IN THE UNITED STATES COURT OF APPEALS DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

THE 200 FOR HOMEOWNERSHIP, THE 60 PLUS ASSOCIATION, ORANGE COUNTY WATER DISTRICT, and MESA WATER DISTRICT *Petitioners*, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY *Respondents*.	)	Case No. 23-1147

PETITION FOR REVIEW

Pursuant to Section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1), Section 702 of the Administrative Procedure Act, 5 U.S.C. § 702, Rule 15(a) of the Federal Rules of Appellate Procedure, Rule 15(a) of the D.C. Circuit Rules, and the U.S. Constitution, Petitioners The 200 for Homeownership, The 60 Plus Association, Orange County Water District, and Mesa Water District (collectively, "Petitioners") hereby petition this Court for review of the final agency action of the Administrator of the United States Environmental Protection Agency ("EPA"), entitled *California State Motor Vehicle and Engine Pollution Control Standards; Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions; Advanced Clean Trucks; Zero Emission Airport Shuttle; Zero-Emission Power Train Certification; Waiver of Preemption; Notice of Decision*, published in the Federal Register at 88 Fed. Reg. 20,688 (Apr. 6, 2023) ("Waiver Grant"). This final agency action purports to grant a waiver of preemption to California (and, by extension, six other states that have opted to copy California's regulations) to impose its own greenhouse gas

emissions standards for new medium and heavy duty trucks and imposes zero- and near-zero-emissions vehicle sales mandates. A copy of this Notice of Decision is attached as Exhibit A to this Petition. This Court has jurisdiction, and venue is proper under 42 U.S.C. § 7607(b)(1).

Respectfully submitted,

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Date: June 5, 2023

CERTIFICATE OF SERVICE

I hereby certify that on June 5, 2023, a copy of the foregoing petition for review has been served by United States first-class mail upon each of the following:

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EXHIBIT A

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OAR–2022–0330, EPA–HQ–OAR–2022–0331; FRL–9900–02–OAR]

California State Motor Vehicle and Engine Pollution Control Standards; Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions; Advanced Clean Trucks; Zero Emission Airport Shuttle; Zero-Emission Power Train Certification; Waiver of Preemption; Notice of Decision

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of decision.

SUMMARY: The Environmental Protection Agency (EPA) is granting the California Air Resources Board's (CARB's) requests for waivers of Clean Air Act (CAA) preemption for the following California regulations: the Heavy-Duty Vehicle and Engine Emission Warranty Regulations and Maintenance Provisions, the Advanced Clean Trucks Regulation, the Zero Emission Airport Shuttle Regulation, and the Zero-Emission Power Train Certification Regulation. EPA is issuing these decisions under the authority of CAA section 209.

DATES: Petitions for review must be filed by June 5, 2023.

ADDRESSES: EPA has established dockets for these requests under Docket ID EPA–HQ–OAR–2022–0330 and EPA–HQ–OAR–2022–0331. All documents relied upon in making these decisions, including those submitted to EPA by CARB, are contained in the public dockets. Publicly available docket materials are available electronically through *www.regulations.gov*. After opening the *www.regulations.gov* website, enter EPA–HQ–OAR–2022–0330 or EPA–HQ–OAR–2022–0331 in the "Enter Keyword or ID" fill-in box to view documents in the record. Although a part of the official docket, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute is not included in the public dockets. EPA's Office of Transportation and Air Quality (OTAQ) maintains a web page that contains general information on its review of California waiver and authorization requests. Included on that page are links to prior waiver and authorization **Federal Register** notices, some of which are cited in this notice; the page can be accessed at *https://www.epa.gov/state-and-localtransportation/vehicle-emissionscalifornia-waivers-and-authorizations.*

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I. Executive Summary

Today, as Administrator of the EPA, I am granting two separate requests for waivers of Clean Air Act (CAA) preemption regarding four California Air Resources Board (CARB) regulations for heavy-duty ("HD") onroad vehicles and engines. CARB made these requests in two separate letters to EPA in October 2021 and December 2021, as described below. EPA is not taking action on CARB's January 2022 request concerning CARB's Omnibus Low NO_X regulation.[1] EPA will announce its decision regarding the Omnibus Low NO_X Regulation waiver request in the future, by separate notice in the **Federal Register.**

First, by letter dated October 22, 2021, CARB notified EPA that it had finalized amendments to its emission standards and associated test procedures for heavy-duty diesel vehicles and engines.[2] These "2018 HD Warranty Amendments," adopted by the CARB Board on June 28, 2018, extend the emissions warranty periods for 2022 and subsequent model year onroad heavy-duty diesel engines and for 2022 and subsequent model year diesel vehicles with a gross vehicle weight rating exceeding 14,000 pounds powered by such engines.[3] In its letter to the Administrator, CARB requested that EPA determine the 2018 HD Warranty Amendments to be within the

[1] Omnibus Low NO_X Waiver Request, Docket No. EPA–HQ–OAR–2022–0332–0012; Omnibus Low NO_X Waiver Support Document, Docket No. EPA–HQ–OAR–2022–0332–0009.

[2] 2018 HD Warranty Amendments Waiver Request, Docket No. EPA–HQ–OAR–2022–0330–0007; 2018 HD Warranty Amendments Waiver Support Document, Docket No. EPA–HQ–OAR–2022–0330–0004.

[3] The 2018 HD Warranty Amendments are comprised of amendments to title 13, California Code of Regulations, sections 1956.8, 2035, 2036, and 2040.

scope of a waiver the Administrator previously granted for California's emission standards and associated test procedures for 2007 and subsequent model year heavy-duty diesel vehicles and engines or, alternatively, that EPA grant California a new waiver of preemption for the amendments. By today's decision EPA finds that 2018 HD Warranty Amendments meet the criteria for a new waiver under section 209(b) of the Clean Air Act (CAA), 42 U.S.C. 7543(b).

Second, CARB's December 20, 2021, letter to the Administrator notified EPA that the CARB Board had finalized Advanced Clean Trucks (ACT), Zero Emission Airport Shuttle Bus (ZEAS), and Zero Emission Powertrain (ZEP) Certification Regulations.[4] The ACT Regulation, adopted by the CARB Board on January 26, 2021, requires that manufacturers produce and sell increasing percentages of medium- and heavy-duty zero-emission vehicles (ZEVs) and near zero-emission vehicles (NZEVs) in California. These quantities of vehicles are based on increasingly higher percentages of manufacturers' annual sales of onroad heavy-duty vehicles, beginning in the 2024 model year. The ZEAS Regulation, adopted by the CARB Board on June 27, 2019, establishes steadily increasing zero-emission airport shuttle fleet composition requirements for airport shuttle fleet owners who service the thirteen largest California airports. The ZEP Certification Regulation, adopted by the CARB Board on June 27, 2019, establishes certification requirements and optional emission standards for 2021 and subsequent model year medium- and heavy-duty ZEVs and the zero-emission powertrains installed in such vehicles.[5] CARB requested that EPA grant a new waiver for each of these regulations. By today's decision EPA finds that each of these three regulations meets the criteria for a new waiver under section 209(b).

The legal framework for these decisions stems from the waiver provision first adopted by Congress in 1967, and later amended in 1977 (and amended again, as explained below, in 1990 when preemption of nonroad engine and vehicle emissions standards was addressed). In sections 209(a) and 209(b) of the Clean Air Act, Congress established that there would be only two programs for control of emissions from new motor vehicles—EPA emission standards adopted under the Clean Air Act, and California emission standards adopted under state law. Congress accomplished this by preempting all State and local governments from adopting or attempting to enforce emission standards for new motor vehicles, while at the same time providing that California could receive a waiver of preemption for its emission standards and accompanying enforcement procedures. Other states can only adopt standards that are identical to California's standards. This statutory scheme struck an important balance that protected manufacturers from multiple and different state emission standards, while preserving California's pivotal role as a laboratory for innovation in the control of emissions from new motor vehicles. Congress recognized that California could serve as a pioneer and a laboratory for the nation in setting new motor vehicle emission standards and the development of new emission control technologies.

Further, Congress intentionally structured this waiver provision to restrict and limit EPA's ability to deny a waiver. The provision was designed to ensure California's broad discretion to determine the best means to protect the health and welfare of its citizens. Section 209(b) specifies that EPA must grant California a waiver if California determines that its standards are, in the aggregate, at least as protective of the public health and welfare as applicable Federal standards. EPA may deny a waiver only if it makes at least one of three findings specified under the Clean Air Act. The findings that permit EPA to deny a waiver (also referred to as the three waiver prongs) are: first, a finding that California's determination that its standards are, in the aggregate, at least as protective as applicable Federal standards is arbitrary and capricious (section 209(b)(1)(A), or the first waiver prong); second, a finding that California has no need for such standards to meet compelling and extraordinary conditions (section 209(b)(1)(B), or the second waiver prong); or third, a finding that California's standards and accompanying enforcement procedures are inconsistent with section 202(a) of the Clean Air Act (section 209(b)(1)(C), or the third waiver prong).

Therefore, EPA's role upon receiving a request for waiver of preemption from California is narrow and limited to determining whether it is appropriate to make any of the three findings specified by the Clean Air Act. If the Agency cannot make at least one of the three findings, then the waiver must be granted.[6] The courts have emphasized the narrowness of EPA's review. In *MEMA II* the Court of Appeals for the District of Columbia Circuit stated that "[S]ection 209(b) sets forth the only waiver standards with which California must comply."[7] EPA and the Court of Appeals for the District of Columbia Circuit have consistently interpreted section 209(b) as placing the burden on the opponents of a waiver to demonstrate that one of the criteria for a denial has been met.[8]

If California acts to amend a previously waived standard or accompanying enforcement procedure, the amendment may be considered within the scope of a previously granted waiver provided that it does not undermine California's determination that its standards in the aggregate are as protective of public health and welfare as applicable Federal standards, does not affect the regulation's consistency with section 202(a) of the Clean Air Act, and raises no new issues affecting EPA's previous waiver decisions.[9]

In 1990, Congress also established that there would be only two programs for control of emissions from most nonroad vehicles and engines—EPA emission standards adopted under the Clean Air Act, and California emission standards adopted under state law.

In section 209(e)(1) of the Act, Congress preempted all states, or political subdivisions thereof, from adopting or attempting to enforce any standard or other requirement relating to the control of emissions for certain types of new nonroad engines or vehicles.[10] For all other nonroad engines, states, with the exception of California, are generally preempted from adopting and enforcing standards and

[4] ACT/ZEAS/ZEP Waiver Request, Docket No. EPA–HQ–OAR–2022–0331–0004; ACT/ZEAS/ZEP Waiver Support Document, Docket No. EPA–HQ–OAR–2022–0331–0003.

[5] The ACT Regulation is at title 13, California Code of Regulation, sections 1963, and 1963.1 through 1963.5. The ZEAS Regulation is at title 17, California Code of Regulation, sections 95690.1, 95690.2, 95690.3, 95690.4, 95690.5, 95690.6, 95690.7, and 95690.8. The ZEP Certification Regulation is at title 13, California Code of Regulation, sections section 1956.8 and title 17, section 95663.

[6] *Motor and Equipment Manufacturers' Association* v. *EPA (MEMA II)*, 142 F.3d 449, 462–63 (D.C. Cir. 1998).

[7] *Id.* ("If EPA concludes that California's standards pass this test, it is obligated to approve California's waiver application.").

[8] *Motor and Equipment Manufacturers' Association* v. *EPA (MEMA I)*, 627 F.2d 1095, 1121 (D.C. Cir. 1979).

[9] 45 FR 54130 (Aug. 14, 1980); 46 FR 36742 (July 15, 1981); 75 FR 44948, 444951 (July 30, 2010).

[10] States are expressly preempted from adopting or attempting to enforce 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. Such express preemption under section 209(e)(1) of the Act also applies to new locomotives or new engines used in locomotives. CAA section 209(e)(1), 42 U.S.C. 7543(e)(1)(A).

other requirements relating to the control of emissions.[11]

On June 13, 2022, EPA issued three notices of opportunity for hearing and comment for the California regulations at issue here: the first notice covered the Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions; the second notice covered the Advanced Clean Trucks Regulation, the Zero Emission Airport Shuttle Regulation, and the Zero-Emission Power Train Certification Regulation; and the third notice covered the "Omnibus" Low NO_X Regulation.[12] EPA is only taking action on the first two notices in this decision.

As part of EPA's public comment process for CARB's waiver requests, we have received comments from several states and organizations representing states, health and environmental organizations, industry, and other stakeholders. The vast majority of comments EPA received supported granting the waiver requests. Commenters generally supporting the waiver requests included CARB,[13] environmental and public health organizations,[14] state and local governments,[15] states' organizations,[16] members of Congress,[17] and some auto manufacturers.[18] Commenters generally opposing the waiver requests included the Truck and Engine Manufacturers Association (EMA),[19] the National Automobile Dealers Association (NADA),[20] the American Fuel & Petrochemical Manufacturers (AFPM),[21] the American Trucking Associations (ATA),[22] the Western States Petroleum Association,[23] and the Texas Public Policy Foundation.[24] EPA has considered all comments including those submitted after the close of the comment period. After an evaluation of the record and comments, I have determined that the waiver opponents have not met their burden of proof in order for EPA to deny either of the two CARB waiver requests under any of the three waiver prongs set forth in section 209(b)(1). As such, EPA is granting CARB's two waiver requests.[25]

II. Background

A. EPA's Consideration of CARB's Request

On June 13, 2022, EPA announced the opportunity for hearing and comment on CARB's waiver requests in three **Federal Register** notices (FR Notices).[26] EPA held one public hearing on June 29 and June 30, 2022, covering all three FR Notices.[27] As noted above, EPA's decision here pertains only to the 2018 HD Warranty Amendments, the ACT Regulation, the ZEAS Regulation, and the ZEP Certification Regulation. EPA has considered all comments submitted pertaining to these regulations, including those submitted after the close of the comment period.[28]

1. 2018 HD Warranty Amendments

EPA's June 2022 FR Notice on CARB's waiver request regarding the 2018 HD Warranty Amendments asked for comment on several matters. Since CARB had submitted a within-the-scope request, EPA first invited comment on whether those amendments meet the criteria for EPA to confirm that they are

[11] Section 209(e)(2)(A) requires the Administrator to authorize California to adopt and enforce standards and other requirements relating to the control of emissions from such vehicles or engines under criteria similar to section 209(b) for new motor vehicles and engines. Considering the nearly identical language in both 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).This means that CARB's nonroad standards must be consistent with the technological feasibility requirements of section 202(a)(2). *See* 80 FR 76169, 76170 (Dec. 9, 2015). *See Engine Mfrs. Ass'n* v. *EPA*, 88 F.3d 1075, 1087 (D.C. Cir. 1996) (". . . EPA was within the bounds of permissible construction in analogizing section 209(e) on nonroad sources to section 209(a) on motor vehicles."). This historical approach to nonroad authorizations is not being revisited here.

[12] 87 FR 35760 (June 13, 2022); 87 FR 35765 (June 13, 2022); and 87 FR 35768 (June 13, 2022).

[13] CARB Initial 2018 HD Warranty Amendments Comments, Docket No. EPA–HQ–OAR–2022–0330–0063; CARB Initial ACT Comments, Docket No. EPA–HQ–OAR–2022–0331–0127; CARB Supplemental Comments, Docket Nos. EPA–HQ–OAR–2022–0330–0072, EPA–HQ–OAR–2022–0331–0133.

[14] Environmental and Public Health Organizations, Docket Nos. EPA–HQ–OAR–2022–0330–0066, EPA–HQ–OAR–2022–0331–0099; Health and Medical Organizations, Docket No. EPA–HQ–OAR–2022–0331–0057.

[15] *See, e.g.*, State of California et al, Docket No. EPA–HQ–OAR–2022–0331–0092 (including comments submitted on behalf of the States of California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Maryland, Minnesota, New Jersey, New York, Oregon, Rhode Island, Vermont, Washington, Wisconsin, the Commonwealth of Massachusetts, the District of Columbia, and the City of New York); New York State Department of Environmental Conservation (NYSDEC), Docket Nos. EPA–HQ–OAR–2022–0330–0061, EPA–HQ–OAR–2022–0331–0103; Maine Department of Environmental Protection (Maine), Docket Nos. EPA–HQ–OAR–2022–0330–0034, EPA–HQ–OAR–2022–0331–0074; Colorado Energy Office (Colorado), Docket No. EPA–HQ–OAR–2022–0331–0034; Washington State Department of Ecology (Washington), Docket Nos. EPA–HQ–OAR–2022–0330–0056, EPA–HQ–OAR–2022–0331–0079; South Coast Air Quality Management District (SCAQMD), Docket No. EPA–HQ–OAR–2022–0331–0075; San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD), Docket Nos. EPA–HQ–OAR–2022–0330–0055, EPA–HQ–OAR–2022–0331–0106.

[16] *See, e.g.*, Northeast States for Coordinated Air Use Management (NESCAUM), Docket Nos. EPA–HQ–OAR–2022–0330–0017, EPA–HQ–OAR–2022–0330–0053, EPA–HQ–OAR–2022–0330–0074, EPA–HQ–OAR–2022–0331–0104, EPA–HQ–OAR–2022–0331–0135, ; National Association of Clean Air Agencies (NACAA), Docket Nos. EPA–HQ–OAR–2022–0330–0035, EPA–HQ–OAR–2022–0330–0019, EPA–HQ–OAR–2022–0331–0067, EPA–HQ–OAR–2022–0331–0029; Ozone Transport Commission (OTC), Docket Nos. EPA–HQ–OAR–2022–0330–0062, EPA–HQ–OAR–2022–0330–0021, EPA–HQ–OAR–2022–0330–0075, EPA–HQ–OAR–2022–0331–0105, EPA–HQ–OAR–2022–0331–0033, EPA–HQ–OAR–2022–0331–0136.

[17] Padilla et al, Docket Nos. EPA–HQ–OAR–2022–0330–0025, EPA–HQ–OAR–2022–0331–0038.

[18] Tesla, Docket No. EPA–HQ–OAR–2022–0330–0038, EPA–HQ–OAR–2022–0331–0060; Rivian, Docket No. EPA–HQ–OAR–2022–0331–0066.

[19] EMA Testimony, Docket Nos. EPA–HQ–OAR–2022–0330–0016, EPA–HQ–OAR–2022–0331–0026; EMA Initial Comments, Docket Nos. EPA–HQ–OAR–2022–0330–0032, EPA–HQ–OAR–2022–0331–0071; EMA Supplemental Comments, Docket Nos. EPA–HQ–OAR–2022–0330–0071, EPA–HQ–OAR–2022–0331–0132,

[20] NADA, Docket Nos. EPA–HQ–OAR–2022–0330–0050, EPA–HQ–OAR–2022–0331–0090.

[21] AFPM, Docket No. EPA–HQ–OAR–2022–0331–0088.

[22] ATA, Docket No. EPA–HQ–OAR–2022–0331–0091.

[23] Western States Petroleum Association, Docket No. EPA–HQ–OAR–2022–0331–0109.

[24] Texas Public Policy Foundation, Docket No. EPA–HQ–OAR–2022–0330–0036, EPA–HQ–OAR–2022–0331–0059.

[25] In deciding to grant these waiver requests, EPA is relying on its legal interpretation of the statute as explained in this notice. In each case, EPA believes that its interpretation constitutes the best interpretation of the statute, applying traditional principles of statutory interpretation. Further, to the extent there is any genuine ambiguity within the statute related to these interpretations, EPA believes it has reasonably resolved such ambiguity. *See Chevron U.S.A., Inc.* v. *NRDC*, 467 U.S. 837, 866 (1984) (deference is owed to reasonable agency resolutions of statutory ambiguity).

[26] 87 FR 35760 (June 13, 2022); 87 FR 35765 (June 13, 2022); and 87 FR 35768 (June 13, 2022).

[27] A transcript for each day of the hearing (June 29th and 30th, 2022) can be found in each docket. June 29th Hearing Transcript, Docket Nos. EPA–HQ–OAR–2022–0330–0028 and EPA–HQ–OAR–2022–0331–0045, June 30th Hearing Transcript, Docket Nos. EPA–HQ–OAR–2022–0330–0029 and EPA–HQ–OAR–2022–0331–0044.

[28] EMA Supplemental Comments, Docket Nos. EPA–HQ–OAR–2022–0330–0071, EPA–HQ–OAR–2022–0331–0132; CARB Supplemental Comments, Docket Nos. EPA–HQ–OAR–2022–0330–0072, EPA–HQ–OAR–2022–0331–0133; Mass Comment Campaign sponsored by Union of Concerned Scientists, Docket Nos. EPA–HQ–OAR–2022–0330–0073, EPA–HQ–OAR–2022–0331–0134; NESCAUM, Docket Nos. EPA–HQ–OAR–2022–0330–0074, EPA–HQ–OAR–2022–0331–0135; OTC, Docket Nos. EPA–HQ–OAR–2022–0330–0075, EPA–HQ–OAR–2022–0331–0136; Mid-Atlantic/Northeast Visibility Union (MANEVU), Docket Nos. EPA–HQ–OAR–2022–0330–0076, EPA–HQ–OAR–2022–0330–0077, EPA–HQ–OAR–2022–0331–0138, EPA–HQ–OAR–2022–0331–0137.

within the scope of prior waivers. Specifically, we requested comment on whether California's 2018 HD Warranty Amendments: (1) Undermine California's previous determination that its standards, in the aggregate, are at least as protective of public health and welfare as comparable Federal standards, (2) affect the consistency of California's requirements with section 202(a) of the Act, and (3) raise any other "new issue" affecting EPA's previous waiver or authorization determinations.[29]

EPA also solicited comment on whether it should grant a new waiver for the 2018 HD Warranty Amendments in the event that EPA cannot confirm that some or all of those amendments were within the scope of previous waivers. We therefore asked commenters to consider the three prongs for the denial of a waiver request under section 209(b)(1) of the CAA: whether (A) California's determination that its motor vehicle emission standards are, in the aggregate, at least as protective of public health and welfare as applicable Federal standards is arbitrary and capricious, (B) California does not need such standards to meet compelling and extraordinary conditions, and (C) California's standards and accompanying enforcement procedures are inconsistent with section 202(a) of the Clean Air Act.[30]

Regarding section 209(b)(1)'s second prong, EPA must grant a waiver request unless the Agency finds that California "does not need such State standards to meet compelling and extraordinary conditions." EPA has interpreted the phrase "need[s] such State standards to meet compelling and extraordinary conditions" to mean that California needs a separate motor vehicle program as a whole in order to address compelling and extraordinary conditions in California (also known as the "traditional" interpretation). EPA noted its intention to use the traditional interpretation and sought comment on whether California needs the 2018 HD Warranty Amendments under section 209(b)(1)(B).[31]

With regard to section 209(b)(1)'s third prong, EPA has historically considered consistency with section 202(a) to require that California's standards are technologically feasible within the lead time provided, giving due consideration to costs, and that California and applicable Federal test procedures are consistent. EPA requested comment on what provisions from section 202(a) apply to California due to the reference to section 202(a) in section 209(b)(1)(C). EPA invited comment on how such provisions, to the extent they may apply to California's standards or enforcement procedures, should be considered in the context of EPA's evaluation of CARB's waiver request under the third prong.[32]

2. ACT, ZEAS, and ZEP Certification Regulations

EPA's June 2022 FR Notice on CARB's waiver request regarding the Advanced Clean Truck Regulation (ACT), the Zero Emission Airport Shuttle (ZEAS) Regulation, and the Zero-Emission Power Train (ZEP) Certification Regulation asked for comment on several matters. We requested comment on all aspects of a full waiver analysis applicable to each of the three regulations. Therefore, we asked commenters to consider the three waiver prongs under section 209(b)(1) of the CAA. EPA also noted its intention to use the traditional interpretation of section 209(b)(1)(B) and sought comment on whether California needs the ACT, ZEAS, and ZEP Certification Regulations, as well what provisions under section 202(a) should apply (and how such provisions should be evaluated) under section 209(b)(1)(C), which requires consistency with section 202(a).[33]

B. Principles Governing this Review

The CAA has been a paradigmatic example of cooperative federalism, under which "States and the Federal Government [are] partners in the struggle against air pollution."[34] In Title II, Congress authorized EPA to promulgate emission standards for mobile sources and generally preempted states from adopting their own standards.[35] At the same time, Congress created an important exception for the State of California.

1. Scope of Preemption and Waiver Criteria Under the Clean Air Act

The legal framework that governs today's decisions stems from the waiver provision first adopted by Congress in 1967 and its subsequent amendments.[36] In title II of the CAA, Congress established only two programs for control of emissions from new motor vehicles—EPA emission standards adopted under the CAA and California emission standards adopted under its state law.[37] Congress accomplished this by preempting all state and local governments from adopting or enforcing emission standards for new motor vehicles, while at the same time providing that California could receive a waiver of preemption for its emission standards and enforcement procedures in keeping with its prior experience regulating motor vehicles, its role as a laboratory for innovation in emission reduction technologies for vehicles, and its serious air quality problems. This framework struck an important balance that protected manufacturers from multiple and different state emission standards and preserved a pivotal role for California in the advancement of control of emissions from new motor vehicles. Recognizing both the harsh reality of California's air pollution and California's ability to serve as a pioneer and a laboratory for the nation in setting new motor vehicle emission standards and developing control technology, Congress intentionally structured this waiver provision to restrict and limit EPA's ability to deny a waiver to ensure that California had broad discretion in selecting the best means to protect the health and welfare of its citizens.[38]

Accordingly, section 209(a) preempts states or political subdivisions from adopting or attempting to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines.[39] Under the

[29] 87 FR at 35762.

[30] *Id.*

[31] *Id.* at 35762–63.

[32] *Id.*

[33] 87 FR 35768, 35770 (June 13, 2022).

[34] *General Motors Corp.* v. *United States,* 496 U.S. 530, 532 (1990).

[35] "The regulatory difference [between Titles I and II] is explained in part by the difficulty of subjecting motor vehicles, which readily move across state boundaries, to control by individual states." *Engine Mfrs. Ass'n* v. *EPA,* 88 F.3d 1075, 1079 (D.C. Cir. 1996). Congress also asserted federal control in this area to avoid "the specter of an anarchic patchwork of federal and state regulatory programs" nationwide. *See MEMA I,* 627 F.2d 1095, 1109 (D.C. Cir. 1979).

[36] *Central Valley Chrysler-Jeep, Inc.* v. *Goldstene,* 529 F. Supp. 2d 1151, 1174 ("The waiver provision of the Clean Air Act recognizes that California has exercised its police power to regulate pollution emissions from motor vehicles since before March 30, 1966; a date that predates . . . the Clean Air Act.").

[37] Motor vehicles are "either 'federal cars' designed to meet the EPA's standards or 'California cars' designed to meet California's standards." *Engine Mfrs. Ass'n* v. *EPA,* 88 F.3d 1075, 1079–80, 1088 (D.C. Cir. 1996) ("Rather than being faced with 51 different standards, as they had feared, or with only one, as they had sought, manufacturers must cope with two regulatory standards.").

[38] *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); *MEMA I,* 627 F.2d 1095, 1111 (D.C. Cir. 1979).

[39] 42 U.S.C. 7543(a)–(a) Prohibition No State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the

Continued

terms of section 209(b)(1), after notice and opportunity for public hearing, EPA must waive the application of section 209(a) to California unless the Administrator finds that at least one of three criteria to deny a waiver in section 209(b)(1)(A)–(C) has been met.[40] EPA may thus deny a waiver, in the context of the Agency's adjudicatory review, only if it makes at least one of these three factual findings (associated with the three waiver criteria) based on evidence in the record, including arguments that opponents of the waiver have provided.

The 1970 CAA Amendments strengthened EPA's authority to regulate vehicular "emission[s] of any air pollutant," while reaffirming the corresponding breadth of California's ability to regulate those emissions (by amending CAA section 202 and recodifying the waiver provision as section 209(b), respectively).[41] Congress also established the National Ambient Air Quality Standards (NAAQS) program, under which EPA issues air quality criteria and sets ambient air quality standards for so-called "criteria" pollutants, and states with regions that have levels of pollutants greater than those Federal standards must submit state implementation plans, or SIPs, indicating how they plan to attain the NAAQS. These attainment SIPs are often multi-year, comprehensive plans.

With the CAA Amendments of 1977, Congress allowed California to consider the protectiveness of its standards "in the aggregate," rather than requiring each California standard to be as or more stringent than its Federal counterpart, to enable stronger standards for a specific pollutant where a weaker standard for a second pollutant was necessary due to interactions between control technologies.[42] Congress also approved EPA's interpretation of the waiver provision as providing appropriate deference to California's policy goals and consistent with Congress's intent "to permit California to proceed with its own regulatory program" for new motor vehicle emissions.[43]

In addition, the 1977 Amendments demonstrated the significance of California's standards to the Nation as a whole with Congress' adoption of a new section 177. Section 177 permits other states addressing their own air pollution problems to adopt and enforce California new motor vehicle standards "for which a waiver has been granted" if certain criteria are met.[44]

Any state with qualifying SIP provisions may exercise this option and become a "section 177 State," without first seeking the approval from EPA.[45] Thus, the 1977 Amendments further recognize California's important role in mobile source air pollution control, both by making it easier for California to obtain waivers (by allowing the State's protectiveness determination to be made "in the aggregate") and by expanding the opportunity (via section 177) for other states to adopt California's standards.

Given the text, legislative history, and judicial precedent, EPA has consistently interpreted section 209(b) as requiring EPA to grant a waiver unless EPA or opponents of a waiver can demonstrate that one of the criteria for a denial has been met.[46] In this context, since inception, EPA has recognized its limited discretion in reviewing California waiver requests. Therefore, EPA's role upon receiving a request for waiver of preemption from California has consistently been limited and remains only to be to determine whether it is appropriate to make any of the three factual findings specified by the CAA. If the Agency cannot make at least one of the three findings, then the waiver must be granted. The three waiver criteria are properly seen as criteria for a denial. This reversal of the normal statutory structure embodies and is consistent with the congressional intent of providing deference to California to maintain and further develop its own new motor vehicle emission program.

Additionally, in previous waiver decisions, EPA has noted that section 209(b)(1) specifies particular and limited grounds for rejecting a waiver and has therefore limited its review to

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control of emissions from new motor vehicles or new motor vehicle engines subject to this part. No State shall require certification, inspection, or any other approval relating to the control of emissions from any new motor vehicle or new motor vehicle engine as condition precedent to the initial retail sale, titling (if any), or registration of such motor vehicle, motor vehicle engine, or equipment.

[40] 42 U.S.C. 7543(b)(1): (1) The Administrator shall, after notice and opportunity for public hearing, waive application of this section to any State which has adopted standards (other than crankcase emission standards) for the control of emissions from new motor vehicles or new motor vehicle engines prior to March 30, 1966, if the State determines that the State standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. No such waiver shall be granted if the Administrator finds that—(A) the determination of the State is arbitrary and capricious, (B) such State does not need such State standards to meet compelling and extraordinary conditions, or (C) such State standards and accompanying enforcement procedures are not consistent with section 7521(a) of this title.

[41] In the 1970 Amendments, section 202(a) was divided into section 202(a)(1) and section 202(a)(2). Section 202(a)(1) included the directive for the Administrator to "prescribe standards applicable to emissions of any air pollutant . . . which in his judgement cause, or contribute to, air pollution which may reasonably be anticipated to endanger publish health or welfare." The previous lead time requirement in section 202(a) was moved to section 202(a)(2) and included the directive that any regulation prescribed under 202(a)(1) "shall 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." The 1970 CAA did not change the cross reference to section 202(a) in section 209(b)(1)(C). *See* CARB Initial ACT/ZEAS/ZEP Comments at 11–12. As described below, the 1977 Amendments did not change the cross reference to section 202(a) in section 209(b)(1)(C) but did expand the flexibility afforded to California under section 209(b). The 1977 Amendments also added section 202(a)(3) directing EPA to set heavy-duty vehicle emission standards for certain emissions for the 1983 model year and later. (Congress having identified a need for standards in 1970 "had become impatient with the EPA's failure to promulgate a particulate standard" for heavy duty vehicles." *NRDC*, 655 F.2d at 325 (citing S. Rep. No.127, 95th Cong., 1st Sess. 67 (1977), reprinted in 3 Legislative History 1441)).

[42] 42 U.S.C. 7543(b)(1). In further amendments to the Act in 1977, section 209 (formerly section 208) was amended to require the U.S. Environmental Protection Agency (EPA) to consider California's standards as a whole, so that California could seek a waiver from preemption if its standards "in the aggregate" protected public health at least as well as Federal standards. *See* Clean Air Act Amendments of 1977, Pub. L. 95–95, section 207, 91 Stat. 685. *See also Motor Vehicle Mfrs. Ass'n of U.S., Inc.* v. *New York State Dep't of Env't Conservation*, 17 F.3d 521, 525 (2d Cir. 1994).

[43] H.R. Rep. No. 95–294, at 301 (1977).

[44] This provision was intended to continue the balance, carefully drawn in 1967, between states' need to meet increasingly stringent federal air pollution limits and the burden of compliance on auto-manufacturers. *See, e.g.*, H.R. Rep. No. 294, 95th Cong., 1st Sess. 309–10 (1977) ("[S]ection 221 of the bill broadens State authority, so that a State other than California . . . is authorized to adopt and enforce new motor vehicle emission standards which are identical to California's standards. Here again, however, strict limits are applied . . . . This new State authority should not place an undue burden on vehicle manufacturers . . . ."); *Motor Vehicle Mfrs. Ass'n* v. *NYS Dep't of Env't Conservation*, 17 F.3d 521, 527 (2d Cir. 1994) ("Many states, including New York, are in danger of not meeting increasingly stringent federal air pollution limits . . . . It was in an effort to assist those states struggling to meet federal pollution standards that Congress, as noted earlier, directed in 1977 that other states could promulgate regulations requiring vehicles sold in their state to be in compliance with California's emission standards or to 'piggyback' onto California's preemption exemption. This opt-in authority, set forth in section 177 of the Act, 42 U.S.C. 7507, is carefully circumscribed to avoid placing an undue burden on the automobile manufacturing industry.")

[45] CAA section 177, 42 U.S.C. 7507.

[46] *MEMA I*, 627 F.2d at 1120–21 ("The 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 requirements and that the burden of proving otherwise is on whoever attacks them."); *MEMA II*, 142 F.3d 449, 462 (D.C. Cir. 1998) ("[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.").

those grounds.[47] EPA has also noted that the structure Congress established for reviewing California's standards is deliberately narrow, which further supports this approach. This has led EPA to reject 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 only marginal improvement in air quality not commensurate with its cost 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. Thus, my consideration of all the evidence submitted concerning a waiver decision is circumscribed by its relevance to those questions that I may consider under section 209(b).[48]

EPA's evaluation of accompanying enforcement procedures that are identified in section 209(b)(1)(C) is done by assessing the first and third waivers prongs at 209(b)(1)(A) and 209(b)(1)(C).[49]

2. Deference to California

EPA has also consistently noted that the text, structure, and history of the California waiver provision clearly indicate both congressional intent and appropriate EPA practice of leaving decisions on "ambiguous and controversial matters of public policy" to California's judgment.[50] In waiver decisions, EPA has thus recognized that congressional intent in limiting review of California waiver requests to the section 209(b)(1) criteria was to ensure that the Federal government did not second-guess the wisdom of state policy.[51] In an early waiver decision EPA highlighted this deference:

> 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 shape 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 these risks and costs against the potential benefits from reduced emissions is a central policy decision for any regulatory agency under the statutory scheme outlined above, I believe I am required to give very substantial deference to California's judgments on this score.[52]

This view is further supported by the House Committee Report accompanying the 1977 amendments to the Clean Air Act. The Report explained that, although Congress had the opportunity to restrict the waiver provision, it instead elected to expand California's flexibility to adopt a complete program of motor vehicle emission controls. According to the Report, the 1977 Amendments were intended to ratify and strengthen the California waiver provision and to affirm the underlying intent of that provision, *i.e.*, to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare.[53]

3. Standard and Burden of Proof

In *Motor and Equipment Manufacturers' Association* v. *EPA*, 627 F.2d 1095 (D.C. Cir. 1979) (*MEMA I*), the U.S. Court of Appeals for the District of Columbia stated, with regard to the standard and burden of proof, that the Administrator's role in a section 209 proceeding is to:

> [C]onsider 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.[54]

The court in *MEMA I* considered the standards of proof under section 209 for the two findings necessary to grant a waiver for an "accompanying enforcement procedure" (as opposed to the standards themselves): (1) Protectiveness in the aggregate and (2) consistency with CAA section 202(a) findings. 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."[55]

With respect to California's protectiveness determination, the court upheld the Administrator's position that to deny a waiver there must be clear and compelling evidence to show that the proposed procedures undermine the protectiveness of California's standards.[56] 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.[57]

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 standards of proof under 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—Congress intended that the standard of EPA review of the State decision to be a narrow one."[58]

Although EPA evaluates whether there are compelling and extraordinary conditions in California, the Agency nevertheless accords deference to California on its choices for how best to address such conditions in light of the extensive legislative history of section 209(b). As noted earlier, the burden of proof in a waiver proceeding is on EPA and the opponents of the waiver. This is clear from the statutory language stating that EPA "shall . . . waive" preemption unless one of three statutory factors is met. This reading was upheld by the D.C. Circuit in *MEMA I*, which concluded that this obligation rests

[47] *See, e.g.*, 78 FR 2112 (January 9, 2013); 87 FR 14332 (March 14, 2022) (SAFE 1 Reconsideration Decision).

[48] 78 FR at 2115 (footnote omitted).

[49] 87 FR 35760, 35762–63 (June 13, 2022).

[50] 40 FR 23102, 23103–04 (May 28, 1975); *see also* LEV I, 58 FR 4166 (January 13, 1993), Decision Document at 64.

[51] *Ford Motor Co.* v. *Environmental Protection Agency (Ford Motor)*, 606 F.2d 1293, 1302 (D.C. Cir. 1979) ("The Administrator is charged with undertaking a single review in which he applies the deferential standards set forth in Section 209(b) to California and either grants or denies a waiver without exploring the consequences of nationwide use of the California standards or otherwise stepping beyond the responsibilities delineated by Congress.").

[52] 40 FR 23102, 23103–04 (May 28, 1975); LEV I, 58 FR 4166 (January 13, 1993), Decision Document at 64.

[53] H.R. Rep. No 294, 95 Cong., 1st Sess. 301–02 (1977) (cited in *MEMA I*, 627 F.2d at 1110).

[54] *MEMA I*, 627 F.2d at 1122.

[55] *Id.*

[56] *Id.*

[57] *Id.*

[58] *See, e.g.*, 40 FR 21102–03 (May 28, 1975).

firmly with opponents of the waiver in a section 209 proceeding by holding that:

> The language of the statute and its legislative history indicate that California's regulations, and California's determinations that they must 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 request bear the burden of persuading the Administrator that the waiver request should be denied.[59]

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.'" [60] Therefore, the Administrator's burden is to act "reasonably." [61]

III. Discussion

This section evaluates each of the two waiver requests and sets forth EPA's rationale for granting each separate request.[62] First, we identify the specific rubric by which we adjudicate each waiver request. Because the 2018 HD Warranty Amendments constitute "accompanying enforcement procedures," as opposed to new standards, EPA evaluates this request under the more limited rubric for accompanying enforcement procedures, as detailed in section III.A below. However, even if EPA were to treat the 2018 HD Warranty Amendments as new onroad standards and evaluate them under the full waiver criteria applicable to such standards, the opponents of the waiver have failed to meet their burden of proof.

We next turn to the three waiver criteria, which we evaluate in turn in sections III.B–D. For each waiver criterion, we set forth EPA's general approach to evaluating the criterion, summarize the position of CARB and the commenters for each of the waiver requests, discuss EPA's analysis of the criterion, and finally present our conclusion.[63] Many of the waiver opponents' arguments centered on the third waiver prong and, in particular, on an argument that, notwithstanding EPA's conclusion that the California standards and accompanying enforcement procedures are feasible within the lead time given under the regulations, EPA must require California standards to include four years' lead time required for certain Federal heavy-duty vehicle standards set out in section 202(a)(3)(C). We address this argument in detail in section III.D.5. In every case, we conclude that the opponents of the waiver have failed to meet their burden of proof.

Finally, EPA received comments outside the scope of this action. We discuss these comments, relating to preemption under the Energy Policy and Conservation Act (EPCA), the Equal Sovereignty Doctrine and other constitutional issues, in section III.E. As the scope of EPA's review under section 209 is constrained, EPA has declined to consider them in granting these waiver requests.

A. Evaluation of CARB's 2018 HD Warranty Amendments

With respect to the 2018 HD Warranty Amendments, we first address the proper rubric by which to evaluate this regulation. To determine the proper rubric, EPA first evaluates whether CARB's 2018 HD Warranty Amendments should be considered standards or "accompanying enforcement procedures" because "section 209(b) refers to accompanying procedures only in the context of consistency with section 202(a)." [64] Specifically, under section 209(b)(1)(C), EPA is to deny a waiver if "such state standards and accompanying enforcement procedures are not consistent with section 202(a)." EPA then evaluates whether CARB's request relating to its 2018 HD Warranty Amendments should be treated as within-the-scope of a prior waiver request or as a request for a new waiver. As we explain below, EPA concludes that CARB's 2018 HD Warranty Amendments are "accompanying enforcement procedures" and that it is also appropriate to treat CARB's request as one for a new waiver. Given these determinations, EPA applies the first and third waiver prongs under 209(b)(1) (relating to California's protectiveness determination and consistency with 202(a)) in evaluating CARB's request. However, even if EPA were to treat CARB's 2018 HD Warranty Amendment as a new standard for which California is seeking a new waiver and apply all three waiver prongs, EPA would nonetheless grant the waiver.

CARB requested that the Administrator confirm that the 2018 HD Warranty Amendments fall within the scope of the 2005 waiver of preemption that the Administrator granted for California's emission standards and associated test procedures for 2007 and subsequent model year heavy-duty diesel vehicles and engines, and its waiver request includes discussion of how each of the relevant prongs applicable to enforcement procedures (*i.e.*, that the enforcement procedure does not undermine California's protectiveness determination and that there is consistency between the Federal and California enforcement procedures) are within the scope of the previously granted waiver. In the alternative, CARB requested EPA grant a new waiver of preemption and discussed each of the relevant prongs for a new waiver (*i.e.*, protectiveness, consistency and, if waiving a standard, the need for the program as a whole to meet compelling and extraordinary conditions in the state).[65] CARB noted that the 2018 HD Warranty Amendments encompass several elements that individually and collectively establish more rigorous emissions warranty and emissions maintenance schedule requirements.[66]

EPA believes that the 2018 HD Warranty Amendments are properly

[59] *MEMA I*, 627 F.2d at 1121.

[60] *Id.* at 1126.

[61] *Id.*

[62] EPA intends our grant of the waiver for each of the four California regulations at issue (*i.e.*, 2018 HD Warranty Amendments, ACT, ZEAS, and ZEP Certification Regulations,) to be severable. Were a reviewing court to set aside our waiver action regarding any particular regulation, or portion of any particular regulation, EPA intends for the actions on the remaining regulations and the remaining portion of the affected regulation to remain in effect.

[63] Although EPA issued separate Federal Notices that solicited comments on each waiver request, EPA is electing to grant waivers for all the regulations included in the two requests in this single document in which it discusses each of the two waiver criteria only once and then evaluates each of CARB's regulations under each criterion and makes separate decisions with respect to each regulation.

[64] *MEMA I*, 627 F.2d at 1111–12.

[65] *See* 2018 HD Warranty Amendments Waiver Support Document at 18–25. CARB maintained that the 2018 HD Warranty Amendments are within the scope of the waiver EPA granted for CARB's 2007 heavy-duty vehicle emission standards. 70 FR 50322 (August 26, 2005). Therefore, CARB's waiver request included information to demonstrate that the 2018 HD Warranty Amendments do not undermine the previous protectiveness determination associated with the 2007 emission standards nor do the Amendments affect the consistency of the heavy-duty vehicles emission standards with section 202(a) of the CAA. CARB also stated that it is not aware of any new issues raised by the Amendments. Alternatively, CARB stated that, if EPA must grant CARB a new waiver for the Amendments (in addition to the two waiver criteria already discussed for the within-the-scope request), California continues to need a separate motor vehicle program to meet compelling and extraordinary conditions.

[66] 2018 HD Warranty Amendments Waiver Support Document at 18–25.

considered accompanying enforcement procedures because they constitute criteria designed to determine compliance with applicable standards and are accordingly relevant to a manufacturer's ability to produce vehicles and engines that comply with applicable standards for their useful lives.[67]

Because accompanying enforcement procedures are only contained in section 209(b)(1)(C), or the third waiver prong, EPA's historical practice of considering whether to grant waivers for accompanying enforcement procedures tied to standards for which a waiver has already been granted is to determine only: (1) Whether the enforcement procedures threaten the validity of California's determination that its standards are as protective of public health and welfare as applicable Federal standards, (*i.e.*, the first prong) and (2) whether the Federal and California enforcement procedures are consistent (*i.e.*, the third prong).[68] EPA notes that these two criteria are similar to the questions EPA reviews for within-the-scope requests for both standards and enforcement procedures. However, when reviewing amendments to a previously waived standard or accompanying enforcement procedure, for which CARB seeks a within-the-scope determination from EPA, EPA also reviews whether the amendments raise any "new issues" affecting the Administrator's previous waiver determination, and if there are new issues that trigger a full review of the relevant two prongs.[69]

In this instance, EPA believes new issues have been raised by the amendments and therefore it is appropriate to review the Amendments under the complete waiver criteria applicable to accompanying enforcement procedures (*i.e.*, the first and third waiver prongs). Because under either compliance path the manufacturer is under an additional requirement that creates a new burden rather than a flexibility, EPA believes this necessarily creates a new question as to whether the accompanying enforcement procedure meets the requirements of the third waiver prong. EPA notes that there could be some level of uncertainty in determining whether "new issues" have been raised, including whether a compliance path where manufacturers only cover the costs of expected additional warranty claims is equivalent to a new, more stringent accompanying enforcement procedure. In addition, because the criteria for a within-the-scope waiver evaluation and a full waiver are similar, EPA believes it is prudent in this instance to review the request under the full waiver criteria (*i.e.*, the relevant two prongs identified above). The 2018 HD Warranty Amendments encompass several elements that individually and collectively establish more rigorous emissions warranty and emissions maintenance schedule requirements that raise issues regarding the technological feasibility of the aggregate requirements applicable to new heavy-duty vehicles and engines. Therefore, EPA is evaluating the 2018 HD Warranty Amendments under the two waiver criteria below that apply to accompanying enforcement procedures.[70]

B. First Waiver Criterion: Are California's Protectiveness Determinations Arbitrary and Capricious?

We now turn to California's protectiveness determinations for the regulations covered under each of its waiver requests. EPA's evaluation of this first waiver prong is performed under the construct explained here. Section 209(b)(1)(A) of the Clean Air Act requires EPA to grant a waiver unless the Administrator finds that California's determination that its State standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards, is arbitrary and capricious. EPA may not disregard California's determination unless there is "clear and compelling evidence" to the contrary.[71] 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 requirements."[72] Additionally, it is "the parties opposing the waiver request bear the burden of persuading the Administrator that the waiver request should be denied."[73]

1. EPA's Historical Interpretation of Section 209(b)(1)(A)

EPA's long-standing interpretation (also called the "traditional interpretation") is that the phrase "State standards" in section 209(b)(1) means the entire California new motor vehicle emissions program.[74] Therefore, as explained below, when evaluating California's protectiveness determination, EPA compares the California standards as a whole to the Federal standards. That comparison is undertaken within the broader context of the previously waived California program, which relies upon protectiveness determinations that EPA has previously found were not arbitrary and capricious.[75] That evaluation follows the instruction of section 209(b)(2), which states: "If each State standard is at least as stringent as the comparable applicable Federal standard, such State standard shall be deemed to be at least as protective of health and welfare as such Federal standards for purposes of [209(b)(1)]."[76]

To review California's protectiveness determination in light of section 209(b)(2), EPA conducts its own analysis of the newly adopted California standards to comparable applicable Federal standards. The comparison

[67] *MEMA I* at 1111–13 ("In that setting we believe that the Administrator correctly classified the in-use maintenance regulations as accompanying enforcement procedures' rather than as "standards."); Decision Document accompanying 51 FR 12391 (April 10, 1986), at 3. EPA sets emissions warranty periods under section 207(a) and not section 202(a). *See, e.g.*, 48 FR 52170 (November 16, 1983).

[68] *MEMA I*, 627 F.2d 1095, 1111, 1113; Decision Document accompanying 61 FR 53371 (Oct. 11, 1996) at 17; 74 FR 3030, 3032 (Jan. 16, 2009).

[69] 45 FR 54130 (Aug. 14, 1980); 46 FR 36742 (July 15, 1981); 75 FR 44948, 444951 (July 30, 2010).

[70] EPA believes it is only necessary to review: (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. However, even if EPA were to review the enforcement procedures under the second waiver criterion (as EPA does in the alternative below, without conceding the second waiver criterion applies, which we include in the event that those opposed to the waiver believe the 2018 HD Warranty Amendments are equivalent to new emission standards rather than accompanying enforcement procedures), the opponents of the 2018 HD Warranty Amendments have not met their burden of proof regarding section 209(b)(1)(B).

[71] *MEMA I*, 627 F.2d 1095, 1121–22 (D.C. Cir. 1979).

[72] *Id. See also Ford Motor*, 606 F.2d 1293, 1297 (D.C. Cir. 1979).

[73] *MEMA I*, 627 F.2d at 1121.

[74] 74 FR 32744, 32749 (July 8, 2009); 70 FR 50322 (Aug. 26, 2005); 77 FR 9239 (Feb. 16, 2012); 78 FR 2112, 2123 (Jan. 9, 2013).

[75] 36 FR 17458 (Aug. 31, 1971). ("The law makes it clear that the waiver requests cannot be denied unless the specific finding designated in the statute can properly be made. The issue of whether a proposed California requirement is likely to result in only marginal improvement in air quality not commensurate with its cost 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."). The "more stringent" standard expressed here in 1971 was superseded by the 1977 Amendments to section 209, which established that California's standards must be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. The stringency standard remains, though, in section 209(b)(2).

[76] CAA section 209(b)(2).

quantitatively answers whether the new standards are more or less protective than the Federal standards.

Section 209 provides two paths for finding that California's protectiveness determination is reasonable. In addition to a side-by-side comparison of California and applicable Federal standards considering section 209(b)(2), California's program can still be at least as protective as EPA's program even if some (or even all) of the new or amended standards in a waiver request are less stringent than the applicable EPA standards if California's program, as a whole, is at least as protective as the Federal standards as a whole.[77] Thus, EPA first examines whether the side-by-side analysis under section 209(b)(2) resolves the protectiveness inquiry. If there are some EPA standards that are numerically more stringent that the California standards, then the question that EPA reviews is whether the new or amended California standards would cause the State's new motor vehicle emissions program as a whole ("in the aggregate") to become less protective than EPA's program. A finding that California's protectiveness determination was arbitrary and capricious under section 209(b)(1)(A) must be based upon "'clear and compelling evidence' to show that proposed [standards] undermine the protectiveness of California's standards." [78]

As noted previously, when considering whether to grant waivers for accompanying enforcement procedures tied to standards for which a waiver has already been granted, EPA has long held that, under section 209(b)(1)(A)'s first prong, it will only address the question of whether the enforcement procedures are so lax that they threaten the validity of California's previous determination that its standards are as protective of public health and welfare as applicable Federal standards.[79]

2. CARB's Discussion of California's Protectiveness Determinations in the Waiver Requests

a. 2018 HD Warranty Amendments

With regard to the 2018 HD Warranty Amendments, CARB made a determination that the Amendments will not cause California's motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable Federal standards in Resolution 18–24.[80] CARB noted that the 2018 HD Warranty Amendments do not reduce the stringency of the previously waived emission standards or the associated test procedures for 2007 and subsequent model year heavy-duty diesel engines and vehicles, but instead establish emissions warranty requirements for heavy-duty diesel engines and heavy-duty diesel vehicles that are more stringent than the corresponding Federal emission warranty requirements for such engines and vehicles.[81]

b. ACT, ZEAS, and ZEP Certification Regulations

Regarding CARB's request for a waiver for the ACT Regulation, ZEAS Regulation, and ZEP Certification Regulation, CARB noted that it made protectiveness determinations for each respective regulation in the request.

First, CARB stated that in Board Resolution 78–10 it determined that the requirements related to the control of emissions contained in the ACT Regulation will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable Federal standards, and that no basis exists for EPA's Administrator to find that determination arbitrary and capricious.[82] CARB noted that its ACT Regulation is clearly more stringent than any applicable Federal requirements because there are no comparable Federal requirements.[83]

Second, the ACT, ZEAS, and ZEP waiver request also contained CARB's summary of the Board's protectiveness findings regarding its ZEAS Regulation and explained that there are no comparable Federal requirements.[84]

Finally, in the ACT, ZEAS, and ZEP waiver request, CARB noted that the ZEP Certification Regulation was also accompanied by the Board approved Resolution 19–15 that contained a determination that these regulations will not cause California's motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable Federal standards.[85]

3. Comments on California's Protectiveness Determinations

EPA did not receive any comment suggesting that CARB's 2018 HD Warranty Amendments threaten the validity of California's determination that its standards are as protective of public health and welfare as applicable Federal standards.[86]

However, EPA received several comments that claimed that CARB's protectiveness determinations in support of the ACT Regulation and the ZEAS Regulation were arbitrary and capricious.[87] One commenter claimed that CARB was pursuing a policy directive toward the acceleration of ZEVs in the medium- and heavy-duty truck sector by glossing over a number of impacts both within and outside the State of California that renders the ACT Regulation less protective than applicable Federal standards.[88] Several commenters asserted that CARB over-estimated the emission benefits of its standards, even though CARB noted that its standards would still enhance the relative protectiveness of the California

[77] *Id.*

[78] *MEMA I*, 627 F.2d at 1122.

[79] *MEMA I*, 627 F.2d 1095, 1113 n.36 (D.C. Cir. 1979)(The Administrator "explored whether the procedures had a negative effect on the protectiveness of the California standards for which a waiver had already been granted. *See* 43 FR 32183 (1978), *reprinted in* J.A. at 56. This inquiry is perfectly consistent with the Administrator's past practice and his position in this court.")

[80] EPA–HQ–OAR–2022–0330–0004.

[81] *Id.* at 19–20. CARB also noted that the newly established emission warranty periods for every category of California heavy-duty diesel engines and heavy-duty diesel vehicles exceed the corresponding federal emission warranty period of 5 years or 100,000 miles during this time frame. CARB also noted that the newly established minimum allowable maintenance schedules for emissions-related parts are more restrictive regarding allowable repairs or replacements of emissions-related parts than the corresponding federal allowable maintenance schedules, and the Amendments expand the scope of California's emissions warranty beyond the federal emissions warranty by expressly encompassing components monitored by HD OBD systems which, when they fail, cause the HD OBD system's malfunction indication light (MIL) to illuminate. *Id.*

[82] EPA–HQ–OAR–2022–0331–0003. *See* Board Resolution 20–19.

[83] *Id.* CARB further notes that "because California's pre-existing motor vehicle emissions program does not require medium- or heavy-duty vehicles and engines to meet zero emission standards, it is evident that the ACT regulation will, in conjunction with other elements of California's motor vehicle emissions program for medium and heavy-duty vehicles, render California's motor vehicle emission emissions standards, in the aggregate, to be at least as protective of public health and welfare as applicable federal standards."

[84] *Id.* at 20. *See* Board Resolution 19–16.

[85] *Id.* at 20–21.

[86] Although there is no information in the record that would support a finding that CARB's protectiveness determination was arbitrary and capricious in a section "209(b)(2) type" of analysis, we note that, because section 209(b)(1)(A) calls for an analysis of whether California's motor vehicle emission standards, in the aggregate, are as protective of public health and welfare as applicable Federal standards, EPA also incorporates the findings below regarding the protectiveness of the regulations in CARB's ACT, ZEAS, and ZEP waiver request to the finding regarding the HD Warranty Amendments.

[87] Although EPA discusses these comments as provided (meaning that some comments are discussed in the context of multiple regulations at once), EPA considered comments separately in its evaluation of California's protectiveness determination for each regulation.

[88] Valero at 2. This commenter asserted that CARB failed to conduct a full lifecycle analysis in order to understand the full emission impacts of battery electric vehicles and that CARB did not consider potential reductions that may be achieved by internal combustion engines.

program that EPA previously found to be as protective as the Federal program.[89] EPA did not receive any comments related to CARB's protectiveness determination for the ZEP Certification Regulation.

As noted above, EPA received comments that claimed that the ACT Regulation would slow down fleet turnover and that, by requiring zero-emission vehicles, this regulation would not "result in lower emissions of GHGs and other pollutants than can be achieved by internal combustion engine (ICE) vehicles." [90] Another commenter contended that "to the extent a CARB [commercial truck or tractor (CMV)] rule or standard is technologically infeasible, or likely result in new CMVs that are cost prohibitive" or that raises reliability concerns then "the agency" would be acting "arbitrarily and capriciously" to issue such a rule or standard.[91]

In response, CARB noted that these commenters cannot establish "that delayed purchases or pre-buys or other purchasing choices would lead to emissions increases as a result of ACT or ZEAS" because "both regulations will require displacement of higher-emitting conventional vehicles with zero-emission vehicles" and "[e]ven if that displacement is lower or slower than CARB estimated, these standards nonetheless could not make California's motor vehicle program less protective than EPA's." [92]

EPA also received comments that questioned the policy of CARB's adoption of the ACT and ZEAS Regulations. One commenter claimed that maintaining the existing Federal standards would be the best way for California to minimize environmental impacts, based on a full lifecycle assessment of emissions, instead of California's approach that would necessitate expensive battery electric technology that would slow fleet turnover.[93] Regarding the ACT Regulation some commenters also claimed that CARB should have adopted different regulatory approaches, such as one that incorporates increased introduction of renewable liquid and gaseous fuels, which the commenter claimed would be more cost effective.[94] In response, CARB noted that EPA is precluded from considering different policy or hypothetical rulemaking options that CARB might have considered and rather is properly guided by the language at section 209(b)(2) that clearly states that if each state standard is at least as stringent as the comparable Federal standard that such California standards shall be deemed at least as protective of public health and welfare as such Federal standards for purposes of section 209(b)(1).[95]

4. California's Protectiveness Determinations Are Not Arbitrary and Capricious

As described above, EPA's traditional analysis has been to evaluate California's protectiveness determination by comparing the new California standards, or amendments, to applicable EPA emission standards for the same pollutants. The comparison of EPA and California standards is undertaken within the broader context of the previously waived California program, which relies upon protectiveness determinations that EPA has previously found were not arbitrary and capricious.[96] The prior statutory requirement that each California standard be "more stringent" than the Federal standard was superseded by the 1977 Amendments to section 209, which established that a waiver must be granted where California's standards are, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. This was intended to afford California the broadest possible discretion in designing is motor vehicle emission program.

EPA did not receive any comments or information in the record that demonstrated that CARB's new, more stringent 2018 HD Warranty Amendments would threaten the validity of CARB's protectiveness determination applicable to these enforcement procedures. Based on the record EPA cannot make a determination that CARB's protectiveness finding regarding the 2018 HD Warranty Amendments was arbitrary and capricious.

EPA has received no comment or other information in the record to support an argument that EPA's statutory interpretation of the first waiver prong for its analysis of the California emission standards (*i.e.*, ACT Regulation, ZEAS Regulation, and ZEP Certification Regulation) is unreasonable. In addition, EPA received no comment or information that provided any type of numerical comparison of the stringency of CARB's standards to applicable Federal standards. Specifically, there is no evidence in the record to demonstrate, by way of numerical comparison, that CARB's standards are not as stringent, in the aggregate, as EPA's requirements.[97] To the extent that commenters stated that CARB over-estimated the emission benefits of its standards, on the basis of the record EPA agrees with CARB that, under a numerical comparison of the standards, the new standards will still be more stringent than the Federal program—especially in the case of the ACT and ZEAS Regulations, which have no comparable Federal requirements.

Therefore, we find that the opponents of the waiver have not met their burden of proof to demonstrate that any of CARB's protectiveness determinations associated with the regulations contained in the two waiver requests were arbitrary and capricious and,

[89] CARB Supplemental Comments, Docket Nos. EPA–HQ–OAR–2022–0330–0072, EPA–HQ–OAR–2022–0331–0133. CARB noted that if there are any benefits from the new standards then their adoption cannot render the existing California program less protective. CARB stated that, since there are no comparable federal requirements for ACT and ZEAS, this logic is all the more true.

[90] Valero at 2; *see also* AFPM at 8.

[91] NADA at 2–3. We further address these latter comments in our analysis of the third waiver criterion below. In general, EPA has long explained that "questions concerning the effectiveness of the available technology are also within the category outside my permissible scope of inquiry," under section 209(b)(1)(C). 41 FR 44209, 44210 (October 7, 1976).

[92] CARB Supplemental Comments at 4.

[93] AFPM at 8–12.

[94] One commenter suggests that, to the extent the ACT Regulation is technologically infeasible or cost prohibitive for customers or otherwise raises reliability concerns, then CARB's protectiveness determination would be arbitrary and capricious. Another commenter stated that California has not conducted any air quality analysis per dollar of investment relative to the existing Federal standards versus the ACT Regulation. This commenter claimed that a full life-cycle analysis would reveal that the existing Federal NO_X standards are the better approach. AFPM at 12–15.

[95] CARB Supplemental Comments at 2.

[96] 78 FR 2112, 2123 (January 9, 2013).

[97] EPA notes that CARB's protectiveness determinations, associated with each of the regulations contained in its waiver request were not arbitrary and capricious despite subsequent changes to the "applicable Federal standards" in section 209(b)(1)(A). In this case changes in the applicable standards are reflected in EPA's recent rule to lower NO_X and other air pollutants from heavy-duty vehicles and engines starting in the 2027 model year. *See* 88 FR 4296 (January 24, 2023). EPA's regulation does not relate to emission warranty and other requirements for the same model year (2022–2023) heavy-duty vehicles and engines as the 2018 HD Warranty Amendments. This is in contrast to EPA's recent rulemaking where the extended emission warranty period takes place with the 2027 model year. Likewise, the EPA regulation does not relate to or does not set zero-emission vehicle requirements related to heavy-duty vehicles and engines as do the regulations contained in CARB's ACT, ZEAS, and ZEP waiver request. In addition, at the time CARB submitted its waiver requests the "applicable Federal standards" were EPA's regulations adopted in 2002 and applicable to 2007 and 2010 requirements, and not EPA's most recent rulemaking. As noted, no evidence is in the record to demonstrate, by way of numerical comparison, that CARB's standards are not as stringent, in the aggregate, as the prior EPA standards that commenced in the 2007 model year.

therefore, EPA cannot deny the CARB's waiver requests based on section 209(b)(1)(A).

Additionally, in response to comments suggesting that CARB should have adopted different policies or different regulations, or that CARB's ACT and ZEAS Regulations will not be effective, EPA notes that there are no comparable Federal standards mandating, for instance, sales of a certain percentage of ZEV and NZEV vehicles, or zero-emission airport shuttle fleet composition.[98] As such, any enhancement to CARB's motor vehicle emission program—including its heavy-duty vehicles standards—cannot render California's program less protective than the applicable Federal standards. Likewise, and as we further address these latter comments in our analysis of the third waiver criterion below, EPA is not permitted in its statutory role to assess different, hypothetical CARB regulations that CARB might have adopted and then, in turn, compare those regulations to Federal standards.[99] That is, the relevant question before EPA is whether California's standards are in the aggregate at least as protective as the Federal ones, not whether California hypothetically should have adopted a different program that the commenter prefers.

EPA also received no comments or evidence to support the view that zero-emission vehicles do not result in some degree of lower emissions—of either criteria pollutants or GHGs—than conventional vehicles do. EPA agrees with CARB that this logically supports a conclusion that the ACT and ZEAS Regulations, which require more and more of these vehicles, would increase the protectiveness of California's program.[100] Moreover, EPA does not agree with the commenters' claims that considering lifecycle emissions renders the protectiveness finding arbitrary and capricious. First, the scope of EPA's review of CARB's protectiveness determination is narrow and need not include far-reaching assessments of the environmental or other impacts of CARB's chosen regulations and associated policy decisions. Section 209(b)(1) does not require California or EPA to consider lifecycle emissions. Nor does it otherwise suggest that EPA must look broadly outside motor vehicle emissions to emissions from other sources, including those regulated under separate federal and state programs. Therefore, EPA is not required to consider potential broader environmental impacts in assessing protectiveness. Secondly, to the extent such impacts and decisions could be relevant to section 209(b)(1)(A), commenters failed to adduce sufficient evidence to support this argument considering California's technical findings relating to this issue.[101]

EPA also finds no evidence in the record, to the extent commenters asserted that fleet turnover would be slower, that supports the view that an emissions increase would occur because of the ACT or ZEAS Regulations. Such claims, without evidence that the regulations result in less protective emission standards do not meet the burden of proof on the opponents of the waiver.[102] Similar to commenters' claims that the regulations would result in slower fleet turnover, statements that these purchasing decisions will result in fewer emission benefits does not otherwise demonstrate that CARB's emission standards are less protective than applicable Federal standards, or that CARB's protectiveness determination was arbitrary and capricious.

5. Section 202(b)(1)(A) Conclusion

EPA believes that, given the lack of any comments or information in the record that demonstrate that CARB's new more stringent 2018 HD Warranty Amendments would threaten the validity of CARB's protectiveness determination, it has no basis to conclude that California's determination that its standards are at least as protective is arbitrary and capricious and therefore deny CARB's waiver request for the 2018 HD Warranty Amendments under section 209(b)(1)(A). The same conclusion applies were EPA to consider (in the alternative) the 2018 HD Warranty Amendments as emission standards as opposed to accompanying enforcement procedures.

Further, based on the record before EPA, we cannot find that CARB was arbitrary and capricious in its respective findings that the California heavy-duty vehicle and engine standards, including the ACT Regulation, the ZEAS Regulation, and the ZEP Certification Regulation) are individually, and in the aggregate, at least as protective of public health and welfare as applicable Federal standards. CARB has provided reasonably detailed information to support its protectiveness determination. Commenters have not provided sufficient information and analysis that calls CARB's analysis (associated with the California protectiveness determination) into question. Therefore, we find that the opponents of the waiver have not met their burden of proof to demonstrate that any of CARB's protectiveness determinations associated with the regulations contained within their waiver requests were arbitrary and capricious and, therefore, EPA cannot deny CARB's waiver requests based on section 209(b)(1)(A).

[98] In general, EPA has long explained that "questions concerning the effectiveness of the available technology are also within the category outside [the Administrator's] permissible scope of inquiry," under section 209(b)(1)(C). 41 FR 44209, 44210 (October 7, 1976).

[99] EPA has recognized that the intent of Congress in creating a limited review based on the section 209(b)(1) criteria was to ensure that the Federal government did not second-guess state policy choices. This has led EPA to state, "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 these risks and costs against the potential benefits from reduced emissions is a central policy decision for any regulatory agency under the statutory scheme outlined above, I believe I am required to give very substantial deference to California's judgments on this score." 40 FR 23103–04. *See also* LEV I, 58 FR 4166 (January 13, 1993), Decision Document at 64.

[100] CARB Final Statement of Reasons for ACT Regulation at 105–06, *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2019/act2019/fsor.pdf;* CARB Supplemental Comments at 3–4 ("It is, in fact, unrefuted that zero-emission vehicles result in lower emissions (and not only of GHGs) than conventional vehicles. This fact naturally leads to the conclusion that requiring the sale (ACT) and use (ZEAS) of more and more of these vehicles increases the protectiveness of California's program which has previously been found to be at least as protective as EPA's.").

[101] CARB Supplemental Comments at 3 ("[T]he only analysis offered—a report by the American Transportation Research Institute—does nothing to undermine CARB's determination. That report (also prepared after CARB's protectiveness determination) focused only on lifecycle GHG emissions from Class 8 trucks engaged in long hauls, and, as such, it cannot undermine CARB's protectiveness determination which was based on consideration of *all* affected pollutants and *all* regulated vehicles. In any event, even though it focused exclusively on the vehicles that CARB found the least promising for near-term electrification, the report nonetheless finds that zero-emission Class 8 trucks engaged in long hauls would have *lower* lifecycle GHG emissions than conventional Class 8 trucks. In other words, this report, too, supports the determination that California's program with ACT is at least as protective as EPA's federal program (which has no ACT-like standards)" (original emphasis)).

[102] As previously mentioned, CARB performed a sensitivity analysis of both "pre-buy" and "no-buy" scenarios regarding both the ACT and ZEAS program. For the ACT Regulation, CARB found that it would cause no increases in emissions. CARB Supplemental Comments at 3–4.

C. Second Waiver Criterion: Does California Need Its Standards To Meet Compelling and Extraordinary Conditions?

Under section 209(b)(1)(B) of the Act, EPA must grant a waiver for California vehicle and engines standards and accompanying enforcement procedures unless EPA finds that California "does not need such State standards to meet compelling and extraordinary conditions." EPA has traditionally interpreted this provision as requiring consideration of whether California needs a separate motor vehicle program to meet compelling and extraordinary conditions.[103]

1. EPA's Historical Interpretation of Section 209(b)(1)(B)

For nearly the entire history of the waiver program, EPA has read the phrase "such State standards" in section 209(b)(1)(B) as referring back to standards "in the aggregate," in the root paragraph of section 209(b)(1), which calls for California to make a protectiveness finding for its standards. EPA has interpreted the phrase "in the aggregate" as referring to California's program as a whole, rather than each State standard, and as such the Agency evaluates both protectiveness and need with reference to California's program as a whole.[104] EPA has reasoned that both statutory provisions must be read together so that the Agency reviews the same standards (*e.g.*, new motor vehicle emission standards program) for need under 209(b)(1)(B) that California considers in making its protectiveness determination, and that under this statutory framework EPA is to afford California discretion in assessing its need for its motor vehicle emission standards program.[105] EPA has also explained that section 209(b)(1)(C) also supports the "whole program" interpretation of section 209(b)(1)(B), as EPA's feasibility assessment necessarily must evaluate any interactions between the standards in the proposed program (as well as other existing compliance obligations) and whether those interactions create feasibility problems.[106] The D.C. Circuit has held that "[t]he expansive statutory language gives California (and in turn EPA) a good deal of flexibility in assessing California's regulatory needs. We therefore find no basis to disturb EPA's reasonable interpretation of the second criterion." [107]

In addressing the Agency's reading of section 209(b)(1)(B) as addressing California's need for the motor vehicle emission program standards program as a whole in the 1983 LEV waiver request, for example, EPA explained that:

This approach to the "need" criterion is also consistent with the fact that because California standards must be as protective as Federal standards in the aggregate, it is permissible for a particular California standard or standards to be less protective than the corresponding Federal standard. For example, for many years, California chose to allow a carbon monoxide standard for passenger cars that was less stringent than the corresponding Federal standard as a "trade-off" for California's stringent nitrogen oxide standard. Under a standard of review like that proposed by MVMA/AIAM, EPA could not approve a waiver request for only a less stringent California standard because such a standard, in isolation, necessarily could be found to be contributing to rather than helping, California's air pollution problems.[108]

In 1994, EPA again had cause to explain the Agency's reading of section 209(b)(1)(B) in the context of California's particulate matter standards waiver request:

[T]o find that the 'compelling and extraordinary conditions' test should apply to each pollutant would conflict with the amendment to section 209 in 1977 allowing California to select standards 'in the aggregate' at least as protective as federal standards. In enacting that change, Congress explicitly recognized that California's mix of standards could 'include some less stringent than the corresponding federal standards.' See H.R. Rep. No. 294, 95th Cong., 1st Sess. 302 (1977). Congress could not have given this flexibility to California and simultaneously assigned to the state the seemingly impossible task of establishing that 'extraordinary and compelling conditions' exist for each standard.[109]

Congress has also not disturbed this reading of section 209(b)(1)(B) as calling for EPA review of California's whole program. With two noted exceptions described below, EPA has consistently interpreted this provision as requiring the Agency to consider whether California needs a separate motor vehicle emission program rather than the specific standards in the waiver 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 waiver 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 standards and developing control technology.[110] EPA notes that "the statute does not provide for any probing substantive review of the California standards by federal officials." [111] As a general matter, EPA has applied the traditional interpretation in the same way for all air pollutants, criteria and GHG pollutants alike.[112]

In a departure from its long-standing interpretation, EPA has on two separate instances limited its interpretation of this provision to California motor

[103] 87 FR 14332 (March 14, 2022).

[104] 49 FR 18887, 18890 (May 3, 1984) ("The interpretation that my inquiry under section 209(b)(1)(B) goes to California's need for its own mobile source program is borne out not only by the legislative history, but by the plain meaning of the statue as well.").

[105] 74 FR 32744, 32751, n. 44, 32761, n.104 (July 8, 2009). *See also* 78 FR 2112, 2126–27, n.78 (January 9, 2013).

[106] EPA notes there would be an inconsistency if "State standards" meant all California standards when used in section 209(b)(1) but only particular standards when used in 209(b)(1)(B) and 209(b)(1)(C). EPA has traditionally interpreted the third waiver criterion's feasibility analysis as a whole-program approach. 87 FR 14361, n.266. See also 84 FR at 51345.

[107] *Am. Trucking Ass'n* v. *EPA*, 600 F.3d 624, 627 (D.C. Cir. 2010) (*ATA* v. *EPA*). *See also Dalton Trucking* v. *EPA*, No. 13–74019 (9th Cir. 2021) ("The EPA was not arbitrary and capricious in declining to find that 'California does not need such California standards to meet compelling and extraordinary conditions,' section 7543(e)(2)(A)(ii), under the alternative version of the needs test, which requires 'a review of whether the Fleet Requirements are per se needed to meet compelling and extraordinary conditions,' 78 FR at 58,103. The EPA considered 'the relevant factors,' *Motor Vehicle Mfrs. Ass'n of U.S.* v. *State Farm Mut. Auto. Ins. Co., Inc.*, 463 U.S. 29, 42–43 (1983), including statewide air quality, 78 FR 58,104, the state's compliance with Federal National Ambient Air Quality standards for ozone and $PM_{2.5}$ on a statewide basis, *id.* at 58,103–04, the statewide public health benefits, *id.* at 58,104, and the utility of the Fleet Requirements in assisting California to meet its goals, *id.* at 58,110. Contrary to Dalton's argument, the EPA did not limit its review to two of California's fourteen air quality regions. The EPA examined the relevant data provided by CARB, and it articulated a 'satisfactory explanation for its action including a rational connection between the facts found and the choice made.' *See Motor Vehicle Mfrs. Ass'n of U.S., Inc.*, 463 U.S. at 43 (cleaned up).").

[108] 58 FR 4166, LEV Waiver Decision Document at 50–51.

[109] 49 FR at 18887, 18890.

[110] *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).

[111] *Ford Motor*, 606 F.2d 1293, 1300 (D.C. Cir. 1979).

[112] 74 FR at 32763–65; 76 FR 34693; 79 FR 46256; 81 FR 95982.

vehicle standards that are designed to address local or regional air pollution problems.[113] 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 (the alternative interpretation).[114] 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 traditional interpretation—in which EPA reviews the need for California's motor vehicle program—is the best interpretation.[115] In the SAFE 1 Reconsideration Decision, for example, the Agency evaluated the traditional interpretation and the appropriateness of interpreting section 209(b)(1)(B) in the same manner for all pollutants and provided a textual analysis of why both section 209(b)(1)(A) and section 209(b)(1)(C) better support interpreting 209(b)(1)(B) as referring to California's need for its mobile source emission program rather than to California's need for a specific standard. EPA has not identified any reason to revise the interpretation contained in the SAFE 1 Reconsideration Decision.[116] Further, EPA's two FR Notices for the HD waiver requests noted the intention to use the traditional interpretation.[117]

[113] 73 FR 12156 (March 8, 2008); SAFE 1 at 51310.

[114] SAFE 1. 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 applies to waiver requests for GHG emission-reducing standards, SAFE 1 at 51341, n. 263. Therefore, even under the SAFE 1 interpretation (which EPA does not agree with for the reasons explained below and in the SAFE 1 Reconsideration Decision), EPA's traditional interpretation would still apply to this request given all of the standards at issue are, in whole or in part, related to the reduction of criteria pollutant emissions, or would otherwise meet the SAFE 1 alternative interpretation test as it applied to GHG emission.

[115] 74 FR 32744 (July 8, 2009); SAFE 1 Reconsideration Decision at 14333–34, 14352–55, 14358–62.

[116] *Id.*

[117] *See* 87 FR 35765, 3767 (June 13, 2022).

2. CARB's Discussion of California's Need for the Standards in the Waiver Requests

a. 2018 HD Warranty Amendments

As noted above, CARB maintained that the 2018 HD Warranty Amendments are an accompanying enforcement procedure and, as such, the second waiver prong at section 209(b)(1)(B) does not apply to the waiver analysis for this regulation. Alternatively, if EPA deems that the 2018 HD Warranty Amendments are standards subject to all three waiver prongs, then CARB maintained that the regulations meet the second waiver prong.[118] CARB also noted the same conclusion applies whether this request involves a new waiver (as EPA has determined) or (in the alternative), a within-the-scope determination.

b. ACT, ZEAS, and ZEP Certification Regulations

CARB provided similar context in its ACT Regulation, ZEAS Regulation, and ZEP Certification Regulation waiver support document. CARB noted that "[t]hese three rulemaking actions individually and collectively implement measures in California's State Implementation Plan (SIP) that are needed for California to achieve compliance with national ambient air quality standards and to reduce emissions of greenhouse gases (GHGs)."[119] CARB noted that its Executive Officer determined that "California needs a separate motor vehicle emission program to meet compelling and extraordinary conditions" based in part on a number of CARB Board findings and statements and information contained in Staff Reports for the regulations.[120] CARB also noted that, even if an alternative interpretation of section 209(b)(1)(B) requires an assessment of the need for individual emission standards, CARB needs the ACT Regulation, ZEAS Regulation, and ZEP Certification Regulation to address compelling and extraordinary conditions that California faces from both criteria pollution and from climate change—each regulation expressly requires categories of medium and heavy-duty vehicles and their powertrains to emit no criteria or GHG pollutants, thereby addressing these conditions in California. CARB further notes that EPA has consistently found that California needs emission standards to address criteria pollutants, and as each of these standards reduces those pollutants EPA has no basis upon which to find that California does not need the standards.[121]

[118] 2018 HD Warranty Amendments Waiver Support Document at 23–25. CARB noted that "[t]he 2018 HD Warranty Amendments are projected to reduce statewide NO_X and PM emissions by 0.75 tons per day (tpd) and 0.008 tpd respectively, by 2030. NO_X emissions are projected to decrease in the South Coast Air Basin and in the San Joaquin Valley Air Basins by 0.24 and 0.18 tpd, respectively, by 2030." Waiver Support Document at 2.

[119] ACT/ZEAS/ZEP Waiver Support Document at 1.

[120] ACT/ZEAS/ZEP Waiver Support Document at 22–25 (citing ACT/ZEAS/ZEP Waiver Request).

3. Comments on Section 209(b)(1)(B)

EPA received several comments requesting a denial of the regulations under the two HD waiver requests based on section 209(b)(1)(B) grounds—that "such State does not need such State standards to meet compelling and extraordinary conditions." Some commenters asserted that the need for California's standards under the second waiver prong should be interpreted on a standard-by-standard basis. In the context of such an interpretation several commenters claimed that one or more of the standards in the waiver requests were not needed to meet compelling and extraordinary conditions.

Regarding the interpretive issue of whether EPA should evaluate a need for the motor vehicle emission program versus an evaluation of the need for a specific standard, EPA received a comment that raises arguments that EPA has previously addressed in other waivers. For example, this commenter claimed that EPA continues to incorrectly interpret the waiver criteria in a manner that does not allow evaluation of each new California emission standard. The commenter asserted that EPA conflates the protectiveness criteria with the "Needs Test" in section 209(b)(1)(B).[122] This

[121] *Id.* at 27 ("As discussed in Section I, the ACT regulation is projected to reduce emissions of NO_X by 6.9 tons per day (tpd), and emissions of $PM_{2.5}$ by 0.24 tpd by 2031, and the ZEAS regulation is projected to reduce emissions of NO_X by 7.60 tons per year (tpy) emissions of $PM_{2.5}$ by 0.15 tpy, and emissions of GHGs by 81 MMT per day of CO_{2e} by 2031. By 2040, the ZEAS regulation is projected to reduce emissions of NO_X by 9.99 tpy, emissions of $PM_{2.5}$ by 1.7 tpy, and emissions of GHGs by 107 MMT per day of CO_{2e}. These emissions reductions will assist California in its efforts to attain the national and state ambient air quality standards for particulate matter and ozone, reduce individual health risk, and meet climate change goals. EPA has consistently found that California 'needs' emissions standards to address the compelling and extraordinary conditions resulting from criteria pollutants, including emissions standards that expressly specify limitations of emissions of GHGs, and therefore has no basis to find that the regulations do not satisfy the 'compelling and extraordinary' criterion.").

[122] Texas Public Policy Foundation at 2–4. This commenter also asserted that legislative intent does not justify EPA's interpretation and that because California must submit a new waiver request each

commenter also asserted that EPA's traditional interpretation of the second waiver prong grants California with preferential regulatory treatment "by rubber-stamping every regulatory change CARB makes" and thus violates the equality of the states under the Equal Sovereignty doctrine and also raises questions of vast economic and political significance.[123]

EPA also received comments that there cannot be a need for GHG- and climate change-related standards (the ACT and ZEAS Regulations) under the second waiver prong. One commenter stated that the causes and effect of climate change are global, not local in nature, and therefore California does not need standards addressing climate change under the second waiver prong. Drawing on principles of equal sovereignty, one commenter asserted that section 209(b) is "unconstitutional to the extent it is construed to allow California to set emission standards aimed at addressing global climate change, as opposed to California's local conventional pollution problems." [124] As such, the commenter argued that California cannot need GHG standards because, unlike criteria pollutant emissions, GHG emissions in California "bear no relation" to "California-specific circumstances" like the local conditions identified by Congress in enacting section 209.[125] The commenter also argued that California does not need the ACT or ZEAS Regulations because the harms of climate change are not unique to California and cannot be alleviated by regulating emissions from sources in one state alone. Similarly, another commenter argued that, because climate change is a global issue, a single-state standard will be less effective and more disruptive to the economy than a Federal rule will.[126] One commenter also asserted that, within the context of the alternative interpretation, California only needs to reduce criteria air pollution in two air districts and cannot therefore "need" statewide standards.[127]

In its own comments, CARB noted that California needs to reduce criteria pollution along major roadways throughout many parts of the State and that even if California only needed to reduce criteria pollutants in the two districts with the worst overall air quality, statewide standards are still needed due to trucks travelling from one part of the State to these districts.[128] CARB noted that EPA has consistently found these challenges, and the conditions that give rise to them, are "extraordinary and compelling" and thus that California needs a separate new motor vehicle emissions program.[129] CARB explained that its ZEV requirements (*i.e.*, the ACT Regulation, ZEAS Regulation, and ZEP Certification Regulation) will result in no tailpipe emissions, reduced brake wear PM emissions, and lower upstream emissions. As such, CARB stated that, at a minimum, California "needs" its ZEV requirements to achieve reductions in criteria pollution emissions including in extreme nonattainment areas and other areas overburdened by unhealthy air quality.[130]

EPA also received comments that California does not need the individual regulations in the waiver requests (as a factual matter) because there are other, more "robust" or "logical" existing or proposed standards and/or because these standards will not be effective in reducing criteria emissions. Regarding the 2018 HD Warranty Amendments, EPA received comment that California does not need such amendments because CARB's Heavy-Duty Inspection & Maintenance Program is more effective and because EPA's HD 2027 rule ("a 50-state harmonized approach") would soon be finalized.[131] EPA also received comment that California does not need the ACT Regulation because they may actually increase criteria emissions by making new trucks more expensive and slowing fleet turnover.[132]

4. California Needs Its Standards To Meet Compelling and Extraordinary Conditions

With respect to the need for California's standards to meet compelling and extraordinary conditions, EPA continues to apply the traditional interpretation of the waiver provision.[133] Many of the adverse comments arguing against the traditional interpretation were also made in the SAFE 1 Reconsideration proceeding. EPA's response to applicable comments on these arguments remains the same as in the SAFE 1 Reconsideration decision, and the Agency incorporates the relevant reasoning in that action here.[134]

As stated above and similar to the SAFE 1 Reconsideration decision, EPA continues to believe the best way to interpret this provision is to determine whether California continues to have compelling and extraordinary conditions giving rise to a need for its own new motor vehicle emission program.[135] EPA believes this continues

time it alters or adds emission standards that California must also demonstrate a need for such standards—a test different from whether California continues to need its motor vehicle emission program.

[123] *Id.* at 3. *See also* AFPM at 16 ("[T]he 'whole program' approach would effectively force EPA to grant a waiver for any later standard California proposes once EPA decided initially that California 'needs' its own motor vehicle program to address criteria pollution. EPA decisions made in the 1970s would tie EPA's hands more than 50 years later and force approval of whatever new regulation CARB proposes for a waiver.").

[124] AFPM at 2. To the extent that this commenter also argued that section 209(b) is "unconstitutional in all its applications" because it violates the equal sovereignty doctrine, that argument is addressed in section III.E.2.

[125] *Id.* at 6–7.

[126] ATA at 6–7.

[127] Texas Public Policy Foundation at 3.

[128] CARB Supplemental Comments at 5–6, n.36. *See also* CARB Initial ACT/ZEAS/ZEP Comments at 11, 14–15 (("[B]oth the South Coast and San Joaquin Valley air districts—which are home to over half of California's population—are classified as 'extreme nonattainment areas for the 2008 eight-hour federal ozone standard.'") ("Indeed, California has the only extreme nonattainment regions for ozone in the country, and the San Joaquin Valley has the highest $PM_{2.5}$ levels in the country.").

[129] CARB Initial ACT/ZEAS/ZEP Comments at 14.

[130] *Id. See also* Environmental and Public Health Organizations at 31–33 ("California continues to experience some of the worst air quality in the nation. The South Coast and San Joaquin Valley Air Basins are in non-attainment of the national ambient air quality standards for $PM_{2.5}$ and ozone. The South Coast has never met any of the federal ozone standards established pursuant to the Clean Air Act. . . California also faces compelling and extraordinary climate change impacts. With each passing year, the dangers of climate change and health-harming air pollution become more and more clear. Climate change worsens the effects of local pollutants: in addition to a severe increase in deadly wildfires and accompanying particulate pollution, increasing heat favors the formation of additional ozone, putting compliance with the ozone NAAQS further out of reach."); SCAQMD at 1 ("The South Coast Air Basin continues to face extraordinary air pollution challenges . . . The area is nonattainment for fine particulates and classified 'extreme' for ozone nonattainment. . . . To highlight one aspect of one of the regulations, the Zero Emission Airport Shuttle Bus regulation will promote the use of zero-emission airport grand transportation at California's commercial airports. The South Coast Air Basin happens to be home to five commercial airports. Among many necessary initiatives for attainment of the NAAQS, Southern California simply needs zero-emission airport transportation to succeed.").

[131] ATA at 5–6.

[132] AFPM at 2–3.

[133] EPA's two notices for comment on CARB's waiver requests noted that the review under the second waiver prong would be done under this traditional interpretation. EPA has not reopened this interpretive issue by these notices nor by this final decision.

[134] 87 FR 14332, 14334, 14352–55, 14358–62 (March 14, 2022).

[135] To the extent comments contend that EPA's interpretation of the second waiver prong provides preferential treatment to California over other States, EPA notes that the review of CARB waiver requests is limited to the criteria set forth in section 209 and that we need not engage in an Equal Sovereignty constitutional law analysis. (See SAFE 1 Reconsideration Decision at 14376). In any case, for the purposes of reviewing the second waiver prong, EPA incorporates the reasoning from the SAFE 1 Reconsideration Decision at 14360. As such, EPA evaluates CARB's waiver requests based

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to be true for section 209(b)(1)(B), which was at issue in the SAFE 1 Reconsideration action.[136] EPA finds that California has demonstrated that it needs its program to address compelling and extraordinary conditions, those arising from criteria pollution and separately, those arising from greenhouse gases. No comments have provided an analytical basis for undermining California's need.[137]

Although nothing in the statutory text limits California's program or the associated waivers to a certain category of air pollution problems, EPA notes that each of the regulations contained in the two waiver requests from CARB is clearly designed to address emissions of criteria pollutants and will have that effect, regardless of whether some also reduce greenhouse gases. As such, these standards are no different from all prior standards addressing criteria emissions that EPA has found to satisfy the section 209(b)(1)(B) inquiry. In any case, there is no statutory basis to suggest that GHG emissions should be treated any differently.

Further, it is inappropriate for EPA to second-guess CARB's policy choices and objectives in adopting its heavy-duty vehicle and engine standards designed to achieve long term emission benefits for both criteria emissions and greenhouse gas emissions. EPA's longstanding practice, based on the statutory text, legislative history, and precedent, calls for deference to California in its approach to addressing the interconnected nature of air pollution within the state. Critically, EPA is not to engage in "probing substantive review" of waiver requests,[138] but rather to "afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare." [139]

As noted above, the term compelling and extraordinary conditions "does not refer to the levels of pollution directly." [140] California continues to experience compelling and extraordinary conditions that cause it to need a separate motor vehicle emissions program. These include geographical and climatic conditions (like thermal inversions) that, when combined with large numbers and high concentrations of automobiles, create serious air pollution problems.[141] For example, as stated in CARB's waiver request and additional written comment, California and particularly the South Coast and San Joaquin Valley Air Basins continue to experience some of the worst air quality in the nation and continue to be in nonattainment with several NAAQS.[142] In the context of these serious and long-lasting pollution challenges, California has demonstrated that every reduction in ozone precursor and particulate emissions is particularly critical.

In addition, EPA did not receive any adverse comments suggesting that California no longer needs a separate motor vehicle emissions program to address the various conditions that lead to serious and unique air pollution problems in California. EPA did receive comment that contends that California does not have a need for its standards as only two areas in the State (the San Joaquin Valley and the South Coast)

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solely on the criteria in section 209(b)(1) and does not consider factors outside of those statutory criteria, including constitutional claims. EPA continues to note that Congress struck a reasonable balance in authorizing two standards (EPA's and California's if certain criteria are met) but that that equal sovereignty principle simply does not fit in section 209. EPA further addresses the commenter's concerns relating to the Equal Sovereignty doctrine in the Other Issues section below. Similarly, to the extent that commenters contend that EPA's traditional interpretation raises questions of vast economic and political significance where Congress must speak clearly, EPA believes that this doctrine is inapplicable. That doctrine posits that in certain extraordinary cases, Congress should not be presumed to delegate its own authority over matters of vast economic and political significance to Federal agencies in the absence of clear statutory authorization. These concerns have no logical connection to provisions that preserve state authority in areas that fall within the police powers of states, such as the protection of the environment. Further, EPA has consistently explained that section 209(b)(1) of the Act limits the Agency's authority to deny California's requests for waivers to the three criteria contained therein and as such the Agency has consistently refrained from reviewing California's requests for waivers based on any other criteria. EPA acknowledges that California adopts its standards as a matter of law under its state police powers, that the Agency's task in reviewing waiver requests is limited to evaluating California's request according to the criteria in section 209(b). Furthermore, the language of section 209 provides clear statutory authorization for the waiver framework, and the history of section 209(b) and (e) provide additional evidence that Congress intended for California to have great deference in designing its own vehicle program. *MEMA I*, 627 F.2d at 1111.

[136] EPA notes that if Congress had been concerned with only California's smog problems when it enacted section 209(b) in 1967 it would have limited California's ability to obtain a waiver to standards for only hydrocarbons and NO_X, which are the known automotive pollutants that contribute to California's smog problem. But Congress was aware that California would most likely decide to regulate other non-smog forming pollutants. "[T]he total program for control of automotive emissions is expected to include [in addition to hydrocarbons and oxides of nitrogen] carbon monoxide, lead and particulate matter." 123 Cong. Rec. 30951 (November 2, 1967) (Remarks of Rep. Herlong). Further, Congress intended that California would serve as a pioneer and a laboratory for the nation in setting new motor vehicle emission standards and developing control technology, which extends to ZEVs, BEVs, FCVs and PHEVs. "The waiver of preemption is for California's "unique problems and pioneering efforts." S. Rep. No. 403, 90th Cong., 1st Sess. 33 (1967); 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). Thus, for example, in the 1990 Amendments Congress mandated California's LEV program, which includes the ZEV program, in its State Implementation Plan provision regarding fleet programs required for certain non-attainment areas relating to issuing credits for innovative and cleaner vehicles. Specifically, "standards established by the Administrator under this paragraph . . . shall conform as closely as possible to standards which are established for the State of California for ULEV and ZEV vehicles in the same class. Section 246(f)(4). ("[W]hen it amended the Act in 1990, [Congress recognized] California's LEV program, including the ZEV mandate. *See e.g.*, Act sections 241(4), 243(f), 246(f)(4)." *MVMA*, 17 F.3d at 536.) See also 87 FR at 14360.

[137] EPA notes that CARB ACT Regulation is only regulating emissions from new motor vehicles and that such standards are the types preempted under section 209(a). Section 209(b) requires EPA to waive such standards unless one or more of the specified criteria are found. CARB's ACT Regulation is focused on emissions of air pollutants from this vehicle source and to EPA's knowledge is not designed to address a broader set of transportation and energy issues nor is the scope of the waiver criteria in section 209 designed for such a broad and searching review.

[138] *Ford Motor*, 606 F.2d 1293, 1300 (D.C. Cir. 1979).

[139] *MEMA II*, 142 F.3d 449, 453 (D.C. Cir. 1998).

[140] 49 FR 18887, 18890 (May 3, 1984).

[141] In response to commenters that believe that the traditional interpretation is simply a "rubber-stamp[ ]" because EPA has already once decided that California "needs" its own motor vehicle program, EPA notes that although California has yet to resolve its pollution problems, that does not mean it will never do so or that Congress could not aim for that goal. *See* 87 FR at 14336 n.22. So long as those problems persist, however, EPA's affirmance of California's need for a separate vehicle program allows California to continue to serve as a "laboratory" for resolving its own pollution problems and those of the entire nation. *See MEMA I*, 627 F.2d at 1109–11.

[142] *See, e.g.*, CARB Supplemental Comments at 5–6, n.36; CARB Initial ACT/ZEAS/ZEP Comments at 11, 14–15; SJVUAPCD at 2 ("Despite achieving significant emissions reductions through decades of implementing the most stringent stationary and mobile regulatory control program in the nation, significant additional reductions in nitrogen oxide (NO_X) emissions are needed to attain the latest health-based National Ambient Air Quality Standards (NAAQS) for ozone and $PM_{2.5}$."); State of California et al at 12–13 ("Sixteen of the 8-hour ozone nonattainment areas are located in California and the only two extreme nonattainment areas in the nation are located in the South Coast Air Basin and San Joaquin Valley of California. Indeed, for the South Coast Air Basin to meet the federal ozone standards, overall NO_X emissions need to be reduced by 70 percent from today's levels by 2023, and approximately 80 percent by 2031."); Environmental and Public Health Organizations at 32 ("California continues to experience some of the worst air quality in the nation. The South Coast and San Joaquin Valley Air Basins are in non-attainment of the national ambient air quality standards for $PM_{2.5}$ and ozone. The South Coast has never met any of the federal ozone standards established pursuant to the Clean Air Act . . . [H]eavy-duty vehicles represent the largest source of NO_X emissions reductions needed to attain the 2015 8-hour ozone National Ambient Air Quality Standards (NAAQS), and California's air quality regulations, like those at issue here, are central to the state's attainment strategy for the South Coast Air Basin.").

have serious air quality issues. EPA believes this commenter misses the mark for several reasons. The commenter provided no legal rationale for limiting the "compelling and extraordinary conditions" to those conditions experienced by all of California. In addition, California is responsible, in part, for developing State Implementation Plan (SIP) measures to address nonattainment and maintenance and EPA sees no basis to deny a waiver for regulations designed at the state level and that address emission sources that move around the state. Nor has the commenter provided sufficient data or analysis to demonstrate that other areas of California do not need the motor vehicle standards program to address compelling and extraordinary conditions. Based on the record, EPA is unable to identify any change in circumstances or any evidence to undermine EPA's prior findings that California needs its motor vehicle emissions program to address compelling and extraordinary conditions. Therefore, using the traditional approach of reviewing the need for a separate California program to meet compelling and extraordinary conditions, EPA cannot deny any of the waiver requests.

Further, EPA does not believe, to the extent that it is appropriate to examine the need for CARB's individual heavy-duty vehicle and engine standards to meet compelling and extraordinary conditions, that the opponents of the waiver requests have met their burden of proof that California does not need these standards. The record demonstrates that each regulation in the two waiver requests is designed to produce reductions in criteria emissions that continue to be a serious air quality concern in California, which is a result of its compelling and extraordinary conditions. While EPA believes that CARB has demonstrated the criteria emission reductions associated with its ACT, ZEAS, and ZEP Certification Regulations and therefore a need for such standards, EPA also believes that, to the extent such standards are designed to also address climate change conditions in California, such standards are needed to meet compelling and extraordinary conditions.[143] EPA notes that the record contains evidence that global warming continues to pose an extraordinary threat to the economic well-being, public health, natural resources and environment in California. These adverse impacts include exacerbation of local air quality problems, severe wildfires, extreme drought, acidification threats to marine ecosystems as carbon dioxide is absorbed by the ocean along California's coastline, and a host of other impacts.[144] EPA believes the same conditions and impacts assessed in the SAFE 1 Reconsideration Decision apply to this waiver decision and incorporates that analysis here.[145]

Regarding comments received that the 2018 HD Warranty Amendments are not needed because EPA's HD 2027 rule and CARB's Heavy-Duty Inspection & Maintenance Program are or will be more effective, EPA notes that California is entitled to substantial deference in its policy choices regarding the best path to address its air pollution problems, including the choice to adopt or retain emission standards that overlap with previous California standards and EPA's standards.[146] In the context of these arguments about effectiveness, it is important to note that under the statute, California's standards in the aggregate must be as protective as EPA's standards—there is no requirement that they be more protective. This reinforces the deference owed to California in its determination of whether it needs a particular configuration of standards as its program to address compelling and extraordinary conditions. In response to comments received that the specific regulations are not necessary (as a factual matter) because they may slow fleet turnover, EPA finds that these commenters have not met their burden of proof to demonstrate that such a result in fleet turnover will occur and that if it did occur, it would cause an increase in emissions. Commenters have also failed to demonstrate that California does not continue to need every reduction in criteria pollutant emissions it can obtain.[147] As EPA continues to believe California has compelling and extraordinary conditions, it is appropriate for EPA to continue giving substantial deference to California's policy choices on how it chooses to protect public health and welfare and achieve its air quality objectives.

5. Section 209(b)(1)(B) Conclusion

As previously explained, EPA believes that the traditional interpretation of the section 209(b)(1)(B) criterion is the best reading of the statute.[148] The traditional approach is for EPA to evaluate California's need for a separate motor vehicle emission program to meet compelling and extraordinary conditions. The issue of whether any particular standard is needed is not the inquiry directed under section 209(b)(1)(B). Applying the traditional approach of assessing California's need for a separate motor vehicle emissions program to address compelling and extraordinary conditions, with the reasoning noted above and with due deference to California, EPA cannot deny the respective waiver requests. CARB has repeatedly demonstrated the need for its motor vehicle program to address compelling and extraordinary conditions in California and opponents of the waiver requests have not demonstrated that California does not need its state standards to meet compelling and extraordinary conditions. Therefore, I determine that I cannot deny either of the waiver requests under section 209(b)(1)(B).

In addition, although EPA does not believe an interpretation that requires a demonstrated need for a specific standard is appropriate, EPA's review of the complete record indicates that opponents of the waiver requests have not met the burden of proof necessary to demonstrate that California does not

[143] 87 FR 14332, 14365–66 (March 14, 2022).

[144] California Supplemental ACT Comments at 16–17. California also noted that the ACT Regulation will ensure the development and commercialization of technology required to achieve further emission reductions to address climate changes and to attain national ambient air quality standards (NAAQS) in California.

[145] 87 FR 14332, 14334, 14352–55, 14358–62.

[146] *See, e.g.*, 78 FR at 2129 ("The Commenter . . . relies on the existence of the federal GHG standards and the 'deemed to comply' language to claim that there is no need for CARB's GHG standards . . . EPA believes that the commenter does not appropriately appreciate the role that Congress envisioned California to play as an innovative laboratory that may set standards that EPA may ultimately harmonize with or that California or EPA may otherwise accept compliance with the others emission program as compliance with their own."). In addition, given that there are a variety of regulatory measures and levels of stringency that California may choose to address the durability of emission controls on vehicles and engines while in use, and the lack of evidence in the record that an inspection and maintenance program is more protective than a warranty regulation (or that both may be implemented at some point), EPA finds that opponents of the waiver have not met their burden of proof with evidence to support their policy preference on an inspection and maintenance program.

[147] CARB Supplemental Comments at 5–6 ("But AFPM provides no evidence that ACT will slow fleet turnover at all, let alone to the degree necessary to increase pollution. And none of these comments refutes CARB's conclusion that zero-emission vehicles placed into well-suited applications will be less expensive, over their lifetimes, than conventional ones, or explains why the requirement to sell a certain percentage of vehicles that will save owners or operators money would slow turnover to the (unspecified) extent required to increase emissions. Moreover, the recently passed Inflation Reduction Act includes numerous financial incentives that will decrease the cost of zero-emission heavy-duty vehicles, further undercutting the claim that the high costs of those vehicles will slow fleet turnover.").

[148] 87 FR 14332, 14334, 14352–55, 14358–62 (March 14, 2022).

need its ACT Regulation, ZEAS Regulation, ZEP Certification Regulation, and the 2018 HD Warranty Amendments when assessed individually.

D. Third Waiver Criterion: Are California's Regulations Consistent With Section 202(a) of the Clean Air Act?

Under section 209(b)(1)(C), EPA must grant California's waiver request unless the Agency finds that California's standards and accompanying enforcement procedures are not consistent with section 202(a) of the Act. EPA's longstanding approach to this third waiver criterion is limited to reviewing California's feasibility assessment and evaluating whether the opponents of the waiver have met their burden of establishing: (1) That California's standards are technologically infeasible, or (2) that California's test procedures are inconsistent with the Federal test procedures. As with the other two criteria, our review is narrow and deferential to California.

Each of CARB's two waiver requests contained a demonstration that its standards in each request were based on technologies currently available or reasonably projected to be available in the lead time given and giving consideration to costs. As such, CARB argued that its standards did not create any issues regarding the consistency with section 202(a) requirements. CARB's waiver requests included their state rulemaking records for each standard, including CARB's detailed responses to any issues raised regarding technological feasibility.

Commenters opposed to the waiver did not argue that the 2018 HD Warranty Amendments were not technologically feasible or that any of the waiver requests presented inconsistent test procedures. Further, while EPA received comment to suggest that CARB's ACT Regulation and ZEAS Regulation were not appropriate policy choices, to the extent commenters raised feasibility issues regarding the ACT Regulation and ZEAS Regulation, such commenters either failed to meet the burden of proof to demonstrate infeasibility in light of California's demonstration of feasibility or such comments fell beyond the scope of EPA's technological feasibility review. As explained in detail below, based on our examination of the record, EPA finds that the commenters have failed to meet their burden of proof as to the third prong.

In addition, certain commenters asserted that, even if the standards were actually feasible, EPA should nonetheless deny the waiver based on the lead time and stability requirements for certain federal heavy-duty vehicle standards found in section 202(a)(3)(C) of the Act. These commenters claim that because the third waiver criterion requires California's standards to be "consistent with" section 202(a), California must necessarily comply with section 202(a)(3)(C), as that is a sub-provision of 202(a). This argument is inconsistent with the plain text of the statute. Congress used the phrase "consistent with," not "compliant with." The statutory phrase "consistent with" indicates that California's standards should be congruent and compatible with section 202(a), which requires that Federal standards provide adequate lead time and consider cost. Thus, EPA interprets this prong of the waiver analysis to require California's standards to be feasible. The statute does not, however, obligate California to comply with provisions of section 202(a) directed solely at the development and design of federal standards. This would make little sense given Congress' intent to set up two motor vehicle programs in title II—with California's program dedicated to address the state's air quality problems and serve as a testing ground for motor vehicle emissions policy designs and technologies. If exactly the same requirements and conditions apply to both the Federal and the California programs, then they would necessarily overlap extensively if not completely, and California could not serve as the testing ground that Congress intended. Further, applying some of the language in 202(a) to California standards would directly conflict with the text and intent of the waiver provisions in section 209. For those reasons, for over five decades, EPA has consistently granted waivers to California without assessing compliance with section 202(a)(3)(C), with a single exception (in 1994).

The commenters' argument regarding section 202(a)(3)(C) fails for a number of additional reasons. That provision, which requires at least four years of lead time and three years of stability, is a companion to a specific Federal standard-setting mandate, section 202(a)(3)(A). That mandate is for EPA to promulgate certain heavy-duty criteria pollutant standards that reflect the greatest degree of emission reduction achievable giving appropriate consideration to a number of factors. Congress paired the mandated stringency with the lead time and stability requirements. By contrast, California may adopt state standards that are "in the aggregate" at least as protective as the Federal standards. As such, California is also not obligated to comply with either the maximum stringency requirements or the companion lead time provision in section 202(a)(3)(C) to provide the four years of lead time and three years of stability that Congress determined was needed for the federal market.

This plain text reading is well-supported by the history and purpose of the Act and is also consistent with administrative and judicial precedents. Commenters rely heavily on EPA's single contrary decision in a 1994 medium-duty vehicle waiver (1994 MDV waiver) even though the interpretation contained in that decision was inconsistent with EPA's historical practice in waiver decisions both before and after 1994.[149] Indeed, by 2012 EPA had indicated that it did not believe section 202(a)(3)(C) applied to California's heavy-duty engines and vehicle standards and issued a decision consistent with its historical practice.[150] We acknowledge that the 1994 MDV waiver took a different position on this issue than we do today, but as explained below, we believe that our practice, both before and after the 1994 MDV waiver, represents the best understanding of the statute. Importantly, the interpretation in the 1994 MDV waiver is inconsistent with the plain text of the statute, as discussed below. In this action, EPA is therefore taking an approach similar to its approach both before and after the 1994 MDV waiver, and different from the 1994 MDV waiver.[151] EPA believes that its historical practice and application of the "consistency with section 202(a)" language is permissible and is the best interpretation of the statute based on all the relevant factors. Additionally, commenters also mistakenly rely on the D.C. Circuit's opinion in *American Motors Corp.* v. *Blum*, 603 F.2d 978 (D.C. Cir. 1979) (*Blum*). *Blum* addressed a different provision of the CAA and is distinguishable from the instant waivers.

The balance of this section begins with a discussion of EPA's longstanding approach to the third waiver criterion and relevant case law (III.D.1). We then

[149] See 77 FR 9239, 9249 (February 16, 2012); 46 FR 22302, 22304 (1981).

[150] 77 FR at 9239. Moreover, in October 2000, EPA informed California of the intent to "conduct a new evaluation of . . . arguments . . . in regard to whether the lead time provisions of the Act apply to California. . . . [As well as] evaluate the applicability of the stability requirement in Section 202(a)(3)(C)." Letter from Margo Oge, Director, Office of Transportation and Air Quality, to Michael Kenny, CARB Executive Officer (Oct. 24, 2000).

[151] *FCC* v. *Fox Television Stations, Inc.*, 556 U.S. 502 (2009).

summarize the positions of CARB and the commenters (III.D.2 and III.D.3 respectively). Subsequently, we evaluate the waiver requests under the historical approach, finding that those opposed to the waiver have failed to meet their burden of proof (III.D.4). We then explain why, contrary to the commenters' arguments, the statutory lead time requirements in section 202(a)(3)(C) do not apply to California (III.D.5). A brief conclusion follows (III.D.6).

1. Historical Interpretation of Section 209(b)(1)(C)

Under section 209(b)(1)(C), EPA must grant California's waiver request unless the Agency finds that California standards and accompanying enforcement procedures are "not consistent" with section 202(a) of the Act.[152] Section 202(a)(1) grants EPA authority to regulate motor vehicle emissions generally and the accompanying section 202(a)(2) specifies that those 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."[153] Thus, no specific lead time requirement applies to standards promulgated under section 202(a)(1). EPA has long limited its evaluation of whether California's standards are consistent with 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;[154] or whether (2) California and Federal test procedures are incompatible so that a single vehicle could not be subjected to both tests.[155] EPA has also explained that "the import of section 209(b) is not that California and 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."[156] 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 whether the regulations under review are the most effective or whether the technology incentivized by California's regulations are the best policy choice or 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 209(b)(1)(C).[157] California's accompanying enforcement procedures would also be inconsistent with 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 California standards are inconsistent with section 202(a), EPA makes a finding as to whether there is inadequate lead time to permit the development of technology that is necessary to meet the standards for which a waiver is sought. For this finding, 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 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."[158]

Regarding the technology 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."[159] In *MEMA I*, the court addressed the cost of compliance issue at some length in reviewing a waiver decision. According to the court:

> 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. 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. Congress wanted to avoid undue economic disruption in the automotive manufacturing industry and also sought to avoid *doubling or tripling* the cost of motor vehicles to purchasers. It, therefore, requires that the emission control regulations be technologically feasible within economic parameters. Therein lies the intent of the cost of compliance requirement (emphasis added).[160]

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

[152] EPA must grant a waiver request unless it finds that there is: "[i]nadequate time to permit the development of the necessary technology given the cost of compliance within that time period." H. Rep. No. 728, 90th Cong., 1st Sess. 21 (1967). "That California standards are not consistent with the intent of section 202(a) of the Act, including economic practicability and technological feasibility." S. Rep. No. 403, 90th Cong. 1st Sess. 32 (1967).

[153] CAA section 202(a)(2); H.R. Rep. No. 95–294, 95th Cong., 1st Sess. 301 (1977) ("Also preemption could not be waived if California standards and enforcement procedures were found not to be 'consistent with section 202(a)' (relating to the technological feasibility of complying with these standards).").

[154] Previous waivers of Federal preemption have thus stated that California's standards are not consistent with section 202(a) 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. *See e.g.*, 36 FR 8172 (April 30, 1971) (HD MY 1972 and later MY); 38 FR 30136 (Nov. 1, 1973); 40 FR 23102, 23105 (May 28, 1975) (extending waiver of April 30, 1971, to MY 1975 HD standards); 40 FR 30311 (July 18, 1975); 70 FR 50322 (August 26, 2005) (2007 California Heavy-Duty Diesel Engine Standards); 71 FR 335 (Jan. 4, 2006) (2007 Engine Manufacturers Diagnostic standards); 77 FR 9239 (February 16, 2012) (HD Truck Idling Requirements); 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).

[155] To be consistent, the California certification procedures need not be identical to the Federal certification procedures. California procedures would be inconsistent, however, if manufacturers would be unable to meet the state and the Federal requirements with the same test vehicle in the course of the same test. *See, e.g.*, 43 FR 32182 (July 25, 1978).

[156] 46 FR 22032, 22034–35 (April 15, 1981).

[157] 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)).

[158] *MEMA II*, 142 F.3d 449, 463 (Emphasis added) (internal citations omitted).

[159] *MEMA* v. *EPA*, 637 F.2d. 1118 (D.C. Cir. 1979).

[160] *MEMA I* 627 F.2d at 1118 (emphasis added). *See also id.* at 1114, n.40 ("[T]he 'cost of compliance' criterion relates to the timing of standards and procedures.").

excessive to find that California's standards are infeasible and therefore inconsistent with section 202(a).[161]

Regarding the burden of proof under the third prong, EPA has previously stated that the third prong's feasibility determination is limited to: (1) Whether those opposed to the waiver have met their burden of establishing that California's standards are technologically infeasible, including whether they include adequate lead time or (2) that California's test procedures impose requirements inconsistent with the Federal test procedure. Additionally, the burden of proof regarding the cost component of feasibility also falls upon the waiver opponents.

The scope of EPA's review under this criterion is also narrow.[162] This is consistent with the motivation behind section 209(b) to foster California's role as a laboratory for motor vehicle emission control, in order "to continue the national benefits that might flow from allowing California to continue to act as a pioneer in this field." [163] According to the D.C. Circuit, "The history of congressional consideration of the California waiver provision, from its original enactment up through 1977, indicates that Congress intended the State to continue and expand its pioneering efforts at adopting and enforcing motor vehicle emission standards different from and in large measure more advanced than the corresponding federal program; in short, to act as a kind of laboratory for innovation." [164] EPA has thus long believed that California must be given substantial deference when adopting motor vehicle emission standards because such action may require new or improved technology to meet challenging levels of compliance. Over 50 years ago, EPA's Administrator discussed this deference in an early waiver decision that approved a waiver request for California:

> There is a well-established pattern that emission control technology have been phased in through use in California before their use nationwide. This pattern grew out of early recognition that auto caused air pollution problems are unusually serious in California. In response to the need to control auto pollution, California led the nation in development of regulations to require control of emissions. This unique leadership was recognized by Congress in enacting federal air pollution legislation both in 1967 and 1970 by providing a special provision to permit California to continue to impose more stringent emission control requirements than applicable to the rest of the nation.[165]

In a subsequent waiver decision approving a waiver request for California, the Administrator stated:

> 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 shape of a 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 these risks and costs against the potential benefits from reduced emissions is a central policy decision for any regulatory agency under the statutory scheme outlined above, I believe I am required to give very substantial deference to California's judgments on this score." [166]

In keeping with this deferential posture, as noted earlier, EPA's historical interpretation of section 209(b) has also been to assess whether California's program of motor vehicle emission standards *as a whole* provides for adequate lead time consistent with section 202(a). This is because EPA's long-standing interpretation is that the phrase "State standards" in section 209(b)(1) means the entire California new motor vehicle emissions program.[167] Similar to the second waiver criterion, EPA has also historically viewed the third waiver criterion's feasibility analysis as a whole-program assessment, *i.e.*, one that ensures manufacturers have sufficient lead time to comply with the program's standards as a whole, accounting for the interactions between technologies necessary to meet both new and existing standards, and any interactions between those technologies that would affect feasibility.[168] EPA's assessment under section 209(b)(1)(C) is thus not in practice a standard-by-standard review. Rather it involves an analysis of feasibility that builds on prior analyses of feasibility and any impacts of the new standards on the feasibility of the remainder of the program.[169]

EPA has also long recognized that the laboratory role and nature of California's standards may result in California amending or revising requirements after the grant of a waiver, or otherwise adjusting the implementation of the waived standards as circumstances dictate.[170] EPA's waiver practice when California amends a previously waived standard or accompanying enforcement procedure is to consider whether such an amendment is within the scope of a previously granted waiver or requires a new waiver. If EPA considers the amendment as within the scope of a prior waived standard, then the Agency reviews the amendment to determine that it does not undermine California's determination that its standards in the aggregate are as protective of public health and welfare as applicable Federal standards, does not affect the regulation's consistency with section 202(a), and raises no new issues affecting EPA's previous waiver decisions.

Decisions from the D.C. Circuit provide guidance regarding the lead time requirements of section 202(a). Section 202(a)(2) states that "any regulation prescribed under paragraph (1) of this subsection (and any revision thereof) shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate

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[161] *See, e.g.*, 47 FR 7306, 7309 (Feb. 18, 1982); 43 FR 25735 (Jun. 14, 1978); 46 FR 26371, 26373 (May 12, 1981).

[162] 41 FR 44208, 44210 (October 7, 1976)("While section 209(b) requires consideration of whether the adoption of standards by California is consistent with section 202(a), nevertheless [the Administrator's] discretion in determining whether to deny the waiver is considerably narrower than [his] discretion to act or not to act in the context promulgating Federal standards under section 202(a).").

[163] 40 FR 23102, 23103 (May 28, 1975) (waiver decision citing views of Congressman Moss and Senator Murphy).

[164] *MEMA I*, 627 F.2d 1095, 1110.

[165] 38 FR 10317, 10324 (April 26, 1973) ("[T]he experience of Federal and State officials as well as the industry itself in meeting such standards for California will facilitate an orderly implementation of the more stringent, catalyst-forcing standards for California.").

[166] 40 FR 23102, 23104 (May 28, 1975). *See also* 78 FR 2111, 2115–16 (Jan. 9, 2013); 79 FR 46256, 46258 (Aug. 7, 2014); 81 FR 95982, 95984 (Dec. 29, 2016).

[167] 74 FR 32744, 32749 (July 8, 2009); 70 FR 50322 (Aug. 26, 2005); 77 FR 9239 (Feb. 16, 2012); 78 FR 2112, 2123 (Jan. 9, 2013).

[168] As a practical matter, EPA's consideration of the third waiver prong, like the first waiver prong, does not necessitate in every case that EPA re-review previously-approved aspects of California's program—for example, where it is evident that new standards will not interact with existing ones. But where a new waiver request might affect one of EPA's previous assessments under any of the waiver criteria, EPA reviews the program as a whole—or any aspect necessary to confirm alignment with the statutory text. 87 FR at 14361 and n.266.

[169] *Id.* at 14361. The feasibility assessment conducted for a new waiver request focuses on the standards in that request but builds on the previous feasibility assessments made for the standards already in the program and assesses any new feasibility risks created by the interaction between the standards in the petition and the existing standards.

[170] *See e.g.*, 68 FR 19811 (April 22, 2003), 71 FR 78190 (December 28, 2006), 75 FR 44948 (July 30, 2006).

consideration to the cost of compliance within such period." For example, in *Natural Resources Defense Council* v. *EPA (NRDC)*, the court reviewed claims that EPA's PM standards for diesel cars and light trucks were both too stringent and not stringent enough. In upholding the EPA standards, the court concluded:

> Given this time frame [a 1980 decision on 1985 model year standards]; we feel that there is substantial room for deference to the EPA's expertise in projecting the likely course of development. The essential question in this case is the pace of that development, and absent a revolution in the study of industry, defense of such a projection can never possess the inescapable logic of a mathematical deduction. We think that the EPA will have demonstrated the reasonableness of its basis for projection if it answers any theoretical objections to the [projected control technology], identifies the major steps necessary in refinement of the technology, and offers plausible reasons for believing that each of those steps can be completed in the time available.[171]

Another key case addressing the lead time requirements of section 202(a) is *International Harvester* v. *Ruckelshaus (International Harvester)*. In *International Harvester*, the court reviewed EPA's decision to deny applications by several automobile and truck manufacturers for a one-year suspension of the 1975 emission standards for light-duty vehicles. In the suspension proceeding, the manufacturers presented data which, on its face, showed little chance of compliance with the 1975 standards, but which, at the same time, contained many uncertainties and inconsistencies regarding test procedures and parameters. In a May 1972 decision, the Administrator applied an EPA methodology to the submitted data, and concluded that "compliance with the 1975 standards by application of present technology can probably be achieved," and so denied the suspension applications.[172] In reviewing the Administrator's decision, the court found that the applicants had the burden of providing data showing that they could not comply with the standards, and if they did, then EPA had the burden of demonstrating that the methodology it used to predict compliance was sufficiently reliable to permit a finding of technological feasibility. In that case, EPA failed to meet this burden.

In *NRDC* the court pointed out that the court in *International Harvester* "probed deeply into the reliability of EPA's methodology" because of the relatively short amount of lead time involved (a May 1972 decision regarding 1975 MY vehicles, which could be produced starting in early 1974), and because "the hardship resulting if a suspension were mistakenly denied outweigh[s] the risk of a suspension needlessly granted."[173] The *NRDC* court compared the suspension proceedings with the circumstances concerning the diesel standards before it: "The present case is quite different; 'the base hour' for commencement of production is relatively distant, and until that time the probable effect of a relaxation of the standard would be to mitigate the consequences of any strictness in the final rule, not to create new hardships."[174] The *NRDC* court further noted that *International Harvester* did not involve EPA's predictions of future technological advances, but an evaluation of presently available technology.

2. CARB's Discussion of the Regulations' Consistency With Section 202(a) in the Waiver Requests

Each of CARB's waiver requests demonstrated that its standards were based on technologies currently available or reasonably projected to be available in the lead time provided under each regulation, taking into consideration costs and other factors. As such, CARB argued that its standards did not create any issues regarding consistency with section 202(a) requirements. CARB's waiver requests included the state rulemaking records for each standard, including CARB's response to any issues raised regarding technological feasibility. In this section III.D.2, we present CARB's arguments for each of its waiver requests in turn. In the following section III.D.3, we present the commenters arguments. EPA has reviewed the information submitted to the record of this proceeding to determine whether the parties opposing the waiver requests have met their burden to demonstrate that the respective standards (and accompanying enforcement procedures) are not consistent with section 202(a). As explained in subsection III.D.4 below, EPA has evaluated each of the waiver requests under the test historically used and is concluding that the opponents of the waiver requests have not met the burden of proof regarding the third waiver prong. EPA also discusses, in subsection III.D.5, why, contrary to the commenters' arguments, the statutory lead time requirements in section 202(a)(3)(C) do not apply to California.

a. 2018 HD Warranty Amendments

CARB's waiver request noted that the elements of the 2018 HD Warranty Amendments that lengthen the warranty periods present no issues regarding technical feasibility or lead time. At the outset, CARB noted that although manufacturers are incentivized to produce and use more durable emission related components and systems in 2022 and beyond, the manufacturers are not compelled to do so. Because manufacturers may elect to use their existing components to comply with the regulations, CARB contended that EPA's prior findings of adequate technical feasibility and lead time found within EPA's waiver for California's 2007 and later model years remains applicable and dispositive. CARB also noted that no commenters raised objections regarding the feasibility and lead time of the extended emission warranty periods during its rulemaking. CARB noted similar findings regarding the new minimum allowable maintenance schedules. CARB also noted its belief that it appropriately considered the costs of the 2018 HD Warranty Amendments and that it is not aware of any test procedure consistency issues.[175]

b. ACT, ZEAS, and ZEP Certification Regulations

CARB's ACT Regulation waiver request provided information pertaining to consistency with section 202(a)'s feasibility requirements for each of the three regulations covered by the request. CARB noted that the ACT Regulation's requirements that new 2024 MY medium- and heavy-duty ZEVs be produced and delivered for sale to ultimate purchasers in California are consistent with section 202(a) because the required technology already exists.[176] CARB's waiver request also

[171] *NRDC*, 655 F.2d 318, 331 (D.C. Cir. 1981).

[172] *International Harvester* v. *Ruckelshaus*, 478 F 2d. 615, 626 (D.C. Cir. 1979).

[173] *NRDC*, 655 F.2d 318, 330.

[174] *Id.* The "hardships" referred to are hardships that would be created for manufacturers able to comply with the more stringent standards being relaxed late in the process.

[175] 2018 HD Warranty Amendments Support Document at 20–23.

[176] ACT/ZEAS/ZEP Waiver Support Document at 31–32 ("As described in the ACT regulation's rulemaking record, medium- and heavy-duty ZEVs are currently commercially available . . . This includes vehicles from companies such as BYD, Motiv, Phoenix Motorcars, XOS, and others. Traditional manufacturers of heavy-duty vehicles, including Freightliner, Kenworth, Peterbilt, and Volvo, are currently demonstrating heavy-duty ZEVs in California, with the intent to launch commercial products by 2024. 15 manufacturers are offering more than 50 different ZEV truck and bus configurations, other than transit buses, from Class 3 through Class 8 through the Hybrid and Zero-Emission Truck and Bus Voucher Incentive

Continued

noted that the ACT Regulation implements the ZEV sales requirement through a credit and deficit mechanism, whereby manufacturers' deficits are generated commencing with the 2024 model year based, in part, on their annual sales of onroad vehicles with gross vehicle weight ratings (GVWRs) exceeding 8,501 pounds produced and delivered for sale in California. Manufacturers may earn credits by producing and delivering for sale, to ultimate consumers in California, certain types of ZEV vehicles, and subsequently there is a banking and trading system.[177]

Similarly, regarding the ZEAS Regulation, CARB noted that the technology needed to produce zero-emission airport shuttle vehicles currently exists.[178] Finally, CARB also noted that the ZEP Certification Regulation, requiring manufacturers to conduct energy-capacity testing for batteries used in zero-emission powertrains, presents no issues of technical feasibility because the specified test procedure only requires use of commercially available test equipment.[179]

In addition to showing that the required technology is already commercially available, CARB noted that it appropriately considered the cost of each of the regulations, including the incremental capital costs as well as total costs of ownership (TCO) to potential vehicle owners.[180] CARB noted that its Staff Report for the ACT Regulation included an estimate that the average incremental vehicle price for certain new ZEVs would be 30 percent to 60 percent higher than a comparable combustion-powered vehicle in certain years, with costs for these vehicles declining over time. Further, CARB noted that it had evaluated the TCO for purchasing an ACT compliant vehicle and all other related costs including fuel, maintenance, Low Carbon Fuel Standard revenue, and infrastructure, and noted that ZEVs in appropriate duty cycles can see a positive TCO by 2024 or sooner and reported similar TCO positive results for ZEAS by 2028.[181] CARB also noted that neither the ACT, ZEAS, nor ZEP Certification Regulations present any issues of test procedure inconsistency because there are no analogous Federal requirements and, as such, engines manufacturers are not precluded from complying with the California and Federal test requirements with one test engine or vehicle.[182]

3. Comments on Section 209(b)(1)(C)

EPA received a range of comments on each of CARB's regulations relating to the third criteria. Regarding the ACT Regulation, EPA received a comment that stated that the applicable technological feasibility criteria to apply is found in section 202(a)(3)(A).[183] This commenter maintains that CARB must demonstrate that the ACT standards "are achievable through reasonably available technology, and must similarly consider related costs, energy, and safety factors" and that CARB cannot meet this obligation. This commenter notes two separate studies regarding the current availability of electric and hydrogen fuel cell medium and heavy-duty trucks, and that one of the studies noted that electric trucks using present lithium battery technology would need levels of energy density and battery storage capacity to support a daily ranger of 600 miles at level that would weigh 6300 kg and cost approximately $180,000. This commenter maintains that CARB did not consider several factors including charging networks as well as safety issues and legal restrictions on commercial activity at rest stops. The commenter maintains that because these factors were not considered by CARB then it does not meet the requirements of section 202(a)(3)(A).[184] EPA also received supplemental comment from CARB that was submitted in response to comments submitted in opposition to the waiver for the ACT Regulation. CARB noted that several comments fail to satisfy opponents' burden of proof because they misunderstand the necessary showing or make no showing at all.[185] CARB also recognized the challenges to the technical feasibility of the ACT Regulation raised by one commenter but noted that no commenter has disputed CARB's evidence that the technology need to comply with the ACT Regulation already exists.[186] In addition, CARB responded to comments regarding ZEV constraints associated with operating ranges and performance characteristics.[187] Finally, CARB noted several commenters' assertions that CARB failed to account for and accurately assess a number of different costs associated with the ACT Regulation (*e.g.*, costs of manufacturing and maintaining ZEVs, battery replacement costs, reduced operational hours due to needs to recharge, etc.) and pointed to its rulemaking record and submissions to EPA that address such claims. And in any case CARB maintained that these commenters have not introduced evidence that establishes that the compliance costs as so excessive as to make the standards infeasible.[188]

Many of the comments EPA received on the third prong also focused not on whether the standards under review were actually infeasible under section 202(a)(2), but on whether CARB, to be consistent with section 202(a), must provide the four years of lead time and three years of stability for standards applicable to new heavy-duty vehicles and engines required under section 202(a)(3)(C). Commenters objected to the 2018 HD Emission Warranty Amendments and the ACT Regulation on the grounds that the third waiver criterion requires "consistency" with every provision of section 202(a) and therefore, by the text of the statute, CARB must provide four years of lead time and three years of stability for its new heavy-duty vehicle and engine

Program (HVIP). HVIP has provided funding for 2,456 zero-emission trucks and buses and 2,593 hybrid trucks since 2010 to support the long-term transition to zero-emission vehicles in the heavy-duty market. These commercially available zero-emission trucks and buses cover a wide variety of vocations and duty cycles; some vehicles available today include delivery vans, school buses, refuse trucks, cutaway shuttles, terminal tractors, and passenger vans.").

[177] *Id.* at 7–10

[178] *Id.* at 33.

[179] *Id.* at 34–36.

[180] *Id.* at 36–38 (ACT), at 38–39 (ZEAS), and 39–40.

[181] *Id.*

[182] *Id.* at 39.

[183] Valero at 4. This commenter does not discuss the phase "greatest degree of emission reduction achievable through application of technology" in 202(a)(3)(A)(i) and whether and how it is related to its cited language regarding the consideration to "cost, energy, and safety factors."

[184] *Id.* at 4–6.

[185] CARB Supplemental Comments at 11. CARB noted both EMA and WSPA comments that do not provide any elaboration of why the lead time provided is not reasonable. "[S]ection 209(b) does not give [the Administrator] the latitude to review procedures at the State level, and the EPA hearing is not the proper forum in which to raise these objections. Similarly, objections pertaining to the wisdom of California's judgment on various public policy matters are beyond the [Administrator's] scope of inquiry." 43 FR 32184 citing 42 FR 44209, 44210 (October 7, 1976).

[186] *Id.* at 11–12.

[187] *Id.* at 12. (CARB's analysis found that although certain market segments presented challenges, a large number of other segments are well suited for electrification across the medium- and heavy-duty truck market, including refuse trucks, yard trucks and box trucks within the Class 8 vocational market. CARB expects that the demand for heavy-duty ZEVs will significantly increase as ZEV technology improves, resulting in increased operating ranges and decreased vehicle prices."). CARB also provided updated data and noted recently enacted federal action.

[188] *Id.* at 12–13 (Citing the ACT waiver request at 31–39, ACT ISOR at IX–8, ACT FSOR at IX–23–IX–24, IX–27–IX–28, ACT FSOR at 105, 192, 204–222, 269–274 (respond to comments asserting that CARB did not accurately assess cost impacts of the ACT Regulation).

standards.[189] In response, supporters of the regulations argued that "consistency" does not require identicality with lead time and stability requirements imposed on EPA. Such a strict imposition, they argued, would frustrate Congress' intent to give California flexibility and deference to create innovative standards that are more stringent than the Federal standards.[190] Identicality also cannot be required, they argued, because it would be impossible for certain sub-provisions of section 202(a) to apply to CARB.[191] In response, one commenter argued that, even if some provisions of 202(a) are relevant only to EPA and not CARB, "consistency" still requires CARB to abide by relevant provisions, such as 202(a)(3)(C)'s lead time and stability requirements.[192]

EPA also received comment that four years of lead time is supported by Federal case law and EPA's prior waiver decisions. In particular, one commenter noted EPA's 1994 MDV waiver decision document, which found that CARB is subject to 202(a)(3)(C)'s four-year lead time requirement.[193] That decision considered the plain text and congressional intent of the CAA as well as the 1979 D.C. Circuit case, *American Motors Corporation* v. *Blum* (*Blum*), which incorporated a specific minimum two-year lead time from CAA section 202(b)(1)(B) into the 202(a)(2) general technological feasibility analysis. The commenter explained that the D.C. Circuit in *Blum* "found that the Congressionally-specified lead time requirement was implicitly incorporated into section 202(a)(2)" and argues that *Blum*'s logic applies equally to section 202(a)(3)(C).[194]

4. California's Standards Are Consistent With Section 202(a) Under EPA's Historical Approach

As explained above, EPA has historically applied a consistency test under 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.[195] After a review of the record, information, and comments received in this proceeding, EPA has determined that the opponents of the waiver request for CARB's regulations have not demonstrated that these regulations are inconsistent with section 202(a). As noted above, CARB's waiver requests indicated that control technology either presently exists or is in use, and opponents do not provide information that sufficiently meets their burden of proof.

The rationale supporting EPA's determination is organized as follows. Applying its historical approach of section 209(b)(1)(C) to CARB's regulations, EPA first examines whether the opponents of the waiver requests at issue have met their burden of proof to demonstrate that the regulations are not technologically feasible, within the lead time provided and giving consideration to cost. We present our analysis for each of the regulations in the two waiver requests (the 2018 HD Warranty Amendments, the ACT, ZEAS, and the ZEP Certification Regulations), in subsections III.D.4.a and b below. We conclude, under EPA's historical approach to the third waiver criterion, that the opponents of the waiver have not met their burden of proof.

a. 2018 HD Warranty Amendments

As previously described, the 2018 HD Warranty Amendments lengthen the warranty periods for new heavy-duty vehicles and engines commencing with the 2022 model year. Manufacturers can choose to meet the new warranty periods either through installing more durable emission related components (with an associated increase in cost) or by relying upon existing emission related components designed to meet applicable emission standards and cover any increase in costs associated with additional emission warranty claims and repairs due to the increase in the warranty periods. Opponents of a waiver for the 2018 HD Warranty Amendments do not claim that the regulation is actually infeasible under EPA's approach. If EPA had received such comments, it would be appropriate to evaluate whether more durable emission related components are technologically feasible (giving consideration to the cost of such components) and to evaluate the costs for manufacturers to choose to use existing components and cover the costs of additional emission warranty related claims.

[189] EMA Initial Comments at 4–5, 6–7; EMA Supplemental Comments at 1. NADA at 2; WSPA at 2.

[190] *See, e.g.*, CARB Initial ACT Comments at 17–18; CARB Initial Omnibus Low NOx Comments at 9 (submitted as Exhibit 4 of CARB's Initial ACT Comments); CARB Supplemental Comments at 7–8; Environmental and Public Health Organizations at 22–24. EPA notes CARB's contention that section 202(a)(3)(C) was designed with specific purposes by Congress, and that such purposes were, in part, to minimize the burden associated with new standards and the associated new designs of affected vehicles and that in many instances CARB's regulations do not require a redesign of existing vehicles. ("The clear purpose of Section 202(a)(3)(C) is to protect manufacturers with respect to specific EPA standards, from having to perform redesigns without four years of lead time or more often than every three years." But "the year-on-year changes in the legal obligations imposed by ACT are different from those imposed by more traditional vehicle emission standards—the kind of standards Congress had in mind when it drafted Section 202(a)(3)(C)." See CARB Supplemental Comments, 9–11 and CARB Initial ACT Comments at 19–22. As explained below, EPA finds its textual assessment of 202(a)(3)(C) to be sufficient to determine the inapplicability to California and that it is not necessary to examine the underpinnings of this aspect of CARB's argument.

[191] *See, e.g.*, CARB Initial Omnibus Low NO_X Comments at 16–17 (submitted as Exhibit 4 of CARB's Initial ACT Comments); CARB Supplemental Comments at 7–8; Environmental and Public Health Organizations at 20–21; ACT/ZEAS/ZEP Waiver Support Document at 31–32 (citing the ACT FSOR at 131).

[192] EMA Supplemental Comments at 4 ("Of course, all of the provisions of section 202(a) are directed on their face to EPA, not California, and that is no reason to distinguish one part of section 202(a) from another. Consistency means that CARB must abide by and avoid contradicting those provisions that are relevant. CARB agrees that it must abide by the technology lead-time requirement directed at EPA in section 202(a)(2), and CARB must equally abide by the four-year lead-time requirement in section 202(a)(3)(C) that is directed at EPA in precisely the same way. Neither of those provisions is uniquely applicable to EPA").

[193] EMA Initial Comments at 3; EMA Supplemental Comments at 2–3.

[194] EMA Initial Comments at 7–9 ("The D.C. Circuit's reasoning in *Blum* applies with equal force here: failing to apply the minimum four-year leadtime requirement would frustrate the leadtime that Congress explicitly found to be necessary for [heavy-duty on-highway] standards."); EMA Supplemental Comments at 2–3 ("In addition to the general technology-based lead-time required for all vehicles and engines, section 202(a)(3)(C) is aimed specifically at the heavy-duty industry, which is not vertically integrated, involves much lower production volumes, is more capital intensive, requires longer planning and product development timelines, and requires longer time periods to recoup large capital investments. *See, e.g.*, Hearing on S.1630 Before Subcomm. on Env't Protection, 101st Cong. 312–13 (1989). These considerations make lead-time necessary regardless of whether it is EPA or CARB that adopts the applicable standards with which the industry must make investments to comply. Thus, as EPA rightly concluded in 1994, the section 202(a)(3)(C) lead-time requirement is no different than the lead-time provision at issue in *Blum*.").

[195] EPA has previously stated that the determination is limited to whether those opposed to the 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. *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).

During the course of EPA's waiver proceeding, we did not receive any comments or evidence to suggest, let alone meet the burden of proof, that the emission control technology needed for the new extended emission warranty periods and the new minimum allowable maintenance schedules did not meet the consistency with section 202(a) requirement.

Likewise, EPA received no comments concerning CARB's separate point regarding the options within California's regulation that incentivize manufacturers to produce more durable emission related parts. EPA received no comments that this separate compliance strategy, of using existing emission control parts and covering the costs of any additional emission warranty claims, was infeasible or too costly. In addition, we did not receive any comments or evidence during the waiver proceeding to suggest such concerns were raised during California's rulemaking. CARB also noted that there are no test procedure consistency issues. EPA has not received comment during the waiver comment period regarding any of these matters.[196]

Therefore, based on the record before us, EPA cannot find that the opponents of the 2018 HD Warranty Amendments waiver have met their requisite burden of proof to demonstrate that such requirements are inconsistent with section 202(a). Thus, EPA cannot deny CARB's 2018 HD Warranty Amendments waiver request on this basis.[197]

b. ACT, ZEAS, and ZEP Certification Regulations

At the outset, EPA notes two key principles among others that guide EPA's evaluation of technological feasibility within section 209(b)(1)(C). As previously explained, first, EPA considers whether adequate technology is either 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 of necessary technology prior to the effective date of the standards for which a waiver is being sought. Second, EPA has thus long believed that California must be given substantial deference when adopting motor vehicle emission standards because such action may require new or improved technology to meet challenging levels of compliance and that California plays a laboratory role. EPA is guided both by the amount of lead time provided by CARB and principles set forth in cases such as *International Harvester* and *NRDC*. This is EPA's historical approach, and it is applied in this decision. As such, the requirements of section 202(a)(3)(A) do not apply to California. Nevertheless, the factors such as energy and safety found in section 202(a)(3)(A) have been addressed by California and are part of the record here.

EPA finds that CARB's assessment of technology, lead time and cost was based on reasonable assumptions and EPA has received no subsequent comment during the waiver proceeding to indicate otherwise. Although EPA received comment suggesting that EPA's technological feasibility analysis should be performed under the criteria of section 202(a)(3)(A), the Agency explains below that section 202(a)(3)(A) does not apply to California. As also explained, section 202(a)(3)(A) was designed by Congress to explicitly address EPA rulemaking activities. As such, EPA's historical waiver approach of applying section 202(a)(2), for purposes of assessing technological feasibility, lead time and cost as required by section 209(b)(1)(C), also applies to California's heavy-duty vehicle and engine emission standards. Nevertheless, EPA has examined the waiver opponents comments regarding the requisite battery technologies (including weight, infrastructure, and safety issues).[198]

CARB's ACT Regulation waiver request provided information pertaining to consistency with section 202(a) for each of the three regulations covered by the request. CARB noted that the ACT Regulation's requirements that new 2024 MY medium- and heavy-duty ZEVs be produced and delivered for sale to ultimate purchasers in California are consistent with section 202(a) because the required technology already exists.[199] In addition, although EPA received limited cost data from a commenter, EPA finds no requisite evidence in the record or comments that suggest that such technology does not exist at reasonable costs (including the costs to consumers), or that ZEV trucks and buses that cover a variety of vocation and duty cycles are not commercially available.[200] EPA also notes that the ACT Regulation includes deficit and credit generation provisions whereby manufacturers have the flexibility to phase in differing products over time and mitigate deficits in later model years or through trading. Further, in examining costs where technologies already exist, EPA is also guided by how costs are juxtaposed with lead time. Costs in this context relates to the timing of a particular emission control technology rather than to broader considerations.[201] Opponents of the waiver have not met their burden of proof to demonstrate the ACT Regulation is inconsistent with section 202(a). The commenters have not demonstrated, based on EPA's assessment of the record on the overall feasibility of technology and costs, that a disruption to the heavy-duty vehicle and engine manufacturing industry would occur or that there is an undue burden on this industry as a result of the ACT Regulation. The record includes evidence of the ability of manufacturers to introduce certain service classes of vehicles that may have availability of central charging and lower costs, and in a timeframe and sequence that meets the ZEV phase-in requirements of the ACT Regulation. Further, while the heavy-duty vehicles that meet the ACT Regulation includes initial development costs and costs of integrating the technology to the vehicles (the cost of compliance) and other higher upfront costs for certain vehicles and in certain years, than traditional or conventionally fueled vehicles, the opponents of the waiver have not met their burden of proof to demonstrate that such costs of compliance are prohibitive. Beyond the technological feasibility of the emission controls needed to meet the applicable standards, EPA is also sensitive to the costs of the vehicles as well as the TCO of such vehicles. There is no indication that the ZEV vehicles today and projected to meet the ACT Regulation would be experience cost increases close in magnitude to prohibitive levels. Additionally, EPA agrees with CARB

[196] The record for this waiver proceeding also includes the ISOR and FSOR for CARB's 2018 HD Warranty Amendments rulemaking (included in the 2018 HD Warranty Amendments Waiver docket at EPA–HQ–OAR–2022–0330–0006 and EPA–HQ–OAR–2022–0330–0014). EPA has received no comment that questions CARB's findings.

[197] EPA evaluates the lead time associated with a CARB's regulation by in part examining the date of CARB's adoption of the regulation and when manufacturers are required to meet the regulation. EPA is guided both by the amount of lead time provided and by the principles set forth in cases such as *International Harvester* and *NRDC*. EPA finds no evidence in the record that manufacturers were unable to comply with CARB's requirements that commenced with the 2022 model year.

[198] EPA finds that it is beyond the scope of EPA's review to examine the feasibility of CARB's standards outside of California, including in states adopting CARB's standards (section 177 states). See 78 FR 2143, 74 FR 32744.

[199] ACT/ZEAS/ZEP Waiver Support Document at 31–32.

[200] *Id.* at 18.

[201] *MEMA I* at 1118. ("Congress wanted to avoid undue economic disruption in the automotive manufacturing industry and also sought to avoid doubling or tripling the cost of motor vehicles to purchasers.").

that the opponents of the waiver that asserted claims regarding various battery issues such as replacement costs, weight, and inabilities to travel longer distances have not demonstrated that the compliance costs are so excessive to make the standards infeasible. EPA notes that CARB, in adopting the ACT Regulation, performed a market segment analysis for 87 market segments that use Class 2b–8 trucks, and assessed their suitability for electrification based on issues including payload, daily operational ranges, infrastructure access, and space considerations.[202] EPA finds that CARB has reasonably identified technologies and vehicle applications that are available in the near term as well as reasonable evidence that the performance and demand for heavy-duty ZEVs will significantly improve as technology evolves. Separately, EPA notes that CARB has submitted extensive information to EPA regarding its assessment of battery technology—including safety, the suitability of the grid and charging infrastructure, and related issues related to the ACT Regulation as a policy choice.[203]

Therefore, the phase-in of ZEV sales percentages in the ACT Regulation falls within the feasibility tests set forth in *International Harvester* and *NRDC* and the opponents of the waiver have not met their burden of proof to refute CARB's analysis and projections. Similarly, EPA finds no evidence in the record that suggests that technology needed to produce zero emission airport shuttle vehicles to meet the ZEAS Regulation does not exist or that manufacturers would not be able to meet the ZEP Certification Regulation.[204] To the extent that commenters suggest preferred feasible alternatives but do not argue that the CARB regulations are technologically infeasible themselves, EPA again notes that CARB has significant discretion in the policy choices it makes to address California's air pollution problems.[205] "The structure and history of the California waiver provision clearly indicate a Congressional intent and an EPA practice of leaving the decision on ambiguous and controversial public policy to California's judgment.[206]

Therefore, based on the record before us, EPA cannot find that the opponents of the ACT, ZEAS, and ZEP Certification Regulations waiver request have met their requisite burden of proof to demonstrate that such requirements are inconsistent with section 202(a) under EPA's historical approach to the third waiver criterion.[207] Thus, EPA cannot deny CARB's ACT, ZEAS, and ZEP Certification Regulations waiver request on this basis.[208]

5. The Inapplicability of Section 202(a)(3)(C) to the Third Prong

Certain commenters asserted that, even if the standards are technologically feasible, EPA should nonetheless deny the waiver based on the lead time and stability requirements found in section 202(a)(3)(C).[209] These commenters claim that because the third waiver criterion requires California's standards to be "consistent with" section 202(a), California must necessarily comply with section 202(a)(3)(C), as that is a sub-provision of 202(a). This argument is inconsistent with the plain text of the statute. The statutory phrase "consistent with" indicates that California's standards should be congruent and compatible with section 202(a), which in turn sets forth requirements for Federal standard-setting. The statute does not, however, obligate California to comply with every single provision of section 202(a). Not only would doing so make little sense given Congress' intent to set up two motor vehicle programs in title II—with California's program dedicated to address the state's air quality problems and serve as a testing ground for motor vehicle emissions policy designs and technologies—but it would also conflict with the text and intent of the waiver provisions in section 209.

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[202] CARB Supplemental Comments at 12 (see appendix E to the ACT ISOR).

[203] See CARB's FSOR at 9–10 (discussion of alternative fueled vehicles and regulatory suggestion of ultra-low NO_X rather than the ZEV levels on ACT, in context of grid readiness); FSOR at 124–127 (grid resiliency); FSOR at 103 (CARB notes "The Board approved the regulation without off-ramps to ensure that vehicle manufacturers, suppliers, and infrastructure manufacturers have certainty in making long-term investments needed to ensure large-scale deployment of ZEVs in California. The regulation's structure gives manufacturers flexibility to bank credits, shift sales between weight classes, and trade credits with other manufacturers. These flexibility provisions give manufacturers assurance that they can comply and does not introduce the uncertainty associated with potential off-ramps."); ACT Waiver Request at 31–39. *See also,* ACT ISOR at IX–8, IX–23 to IX–24, IX–27 to IX–28, 10, 192, 204–22, and 269–74.

[204] *Id.* While the ZEAS Regulation regulates fleet operators of airport shuttles, EPA acknowledges that the emission levels expressed in the ZEAS Regulation are emission standards preempted under section 209(a) and require a waiver of preemption under 209(b). *See Engine Manuf. Ass'n v South Coast Air Quality Mgmt. Dist.,* 541 U.S. 246, 255 (2004). Although the ZEAS Regulation does not expressly require operators to purchase cleaner new vehicles because regulated parties may comply by converting existing internal combustion vehicles to zero-emissions vehicles, EPA nevertheless believes it necessary to evaluate the purchasing requirements and options within the ZEAS Regulation and waives preemption of the ZEAS Regulation by this action.

[205] *See, e.g., Ford Motor,* 606 F.2d 1293, 1302 (D.C. Cir. 1979) ("There is no indication in either the statute or the legislative history that Congress intended to permit the Administrator to supplant its emission control regulations with those of California, no matter how sagacious and beneficial the latter may be. Nor is there any evidence that the Administrator is supposed to determine whether California's standards are in fact sagacious and beneficial."). To the extent comments suggest that consistency with 202(a) requirements includes limits on the types of emission standards that may be adopted, these claims do not pertain to the third prong analysis. Rather, the consistency with section 202(a) requirement relates to the technological feasibility of California's standards as explained in this decision. Further, the Administrator has long explained that "questions concerning the effectiveness of the available technology are also within the category outside my permissible scope of inquiry," under section 209(b)(1)(C). 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)). Finally, one commenter (AFPM at 12–13) specifically suggests that consistency with section 202(a), including section 202(a)(3)(A), means California cannot require particular technologies. However, as we explain below, section 202(a)(3)(A) does not apply to California and EPA evaluates the third waiver prong under the technological feasibility, lead time, and costs requirements in section 202(a)(2). Further, with respect to CARB's ability to set particular technology requirements, see 71 FR 78190 (December 28, 2006) and Decision Document at EPA–HQ–OAR–2004–0437–0173, at 35–46).

[206] 40 FR 213101, 23103 (May 28, 1975).

[207] EPA recognizes that CARB may make different policy choices based on the air quality and other conditions within the State, and that EPA does not play the role of second-guessing such choices. It also follows that, in response to the ACT Regulation, a manufacturer will determine which product offerings to make available in the California marketplace during the transition to and for showing compliance with the new standards. These market choices could include offering for sale a limited set of products. Given the statutory scheme, the EPA Administrator is to give very substantial deference to California's judgments. *See also International Harvester* v. *Ruckelshaus,* 478 F 2d. 615, 640 (D.C. Cir. 1979) ("We are inclined to agree with the Administrator that as long as feasible technology permits the demand for new passenger automobiles to be generally met, the basic requirements of the Act would be satisfied, even though this might occasion fewer models and a more limited choice of engine types. The driving preferences of hot rodders are not to outweigh the goal of a clean environment.").

[208] EPA evaluates the lead time associated with CARB's regulation by examining the date of CARB's adoption of the regulation and when manufacturers are required to meet the regulation. The CARB Board adopted the ACT Regulation on June 25, 2020. EPA is guided both by the amount of lead time provided and by the principles set forth in cases such as *International Harvester* and *NRDC.* The lead time here is between the CARB Board's adoption of the ACT Regulation in June 2020 and the compliance implementation for the 2024 model year (recognizing that manufacturers may choose to certify earlier in 2023 for the 2024 model year). EPA finds no evidence in the record that manufacturers are unable to comply with CARB's requirements that commence with the 2024 model year.

[209] Formerly contained in section 202(a)(3)(B), the 1990 Amendment renumbered this section as section 202(a)(3)(C).

The commenters' argument regarding section 202(a)(3)(C) fails. That provision, which requires at least four years of lead time and three years of stability, is a companion to a specific Federal standard-setting mandate, section 202(a)(3)(A). That mandate is for EPA to promulgate certain heavy-duty standards for hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter that reflect the "greatest degree of emission reduction achievable" using technology that EPA determines will be available for a given model year, giving appropriate consideration to cost, energy, and safety factors associated with application of those technologies. In conjunction with this directive to set standards reflecting the "greatest degree of emission reduction achievable," section 202(a)(3)(C) requires EPA to provide the four years of lead time and three years of stability for the Federal standards.

The statute is also explicit that California, by contrast, may adopt state standards that are "in the aggregate" at least as protective as the Federal standards—a starkly different structure than requiring each of the relevant heavy-duty standards to reflect the "greatest degree of emission reduction achievable." As such, the requirement for EPA to find, in granting a waiver, that California's standards "are not [in]consistent with" section 202(a) cannot mean that California's standards comply with every provision of section 202(a). Further, given that California's standards are *not* subject to the "greatest degree of emission reduction achievable" mandate, and apply only in a limited market, it would make little sense in the statutory scheme to obligate California to comply with the companion lead time provision in section 202(a)(3)(C) to provide four years of lead time and three years of stability.

This plain text reading is well-supported by the history and purpose of the Act and is also consistent with administrative and judicial precedents. Commenters rely heavily on EPA's single cursory and contrary decision in a 1994 MDV waiver, even though by 2012 EPA had indicated that it did not believe section 202(a)(3)(C) applied to California's heavy-duty engines and vehicle standards.[210] We acknowledge that the 1994 waiver action took a different position on this issue than we do today. EPA believes that the interpretation of the "consistency with section 202(a)" language that EPA has historically applied—both before and after the 1994 waiver—is permissible and is the best view based on all the relevant factors. EPA's reasoning in the 1994 MDV waiver is unpersuasive, as explained below, especially because this aspect of the 1994 MDV waiver is inconsistent with both prior and subsequent agency decisions,[211] and more importantly, it is inconsistent with the plain text of the statute. EPA is therefore taking a different approach from the 1994 MDV waiver.[212] Additionally, commenters also mistakenly rely on the D.C. Circuit's opinion in *American Motors Corp.* v. *Blum*, 603 F.2d 978 (D.C. Cir. 1979) (*Blum*). *Blum* addressed a different provision of the CAA and is readily distinguishable from the instant waivers.

a. EPA's Historical Practice Is Supported by the Text, Context, and Purpose of the Statute

We begin by interpreting the text of section 209(b)(1)(C), which requires EPA to assess whether CARB's standards are "*consistent* with section [202(a)]." The mere fact that Congress placed a provision applicable to Federal standards in section 202(a) does not mean California must comply with it in order for its standards to be "consistent" with section 202(a).[213] Rather, what the "consistent with" provision requires must "account for the broader context of the statute as a whole" [214] and should be based on analysis of the text, context, purpose, and history of the relevant portions of the Act. The term "consistent" means "marked by harmony, regularity, or steady continuity: free from variation or contradiction," "marked by agreement," and "showing steady conformity to character, profession, belief, or custom." [215] These definitions support the conclusion that the phrase "consistent with section 202(a)" does not require California's standards to comply with all sub-provisions in section 202(a), but rather calls for congruence and compatibility. Caselaw from the D.C. Circuit explaining the meaning of the phrase "consistent with" in other parts of the Clean Air Act also supports this understanding that the phrase does not mean lockstep correspondence.[216]

EPA thus believes that the phase "consistent with" does not require California's standards to strictly conform or comply with *every* provision in section 202(a). After all, that would defeat the scheme Congress set up to encourage *two* sets of standards—the Federal standards and California's standards. Congress chose the term "consistent with" instead of, for example, "comply with," or terms connoting identicality such as "the same as," or "identical to" in section 209(b)(1)(C).[217] The use of "consistent with" in section 209, rather than "identical" or the like, makes perfect sense because Congress established two programs for control of emissions from new motor vehicles in Title II—EPA emission standards adopted under the Act and California emission standards adopted under its state law. Motor vehicles are "either 'federal cars' designed to meet the EPA's standards or 'California cars' designed to meet California's standards." [218] Thus, an interpretation that every portion of section 202(a) must be applicable to California standards would defeat Congress's plan.[219] In contrast, EPA's

[210] 77 FR 9239 (February 16, 2012).

[211] See 77 FR 9239, 9249 (2012); 46 FR 22302, 22304 (1981).

[212] *FCC* v. *Fox Television Stations, Inc.*, 556 U.S. 502 (2009).

[213] The D.C. Circuit has noted "section 202's pervasive regulation of national motor vehicle emission standards" and explained that if the entire provision were applicable to California "[the Administrator] would be powerless to consider waiving federal preemption for California's emission standards and certification process. This lack of power would render the waiver provision and indeed, the express preemption provision mere surplusage." *MEMA I*, 627 F.2d at 1122.

[214] *Wisconsin* v. *EPA*, 938 F.3d 303, 316 (D.C. Cir. 2019) ("We note that we do not conclude that the phrase 'consistent with' in the Good Neighbor Provision necessarily effects an incorporation of the full contours of every provision of Title I in pure, lockstep fashion. As we have observed elsewhere in construing the same words in the context of the same statute, the phrase 'consistent with' other statutory sections 'calls for congruence or compatibility with those sections, not lock-step correspondence.'") (Citing *Envtl. Def. Fund Inc.* v. *EPA*, 82 F.3d 451, 460 (D.C. Cir. 1996); *Nuclear Energy Institute, Inc.* v. *EPA*, 373 F.3d 1251, 1270 (D.C. Cir. 2004)).

[215] Consistent, *https://www.merriam-webster.com/dictionary/consistent* (last accessed Jan. 30, 2023).

[216] See *Wisconsin* v. *EPA*, 938 F.3d 303, 316 (D.C. Cir. 2019) (collecting authorities).

[217] EPA notes, moreover, that elsewhere in the statute Congress did use the term "identical," indicating that Congress knew how to clearly express when it wanted identicality as opposed to consistency. For example, under section 177, Congress "permitted other states to 'piggyback' onto California's standards, if the state's standards 'are *identical* to the California standards for which a waiver has been granted for such model year.'" *Motor Vehicle Mfrs. Ass'n* v. *New York State Dep't of Envtl. Conservation*, 17 F.3d 521, 525 (2d Cir. 1994) (Emphasis added); Similarly, in section 211(c)(4)(A)(ii), state fuel controls that are "*identical*" to controls promulgated under section 211(c)(1) are otherwise not preempted. (Emphasis added). Section 211(c)(4)(A)(ii)(Emphasis added).

[218] *Engine Mfrs. Ass'n* v. *EPA*, 88 F.3d 1075, 1079–80, 1088 (D.C. Cir. 1996).

[219] For example, the requirement in section 202(a)(3)(D) for the Administrator to conduct a study for the practice of rebuilding heavy-duty engines and, on the basis on such study, consider prescribing requirements for rebuilding practices is clearly directed at EPA and not a requirement of California. It would not be a reasonable reading of

historical practice regarding "consistent with" is in accordance with both Congress's structure and the case law that guides how the phrase should be interpreted by ensuring that California, in setting its standards, evaluates the same factors that EPA does—*e.g.*, feasibility, lead time, and cost. EPA also ensures that enforcement mechanisms, such as test procedures, are compatible to avoid creating challenges for automakers in complying with both California and federal standards.[220] For example, EPA has considered California's classification scheme for heavy-duty vehicles as consistent with section 202(a), even though it is not identical to the federal classification.[221] This understanding of "consistent with" is supported by case law, such as *MEMA II:* "Section 209(b)(1) makes clear that section 202(a) does not require, through its cross-referencing, consistency with each federal requirement in the act. . . . California's consistency [with section 202(a)] is to be evaluated 'in the aggregate,' rather than on a one-to-one basis. CAA section 209(b)(1)." [222] In sum, section 209(b)(1)(C) does not require California to conform identically to every provision of section 202(a).

Having established that California's standards do not need to be identical to or meet all of the requirements set out in section 202(a) for Federal standards, we now turn to the question whether California's standards must comply with section 202(a)(3)(C)'s requirements to be "consistent" with section 202(a). To answer this question, EPA further examines the statute's text and purpose. Based on the plain language, statutory context and legislative history, we conclude that the best view is that compliance with section 202(a)(3)(C) is not necessary for consistency. In particular, section 202(a)(3)(C) is a companion lead time provision that applies to Federal standard-setting under section 202(a)(3)(A) and is therefore not relevant to California's program.

In general, section 202(a)(3), which was first added in the 1977 Amendments, reflected congressional frustration at EPA's slow pace of regulating emissions from heavy-duty vehicles and engines and was thus a direct command to EPA.[223] By its terms, section 202(a)(3)(A)(i) directs EPA to establish standards for hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter emissions from heavy-duty vehicles and engines that "reflect the greatest degree of emission reduction achievable." [224] Section 202(a)(3)(C) in turn requires that such stringent standards ("those promulgated . . . under this paragraph," section 202(a)(3)(C)) have at least four years of lead time and apply for no less than three model years.[225] Congress intended the fixed lead time and stability provisions of section 202(a)(3)(C) as a companion to the requirement in section 202(a)(3)(A) to promulgate national standards which "reflect the greatest degree of emission reduction achievable," balancing the mandate for the most stringent possible standards with granting regulated manufacturers a minimum amount of lead time and considering costs and other factors.[226] Congress chose these prescribed lead time and stability requirements because of industry concerns over the level of stringency expected of EPA's national standards. According to the D.C. Circuit "[t]hat requirement was enacted for the benefit of manufacturers to allow time for them to design and develop engines in compliance with newly promulgated standards." [227] Both the four-year lead time and the three-year stability time frames thus provide assurance to the heavy-duty industry of a minimum amount of lead time and stability to meet EPA's national standards considering the mandate to EPA to promulgate standards which reflect the greatest degree of emission reduction achievable under in section 202(a)(3)(A).[228] ("It seems that Congress intended the EPA in promulgating standards with an adequate lead period to engage in reasonable predictions and projections in order to force technology.").[229]

Several factors indicate that section 202(a)(3)(C) is a companion provision to section 202(a)(3)(A). As a general matter, the level of stringency of a standard and its accompanying lead time are intertwined. Notably, a standard does not act in isolation, but rather goes into effect after a certain amount of lead time and in a particular model year (*e.g.*, a 1 gram/mile standard effective beginning model year 2027). The feasibility of a standard, including the availability of technology and its costs, also depends on the lead time provided. Further, the actual impact of a standard, whether on regulated entities or its protectiveness of public

section 209(b)(1)(C) to require California to complete an identical study in order to be "consistent with" section 202(a).

[220] 42 FR 2337, 2338 (January 11, 1977).

[221] *Id.* (A medium duty vehicle is defined by the CARB as a subset of the heavy-duty vehicle class, and is any motor vehicle (except a passenger car) with a gross vehicle weight rating (GVWR) of between 6000 and 8500 pounds).); See also, 43 FR 1829, n.2, 1830, n.9 (January 12, 1978); CARB Waiver Request at 3 n.6; 78 FR 2114 n.9 (Medium-duty vehicles (MDVs) are vehicles in California's regulations between 8,500 and 114,000 lbs GVWR that are also called Class 2b/Class 3 vehicles. These vehicles are generally termed heavy-duty vehicles under EPA's regulation).

[222] *MEMA II,* 143 F.3d 449, 463–64.

[223] *NRDC* v. *Thomas,* 805 F.2d 410 (D.C. Cir. 1986) (for the history and treatment of the 1977 Amendments for heavy-duty vehicles and engines particulate matter, oxides of nitrogen, carbon monoxide and hydrocarbons standards). Acting under the 1977 Amendments, EPA first promulgated heavy-duty vehicle and engines standards on May 15, 1985 (50 FR 10606) but by that time California had been granted waivers for heavy-duty vehicles and engines standards (*See for example,* 34 FR 7348 (May 6, 1969); 36 FR 8172 (April 30, 1971); 40 FR 23102 (May 28, 1975); Section 202(a)(3)(A)(iii) was originally contained in the 1977 Senate bill "applicable to emissions of carbon monoxide, hydrocarbons, particulates, and oxides of nitrogen from heavy duty trucks, buses, and motorcycles and engines thereof." S. Rep. No. 252, 95th Cong., 1st Sess. at 19 (1977). *See* S. Rep. No.127, 95th Cong., 1st Sess. 193 (1977), reprinted in 3 Legislative History 1567. The 1977 Amendments added section 202(a)(3) directing EPA to set heavy-duty vehicle emission standards for certain emissions for the 1983 model year and later. (Congress having identified a need for standards in 1970 "had become impatient with the EPA's failure to promulgate a particulate standard" for heavy duty vehicles." *NRDC,* 655 F.2d at 325 (citing S. Rep. No.127, 95th Cong., 1st Sess. 67 (1977), reprinted in 3 Legislative History 1441). This language appears in the same legislative history where Congress expressed approval for EPA's implementation of the waiver provision over the past decade and expanded California's discretion to adopt standards that were intended to address the state's severe air quality issues.

[224] *NRDC* v. *Thomas,* 805 F.2d at 414–16.

[225] Formerly contained in section 202(a)(3)(B), the 1990 Amendments renumbered this section as section 202(a)(3)(C) and slightly modified its terms while still retaining the four-year lead time and three-year stability requirement and extending this lead time to standards promulgated by EPA for the control of NO_x emissions from heavy-duty vehicles and engines. ("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." Section 202(a)(3)(C)).

[226] *NRDC* v. *Thomas,* 805 F.2d 420–23 (Rejecting argument that the terms "maximum" and "greatest" before the phrase "degree of emission reduction" meant that EPA must set standards at the performance level of the best vehicle or engine and upholding instead EPA's consideration and balancing of all relevant factors in setting applicable standards.).

[227] EPA "cannot cite us to any precedent allowing a court to ignore an explicit leadtime requirement." *NRDC* v. *Thomas,* 805 F.2d at 435 (Reversing EPA's decision to provide less than the statutorily mandated four-year lead time for certain model year heavy-duty vehicles and engines standards.). See also, 805 F.2d 435 n.40.

[228] "[I]n adding section 202(a)(3)(A)(iii) . . . Congress directed the EPA to give priority to establishing particulate emission standards for heavy-duty vehicles and left the agency free to exercise its power under section 202(a)(1) to regulate light-duty automobiles, whether diesel-powered or otherwise." *NRDC.,* at 326; H.R. Conf. Rep. No. 294, 95th Cong., 1st Sess. 542–43 (1977) ("Additional revisions of up to 3 years each could be granted at three-year intervals thereafter;" and Congress "provides four years lead time before temporary or permanent revision of any statutory standard.").

[229] *NRDC* v. *Thomas,* 805 F.2d at 430.

health and the environment, depends on the lead time provided.

The context of the statute also evinces the link between sections 202(a)(3)(A) and (C). EPA's general authority to establish motor vehicle standards is found in section 202(a)(1), which authorizes the Administrator to prescribe emission standards for motor vehicles upon making an endangerment finding but does not specify the stringency of the standard (*i.e.*, there is no requirement to promulgate standards that reflect the greatest degree of emission reduction achievable).[230] Section 202(a)(1) in turn is accompanied by the general lead time provision in section 202(a)(2), which does not set any fixed lead time but rather allows the Administrator to determine the lead time "necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period." By contrast, in enacting section 202(a)(3), Congress was more prescriptive in both the appropriate level of stringency and lead time, requiring both standards that reflect the greatest degree of emission reduction achievable for specific pollutants emitted from heavy-duty vehicles and at least four-year lead time. This contextual contrast between sections 202(a)(1)–(2) and 202(a)(3) further demonstrates the close link between the standard-setting provision in section 202(a)(3)(A) and the lead time provision in section 202(a)(3)(C). That is, Congress departed from EPA's general authority to set motor vehicle emission standards in sections 202(a)(1)–(2) in two respects by making a very specific legislative compromise in 202(a)(3): (1) By forcing stringent standards that reflect the greatest degree of emission reduction achievable, while (2) also expecting that such standards may be sufficiently difficult to achieve such that manufacturers would be entitled to a minimum of four years of lead time and three years of stability.[231] Legislative history supports this connection.[232] Opponents of the waiver, however, contend that California's standards must "reflect the greatest degree of emission reduction achievable" required for Federal standards in 202(a)(3)(A) and meet the companion lead time and stability requirements in section 202(a)(3)(C).

Congress' direction to EPA in sections 202(a)(3)(A) and (C) stands in stark contrast to its approach to California's standards. EPA's practice of providing a highly deferential review of California's standards in waiver proceedings was already well established by 1977, and Congress recognized and approved of this practice.[233] And in the very same 1977 Amendments, Congress instructed California to consider the protectiveness of its standards "in the aggregate," rather than requiring each California standard being as or more stringent than its Federal counterpart.[234] Congress explicitly recognized that California's mix of standards could "include some less stringent than the corresponding federal standards."[235] "[T]here is no question that Congress deliberately chose in 1977 to expand the waiver provision so that California could enforce emission control standards which it determined to be in its own best interest even if those standards were in some respects less stringent than comparable federal ones."[236] The four-year lead time and three-year stability requirement for heavy-duty engines and vehicles standards contained in section 202(a)(3)(C) should thus be properly viewed as applying to EPA's standard-setting authority under section 202(a)(3)(A), and not California's authority as applied under the waiver provisions. To give proper effect to the "in the aggregate" language in section 209(b)(1), and for California to retain its ability to set more stringent standards for some pollutants and less stringent for others, California is not explicitly required, nor should it be implicitly required by the cross-reference to section 202(a), to set heavy-duty vehicle emission standards that "reflect the greatest degree of emission reduction." In other words, the legislative compromise that Congress established in 202(a)(3) for Federal standard-setting—between standards that reflect the greatest degree of emission reduction achievable and at least four years of lead time and three years of stability—does not make sense in the California context: since California can establish differing (and sometimes less stringent) standards than what is required by 202(a)(3)(A), it also follows that it may prescribe differing lead time and stability requirements than what is required by 202(a)(3)(C))—provided those requirements are "consistent with" EPA's general approach to addressing feasibility, lead time, and cost pursuant to section 202(a)(2). The 1977 Amendment to section 209(b)(1) thus also supports the view that California's standards should be reviewed under the traditional feasibility test of section 202(a), and that California need only provide lead time it deems sufficient based on its analysis of technology feasibility and cost for standards at issue, and that EPA reviews California's determinations.

As previously noted, the 1977 Amendments removed the stringency requirements for California standards

[230] And "[w]hile section 209(b) requires consideration of whether the adoption of standards by California is consistent with section 202(a), nevertheless [the Administrator's] discretion in determining whether to deny the waiver is considerably narrower than [his] discretion to act or not to act in the context promulgating Federal standards under section 202(a). . . . [The Administrator] would therefore feel compelled to approve a California approach to the regulation of . . . emissions which [he] might choose not to adopt at the Federal level." 41 FR 44210.

[231] *NRDC* v. *Thomas*, 805 F.2d at 421–24, 430, 435. EPA acknowledges that the lead time requirements in 202(a)(3)(C) apply to "any standard promulgated or revised under this paragraph" and that paragraph (3) also includes other standard-setting provisions. We view these additional provisions as further support for the main argument in the text: the lead time requirements in 202(a)(3)(C) accompany specific Federal standard-setting requirements and do not act in isolation. Thus, those lead time requirements were not intended to apply to all Federal standards for heavy-duty vehicles or engines, much less to apply to California standards. See *infra* footnote 250. Instead, they apply only to standards "promulgated or revised under this paragraph."

[232] H.R. Conf. Rep. No. 564, 95th Cong., 1st Sess. 542–43 (1977) (The conference agreement provides four years lead time before temporary or permanent revision of any statutory standard and requires the Administrator to promulgate particulate standards based on criteria set forth in the House interim standards provision. These standards are to become effective as expeditiously as practicable taking into account the lead time necessary to comply, but in no event later than 1981 model year.). This legislative history from the Conference Report indicates that section 202(a)(3)(C) provides lead time and stability requirements for standards promulgated under section 202(a)(3)(A).

[233] In the 1977 Amendments to section 209(b)(1), Congress also approved EPA's interpretation of the waiver provision as providing appropriate deference to California's policy goals and consistent with Congress's intent "to permit California to proceed with its own regulatory program" for new motor vehicle emissions. H.R. Rep. No. 95–294, at 301 (1977); *MEMA I*, 627 F.2d at 1120–21 ("The 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 requirements and that the burden of proving otherwise is on whoever attacks them."); *Id.* at 1110 ("The Committee amendment is intended *to ratify and strengthen* the California waiver provision and to affirm the underlying intent of that provision, *i.e., to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare.*" *Citing* H.R. Rep. No. 294, 95th Cong., 1st Sess. 30102 (1977), U.S. Code Cong. Admin. News 1977, p. 1380 (emphasis in original).")

[234] "Congress decided in 1977 to allow California to promulgate individual standards that are not as stringent as comparable federal standards, as long as the standards are 'in the aggregate, at least as protective of public health and welfare as applicable federal standards." *Ford Motor*, 606 F.2d 1293, 1302 (DC Cir. 1979) ("[T]he 1977 amendments significantly altered the California waiver provision.").

[235] H.R. Rep. No. 294, 95th Cong., 1st Sess. 302 (1977).

[236] *MEMA I*, 627 F.2d at 1110.

under review and now allows for granting waivers if standards are "in the aggregate" as protective of health as federal standards in section 209(b)(1). This amendment reflected California's wish to "trade off" controlling carbon monoxide emissions, which were not as critical of a problem in California, for NO_X emissions, which were and continue to present severe air quality challenges in California.[237] Therefore, California's carbon monoxide standards can now be less stringent than federal standards.[238] Recognizing that both carbon monoxide and NO_X are also listed in section 203(a)(3)(C), and then reading this section as applicable to California's heavy-duty vehicles standards, however, would entirely undermine the purpose of the 1977 Amendments. Under such a reading, if California identified a need to relax an existing carbon monoxide standard to enable a much more stringent NO_X standard, based on the interactions between the control technologies involved, it would be precluded from doing so because the carbon monoxide standard would not meet the "greatest degree of emission reduction" requirement. This result is in direct conflict with Congress amending section 209(b)(1) to enable California to do precisely that, with precisely those pollutants.[239] As such, it is not a reasonable reading of the statute.

Moreover, the D.C. Circuit has held that not all the 1977 amendments to the Clean Air Act apply in the waiver context. In *MEMA I*, for instance, the Court held that section 302 was inapplicable to section 209 because "[s]ection 302(k)'s definition [of standards] was not enacted until ten years after the original waiver provision, and it was developed in the context of regulating emissions from stationary sources."[240] Similarly, Congress developed section 202(a)(3) in the context of the nationwide regulation of emissions from heavy-duty engines and vehicles by EPA, a decade after enactment of the original waiver provision and also after California had been regulating heavy-duty engine emissions with the appropriate waivers that EPA granted applying the traditional consistency test.[241] In amending section 202(a) to ensure more effective Federal regulation of certain heavy-duty vehicle emissions, Congress gave no indication that it had any intention of upending the application of the traditional consistency test to California standards.

Further, as far back as 1967 Congress in enacting section 209(b) recognized that emissions technology would be introduced and tested first in California before nationwide introduction and use.[242] According to the D.C. Circuit: "The history of congressional consideration of the California waiver provision, from its original enactment up through 1977, indicates that Congress intended the State to continue and expand its pioneering efforts at adopting and enforcing motor vehicle emission standards different from and in large measure more advanced than the corresponding Federal program; in short, to act as a kind of laboratory for innovation."[243] EPA has thus also long recognized Congressional intention that California "pioneer" emissions control.[244] EPA's view is supported by legislative history. Congress recognized California's severe air quality problems and envisioned California's role as an innovative laboratory for motor vehicle emission standards and control technology. California's "unique [air pollution] problems and [its] pioneering efforts justif[ied] a waiver of the preemption section;" California "should serve the Nation as a 'testing area' for more protective standards."[245] Similarly, California is to "blaze its own trail with a minimum of federal oversight."[246] EPA has thus "[h]istorically granted waivers allowing the introduction of new technology in California prior to its introduction nationwide" intending for the phase-in of new control technology in California as a means of successful implementation nationwide.[247] The Administrator has explained that allowing California to first introduce technology "best serves the total public interest and the mandate of the statute. It promotes continued momentum toward installation of control systems meeting the statutory standards while minimizing risks incident to national introduction of new technology."[248] Applying fixed lead time and stability requirements to the California heavy-duty vehicle program would thwart California's ability to serve as a laboratory of vehicle emission reduction technologies and delay the transfer of

[237] 58 FR 4166, LEV Waiver Decision Document at 50–51.

[238] *MEMA II*, 142 F.3d at 464 ("EPA has observed, 'California would not be denied a waiver if its CO standard were slightly higher than the federal . . . standard. . . . This is despite the fact that section 202(g) contains specific standards for CO that EPA must promulgate.' EPA Air Docket A–90–28, Doc. No. V–B–1 at 47.").

[239] *MEMA II*, 142 F.3d at 464 ("California would not be denied a waiver if its CO standard were slightly higher than the federal . . . standard. . . . This is despite the fact that section 202(g) contains specific standards for CO that EPA must promulgate."); *MEMA I*, 627 F.2d at 1110 n.32 (explaining the specific intent of Congress to allow California carbon monoxide standards to be less stringent than federal carbon monoxide standards).

[240] *MEMA I*, 627 F.2d 1095, 1112 n.35 (DC Cir. 1979) ("For this reason we find unpersuasive petitioners' suggestion that section 302(k) of the Clean Air Act, 42 U.S.C. 7602(k) (Supp. I 1977), which contains a definition of "emission standards," controls our examination of the meaning of the word "standards" in section 209); *Motor Vehicle Mfrs. Ass'n* v. *New York State Dep't of Envtl. Conservation*, 17 F.3d 521, 533 (2d Cir. 1994).

[241] "The 1977 Amendment also drew heavily on the California experience in the ten years since enactment of the first waiver provision. *See* 123 Cong. Rec. H4852 (daily ed. May 21, 1977); *id.* at H5061 (daily ed. May 25, 1977)." *MEMA* I, 627 F. 2d. 1095, 1111 n.34; *For example*, EPA granted a waiver for 1972 and later heavy-duty vehicles gasoline standards to California on May 6, 1969 (34 FR 7348). In turn, EPA first promulgated heavy-duty vehicle and engine standards pursuant to the 1977 Amendments in 1985. 50 FR 10606 (May 15, 1985).

[242] 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); *MEMA I*, 627 F.2d 1095, 1111 (DC Cir. 1979).

[243] *MEMA I*, 627 F.2d 1095, 1110.

[244] 38 FR 10317, 10324 (April 26, 1973). There is a general pattern that emission control technology have been phased in through use in California before their use nationwide. This pattern grew out of early recognition that auto caused air pollution problems are unusually serious in California. In response to the need to control auto pollution, California led the nation in development of regulations to require control of emissions. This unique leadership was recognized by Congress in enacting Federal air pollution legislation both in 1967 and 1970 by providing a special provision to permit California to continue to impose more stringent emission control requirements than applicable to the rest of the nation. In 1973 for example, the Administrator granted a waiver to California that would force the use of emissions catalyst while setting national standards that would not call for such technology. The Administrator explained that "[i]f the new technology is largely restricted to California vehicles in 1975, it is the testimony of both General Motors and Ford that all the processes needed to mass produce catalyst cars can be tested out on a limited scale that makes tighter quality control possible and allows extra energy to be applied to the cure of any problems that may arise [ ]. Both companies also stated that they would be able to focus their energies to deal more effectively with such in use failures as did occur if the first introduction of catalysts were in a limited geographical area [ ]." Notably, the Administrator was acting under a somewhat analogous provision to section 202(a)(3)(A)(ii) by calling for standards that "reflect the greatest degree of emissions control which is achievable by application of technology which the Administrator determines is available giving appropriate consideration to the cost of applying such technology within the period of time available to manufacturers." Section 202(b)(5)(C).

[245] S. Rep. No. 90–403, at 33 (1967); 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); *MEMA I*, 627 F.2d 1095, 1111 (D.C. Cir. 1979).

[246] *Ford Motor Co.*, v. *EPA*, 606 F.2d 1293, 1297 (D.C. Cir. 1979).

[247] 49 FR 18887, 18894 (May 3, 1984).

[248] 38 FR 10317, 10319 (April 26, 1973).

those innovations to the country as a whole under federal standards. Given Congress's desire for California to serve as a laboratory for innovation, the traditional feasibility inquiry under section 209(b)(1)(C) suffices to ensure that manufacturers have sufficient time to deploy technologies to comply within the California market while allowing California to move faster in deploying feasible technologies than the fixed lead time and stability requirements would allow.

Additional statutory text and context further supports our historical view. A plain reading of "under this paragraph" in section 202(a)(3)(C) means *under paragraph 3*.[249] Paragraph 3 grants EPA the authority to: (1) Establish heavy-duty engine and vehicles standards for four listed pollutants in 202(a)(3)(A)(i), (2) classify or categorize heavy-duty vehicles and engines in 202(a)(3)(A)(ii); (3) revise earlier promulgated heavy-duty standards in 202(a)(3)(B); and (4) establish standards for motorcycles in 202(a)(3)(E).[250] EPA has thus long read and applied in its regulatory practice "under this paragraph" in section 202(a)(3)(C) as meaning *under paragraph 3, i.e.,* section 202(a)(3).[251] In other words, the lead time and stability requirements apply to, and only to, certain regulations authorized under paragraph 3. EPA has thus also long read section 202(a)(3)(C) as the authority to provide the specified lead time and stability requirements for heavy-duty vehicle and engine emissions standards that are promulgated "under this paragraph"—under paragraph 3 ("That requirement was enacted for the benefit of manufacturers to allow time for them to design and develop engines in compliance with newly promulgated standards.").[252] Specifically, this language applies when EPA promulgates heavy-duty vehicle and engine emissions standards for the listed pollutants: hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter emissions from heavy-duty vehicles, under section 202(a)(3).[253] The 1994 MDV decision that commenters rely on also acknowledged this reading of section 202(a)(3)(C) at the time. By contrast, California's standards are *not* promulgated under section 202(a)(3); as a general matter, California adopts standards for which it seeks a waiver as a matter of law under its police powers.[254]

Additional reasons justify not applying 202(a)(3)(C) to the 2018 HD Warranty Amendments. Specifically, it has been EPA's long-standing view that section 207, which requires manufacturers to provide an emissions warranty for heavy-duty engines, is the grant of authority to EPA to promulgate heavy-duty vehicles emissions warranty requirements.[255] Accordingly, section 202(a)(3) is inapplicable to Federal warranty requirements, and it would not be reasonable to give it force in California's warranty requirements. Notably, the D.C. Circuit has agreed, holding that "California is not required to comply with section 207 to get a waiver.[256] Further, EPA has also long considered CARB's warranty amendments as not standards themselves, but rather accompanying enforcement procedures because they constitute criteria designed to better ensure compliance with applicable standards and are accordingly relevant to a manufacturer's ability to produce vehicles and engines that comply with applicable standards.[257] And while "section 209(b) refers to accompanying procedures only in the context of

[249] In deciding to grant these waiver requests, EPA is relying on its legal interpretation of the statute as explained in this notice. In each case, EPA believes that its interpretation is the best interpretation of the statute, regardless of judicial deference. *Guedes* v. *ATF*, 45 F.4th 306, 313 (D.C. Cir. 2022). Moreover, to the extent the statute is ambiguous, EPA's interpretation is reasonable and entitled to deference. *Washington All. of Tech. Workers* v. *DHS*, 50 F.4th 164, 192 (D.C. Cir. 2022).

[250] One commenter also mistakenly suggests that 202(a)(3)(B) may also apply to California. EMA Supp. Comment at 6. To begin with, the commenter's argument is internally inconsistent. Compare id. at 6, with id. at 4 ("certain provisions in section 202(a)(3) are not directly relevant to CARB—for example, because they authorize EPA to revise standards (*i.e.*, section 202(a)(3)(B))"). Underscoring the point, there are other obligations imposed on EPA by section 202(a) that are not imposed on California. For example, the requirements involving motorcycles under section 202(a)(3)(E) do not apply to California, (EPA has issued waivers for California's motorcycle standards that include 42 FR 1503 (January 7, 1977); 41 FR 44209 (October 7, 1976); 43 FR 998 (January 5, 1978)), neither does the consultation requirement under section 202(a)(5)(A), nor do certain requirements of section 202(a)(6) addressing onboard vapor recovery. Moreover, applying section 202(a)(3)(B) to California would, as with applying section 202(a)(3)(A), create a conflict with section 209(b). Section 209(b)'s "in the aggregate" language allows California to adopt any standards so long as they are in the aggregate more protective than the federal standards; California is not limited to the fixed numerical NOx standards found in section 202(a)(3)(B)(ii), or to revising standards based on certain air quality information as provided by 202(a)(3)(B)(i). Further, section 202(a)(3)(B)(i) grants the Administrator discretion to revise certain heavy-duty standards that the Administrator previously "promulgated under, or before the date of, the enactment of the Clean Air Act Amendments of 1990 (or previously revised under this subparagraph)." This provision is closely linked with section 202(a)(3)(A). That is, notwithstanding the mandate in section 202(a)(3)(A) for EPA to promulgate heavy-duty standards for the four listed pollutants that reflect the greatest emissions reductions achievable, section 202(a)(3)(B)(ii) allows EPA to revise such standards based on certain air quality information. See section 202(a)(3)(A)(i) (including the proviso "unless the standard is changed as provided in subparagraph (B)"). As explained above, section 202(a)(3)(A) does not apply to California, and thus section 202(a)(3)(B)(ii) does not either. Separately, section 202(a)(3)(B)(ii) also does not apply to California because California is not revising standards previously promulgated under the CAA, whether "under, or before the date of, the enactment of" the 1990 CAA Amendments. Finally, to the extent the commenter is specifically concerned with greenhouse gas aspects of California's regulations, EPA notes that in the federal standard-setting context, the agency has promulgated heavy-duty GHG standards under its general standard-setting authority in section 202(a)(1)–(2) and does not apply the four-year lead time and three-year stability requirements in section 202(a)(3)(C) in such heavy-duty GHG rulemakings. See 87 FR 17436–37 & n.26 (Mar. 28, 2022) ("Section 202(a)(3)(A) and (C) . . . do not apply to regulations applicable to GHGs."); 81 FR 73512 (Oct. 25, 2016); Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles EPA Response to Comments Document for Joint Rulemaking 5–34 to 5–36 (Aug. 2011).

[251] "[I]n adding section 202(a)(3)(A)(iii) . . . Congress directed the EPA to give priority to establishing particulate emission standards for heavy-duty vehicles, and left the agency free to exercise its power under section 202(a)(1) to regulate light-duty automobiles, whether diesel-powered or otherwise." *NRDC* v. *EPA*, 655 F.2d 318, 326 (D.C. Cir. 1981); *See, e.g.*, EPA's statutory authority requires a four-year lead time for any heavy-duty engine or vehicle standard promulgated or revised under CAA section 202(a)(3). *See also* 81 FR 95982 (December 29, 2016); 79 FR 46256 (August 7, 2014); 77 FR 73459 (December 10, 2012); 73 FR 52042 (September 8, 2008).

[252] EPA "cannot cite us to any precedent allowing a court to ignore an explicit leadtime requirement." *NRDC* v. *Thomas*, 805 F.2d at 435. *See also*, 805 F.2d 435, n.40.

[253] *NRDC* v. *Thomas*, 805 F.2d at 414–16, 435 (reversing EPA decision to provide less than the statutorily mandated four-year lead time for certain model year heavy-duty vehicles and engines standards.); 805 F.2d 435 n.40; *See also, e.g.*, 87 FR 17414, 17420 n.26 (March 28, 2022) ("Section 202(a)(3)(A) and (C) apply only to regulations applicable to emissions of these four pollutants."); 87 FR 17435–36. EPA's statutory authority requires a four-year lead time for any heavy-duty engine or vehicle standard promulgated or revised under CAA section 202(a)(3).

[254] *Central Valley Chrysler-Jeep, Inc.* v. *Goldstene*, 529 F.Supp.2d 1151, 1174 ("The waiver provision of the Clean Air Act recognizes that California has exercised its police power to regulate pollution emissions from motor vehicles since before March 30, 1966; a date that predates . . . the Clean Air Act.").

[255] *Auto. Parts Rebuilders Ass'n* v. *EPA*, 720 F.2d 142, 149 (D.C. Cir. 1983) (Section 207 "commands that the Administrator 'shall prescribe regulations which shall require manufacturers to warrant [their cars].'" (Alteration in original)). *See* Decision Document for the Notice of Scope of Preemption for California's amendments to warranty regulations pertaining to 1983 and later model year passenger cars, light-duty vehicles, medium- and heavy-duty vehicles and motorcycles, V–B–1, at 65, n.132 and 66–67; 51 FR 12391 (Apr. 10, 1986).

[256] *MEMA II*, 142 F.3d at 466–67.

[257] *MEMA I* at 1111–13; Decision Document accompanying 51 FR 12391 (April 10, 1986), at 3; 43 FR 32182, 32184 (July 25, 1978). EPA sets emissions warranty period under section 207(a) and not section 202(a). *See, e.g.*, 48 FR 52170 (November 16, 1983).

consistency with section 202(a)," EPA has long reviewed the accompanying procedures under the traditional consistency test.[258] In any event, the 2018 HD Warranty Amendments would not be properly considered emission standards for the listed pollutants that would come within the purview of section 202(a)(3)(C).

Further, section 202(a)(3)(C) by its terms applies to onroad heavy-duty vehicles and engines, not to nonroad vehicles or engines.[259] Considering the nearly identical language in both 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).[260] Under the third authorization criterion, EPA historically has interpreted the consistency inquiry to require, at minimum, that California standards and enforcement procedures be consistent with section 209(a), section 209(b)(1)(C), and section 209(e)(1) of the Act. And, in evaluating consistency with section 209(b)(1)(C), for purposes of consistency with section 202(a) EPA has applied the traditional feasibility test where the inquiry is solely whether California standards are feasible within the lead time provided.[261] EPA has thus never applied section 202(a)(3)(C) to authorizations for nonroad engines and vehicles, explaining for instance that "section [202(a)(3)(C)] by its own terms applies only to standards applicable to emissions from new heavy-duty on-highway motor vehicle engines, not the nonroad engines being regulated by California."[262]

Considering the 1977 Amendments and subsequent ones, Congress could have explicitly provided that the four-year lead time and three-year stability requirements in section 202(a)(3)(C) apply to California heavy-duty standards, had that been Congress's intent. For example, Congress could have changed the text of section 209(b)(1)(C) to say, "compliant with" rather than "consistent with." It did not. Further demonstrating the point, in section 202(m)(2) regarding certain standards that were determined infeasible by EPA, Congress set out a specific delayed lead time requirement that is "consistent with corresponding regulations or policies adopted by the California Air Resources Board."[263] Similarly, in section 428 of the 2004 Consolidated Appropriations Act Congress required that EPA specifically address safety implications of any California standard for certain engines prior to granting authorizations under section 209(e).[264] Section 202(a)(3)(C), however, is devoid of either any explicit language or exception that would be read as a reference to California's heavy-duty standards.[265] A provision that would require the Administrator to preclude California from revising the state's heavy-duty standards for a minimum of three model years would appear to be an important enough limitation for Congress to explicitly set out in either section 202 or 209 especially if Congress intended California to be the judge of the "best means to protect the health of its citizens and the public welfare."[266] EPA thus believes more explicit Congressional directive is needed prior to precluding California from revising standards for heavy-duty vehicles and engines that are to be sold in that state.[267]

In any event, except for the 1994 MDV waiver, since the 1977 Amendments EPA has granted heavy-duty engine and vehicle waivers where California has provided less than four years of lead time from adoption of its regulations and three years stability also under the traditional consistency test.[268] Congress did not add anything to section 202(a)(3) during the 1990 amendments to the Clean Air Act to indicate its applicability to California.[269] And, in

[258] *MEMA I*, 627 F.2d at 1111–12.

[259] Section 202 of the CAA pertains to new motor vehicles or new motor vehicle engines, and motor vehicles and engines is further defined in section 216 of the CAA. Section 216 also provides the definition of nonroad engine and nonroad vehicle and provides that nonroad engines are not subject to standards promulgated under section 202 of the CAA.

[260] *See Engine Mfrs. Ass'n* v. *EPA*, 88 F.3d 1075, 1087 (D.C. Cir. 1996) (". . . EPA was within the bounds of permissible construction in analogizing section 209(e) on nonroad sources to section 209(a) on motor vehicles.").

[261] On July 20, 1994, EPA promulgated a rule that sets forth, among other things, regulations providing the criteria, as found in section 209(e)(2)(A), which EPA must consider before granting any California authorization request for new nonroad engine or vehicle emission standards. 59 FR 36969 (July 20, 1994). EPA revised these regulations in 1997. These regulations were further slightly modified and moved to 40 CFR part 1074, *See* 73 FR 53979 (Oct. 8, 2008). As stated in the preamble to the 1994 rule, EPA has historically interpreted the section 209(e)(2)(A)(iii) "consistency" inquiry to require, at minimum, that California standards and enforcement procedures be consistent with 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). In order to be consistent with 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 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.

[262] See, for example, 77 FR 9249, n.73.

[263] "The regulations required under paragraph (1) of this subsection shall take effect in model year 1994, except that the Administrator may waive the application of such regulations for model year 1994 or 1995 (or both) with respect to any class or category of motor vehicles *if the Administrator determines that it would be infeasible to apply the regulations to that class or category in such model year or years, consistent with corresponding regulations or policies adopted by the California Air Resources Board for such systems.*" Section 202(m)(2) (Emphasis added). By the time of this amendment California had been regulating heavy-duty vehicle and engine emissions with the appropriate waivers that EPA granted applying the traditional consistency test. *See, e.g.*, 34 FR 7348 (May 6, 1969) (HD gasoline MY 72 and later); 36 FR 8172 (April 30, 1971) (HD diesel MY 72 and later MY); 40 FR 23102, 23105 (May 28, 1975) (extending waiver of April 30, 1971, to MY 1975 HD standards).

[264] Codified at 40 CFR 1074.105(c). "In considering any request from California to authorize the state to adopt or enforce standards or other requirements relating to the control of emissions from new nonroad spark-ignition engines smaller than 50 horsepower, the Administrator will give appropriate consideration to safety factors (including the potential increased risk of burn or fire) associated with compliance with the California standard."

[265] In contrast, for example, under section 246(f)(4), which sets out a State Implementation Plan provision regarding fleet programs required for certain non-attainment areas, "standards established by the Administrator under this paragraph . . . shall conform as closely as possible to standards which are established for the State of California for ULEV and ZEV vehicles in the same class." And "[f]*or vehicles of 8,500 lbs. GVWR or more, the Administrator shall promulgate comparable standards for purposes of this subsection.*" Section 246(f)(4) (Emphasis added).

[266] H.R. Rep. No. 95–294, 95th Cong., 1st Sess. 301–302 (1977).

[267] Moreover, in 1977, the congressional record indicates that at least one heavy-duty vehicle and engine manufacturer requested that Congress amend section 209(b) by limiting this waiver provision to only light-duty vehicles and engines. According to the engine manufacturer, California's heavy-duty vehicle standards would be on par with federal standards by 1983. Hearing on S. 251, 252 and 253 Before Subcomm. On Env't Protection, H.R. Rep. No. 95–294, 95th Cong. 1st Sess. 4221–23 (1977). There was no concurrent testimony from a member of Congress in 1977 or 1990 regarding the intent of section 202(a)(3) and certainly nothing to indicate that it would apply to California. While there was general testimony from a member of industry during the 1990 process, there is no evidence in the record suggesting the applicability of 202(a)(3)(C) to California. Hearing on S.1630 Before Subcomm. on Env't Protection, 101st Cong. 312–13 (1989). In any event, "The 1977 Amendment also drew heavily on the California experience in the ten years since enactment of the first waiver provision. *See* 123 Cong. Rec. H4852 (daily ed. May 21, 1977); *id.* at H5061 (daily ed. May 25, 1977)." *MEMA I*, 627 F. 2d. 1095, 1111 n.34.

[268] *For example*, 34 FR 7348 (May 6, 1969 (HD gasoline MY 1972 and later); 36 FR 8172 (April 30, 1971) (HD diesel MY 1972 and later MY); 43 FR 1829 (January 12, 1978); 49 FR 18887 (May 3, 1984).

[269] The 1990 Amendments did extend the four-year lead time and three-year stability to standards

Continued

2012, EPA specifically rejected commenters assertions that section 202(a)(3)(C) applied to California, stating that EPA's lead time inquiry relates to technological feasibility and that there is no additional requirement imposed by the section 209 criteria.[270]

Turning to section 209(b), in section 209(b)(1) Congress directed that EPA "shall" grant waivers absent one of the three limited bases for a waiver denial.[271] Section 209(b)(1) "contains an imperative to do an act—grant the waiver after a hearing—once California has made the protectiveness determination." [272] Congress did not amend section 209(b)(1)(C) in the 1977 Amendments, rather the "more stringent" standard required for California standards and contained in section 209(b)(1) in the 1967 Act was superseded by amendments to section 209, which established that California's standards must be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. Specifically, under section 209(b)(1), California is now required to make a protectiveness finding "in the aggregate" for each waiver request by looking at the summation of the standards within its vehicle program. The protectiveness finding does not call for identicality of the standards under review with Federal standards. Instead, the 1977 Amendments to section 209(b)(1), which reflected California's preference to "trade off" emissions of carbon monoxide, which was not as critical a problem in California, for NO_X emissions, which were and continue to present severe air quality challenges in California.[273] With this amendment, California was no longer required to design a program where each standard was equally or more stringent than the applicable Federal standards, but rather can prioritize the emission reductions it views as most important for its citizens and to regulate certain pollutants less stringently than the Federal government, as long as the state program standards are in the aggregate at least as protective as the Federal standards.[274] CARB may now design motor vehicle emission standards that are not as stringent as Federal standards but when considered collectively with other standards would be best suited to address California air quality problems, as long as the in the aggregate, the protectiveness finding is made and it is not arbitrary and capricious.[275] "[T]here is no question that Congress deliberately chose in 1977 to expand the waiver provision so that California could enforce emission control standards which it determined to be in its own best interest even if those standards were in some respects less stringent than comparable federal ones." [276]

It is also this protectiveness determination by California, under section 209(b)(1) that determines EPA's scope of review for consistency under section 209(b)(1)(C).[277] EPA has reasoned that this is appropriate because the phrase "in the aggregate," which as earlier explained is California's whole program precedes "such state standards," which is the relevant language in section 209(b)(1)(C).[278] EPA has thus long read both sub-provisions together so that the Agency reviews California's entire program for both protectiveness and feasibility.[279] So, EPA's historic practice has been to conduct the technology feasibility analysis for CARB's standard under review as a whole-program assessment, *i.e.*, one that ensures manufacturers have sufficient lead time to comply with the program's standards as a whole, accounting for the interactions between technologies necessary to meet both new and existing standards.[280] And most importantly, because California can "include some less stringent [standards] than the corresponding federal standards" California would logically not be expected to take section 202(a)(3)(C) into account in any protectiveness finding made for a waiver request for California standards with a shorter lead time than specified in section 202(a)(3)(C), and such standards would otherwise be properly considered more stringent than Federal standards.[281] "[T]he agency's long-standing interpretation that section 209(b) does not require California to establish

promulgated by EPA for control of NO_X emissions from heavy duty engines and vehicles. ("The conference agreement adopts the House provisions, modified to retain the Senate oxides of nitrogen (NO_X) standard for heavy-duty engines effective in model year 1998, and to reinstate the four-year lead time and three-year stability provisions in current law." Conference Report on S. 1630 (H. Rept. 101–952) 103d Cong. 1st Sess. 887).

[270] 77 FR 9239, 9249 (Feb. 16, 2012) ("However, the lead-time inquiry EPA undertakes relates to technological feasibility. Specifically, 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 . . . EPA then has no further inquiry into lead-time, because no additional requirement is imposed by the section 209 criteria."). EPA acknowledges that the regulations at issue in this 2012 waiver decision concerned nonroad engines, not heavy-duty on-highway motor vehicle engines, and that the Agency noted, in that decision, that "even if the language in [section 202(a)(3)(C)] were relevant to its consistency analysis, that section by its own terms applies only to standards applicable to emissions from new heavy-duty on-highway motor vehicle engines, not the nonroad engines being regulated by California." *Id.* at 9249, n.73.

[271] *See, e.g., Ford Motor Co.*, 606 F.2d 1293, 1302 ("The Administrator is charged with undertaking a single review in which he applies the deferential standards set forth in Section 209(b) to California and either grants or denies a waiver without exploring the consequences of nationwide use of the California standards or otherwise stepping beyond the responsibilities delineated by Congress.").

[272] *MEMA I*, 627 F.2d 1095, 1120.

[273] The House Committee recognized "California's longstanding belief that stringent control of oxides of nitrogen emission from motor vehicles may be more essential to public health protection than stringent control of carbon monoxide," and was aware that it might be technologically difficult to meet both the NO[x] standards California desired and the federal CO standard. Accordingly, Section 209(b) was rewritten to permit California to obtain a waiver of federal preemption so long as it determines that its emission control standards would be, "*in the aggregate*, at least as protective of public health and welfare as applicable Federal standards." *Ford Motor*, 606 F.2d 1293, 1297 (D.C. Cir. 1979).

[274] H.R. Rep. No. 95–294, 95th Cong., 1st Sess., 301–302 (1977). The amendment is to afford California "the best means to protect the health of its citizens and the public welfare." (*Motor Vehicle Mfrs. Ass'n* v. *NYS Dep't of Env't Conservation*, 17 F.3d at 525 ("section 209 (formerly section 208) was amended to require the U.S. Environmental Protection Agency (EPA) to consider California's standards as a package, so that California could seek a waiver of preemption if its standards 'in the aggregate' protected public health at least as well as federal standards.")).

[275] 74 FR at 32761 ("Congress decided in 1977 to allow California to promulgate individual standards that are not as stringent as comparable federal standards, as long as the standards are 'in the aggregate, at least as protective of public health and welfare as applicable federal standards."); *Ford Motor*, 606 F.2d 1293, 1302 (D.C. Cir. 1979) ("[T]he 1977 amendments significantly altered the California waiver provision.").

[276] *Ford Motor Co.*, 606 F.2d 1293, 1301; *MEMA II*, 142 F.3d 464 ("California would not be denied a waiver if its CO standard were slightly higher than the federal . . . standard. . . . This is despite the fact that section 202(g) contains specific standards for CO that EPA must promulgate.").

[277] EPA's assessment under 209(b)(1)(C) is not in practice a standard-by-standard review. EPA believes it appropriate to read the entirety of 209 together, along with its purposes, in order to properly interpret its components such as 209(b)(1)(C). *See e.g.*, 87 FR 14332.

[278] 78 FR 2131–45. EPA notes that the term "such state standards" in 209(b)(1)(C) allows the Agency, in appropriate circumstances, to review the consistency of CARB's suite of standards, for a particular vehicle category, with section 202(a). For example, EPA evaluated all of the standards (LEV III criteria pollutant, ZEV sales mandate, and GHG standards) of the ACC program in recognition of the aggregate costs and lead time associated with CARB's standards as well as technologies that may be employed to meet more than one standard.

[279] 49 FR 14353–54, 14358–62. EPA notes there would be an inconsistency if "State standards" meant all California standards when used in section 209(b)(1) but only particular standards when used in 209(b)(1)(B) and 209(b)(1)(C). EPA has historically interpreted the third waiver criterion's feasibility analysis as a whole-program approach. 87 FR 14361, n.266.

[280] 38 FR 30136 (November 1, 1973) and 40 FR 30311 (July 18, 1975).

[281] *See for example*, 41 FR 44209, 44212 (October 7, 1976).

perfect compliance with the CAA to obtain a waiver is particularly plausible because section 209(b) explicitly requires only that the state's standards 'be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards.' CAA section 209(b)(1)." [282]

Section 202(a)(3)(C) also requires that standards for heavy-duty vehicles and engines apply for no less than three model years without revision.[283] Under a commenter's argument, the Administrator would have to "align" or make a finding that precludes California from revising each one of the standards under review for a minimum of three model years, under section 202(a)(3)(C).[284] Commenters' reading of "consistency" would thus require EPA to first conduct "the narrow[ ] . . . congressionally mandated EPA review" under which EPA's scope of review is delineated by the protectiveness finding California has made, and then a second broader review, beyond the confines of EPA's historic waiver practice, that would account for the stability requirements for California cars.[285] Under this reading, "[EPA] must come to the rather curious conclusion that Congress intended the Administrator to approach every new set of California standards wearing two hats one expressly provided by statute and the other a product of elusive inference. Under the first he would undertake the cursory review set forth in Section 209(b) for purposes of deciding whether to grant California a waiver of preemption; and under the other he would turn around and, apparently in the course of a full-fledged rulemaking proceeding, plumb the merits of the California standards." [286] EPA disagrees. "The Administrator has consistently held since first vested with the waiver authority, his inquiry under section 209 is modest in scope. He has no broad and impressive authority to modify California regulations." [287] "[H]is role with respect to the California program is largely ministerial." [288] And "[t]he statute does not provide for any probing substantive review of the California standards by federal officials." [289] Rather "[t]he Administrator is charged with undertaking *a single review* in which he applies the deferential standards set forth in Section 209(b) to California and either grants or denies a waiver without exploring the consequences of nationwide use of the California standards or otherwise stepping beyond the responsibilities delineated by Congress." (Emphasis added).[290] As previously discussed, the deference called for in reviewing California's waiver request led EPA to explain over 50 years ago:

> Even on this issue of technological feasibility I would feel constrained to approve a California approach to the problem which I might feel unable to adopt at the Federal level in my own capacity as a regulator. The whole approach to 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 to automotive emission control might be attended with costs, in the shape of reduced product offering, or price and 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 these risks and costs against the potential benefits from reduced emissions is a central policy decision for any regulatory agency, under the statutory scheme outlined above I believe I am required to give very substantial deference to California's judgment on that score.[291]

Commenters' reading would also introduce two different tests for the evaluation of the consistency of California's standards under the third prong: one for onroad heavy-duty vehicle and engine standards; and a different one for nonroad heavy-duty vehicle and engine standards. For one set of standards, EPA would continue evaluation of technology feasibility under the traditional test while other standards would have to be evaluated for consistency under the four-year lead time and minimum three-model year stability requirements. This would create a dichotomy, for example, between California's heavy-duty onroad and nonroad vehicle and engine standards that address hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter that is neither supported by the statute nor EPA's waiver practice. It would be particularly confounding, in that as a general matter, the only difference between certain heavy-duty vehicles is the placement in service with some heavy-duty engines being used interchangeably for either onroad or nonroad purposes. Since the inception of the waiver program EPA has reviewed both California's onroad and nonroad heavy-duty engine standards under the traditional test. This waiver practice predated the 1990 Amendments that provided for authorizations of nonroad engines and vehicles standards by over two decades. Thus, for example, over fifty years ago EPA, in granting a waiver of preemption for California's 1972 and 1973 MY HD vehicles, also denied the waiver for certain nonroad utility vehicles under the historical technology feasibility test.[292] Since the 1990 amendments and considering the identical language in both 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 we have historically applied in reviewing requests for waivers of preemption for new motor vehicle or new motor vehicle engine standards under section 209(b).[293] Specifically, EPA's practice has been to conduct the consistency inquiry called for under section 209(e)(2)(A)(iii) by evaluating, at a minimum, whether California's standards and enforcement procedures for nonroad engines and vehicles are consistent with section 209(a), section

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

[283] "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." Section 202(a)(3)(C)(Emphasis added).

[284] EMA Initial Comments at 5, 11.

[285] *Ford Motor*, 606 F.2d 1293, 1298–99.

[286] *Id.* at 1302.

[287] *MEMA I*, 627 F.2d at 1119 (internal citations omitted).

[288] *Id.* at 1123 n.56 ("[T]he Administrator has no broad mandate to assure that California's emissions control program conforms to the Administrator's perceptions of the public interest. Absent the contingency that he is able to make contrary findings, his role with respect to the California program is largely ministerial.").

[289] *Ford Motor*, 606 F.2d at 1301.

[290] *Id.* at 1302.

[291] 36 FR 17158 (August 31, 1971); See also See 78 FR at 2133. (EPA notes that when reviewing California's standards under the third waiver prong, the Agency may grant a waiver to California for standards that EPA may choose not to adopt at the Federal level due to different considerations).

[292] 36 FR 8172 (April 30, 1971) (Provided that due to considerations of technological feasibility, this waiver of such standards and procedures (1) shall not become applicable with respect to hydrocarbon and carbon monoxide emissions from nonroad utility vehicles (as defined at 45 CFR 85.1(a), 35 FR 17288); 34 FR 7348 (May 6, 1969) (Due to technological feasibility and lead-time issues, exhaust emission standards and test procedures for 1970 gas-powered light duty vehicles are not applicable to off-road utility vehicles until April 30, 1970, and not at all unless provision is made for calculating emissions of hydrocarbons and carbon monoxide. Due to technological feasibility issues, standards and procedures for 1971 and later gas-powered light-duty vehicles are not applicable to off-road utility vehicles unless provision are made for calculating emissions of hydrocarbons and carbon monoxide. Due to technological feasibility issues, fuel evaporative emission standards and test procedures for 1970 and later gas-powered light duty vehicles are not applicable to off-road utility vehicles until April 30, 1970).

[293] *See Engine Mfrs. Ass'n* v. *EPA*, 88 F.3d 1075, 1087 (D.C. Cir. 1996) (". . . EPA was within the bounds of permissible construction in analogizing section 209(e) on nonroad sources to section 209(a) on motor vehicles.").

209(e)(1) and section 209(b)(1)(C).[294] In short, "EPA's review of California's regulations under the third statutory criterion is quite deferential, limited to judging whether a regulation is 'not consistent' with the terms of section 7543. *See* 42 U.S.C. 7543(e)(2)(A)(iii)."[295]

The "technological feasibility component of section 202(a) [only] obligates California to allow sufficient lead time to permit manufacturers to develop and apply the necessary technology."[296] Under EPA's historical practice, standards that are technologically feasible because technology is presently in use are "consistent with section 202(a)." So too are standards for which technology is reasonably projected to be available by the relevant model year. For California standards, that ends the inquiry. Otherwise, the Administrator, who has long explained that his role in the waiver context is "modest in scope" and not to "overturn" and "substitute his judgment" for those of California would nevertheless impose a four-year lead time requirement on California despite a showing that necessary emission control technology is available and otherwise well within the bounds of EPA's historical waiver practice of reviewing feasibility.[297] Doing so would be inconsistent with the statutory text and the structure that Congress put in place to enable innovation in California's market. In sum, "the import of section 209(b) is not that California and Federal standards be identical, but that the Administrator does not grant a waiver of Federal preemption where compliance with the California standards is not technologically feasible within available lead time."[298]

b. Neither AMC v. Blum nor the 1994 MDV Waiver Dictate a Contrary Interpretation

As also noted above, EPA received comment that the D.C. Circuit's decision in *Blum* along with EPA's 1994 MDV waiver constrain EPA and require it to apply the precise requirements of section 202(a)(3)(C) California's program in reviewing for consistency with section 202(a).[299] But the lead time section at issue in *Blum* is distinguishable from section 202(a)(3)(C) in several key respects, and *Blum* thus does not control consideration of that latter section. In *Blum*, the D.C. Circuit held that a waiver of preemption that denied a small volume manufacturer the statutorily mandated lead time specified as an exception in section 202(b)(1)(B) was incorrectly granted because the relevant California's standards did not provide two-year lead time and were thus inconsistent with section 202(a) under the third waiver prong.[300] According to the court, "Congress itself finds and mandates that with respect to small manufacturers a lead period two years is necessary. 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)."[301]

There are several important distinctions between *Blum* and the present waivers. As an initial matter, *Blum* is not directly on point because it did not resolve the applicability of section 202(a)(3)(C) in a California waiver proceeding. Nor did *Blum* suggest that all nationally applicable lead time requirements in section 202 must apply to California. Rather, *Blum* performed a detailed analysis of the text and history of the specific provision at issue, section 202(b)(1)(B), and found that that provision alone must be strictly applied for California's standards to be "consistent" with section 202(a). Applying the same kind of detailed textual and historical analysis here, EPA concludes that section 202(a)(3)(C) does not apply in the California waiver context.[302]

Moreover, the facts surrounding section 202(b)(1)(B) in *Blum* and section 202(a)(3)(C) here are quite different. *Blum* dealt with a narrow, time-limited issue: whether a specific group of manufacturers were entitled to relief from certain NO_X standards for two model years shortly after the enactment of the 1977 Amendments. Congress made findings specific to those standards and that group of manufacturers, including one of the petitioners in the litigation by name. The court of appeals gave substantial weight to the specific findings Congress made and the detailed legislative history. By contrast, section 202(a)(3)(C) deals with a much broader set of standards applying to a broader set of manufacturers over an indefinite period of time—none of which Congress specifically evaluated. Applying section 202(a)(3)(C) to California's program is not necessary because it was not grounded in manufacturer and model year-specific findings and would, as discussed above, interfere with California's ability to serve as a laboratory—all in stark contrast to the application of section 202(b)(1)(B). Congress purposely crafted statutory language in section 202(b)(1)(B) to provide practical flexibility that would only apply for a short period of time (the 1981 and 1982 model years) with knowledge of the industry at the time, and the court of appeals in *Blum* acknowledged the congressional purpose of this language. This short-lived statutory exception no longer applies in EPA rulemakings, nor does it apply to California at this point in time. In contrast, there is no evidence that Congress evaluated questions of lead time and stability with respect to future California heavy-duty standards—or that it had any intent to constrain the form of California's standards, in contrast to the federal standards tied to the "greatest degree of emission reduction achievable" mandate. And more importantly, there are no similar legislative findings or other legislative history indicating that Congress believed all manufacturers needed at least four years of lead time to meet CARB's heavy-duty standards generally or the standards that are the subject of these waiver requests specifically. Indeed, as EPA has explained, CARB set forth a detailed explanation of the feasibility of its standards and commenters have failed to meet their burden of proof to show that the standards are infeasible.

As noted, there is a critical textual distinction between the issue addressed in *Blum* and the one here. In *Blum*, the applicability of section 202(b)(1)(B) to California resulted from an exception to the general lead time of section 202(a)(2) that Congress provided for certain motor vehicle manufacturers for a short period of time and for specified model years. Immediately introducing section 202(a)

[294] 40 CFR part 1074, subpart B, 73 FR 59379 (October 8, 2008).

[295] *American Trucking Assoc.* v. *EPA*, 600 F.3d 624, 629 (D.C. Cir. 2010).

[296] *MEMA II*, 142 F.3d at 463 (Internal citations omitted).

[297] H.R. Rep. No. 95–294, at 302 (The Administrator "is not to overturn California's judgment lightly. Nor is he to substitute his judgment for that of the State.").

[298] 46 FR 22032, 22034–35 (April 15, 1981).

[299] 59 FR 48625 (September 22, 1994) and associated Decision Document at EPA–HQ–OAR–2022–0330, (MDV Waiver Decision Document).

[300] Waiver of preemption for California to Enforce NO_X emissions standards for 1981 and later model years passenger cars. 43 FR 25729 (June 14, 1978).

[301] *American Motors Corp.* v. *Blum*, 603 F.2d 978, 981 (D.C. Cir. 1979) ("Section 202(b)(1)(B) directs that the regulations prescribed by the Administrator pursuant to section 202(a) shall require that NO_X emissions may not exceed 2.0 grams per vehicle mile for vehicles and engines manufactured during model years 1977 through 1980. For those manufactured during model year 1981 and thereafter, NO_X emissions may not exceed 1.0 grams per vehicle mile. . . . In establishing these regulations the Administrator is bound by section 202(a)(2) to allow such lead time as he finds necessary.")

[302] *See* section III.D.5.a.

is the phrase "Except as otherwise provided in subsection (b) –)," which by its terms means that section 202(b) governs over the more general and potentially conflicting terms in section 202(a). But Congress did not disturb the applicability of section 202(a)(2) for subsequent model years standards and the D.C. Circuit held accordingly: "In establishing these regulations [for model year 1981 and thereafter] the Administrator is bound by section 202(a)(2) to allow such lead time as he finds necessary." [303] There is also nothing to indicate Congressional intent to override section 202(a)(2). But commenters' reading would have the Administrator do just that by allowing section 202(a)(3)(C) to govern over section 202(a)(2) even where California has made a showing of technology feasibility for the standards under review.

According to relevant legislative history of section 202(b)(1)(B), that language was introduced due to concerns that small volume manufacturers would not be able to comply with the 1.0 gram per mile NO_X standard for light-duty vehicles. According to statements made by members of Congress at the time of the amendment's introduction and debate, the amendment was intended to apply to only American Motors Corporation and one other small manufacturer (Avanti) because the standard required the development of a specific technology that they would have to purchase and adapt from other manufacturers, so these small volume manufacturers would be unavoidably behind in the pollution abatement timetable from the very beginning.[304] This legislative history was crucial to the *Blum* Court's holding that Congress had "f[ound] and mandate[d] that with respect to small manufacturers a lead period of two years is necessary." In contrast, there does not appear to be similar legislative history detailing a special or peculiar need for the strict lead time requirements for section 202(a)(3)(C), which was enacted in the same year Amendments as section 209(b)(1)(B), that would indicate Congress's belief that a specific amount of lead time was "necessary." [305]

Moreover, after *Blum*, the D.C. Circuit also considered a somewhat analogous argument in *MEMA II*, where petitioners maintained that section 202(m), which calls for promulgation of regulations "under section 202(a)," meant that EPA was to evaluate applicability of section 202(m) to California's onboard diagnostic regulations for consistency with section 202(a). The court disagreed, held that section 202(m) does not apply, and declined to extend its holding in *Blum*, holding instead that "section 209(b)(1) makes clear that section 202(a) does not require, through its cross-referencing, consistency with each federal requirement in the act. California's consistency is to be evaluated 'in the aggregate,' rather than on a one-to-one basis." [306] According to the court "[a]lthough statutory cross-referencing presents a superficially plausible textual argument linking compliance with subsection (m) to compliance with subsection (a), the agency has long interpreted the statute to give California very broad authority, and the court has held that this interpretation is not unreasonable." [307]

EPA also disagrees with commenter's claim that the 1994 MDV waiver constrains and binds EPA in the current waiver review. EPA is retaining the position it has consistently held with the sole exception of the 1994 MDV waiver for all the reasons discussed herein.[308] EPA notes that in *MEMA II* the court revisited *Blum* and explained:

> Petitioners' reliance on American Motors Corp., [] is misplaced. In that case, EPA viewed the petitioner's complaint about the lead time for a proposed action by CARB to be solely based on section 202(b), not section 202(a), and so was not cognizable in the waiver process. The court disagreed, observing that the lead time for implementation of the NO_X standard was governed by section 202(a)(2) and concluding that the California regulation, which denies to [petitioner] a lead time of two years, is inconsistent with section 202(a)(2). *Id.* at 981. Thus, the American Motors decision did not suggest that all of the subsections of section 202 were incorporated into subsection (a) for the purposes of assessing a California waiver application. Instead, it concluded that the EPA had granted a waiver without determining whether California had met the standards of section 202(a)." [309]

And in the intervening years since the 1994 MDV waiver, EPA has not applied section 202(a)(3)(C) to a number of other waiver decisions for California's heavy-duty standards.[310] For instance, in 2012 EPA did not require four years of lead time nor address the stability requirements for California's heavy-duty truck idling standards under section 202(a)(3)(C) and explicitly disagreed with comments asserting its applicability.[311] Similarly, in 2008, 2012, 2014, and 2016, EPA did not require four years of lead time nor address the stability requirements for California's heavy-duty vehicle and engine greenhouse gas waivers as well as the On-Board Diagnostics requirements under section 202(a)(3)(C).[312] So, the 1994 MDV waiver remains the sole waiver decision where EPA reviewed California standards for consistency with section 202(a) under both section 202(a)(3) and the historically-applied technology feasibility test (202(a)(2)). At the time of the 1994 MDV waiver, EPA posited that "*Blum* indicates that California would be required to provide the statutory lead time required under section 202(a)(3)(C)." [313] But EPA did not

[303] *American Motors Corp.* v. *Blum*, 603 F.2d 978, 981.

[304] 123 Cong. Rec. S9233 (daily ed. June 9, 1977). Even the EPA Administrator acknowledged AMC's specific need for extra lead time in a letter to Congress in support of the amendment. Both the amendment's sponsor and the Administrator explained that the 1.0 gram/mile standard created a "peculiar" and "special" problem for AMC and other small manufacturers. The two years of lead time was intended to give these small manufacturers adequate time to "modify and adapt the system [purchased from other manufacturers] to [their] own product line." *Id.*

[305] To the extent commenters cite statements in the legislative history regarding the need for three years of stability and four years of lead time, EPA notes that none of the cited statements are from members of Congress themselves and are instead testimony from commenters themselves. *See, e.g.*, EMA Initial Comments at 10. But see, H.R. Rep. No. 95–294 at 542 (1977) (For standards promulgated under section 202(a)(3)(A) "[a]dditional revisions of up to 3 years 'each could be granted at three-year intervals thereafter;' " and Congress "provides four years lead time before temporary or permanent revision of any statutory standard.").

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

[307] *Id.* at 464 ("[I]t would appear virtually impossible for California to exercise broad discretion if it had to comply with every subsection of section 202 that cross-referenced subsection (a). See, *e.g.*, CAA section 202(b), (g), (h), (j), (m)(1), (m)(2), (m)(4).").

[308] *FCC* v. *Fox Television Stations, Inc.*, 556 U.S. 502 (2009).

[309] 142 F.3d at 464, n.14 (internal citations omitted).

[310] 70 FR 50322 (August 26, 2005) (2007 California Heavy-Duty Diesel Engine Standards); 71 FR 335 (Jan. 4, 2006) (2007 Engine Manufacturers Diagnostic standards); 77 FR 9239 (February 16, 2012) (HD Truck Idling Requirements); 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).

[311] 77 FR 9239, 9249 (Feb. 16, 2012).

[312] 73 FR 52042 (September 8, 2008); 77 FR 73459 (December 10, 2012); 79 FR 46256 (August 7, 2014); 81 FR 95982 (December 29, 2016). EPA also notes that several waivers have been granted for California's on-highway motorcycles (*See for example*, 42 FR 1503 (January 7, 1977); 41 FR 44209 (October 7, 1976); 43 FR 998 (January 5, 1978); 46 FR 36237 (July 14, 1981)).

[313] 59 FR 48625 (September 22, 1994) and associated Decision Document at EPA–HQ–OAR–2022–0330, (MDV Waiver Decision Document) at page 26 ("Under section 209, the Administrator has an oversight role to review California lead time decisions associated with their rules. While CARB may well choose to provide a different amount of

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address the stability requirements also contained within section 202(a)(3)(C) that requires standards for heavy-duty vehicles and engines to apply for no less than three model years without revisions. Where section 202(a)(3)(C) applies, standards must allow at least three model years of stability, meaning that no revisions or amendments are allowed until after three model years. The 1994 MDV Waiver was also silent on California's longstanding practice of amending standards for which a waiver has been granted.[314] EPA's waiver practice has long allowed for such revisions under the rubric of within-the-scope amendments, which calls for review of California standards that have been amended under both the protectiveness finding and the technology feasibility requirements of the third waiver prong.[315] In other words, there is no prescribed lead time for within-the-scope amendments because EPA reviews them under the traditional consistency test. The 1994 MDV waiver did not wrestle with the implications of applying section 202(a)(3)(C) to waiver decisions for either of these important factors—the constraints on California's ability to drive innovations in vehicle emission control technologies, as Congress intended, with a four-year lead time and a three-year stability requirement, and the problematic constraint such an interpretation would impose on California's ability to amend standards for which a waiver has been granted to address any newly emergent issues. As such, the conclusions in the decision are based on insufficient analysis.

In the 1994 MDV waiver, EPA also reviewed the standards under the traditional technology feasibility test finding that "no significant development nor associated lead time is required."[316] Notably, California had provided four-year lead time for the standards at issue. Thus, EPA was not confronted by the situation as in the instant waiver where California had made a feasibility showing of presently available technology.

EPA in 1994 also did not discuss an earlier 1981 decision denying the petition for reconsideration that sought reconsideration of a waiver decision on grounds that *Blum* also required the Administrator to take certain lead time provisions into account when considering California waiver requests at issue.[317] In 1981, shortly after *Blum*, EPA explained in relevant part that:

> The specific Congressional finding that under prescribed circumstances additional lead time is necessary is unique to the small volume manufacturer provision, and is not present in the other sections of the Act. Moreover, the fact that Congress determined that qualified manufacturers such as AMC are entitled to additional lead time was the critical factor leading to the Court's decision. *AMC* v. *Blum* did not involve or discuss other Federal waiver provisions, which, unlike section 202(b)(1)(B), do not reflect such a Congressional finding.[318]

EPA further explained that

> The small-volume manufacturer waiver provision was interpreted by the court as a "proviso" to section 202(a) of the Act, such that the determination of technological feasibility of the 1.0 gpm NO_X, standard in question within available lead time is taken out of the hands of the Administrator and is made by *the unique Congressional finding of 202(b)(1)(B)* (Emphasis added).[319]

Most significant was EPA's explanation of the protectiveness finding California makes under section 209(b)(1) on EPA's consistency determination. EPA explained:

> California standards need not be identical to their Federal counterparts, even those established in waiver decisions. An argument along those lines would be inconsistent with section 209(b) of the Act. Because California has special air pollution problems, section 209(b) permits the Administrator to waive Federal preemption to permit the State of California to implement its own air pollution control programs that are, in the aggregate, at least as protective as nationally applicable standards. *The import of section 209(b) is not that California and 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, consistent with section 202(a).*[320]

Lastly, EPA has examined the text of section 177 of the CAA, added by Congress in the 1977 Amendments. At the time that Congress was affording California additional programmatic flexibility and policy deference with the addition of the "in the aggregate" language to section 209(b)(1), Congress added section 177 to allow other States (those with plan provisions approved under Part D) to adopt California's new motor vehicle emission standards if certain criteria are met. Such criteria include that the State standards adopted be identical to the California standards for which a waiver has been granted for such model year, and that "California and such State adopt such standards at least two years before commencement of such model year (as determined by regulations of the Administrator)."[321] EPA notes that Congress understood and acted to specify a number of years of lead time applicable to other States before those States could enforce standards under section 177. In the same 1977 Amendments, Congress did not specify that the lead time and stability requirements in the new section 202(a)(3)(C) were applicable to either California or to states adopting California's standards under section 177. EPA believes there is no basis to find or infer that the section 202(a)(3)(C) requirements apply to California. And, as importantly, Congress established a structure under which California would receive a waiver for standards that EPA deemed would be feasible (or that opponents had not demonstrated to be infeasible), with the lead time provided within the California market, specifically.[322] Other States (section 177 States) could enforce California's standards but would have to allow two years of lead time. It is assumed that these additional two years would allow manufacturers time to comply with the expanded market for which the California standards apply, which would still not be a fully national market subject to EPA standards.[323]

lead time for light-duty vehicles than EPA has determined is necessary, *Blum* instructs that the specific lead time requirements of section 202 apply to both agencies with equal force. Again, the *Blum* court interpreted literally the specific congressional requirement of lead time and stated, '[t]he necessity for lead time cannot be obviated by a waiver.'" *Id.* at 32; (As Congress intended, EPA has liberally construed the section 209 waiver provision to give California broad discretion with its program. Nonetheless, EPA's discretion is not unlimited. In light of the plain language and Congressional intent of sections 202 and 209, and applying the rationale of *Blum*, I find that the opposing parties have provided persuasive 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.).

[314] *See, e.g.*, 76 FR 61095 (October 3, 2011) (granting California a within-the-scope waiver for its 2008 amendments to its ZEV Standard); 71 FR 78190 (December 28, 2006) (granting California a within-the-scope waiver for its 1993–2003 amendments to its ZEV Regulations).

[315] *See, e.g.*, the Notice of Scope of Preemption for California's amendments to warranty regulations pertaining to 1983 and later model year passenger cars, light-duty vehicles, medium- and heavy-duty vehicles and motorcycles; 51 FR 12391 (Apr. 10, 1986).

[316] 1994 MDV Waiver Document at 48–49 ("In view of these facts, I agree with CARB's assessment that adequate technology exists and may be readily adapted to enable MDVs to meet all of CARB's standards. Thus, no significant development nor associated lead time is required.").

[317] Petition for Reconsideration of Waiver of Federal Preemption for California To Enforce Its NO_X Emission Standards and Test Procedures: Notice of Denial. 46 FR 22032 (April 15, 1981).

[318] 46 FR 22034.

[319] *Id.*

[320] 46 FR 22034–35.

[321] 42 U.S.C. 7507(1), 7507(2); *Motor Vehicle Mfrs. Ass'n* v. *New York State Dep't of Envtl. Conservation*, 17 F.3d 527.

[322] 78 FR at 2143, n.165.

[323] *Motor Vehicle Mfrs. Ass'n* v. *New York State Dep't of Envtl. Conservation*, 17 F.3d 527; *American Automobile Mfrs. Ass'n*, 31 F.3d 18, 26–27 (1st Cir. 1994).

There is no language in section 177 that would require the section 177 states to provide more lead time (an additional two years) in order to be consistent with the four years of lead time that commenters claim apply to California. EPA agrees with the CARB comment that it makes little sense to assume Congress would have provided four years of lead time for vehicle and engine manufacturers to prepare to comply in the California market but only two years to prepare for compliance in a potentially much larger market captured, collectively, in the section 177 States.

Further, EPA traditionally applies a "record-based" review to determine the actual technological feasibility of California's standards, and to the degree requisite technology is not currently available then EPA examines the factual record to determine whether sufficient lead time is provided for the California market, giving consideration to cost. In addition, EPA's technological feasibility assessment is conducted within the confines of the manufacturers' ability to meet the California standards within California and the California market.[324] It is illogical to couple EPA's limited role in reviewing the feasibility of CARB's standards, confined to the manufacturers' ability to meet the emission standards for new vehicles introduced into commerce in California, with the four-year lead time directive that Congress provided to EPA in setting national new heavy-duty vehicle emission standards which are required to secure the greatest degree of emission reduction achievable.

6. Section 209(b)(1)(C) and 209(e)(2)(A)(iii) Conclusion

As previously explained, EPA believes that the historical approach to section 209(b)(1)(C) (and the section 209(e)(2)(A)(iii)) prong reflects the best reading of the statute. The historical approach is to evaluate California's program including the changes to that program reflected in a waiver request for feasibility, and in doing so to determine whether the opponents of the waiver have met their burden of proof (as a factual matter) to demonstrate that California's standards are not technologically feasible, giving consideration to lead time and cost. Applying this approach with the reasoning noted above, with due deference to California, I cannot deny the respective waiver requests. CARB has demonstrated that technologies exist today to meet the most imminent standards and has identified refinements to emission control technologies and other emission controls reasonably projected to be available to meet the emission standards when needed in later model years. EPA finds that there is no evidence in the record to demonstrate that CARB's assessments, including those made in the state rulemakings, are unreasonable. In addition to CARB's demonstration and EPA findings, the Agency also notes that CARB's regulations include a number of provisions that may provide, if manufacturers choose to use them, additional compliance pathways. Therefore, I determine that I cannot deny either of the two waiver requests under section 209(b)(1)(C).

In addition, after a review of the text in sections 209, 202, and section 177, I find that the lead time and stability language Congress added in 1977 in section 202(a)(3)(C) was only directed at EPA and does not apply to California by way of EPA's review of section 209(b)(1)(C) and section 209(e)(2)(B)(iii). Further, EPA has reviewed the legislative history, EPA's prior waiver decisions, and applicable case law and concludes that each of these considerations further supports EPA's textual analysis and conclusion that section 202(a)(3)(C) does not apply to California and thus EPA cannot deny CARB's waiver requests on this basis.

E. Other Issues

1. Energy Policy and Conservation Act (EPCA)

One commenter argued that ZEV mandates are preempted by the Energy Policy and Conservation Act (EPCA) because they are "related to" fuel economy standards.[325] The commenter asserted that it would therefore be "arbitrary and capricious" for EPA to grant waivers for the ACT Regulation and the ZEAS Regulation (that each contain a ZEV mandate) because "California's ZEV mandate is void *ab initio*" and "[a]s such, California does not have a valid waiver request."[326] EPA has long construed section 209(b) as limiting the Agency's authority to deny California's requests for waivers to the three listed criteria. This narrow review approach is supported by decades of waiver practice and judicial precedent. In *MEMA I*, the D.C. Circuit held that the Agency's inquiry under section 209(b) is "modest in scope."[327] 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."[328] 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."[329] EPA's duty, in the waiver context, is thus to grant California's waiver 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."[330] EPA has therefore consistently declined to consider factors outside the three statutory criteria listed in section 209(b), including preemption under EPCA, explaining instead that preemption under EPCA is not one of these criteria.[331]

[324] *Id.* at 2143.

[325] AFPM at 15–16. EPA notes that this commenter cited to 49 U.S.C. 32903(h)(1) and the action taken in 2019 ("The Safer Affordable Fuel-Efficient Vehicles (SAFE) Rule Part One: One National Program"). SAFE 1 at 51320–21. NHTSA subsequently repealed all regulatory text and appendices promulgated in the SAFE Part One and made clear that no prior regulations or positions of the Agency reflect ongoing NHTSA views on the scope of preemption of states or local jurisdictions under EPCA. 86 FR 74236 (Dec. 29, 2021). EPA also notes that the "related to" language that was the subject of SAFE Part One and the subsequent repeal is in 49 U.S.C. 32919.

[326] AFPM at 15–16.

[327] *MEMA I*, 627 F.2d at 1119.

[328] *Id.* at 1116 (acknowledging that "the Administrator must be sensitive to [CAA] section 207 concerns in approaching a waiver decision," but concluding that "he has no duty beyond that to consider claims of anti-competitiveness in a waiver proceeding").

[329] *MEMA II*, 142 F.3d at 464 (rejecting a claim that California's standards must comply with CAA section 202(m) because "it would appear virtually impossible for California to exercise broad discretion if it had to comply with every subsection of section 202 that cross-referenced subsection (a).").

[330] *Id.* at 462–63.

[331] 87 FR 14332, 14372 (March 14, 2022) (rescinding the SAFE 1 waiver withdrawal partially premised on EPCA preemption because, in part, "[c]onsideration of preemption under EPCA is beyond the statutorily prescribed criteria for EPA in section 209(b)(1)."). The sole instance that EPA considered preemption under EPCA in a waiver proceeding was in SAFE Part One, a joint-rulemaking with NHTSA, where EPA simultaneously explained that the Agency "d[id] not intend in future waiver proceedings concerning submissions of California programs in other subject areas to consider factors outside the statutory criteria in section 209(b)(1)(A)–(C)." SAFE 1 at 51338. EPA subsequently rescinded that decision, finding that "the joint-action context of SAFE 1 [w]as an insufficient justification for deviating from its statutory authority and the Agency's historical practice" of "limiting its waiver review to the criteria in section 209(b)(1)." 87 FR at 14371–73. EPA hereby incorporates by reference the reasoning in this decision. *See also*, 43 FR 32182, 32184 (July 25, 1978) (rejecting objections to the procedures at state level, objections that section 207(c)(3)(A) establishes field protection, and constitutional

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In evaluating CARB's two waiver requests, including the ACT and ZEAS Regulations, EPA has not considered preemption under EPCA. As in previous waiver evaluations, the decision on whether to grant or deny these waiver requests is based solely on the criteria in section 209(b). Evaluation of whether these regulations are preempted under EPCA is not among the criteria listed under section 209(b). EPA may only deny waiver requests based on the criteria in section 209(b), and preemption under EPCA is not one of those criteria. In considering California's request for a waiver, I therefore have not considered whether California's standards are preempted under EPCA. As in previous waiver decisions, the decision on whether to grant the waiver is based solely on criteria in section 209(b) of the Clean Air Act and this decision does not attempt to interpret or apply EPCA.[332]

2. Equal Sovereignty and Other Constitutional Issues

One commenter objected to both the ACT and ZEAS Regulations because "[b]y authorizing California, and only California, to set its own motor vehicle emission standards, Section 209(b) violates the constitutional equal sovereignty doctrine." [333] The commenter claimed that Section 209(b) is "unconstitutional in all its applications" or, in the alternative, "to the extent it is construed to allow California to set emission standards aimed at addressing global climate change, as opposed to California's local conventional pollution problems." [334] Another commenter objected to the ACT Regulation as it "calls for measures that may violate other constitutional provisions and principles." [335] [336] EPA has previously considered equal sovereignty objections to waiver requests as outside the scope of EPA's review and incorporates the reasoning in that prior decision as it pertains to the constitutional claims raised by commenters.[337]

As EPA has long stated, "the Agency's task in reviewing waiver requests is properly limited to evaluating California's request according to the criteria in section 209(b), and . . . it is appropriate to defer to litigation brought by third parties in other courts, such as state or federal court, for the resolution of constitutionality claims and inconsistency, if any, with other statutes." [338] EPA's longstanding practice, affirmed by judicial precedent, has been to refrain from considering factors beyond section 209(b)(1) criteria, including constitutional claims, in evaluating California waiver requests.[339] For example, in 1978 EPA declined to consider First Amendment and Due Process objections to a waiver request, stating that constitutional arguments "are beyond the scope of [the Administrator's] review, and the waiver hearing is not a proper forum in which to raise them." [340] The D.C. Circuit agreed with the Administrator's position, that there was no obligation to consider these constitutional objections, because "it is generally considered that the constitutionality of Congressional enactments is beyond the jurisdiction of administrative agencies." [341] Additionally, in 2009, EPA declined to consider comments that California's transport refrigeration unit (TRU) Rule violated the Dormant Commerce Clause, stating that "EPA's review of California's regulations is limited to the

objections all as beyond the "narrow" scope of the Administrator's review); 74 FR 32744, 32783 (July 8, 2009) (declining to consider EPCA preemption, stating that "section 209(b) of the Clean Air Act limits our authority to deny California's requests for waivers to the three criteria therein."); 78 FR 2112, 2145 (Jan. 9, 2013), 79 FR 46256, 46264 (Aug. 7, 2014) (reiterating that EPA can only deny a waiver request based on the 209(b) statutory criteria, dismissing comments on preemption under EPCA, as well as the Constitution and the implications of the Federal Aviation Administration Authorization Act of 1994).

[332] EPA notes that both courts that have considered whether EPCA preempts greenhouse-gas emission standards have concluded that it does not. *See, e.g., Cent. Valley Chrysler-Jeep, Inc.* v. *Goldstene,* 529 F. Supp. 2d 1151, 1153–54 (E.D. Cal. 2007), as corrected Mar. 26, 2008; *Green Mountain Chrysler Plymouth Dodge Jeep* v. *Crombie,* 508 F. Supp. 2d 295, 300–01 (D. Vt. 2007).

[333] AFPM at 2.

[334] *Id.*

[335] Valero at 8–10. This commenter claimed that EPA's grant of a waiver represents a major question that was not contemplated by Congress. That claim is addressed above in Section III.C. This commenter also provided a list of other possible constitutional constraints that it believes the ACT Regulation may violate (*e.g.,* Dormant Commerce Clause, dormant foreign affairs preemption doctrine under the Supremacy Clause, the Takings Clause of the Fifth Amendment, and the Equal Sovereignty doctrine). EPA notes that it is unclear whether this commenter requested EPA to not grant the ACT Regulation waiver request based on these latter possible constraints. Nevertheless, EPA notes (as discussed in this section) that EPA's task in reviewing California's waiver requests is limited to the criteria in section 209(b) and therefore provides no assessment of these claims.

[336] The same commenter (Valero) raises miscellaneous claims not related to constitutional issues that we also address here. Valero claims that granting the ACT waiver exceeds EPA's statutory authority because the ACT allegedly "bans internal combustion engines," has "vast nationwide political and economic significance," would be "beyond the scope of the type of emission standards the waiver was originally intended to accommodate," and accomplishes what failed Congressional bills would have done. Valero Comment 6, 8. EPA disagrees. The ACT constitutes standards for the control of emissions from motor vehicles, and thus clearly falls within the scope of section 209(a) preemption and EPA's authority to waive preemption under section 209(b)(1). Moreover, while the ACT increases the stringency of California's program, the requirements it imposes are not different in kind from earlier California ZEV rules for which EPA has waived preemption. See 71 FR 78190 (December 28, 2006) and Decision Document at EPA–HQ–OAR–2004–0437–0173, at 35–46) (explaining that certain earlier California ZEV requirements constituted emissions standards and waiving preemption for such standards under section 209(b)); 58 FR 4166 (January 13, 1993) (granting a waiver for California's first Low Emission Vehicle (LEV I) regulation that include the original California ZEV standards that were adopted in 1990). Valero's reference to failed Congressional bills is inapposite given the clear language of section 209. See also Public Law 117–169, tit. VI, Subtitle A, section 60105(g), 136 Stat. 1818, 2068–69 (2022) (providing funds for EPA to issue grants specifically to states to support their adoption of California's greenhouse-gas and zero-emission vehicle standards under Section 177). Moreover, the major questions doctrine, to the extent Valero is invoking it, does not apply to California's exercise of its police powers, nor to EPA's waiver of preemption to preserve the State's exercise of such powers. See supra fn. 135. Valero further claims that EPA must consider wide-ranging impacts of granting the waiver (*e.g.,* on the nationwide distribution of goods, renewable fuels, petroleum refiners, chemical manufacturing, agricultural sector, international and military consequences, etc.). Valero Comment 6–9. However, this is belied by the statutory waiver criteria in section 209(b), which require EPA to grant a waiver unless the agency makes one of the three statutory findings. See MEMA I, 627 F.2d at 1118 (Section 209 does not require EPA to consider the social costs of pollution control, for "Congress, not the Administrator, made the decision to accept those costs."). Finally, Valero suggests that granting the waiver is inconsistent with Congress's mandates designed to promote renewable fuels under the federal Renewable Fuel Standard. Valero Comment 6. However, nothing in section 209(b) suggests EPA must consider consistency with the Renewable Fuel Standard program in deciding to grant a waiver. See also section 211(o)(12) ("Nothing in this subsection . . . shall affect or be construed . . . to expand or limit regulatory authority regarding carbon dioxide or any other greenhouse gas, for purposes of other provisions . . . of this chapter.").

[337] 87 FR 14332, 14376–77 (March 14, 2022). *See also,* 42 FR 2337, 2338 (January 11, 1977); 41 FR 44209, 44212 (October 7, 1976).

[338] *Id.*

[339] EPA has declined to consider constitutional challenges to California Waivers since at least 1976. 41 FR 44212 (Oct. 7, 1976) ("An additional argument against granting the waiver was raised by the Motorcycle Industry Council and Yamaha, who contended that the CARB had violated due process when adopting their standards, by not allowing the manufacturers a fair and full opportunity to present their views at a State hearing. If this argument has any validity, the EPA waiver hearing is not the proper forum in which to raise it. Section 209(b) does not require that EPA insist on any particular procedures at the State level. Furthermore, a complete opportunity was provided at the EPA waiver hearing for the presentation of views."). *See also, e.g.,* 43 FR 32182, 32184 (July 25, 1978) (rejecting objections to the procedures at state level, objections that section 207(c)(3)(A) establishes field protection, and constitutional objections all as beyond the "narrow" scope of the Administrator's review).

[340] 43 FR at 32185.

[341] *MEMA I,* 627 F.2d at 1114–15 (holding that EPA did not need to consider whether California's standards "unconstitutionally burden[ed] [petitioners'] right to communicate with vehicle purchasers.").

criteria that Congress directed EPA to review." [342] The D.C. Circuit again concluded that this constitutional claim was outside the scope of EPA's review, agreeing with EPA that the commenters had sought to "improperly . . . engraft a type of constitutional Commerce Clause analysis onto EPA's Section 7543(e) waiver decisions that is neither present in nor authorized by the statute." [343] Such a question, the Court noted, is "best directed to Congress." [344]

EPA notes that Congress struck a deliberate balance in 1967, when it chose to authorize two standards—the Federal standard and California's standards—rather than one national standard or 51 individual state standards.[345] EPA believes this balance reflected Congress's desire for California to serve as a laboratory of innovation and Congress's understanding of California's extraordinary pollution problems on the one hand, and its desire to ensure that automakers were not subjected to too many different standards on the other. Congress reaffirmed this balance in 1977 when it amended the Clean Air Act to allow other states facing similar air quality problems the option of adopting California's new waived motor vehicle standards.[346] Thus Congress has consistently and repeatedly made determinations regarding California's important role in driving advancements in motor vehicle emissions control (which benefit all Americans when subsequently reflected in federal standards) and the value of providing states with two regulatory pathways to address motor vehicle emissions.

In evaluating CARB's two waiver requests, including the ACT and ZEAS Regulations, EPA has not considered whether section 209(a) and section 209(b) are unconstitutional under the Equal Sovereignty Doctrine. As in previous waiver evaluations, the decision on whether to grant or deny the waiver is based solely on the criteria in section 209(b) and this decision does not attempt to interpret or apply the Equal Sovereignty Doctrine or any other constitutional provision.

IV. Decision

After evaluating California's 2018 HD Warranty Amendments, ACT Regulations, ZEAS Regulations, and the ZEP Certification Regulations, CARB's submissions, relevant adverse comment, and other comments in the record, EPA is granting a waiver of preemption and authorization, as applicable, for each of these regulations.

A. Judicial Review

Section 307(b)(1) of the CAA governs judicial review of final actions by the EPA. This section provides, in part, that petitions for review must be filed in the United States Court of Appeals for the District of Columbia Circuit: (i) when the agency action consists of "nationally applicable regulations promulgated, or final actions taken, by the Administrator," or (ii) when such action is locally or regionally applicable, but "such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination." For locally or regionally applicable final actions, the CAA reserves to the EPA complete discretion whether to invoke the exception in (ii).

This final action is "nationally applicable" within the meaning of CAA section 307(b)(1). In the alternative, to the extent a court finds this final action to be locally or regionally applicable, the Administrator is exercising the complete discretion afforded to him under the CAA to make and publish a finding that this action is based on a determination of "nationwide scope or effect" within the meaning of CAA section 307(b)(1), for several reasons.[347] This final action will not only affect manufacturers of new heavy-duty vehicles and engines sold in California, but also manufacturers that sell their new heavy-duty vehicles and engines in those states that have already adopted or may choose to adopt California's regulations.[348] For example, five states have already adopted California's ACT Regulation.[349] These jurisdictions represent a wide geographic area that falls within three judicial circuits.[350]

Furthermore, the regulations that are the subject of today's action are part of California's on-highway for which EPA may waive preemption under CAA section 209. As required by statute, in evaluating the waiver criteria in this action, EPA considers not only the HD emissions regulations in isolation, but in the context of the entire California program.[351] Moreover, EPA generally applies a consistent statutory interpretation and analytical framework in evaluating and deciding various waivers under CAA section 209. EPA also relies on the extensive body of D.C. Circuit case law developed by that court since 1979 as it has reviewed and decided judicial challenges to these actions. As such, judicial review of any challenge to this action in the D.C. Circuit will centralize review of national issues in that court and advance other Congressional principles underlying CAA section 307(b)(1) of avoiding piecemeal litigation, furthering judicial economy, and eliminating the risk of inconsistent judgments.

For these reasons, this final action is nationally applicable or, alternatively, the Administrator is exercising the complete discretion afforded to him by the CAA and hereby finds that this final action is based on a determination of nationwide scope or effect for purposes of CAA section 307(b)(1) and is hereby publishing that finding in the **Federal Register**. Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the District of Columbia Circuit by June 5, 2023.

V. 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.

[342] Decision Document, EPA–HQ–OAR–2005–0123–0049 at 67.

[343] *ATA* v. *EPA*, 600 F.3d 624, 628 (D.C. Cir. 2010) (quoting the U.S. brief). In a footnote to this statement, the Court said ATA could attempt to bring a constitutional challenge directly (which would argue that the waiver unconstitutionally burdens interstate commerce) but "express[ed] no view on that possibility." *Id.* at n.1.

[344] *Id.* at 628.

[345] Motor vehicles are "either 'federal cars' designed to meet the EPA's standards or 'California cars' designed to meet California's standards." *Engine Mfrs. Ass'n* v. *EPA*, 88 F.3d 1075, 1079–80, 1088 (D.C. Cir. 1996) ("Rather than being faced with 51 different standards, as they had feared, or with only one, as they had sought, manufacturers must cope with two regulatory standards.").

[346] Under section 177, "any State which has plan provisions approved under this part may adopt and enforce" identical California standards and delineates three specific criteria for adoption.

[347] In deciding whether to invoke the exception by making and publishing a finding that this final action is based on a determination of nationwide scope or effect, the Administrator has also taken into account a number of policy considerations, including his judgment balancing the benefit of obtaining the D.C. Circuit's authoritative centralized review versus allowing development of the issue in other contexts and the best use of Agency resources.

[348] *See* CAA section 177.

[349] Massachusetts, New Jersey, New York, Oregon, and Washington have adopted the ACT Regulation.

[350] In the report on the 1977 Amendments that revised CAA section 307(b)(1), Congress noted that the Administrator's determination that the "nationwide scope or effect" exception applies would be appropriate for any action that has a scope or effect beyond a single judicial circuit. See H.R. Rep. No. 95–294 at 32.

[351] *See* CAA sections 209(b)(1)(B) and 209(e)(2)(A) (requiring that the protectiveness finding be made for California's standards "in the aggregate").

601(2). Therefore, EPA has not prepared a supporting regulatory flexibility analysis addressing the impact of this action on small business entities. 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).

Dated: March 30, 2023.

Michael S. Regan,

Administrator.

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