

ORAL ARGUMENT NOT YET SCHEDULED

No. 20-1145

Consolidated with Nos. 20-1167, 20-1168, 20-1169, 20-1173,
20-1174, 20-1176, 20-1177, and 20-1230

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

COMPETTIVE ENTERPRISE INSTITUTE, et al.,
Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, et al.,
Respondents.

**PROOF BRIEF OF STATE AND
LOCAL GOVERNMENT PETITIONERS**

XAVIER BECERRA
Attorney General of California
ROBERT W. BYRNE
EDWARD H. OCHOA
Senior Assistant Attorneys General
GARY E. TAVETIAN
DAVID A. ZONANA
Supervising Deputy Attorneys General

JESSICA BARCLAY-STROBEL
JULIA K. FORGIE
MEREDITH HANKINS
MICAELA M. HARMS
JENNIFER KALNINS TEMPLE
CAROLYN NELSON ROWAN
ROBERT D. SWANSON
JONATHAN A. WIENER
DAVID ZAFT
M. ELAINE MECKENSTOCK
Deputy Attorneys General
1515 Clay Street, 20th Floor
Oakland, CA 94612-0550
Telephone: (510) 879-0299
Elaine.Meckenstock@doj.ca.gov

*Attorneys for Petitioner State of California, by and through its Governor Gavin Newsom,
Attorney General Xavier Becerra, and the California Air Resources Board*

Additional counsel listed in signature block

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GLOSSARY

Adv. Energy & Transp. Petitioners Br.	Brief of Advanced Energy and Transportation Petitioners in Case Nos. 20- 1174, -1176, and -1177
Agencies	Environmental Protection Agency and National Highway Traffic Safety Administration
EPA	Environmental Protection Agency
EPCA	Energy Policy & Conservation Act of 1975
GHG	Greenhouse Gas
NHTSA	National Highway Traffic Safety Administration
Public Interest Petitioners Br.	Brief of Public Interest Organization Petitioners

INTRODUCTION

The Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) replaced achievable, cost-effective greenhouse gas (GHG) emission and fuel-economy standards with far weaker ones that will dramatically increase harmful air pollution—including adding almost one billion metric tons of GHG emissions to the atmosphere—and will drive the consumption of almost two billion additional barrels of fuel. EPA and NHTSA neither deny these consequences nor reconcile them with the core purposes of their respective statutes: the Clean Air Act and the Energy Policy Conservation Act of 1975 (EPCA). Instead, they point to other objectives—such as facilitating consumer preferences in the vehicle market—and claim those support rolling back the pre-existing standards. But those other objectives are not the ones Congress unambiguously identified, and the Agencies' interpretative contortions do not establish otherwise. At bottom, both of these Agencies unlawfully prioritized non-statutory objectives over Congress's express purposes and adopted standards inconsistent with their respective statutes.

EPA and NHTSA also flouted their obligations to make reasoned decisions based on the record before them. Despite unequivocal evidence of a

climate crisis that has only worsened since the adoption of the pre-existing standards in 2012, the Agencies remained steadfastly committed to rolling back those standards. They took multiple steps to do so, although none of the rationales advanced along the way was supported by evidence. Indeed, the path to finalizing these Rollbacks is littered with debunked justifications the Agencies advanced and then later abandoned—including claims that rolling back the standards would save auto industry jobs, would prevent thousands of crash fatalities by speeding up the turnover of older cars for newer, safer ones, and would generate more than a hundred billion dollars in net societal benefits.

The rationales on which the Agencies finally relied fare no better because they rest on an analysis that is riddled with consequential errors, including unsupported assumptions, unjustified departures from prior agency findings, unexplained inconsistencies, and simple, baffling mistakes. The fundamental and numerous flaws in the underlying analysis render both Rollbacks arbitrary and capricious; and the EPA Administrator's uncritical adoption of that analysis—which was prepared by NHTSA and roundly criticized by EPA's expert staff—provides an additional, separate basis for vacating EPA's Rollback.

Ultimately, the Agencies fail to identify a supportable reason for replacing effective, feasible standards with weaker ones that directly undermine Congress's objectives, cost consumers money, reduce auto industry employment, and impose significant net costs on society. These actions should be vacated.

JURISDICTIONAL STATEMENT

Petitioners seek review of three agency actions: EPA's 2018 Revised Determination, published at 83 Fed. Reg. 16,077 (Apr. 13, 2018) and EPA and NHTSA's respective 2020 Rollbacks of GHG emission and fuel-economy standards for light-duty vehicles, published at 85 Fed. Reg. 24,174 (April 30, 2020). This Court has jurisdiction to review EPA's actions under 42 U.S.C. § 7607(b)(1) and to review NHTSA's Rollback under 49 U.S.C. § 32909(a)(1).

ISSUES PRESENTED

1. Whether EPA's Revised Determination violated the plain terms of the agency's Mid-Term Evaluation regulation and unlawfully disregarded substantial evidence, including the agency's own prior factual findings.

2. Whether, in rolling back EPA's standards, its Administrator unlawfully disregarded pollution impacts (including by failing to conduct the required conformity analysis), misinterpreted and misapplied Section 202(a)(2)'s lead-

time requirements, and prioritized other, non-statutory objectives over Congress's goal of reducing air pollution.

3. Whether EPA's Administrator's decision to bypass EPA's experts and rely on an analysis prepared by NHTSA in EPA's name, while turning a blind eye to identified errors in that analysis, was an unlawful failure to exercise independent judgment.

4. Whether NHTSA's error-filled analysis fails to support EPA's rationales for its Rollback, rendering it arbitrary and capricious.

5. Whether NHTSA's Rollback contravenes Congress's mandate to set "maximum feasible" fuel-economy standards under EPCA because, among other things, NHTSA replaced technologically and economically feasible standards with ones that will *increase* energy consumption.

6. Whether NHTSA's Rollback is arbitrary and capricious because, like EPA's Rollback, it rests on an error-filled analysis that does not support the agency's rationales.

7. Whether NHTSA violated the Clean Air Act's conformity requirements, as well as the requirements of the National Environmental Policy Act, and whether NHTSA and EPA violated the Endangered Species Act.

STATUTES AND REGULATIONS

Pertinent statutes and regulations are reproduced in a separately bound addendum to this brief.

STATEMENT OF THE CASE

I. STATUTORY BACKGROUND

The Nation's motor vehicles are a substantial source of harmful air pollution, and Congress has directed EPA to reduce their emissions. *See* Pub. L. 89-272 § 201, 79 Stat. 992, 992-93 (1965). Under Section 202(a) of the Clean Air Act, EPA must promulgate “standards applicable to the emission of any air pollutant from” new motor vehicles that “cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7521(a)(1).

States are generally preempted from establishing their own new motor vehicle emission standards. *Id.* § 7543(a). But, recognizing that California's pioneering work in this field would continue to promote national progress, Congress directed EPA to waive preemption for California's standards unless one of three limited bases for denial were satisfied. *Id.* § 7543(b)(1). Congress also authorized other States to adopt and enforce California's standards under certain conditions. *Id.* § 7507.

In 1975, in the face of an energy crisis, Congress required NHTSA to set fuel-economy standards for automobiles as part of a suite of measures to reduce energy consumption. Pub. L. No. 94-163 § 2(5), 89 Stat. 871, 874, 902 (1975).¹ Congress strengthened and expanded this energy conservation program in the Energy Independence and Security Act of 2007. *See* Pub. L. No. 110-140, 121 Stat. 1492, 1498-1501 (2007). The statute requires NHTSA to prescribe “average fuel economy standards” that reflect “the maximum feasible” level “manufacturers can achieve” in a given model year. 49 U.S.C. § 32902(a), (b)(2)(B). In setting these “maximum feasible” standards, NHTSA “shall consider technological feasibility, economic practicability, the effect of other motor vehicle standards of the Government on fuel economy, and the need of the United States to conserve energy.” *Id.* § 32902(f).

Pursuant to these statutory frameworks, EPA and California have set vehicular emission standards, and NHTSA has set fuel-economy standards, for decades. JA____-____[EPA-HQ-OAR-2018-0283-5054_30-56].

¹ The statute assigns this task to the Secretary of Transportation, who has delegated it to NHTSA. 49 CFR § 1.94(c).

II. REGULATORY BACKGROUND

A. The Origins of Vehicular GHG Emission Standards

In 2007, the Supreme Court invalidated EPA's denial of a petition asking the agency to regulate vehicular GHGs because those emissions "may reasonably be anticipated to endanger public health or welfare," *Massachusetts v. EPA*, 549 U.S. 497, 511 (2007), holding that "[t]he Clean Air Act's sweeping definition of 'air pollutant'" encompassed GHGs, *id.* at 528.

California had already adopted GHG standards applicable to light-duty vehicles (i.e., passenger cars and light trucks) beginning with model year 2009. Cal. Code Regs. tit. 13, § 1961.1. After an initial denial, and after *Massachusetts* was decided, EPA granted the State a preemption waiver for those standards. 74 Fed. Reg. 32,744 (July 8, 2009).

In 2009, EPA finalized its "endangerment finding," concluding "that greenhouse gases in the atmosphere may reasonably be anticipated both to endanger public health and to endanger public welfare." 74 Fed. Reg. 66,496, 66,497 (Dec. 15, 2009). EPA recognized public health risks, including changes in air quality, more frequent heat waves and other extreme weather events, and increases in food- and water-borne pathogens, *id.*, as well as harms to public welfare, including threats to water supplies and water quality, *id.* at 66,498. EPA

found that “new motor vehicles and new motor vehicle engines ... contribute to the greenhouse gas air pollution” that gives rise to these threats. *Id.* at 66,496. This endangerment finding—which EPA has reaffirmed several times since 2009—requires EPA to regulate GHGs from new motor vehicles and engines. *See Coal. for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 126-27 (D.C. Cir. 2012).

B. The National Program

In 2010, the federal government brokered an agreement with California and major automakers that resulted in a “National Program” of harmonized standards for vehicular GHG emissions and fuel economy. *Chamber of Commerce v. EPA*, 642 F.3d 192, 198 (D.C. Cir. 2011). Under this agreement, EPA and NHTSA conducted a joint rulemaking in which EPA promulgated the first federal GHG standards for new motor vehicles and NHTSA promulgated fuel-economy standards. 75 Fed. Reg. 25,324 (May 7, 2010). The standards covered model years 2012 through 2016. *Id.* at 25,324. California and EPA also aligned their respective GHG standards, and California agreed to allow automakers to comply with its state standards by complying with EPA’s. *Id.* at 25,328.

Automakers supported the National Program because it reduced administrative and other burdens. *Id.* at 25,328-29. Other stakeholders—

including California—supported the National Program because national standards could more forcefully address urgent public health and environmental threats, especially climate change. *Id.* at 25,326. Mobile sources, and particularly light-duty vehicles, were significant contributors to—indeed, “the fastest growing source of”—the Nation’s GHG emissions. *Id.* EPA’s standards would secure “substantial reductions” of these emissions—approximately 960 million metric tons. *Id.* at 25,326, 25,328. For its part, NHTSA recognized that light-duty vehicles “account for about 40 percent of all U.S. oil consumption” and affirmed the continuing need to improve their fuel economy. *Id.* at 25,326-27.

The Agencies found that a wide range of technologies already existed to meet their standards and that broader deployment of these technologies would be highly cost-effective. *Id.* at 25,328. Indeed, they found consumers would more than recoup the modest additional costs for new vehicles through reduced fuel expenditures. *Id.* at 25,328-29. And, for consumers who financed their new vehicle purchases, the savings would be immediate, exceeding “the increase in loan payments by \$130–\$180 per year.” *Id.* at 25,329.

EPA’s and NHTSA’s standards shared a general design framework. Both sets of standards were fleetwide averages based on the “footprints” of the

vehicles an automaker actually sells in a given model year. *Id.* at 25,333.

(Footprint refers to the area enclosed by the four points where the tires meet the ground. *Id.*) “Every vehicle model has a performance target, ... the level of which depends on the vehicle’s ... footprint” and on whether the vehicle is classified as a car or truck. *Id.* The standards for a particular automaker and model year are “production-weighted average[s]” of those targets for the fleet of vehicles that automaker produced in that model year. *Id.* A manufacturer that sells both cars and trucks will have two of these production-weighted average standards—one each “for cars and for trucks.” *Id.*

Under these footprint-based standards, larger vehicles are generally subject to less stringent standards than smaller vehicles. *Id.* “All vehicles, whether smaller or larger” must make improvements; but, under the footprint-based standards, the Agencies anticipated “no significant effect on the relative distribution of different vehicle sizes in the fleet,” meaning “consumers will still be able to purchase the size of vehicle that meets their needs.” *Id.* at 25,338.

The Agencies also built similar “compliance flexibilities” into their respective programs, including allowing automakers to earn credits for overshooting the applicable fleetwide-average standards. *Id.* at 25,338-39.

Those credits could then be traded to another automaker; used across the

automakers' car and truck fleets in a given model year (e.g., if its truck fleet overcomplied but its car fleet fell short); or applied to compliance deficits in other model years. *Id.* at 25,339. Generally, automakers may use credits to address fleet compliance deficits for the previous three model years or may bank the credits for use in the next five model years. *Id.*

C. Extension of the National Program

EPA, NHTSA, California, and major automakers later agreed to extend the National Program. In a 2012 joint rulemaking with NHTSA, EPA promulgated GHG standards for model years 2017-2025. 77 Fed. Reg. 62,624 (Oct. 15, 2012). Because EPCA limits NHTSA to promulgating five years of fuel economy standards at a time, 49 U.S.C. § 32902(b)(3)(B), NHTSA promulgated fuel-economy standards only for model years 2017-2021, 77 Fed. Reg. at 62,627. However, it announced “augural” standards—harmonized with EPA’s—for model years 2022-2025, finding they reflected “NHTSA’s current best estimate ... of what levels of stringency might be maximum feasible in those model years.” *Id.*²

² In 2013, EPA granted a Clean Air Act preemption waiver for California’s Advanced Clean Cars program, which included, among other things, GHG standards for model years 2017-2025 that were similar to EPA’s. 78 Fed. Reg. 2,112 (Jan. 9, 2013). EPA withdrew portions of that waiver in

The Agencies explained they were responding “to the country’s critical need to address global climate change and to reduce oil consumption,” *id.* at 62,626-27, estimating the standards would prevent “approximately 2 billion metric tons” of GHG emissions and would also “save approximately 4 billion barrels of oil.” *Id.* at 62,627. The Agencies found that “a wide range of technologies” was already available for compliance, with further advancements and deployments anticipated. *Id.* at 62,631. Although the standards might add, on average, \$1,800 to the cost of a new light-duty vehicle, that cost would be dwarfed by fuel savings of \$5,700 to \$7,400 “for a net [vehicle] lifetime savings of \$3,400 to \$5,000.” *Id.* at 62,627. The Agencies projected “net benefits to society ... in the range of \$326 billion to \$451 billion.” *Id.*

The Agencies retained the fleetwide-average and footprint-based approaches of the prior standards, noting, again, that “[m]anufacturers are not compelled to build vehicles of any particular size or type (nor do the rules create an incentive to do so).” *Id.* at 62,627-28. In other words, the Agencies affirmed that these standards “preserve consumer choice – that is, the standards should not affect consumers’ opportunity to purchase the size of

2019. 84 Fed. Reg. 51,310 (September 27, 2019). Challenges to that withdrawal are pending before this Court. *See* Case No. 19-1230 (lead).

vehicle with the performance, utility and safety features that meets their needs.”

Id. at 62,631.

D. The Mid-Term Evaluation

Automakers generally supported the standards but requested a mid-program review of the standards EPA set for model years 2022-2025. 77 Fed. Reg. at 62,636. EPA agreed, committing to conduct a “Mid-Term Evaluation,” by April 2018, of the appropriateness of those later-year standards. *Id.* at 62,652. That evaluation would be “a collaborative, robust and transparent process, including public notice and comment” and would begin with, and be based on, a rigorous Technical Assessment Report to be prepared jointly by EPA, NHTSA, and the California Air Resources Board. *Id.* at 62,784. EPA codified these commitments in its Mid-Term Evaluation regulation, identifying eight specific factors it would assess before determining whether the standards remained appropriate. 40 C.F.R. § 86.1818–12(h).

In July 2016, EPA, NHTSA, and the California Air Resources Board published their 1,217-page Technical Assessment Report. 81 Fed. Reg. 49,217 (July 27, 2016). The Report found that a “wider range of [compliance] technologies” had become available at costs “similar or lower, than those projected” when the standards were promulgated in 2012. *California v. EPA*,

940 F.3d 1342, 1347 (D.C. Cir. 2019) (cleaned up). Based in large part on that Report and extensive public comments, EPA issued a 268-page Proposed Determination. *Id.* That Proposed Determination assessed the eight regulatory factors and concluded that the standards for model years 2022-2025 remained appropriate. 81 Fed. Reg. 87,927 (Dec. 6, 2016). EPA finalized that determination in January 2017. JA__[EPA-HQ-OAR-2015-0827-6270_1]; *see also California*, 940 F.3d at 1347.

III. THE CHALLENGED ACTIONS

A. EPA's Revised Determination

“Following the transition in presidential administrations, EPA changed lanes.” *California*, 940 F.3d at 1348. On March 15, 2017, President Trump announced his intention to “cancel” the determination issued two months earlier, ostensibly over concerns about possible job losses in the auto industry. *See* 83 Fed. Reg. at 16,078. One week later, EPA announced that it would reconsider the determination for a different reason: to accommodate “additional consultation and coordination with NHTSA.” 82 Fed. Reg. 14,671, 14,672 (March 22, 2017).

In April 2018, EPA published an eleven-page Revised Determination concluding that the standards set in 2012 were no longer appropriate and

asserting still different rationales. 83 Fed. Reg. at 16,079. The Administrator claimed there was suddenly “uncertainty” about the availability of compliance technologies, *id.* at 16,082, and asserted brand new concerns about consumer costs, *id.* at 16,084. The Revised Determination contained only fleeting references to the Technical Assessment Report and provided no detailed assessments of the eight regulatory factors. *E.g., id.* at 16,081-82, 16,085.

A coalition of States, nongovernmental organizations, and industry representatives challenged the Revised Determination. *California*, 940 F.3d at 1345. This Court held that the decision was not “final action,” 42 U.S.C. § 7607(b)(1), and dismissed the petitions, *California*, 940 F.3d at 1353. Recognizing that EPA might revise its standards, and, in fact, had proposed to do so during the litigation, this Court and EPA’s counsel confirmed that EPA’s withdrawal of its 2017 Determination did not “eliminate any part of the existing administrative record”—including the Technical Assessment Report. *California*, 940 F.3d. at 1351. It also did not “affect the standard for judicial review of any future final action” on the standards. *Id.* Thus, to be lawful, any changes to the standards would require “a reasoned explanation for” disregarding the factual findings and analysis that underlay both the 2012

rulemaking and “the original mid-term evaluation process.” *Id.* at 1351 (cleaned up).

B. The Agencies’ Proposed Rollbacks

In 2018, EPA and NHTSA proposed to freeze their respective standards at model year 2020 levels for six years, meaning *no* increase in stringency would be required in model years 2021-2026 (although model year 2021 was not part of the Mid-Term Evaluation). 83 Fed. Reg. 42,986 (Aug. 24, 2018). The standards would still be based on vehicle footprints and automakers’ fleetwide averages, with separate standards for car and light-truck fleets. *Id.* at 43,015.

EPA estimated its Proposed Rollback would increase GHG emissions by 872 million metric tons, *id.* at 43,230, eliminating almost half the GHG benefits of the standards adopted in 2012, *see supra* at 12. Freezing the standards would also cause “U.S. fuel consumption to increase by about half a million barrels per day.” 83 Fed. Reg. at 42,986. Shifting rationales again, the Agencies claimed the Proposed Rollbacks would avoid thousands of highway crash fatalities and produce approximately \$200 billion in net societal benefits. *Id.* at 43,152, 43,157, 43,367-68; *see also id.* at 42,986.

Multiple expert commenters—including the California Air Resources Board, which had collaborated with EPA and NHTSA on the Technical

Assessment Report and past rulemakings—identified numerous, fundamental flaws in the analysis underlying these claims. Indeed, a group of academics whose work had been relied on by the Agencies wrote in *Science* magazine that the Proposal was “misleading,” filled with “fundamental flaws and inconsistencies,” and “at odds with basic economic theory and empirical studies.” JA____[NHTSA-2018-0067-12326_1119].

Among the most consequential errors was the Agencies’ inexplicable projection that the pre-existing standards would somehow cause Americans to own tens of millions more vehicles and, as a result, drive about a *trillion* more miles, resulting in more crashes, more fatalities, and more costs to society. 83 Fed. Reg. at 43,098-99, 43,152, 43,257. These unexplained dramatic expansions in fleet size and miles driven were soundly debunked. JA____, ____[EPA-HQ-OAR-2018-0283-5054_228,234]; ____-____[EPA-HQ-2018-0283-2650]; ____-____[EPA-HQ-OAR-2018-0283-5842_Gillingham_Scrappage]. Without them, however, the Proposed Rollbacks did not appear to prevent crash fatalities in a statistically significant way and the alleged societal benefits were seriously diminished. *See* 83 Fed. Reg. at 43,353, 43,368 (Table VII-98) (showing more than \$100 *billion* difference in net benefits between “Reference Case” and “Scrappage and Fleet Share Disabled” scenarios).

These enormous errors in the projection of fleet size and miles driven were produced by new models NHTSA developed to estimate the standards' effects on fleet turnover (the replacement of older vehicles with newer ones). JA____-____[EPA-HQ-OAR-2018-0283-5054_188-250]. The models had not been peer-reviewed before the Agencies relied on them. JA____-____[EPA-HQ-OAR-2018-0283-5054_92-93n.135]. However, EPA's experts reviewing NHTSA's analysis had identified the problem (and others). They noted that NHTSA's models produced "vastly unrealistic growth in the overall fleet size, which in turn causes an unrealistic over-inflation of the fatalities estimated." JA____[EPA-HQ-OAR-2018-0283-5666_Atch5-CharmleyEmail_pdf10].

Commenters pointed out many other flaws in the analysis, including numerous departures from factual findings in the joint Technical Assessment Report and in EPA's 2017 Determination. For example, the Agencies chose to constrain which technologies could be applied to which vehicles in ways directly contrary to their previous analyses. JA____-____[EPA-HQ-OAR-2018-0283-5054_93-122]. These assumptions, and myriad other errors, inflated the compliance costs of the pre-existing standards and, thus, the cost savings attributed to the Proposed Rollbacks. *Id.*

C. The Agencies' Final Rollbacks

On April 30, 2020, EPA and NHTSA published their Final Rollbacks. Changing course slightly from the Proposal's preferred alternative of freezing the standards, the Agencies finalized standards that would increase in stringency by approximately 1.5% each year, 85 Fed. Reg. at 24,174, a rate still far lower than the annual increase (approximately 5%) required by the pre-existing standards. *Id.* at 25,106. The vast majority of the work on the Final Rollbacks was done by NHTSA. *E.g.*, JA____-____[ECFNo1858308_ExF_1-2]. EPA's experts were given only two, extraordinarily limited opportunities to review the purportedly joint analysis that NHTSA had prepared. *Id.* In fact, one of those review windows was only about 36 hours long. *Id.* Even so, EPA's experts once again identified numerous errors—many of which were not corrected. Those experts were given the extraordinary instruction to provide their comments only to NHTSA and only in hard copy, which would avoid the public disclosure practices at the Office of Management and Budget. JA____[ECFNo_1858308_ExhG_pdf4]; *see also* E.O. 12,866, § 6(b)(4)(D), 58 Fed. Reg. 51,735 51,743 (Sept. 30, 1993).

The analysis NHTSA prepared—and EPA's Administrator adopted—projected that the Rollbacks would increase GHG emissions by up to 923

million metric tons and “result in 1.9 to 2.0 additional billion barrels of fuel consumed.” 85 Fed. Reg. at 24,176. It also estimated that increases in criteria-pollutant emissions from EPA’s Rollback would lead to up to 1,000 premature deaths and numerous other adverse health impacts.³ *Id.* at 25,119. The Agencies acknowledged that the Rollbacks would cost consumers money overall, because increases in fuel expenditures would exceed estimated decreases in vehicle prices. *Id.* at 24,180-81. The Agencies likewise reaffirmed that the “majority” of technologies needed to comply with the pre-existing standards “have already been developed, have been commercialized, and are in-use on vehicles today.” *Id.* at 25,107. Indeed, NHTSA predicted automakers would improve fuel economy more than required by its Rollback if it held the standards constant at model year 2020 levels. JA____-____[NHTSA-2018-0067-12636_17-18].

The analysis for the Final Rollbacks no longer projected a massive, unexplained increase in vehicles owned and miles driven under the pre-existing standards. *See* 85 Fed. Reg. at 25,117. That change eliminated the basis for most of the Proposal’s purported safety benefits, *id.* at 24,176, along with the hundreds of billions of dollars in purported net benefits that had been its other

³ Criteria pollutants are those for which EPA has established National Ambient Air Quality Standards. *See* 42 U.S.C. § 7408(a).

primary justification. In fact, the Agencies estimated that the net benefits of the Final Rollback “straddle[d] zero.” *Id.*

The Agencies nonetheless maintained that the Rollbacks’ safety benefits supported weakening the standards, but they had to try to find another way to bolster the rationale. Thus, the Agencies claimed the Rollbacks would avoid crash fatalities associated with additional driving consumers might do under the pre-existing standards because more stringent standards improve fuel efficiency and reduce the cost of driving. *Id.* at 24,825-26. In the Proposal, the Agencies had recognized that this additional driving is “freely chosen” and that the benefits of this additional driving fully offset its costs (including those from additional crashes). *Id.* at 24,826. For the Final Rollbacks, however, the Agencies decided to attribute these estimated additional crash fatalities to their standards, rather than to consumers’ independent choices, and also decided to offset only 90% of the associated costs. *Id.* This new category of purportedly avoided crash fatalities made up approximately 80% of the claimed safety benefits of the Final Rollbacks. *Id.* at 25,119.

The Agencies also claimed the Rollbacks were supported by feasibility concerns about the pre-existing standards (including an assertion that consumer preferences for certain vehicles make automaker compliance

challenging) and by a theory that consumers value the dollars they save “upfront,” when they purchase a vehicle, more than the dollars they save at the pump. *Id.* at 25,120.

STANDARD OF REVIEW

This Court holds unlawful agency actions that are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 42 U.S.C. § 7607(d)(9)(A); *accord* 5 U.S.C. § 706(2)(A), (C). When “Congress has directly spoken to the precise question at issue, ... the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” *Chevron v. NRDC*, 467 U.S. 837, 842-43 (1984). But “if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency’s answer is based on a permissible construction of the statute.” *Id.* at 843. An agency is not entitled to deference for interpretations of statutes it does not administer or for interpretations not clearly articulated or reasonably explained. *See Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125, 2126 (2016).

“[T]he same standard of review for arbitrary-and-capricious challenges” applies to EPA’s actions under the Clean Air Act as to NHTSA’s actions reviewable under the Administrative Procedure Act. *See NRDC v. EPA*, 777

F.3d 456, 463 (D.C. Cir. 2014). An action “is arbitrary and capricious when, *inter alia*, the agency has entirely failed to consider an important aspect of the problem,” “offered an explanation for its decision that runs counter to the evidence before the agency,” “ignore[d] evidence that cuts against [the agency’s] judgment,” or “failed to articulate a rational explanation for its actions.” *Genuine Parts Co. v. EPA*, 890 F.3d 304, 346 (D.C. Cir. 2018) (cleaned up). Agency fact-finding is arbitrary and capricious unless it is supported by substantial evidence in the record as a whole. *Id.* Moreover, when an agency changes course, it must “display awareness that it is changing position” and provide “a reasoned explanation ... for disregarding facts and circumstances that underlay” its prior position. *Encino Motorcars*, 136 S. Ct. at 2126.

SUMMARY OF THE ARGUMENT

The EPA Administrator’s effort to roll back the agency’s vehicular greenhouse gas standards was unlawful from beginning to end.

1. The Administrator began by arbitrarily rescinding EPA’s 2017 Final Determination, which was based upon a robust technical analysis and detailed agency findings. His Revised Determination contravened EPA’s Mid-Term Evaluation regulation and departed, without adequate justification, from EPA’s own prior findings affirming the appropriateness of the pre-existing standards.

2. EPA's Rollback also suffers from numerous defects that each warrant vacatur.

a. The Administrator unlawfully elevated non-statutory objectives over those specified by Congress. He disregarded the emission increases the Rollback will cause and failed to consider the impacts of those additional emissions on state plans to comply with federal air quality standards. Then, while recognizing that the technologies necessary for compliance with the pre-existing standards already exist, the Administrator extended automakers' lead time on grounds untethered from the statutory text (e.g., consumer preferences). Those improper lead-time findings, which were entirely absent from the Proposal, cannot convert non-statutory objectives into statutory ones or authorize the Administrator to prioritize the former over the latter.

b. The Administrator unlawfully abdicated his responsibility to exercise independent judgment when he uncritically accepted analysis prepared by NHTSA in EPA's name, bypassing EPA experts and ignoring errors they identified in NHTSA's work.

c. EPA's Rollback is arbitrary and capricious because the underlying analysis is riddled with errors that undermine each of the rationales the Administrator advanced. Moreover, because none of these rationales is

independently sufficient to support EPA's Rollback, the failure of any one of them warrants vacatur.

i. *Safety*. The Rollbacks will not improve vehicle safety, as evident from the Administrator's struggle to identify a basis for his contrary claim. He relied on two theories in the Proposal, but one—based on turnover in the Nation's vehicle fleet—provided the vast majority of the alleged safety benefits. That central theory was soundly debunked, and, by the Final Rollback, neither of the two original theories produced fatality figures the Administrator could claim were statistically different from zero. He then turned to a third theory to bolster the safety numbers: attributing to the pre-existing standards the additional driving consumers *choose* to do when vehicles are more efficient and less expensive to operate. But, as the Administrator recognized, this additional driving is a consequence of consumers' independent choices, not government standards, and consumers undertake this additional driving because its benefits match or exceed its costs, including those from car crashes. None of the three theories supports a safety rationale for the Rollback.

ii. *Feasibility*. The Administrator admitted the technologies needed to meet the pre-existing standards are already in use in vehicles on the market today but nonetheless claimed feasibility concerns justify the Rollback.

These concerns rest on multiple unfounded assertions. First, his claim that reductions in compliance costs support the Rollback are undercut by the numerous manipulations and errors in the modeling that substantially inflated those alleged savings. Second, the Administrator's assertion that automakers' use of credits earned through over-compliance in earlier years is a sign of feasibility challenges ignores that this rational exercise of an expressly authorized, cost-effective compliance option indicates only that the program is working as designed. Third, the Administrator's claims that consumers' vehicle preferences present feasibility challenges also fall flat because, as both EPA and NHTSA previously asserted, the standards are expressly designed to permit automakers to accommodate consumer preferences (including those for larger vehicles). Finally, the Administrator's purported concerns that the pre-existing standards would require too many hybrid and electric vehicles to be sold are baseless. The estimates of those sales are inflated because they derive, at least in part, from the inflation of compliance costs for conventional vehicles. And, in any event, the record—and the agency's own prior findings—indicate that these sales levels are readily achievable.

iii. *Consumer Costs.* The Administrator admitted that the Rollback will cost consumers money because the additional fuel costs exceed

even the inflated savings in new vehicle prices. The Administrator's claim that the Rollback nonetheless benefits consumers economically is based on illogical and inconsistent theories that are wholly unsupported by evidence.

iv. *Cost-Benefit Analysis*. The Administrator asserted that the costs and benefits of the Rollback are a wash, but he did not explain how that would support rolling back feasible, cost-effective standards that substantially advance the Clean Air Act's emission-reduction objective. Further, the cost-benefit analysis on which the Administrator relied is riddled with errors—some intentional, some inadvertent—that dramatically skew it in favor of the Rollback. Thus, far from being cost-neutral, the Rollback will actually impose significant costs on society.

NHTSA's Rollback is also unlawful, for many of the same reasons.

1. a. Like EPA, NHTSA misinterprets and misapplies its statute and improperly substitutes non-statutory policy objectives—e.g., facilitating consumer preferences—for Congress's core objective of conserving energy.

b. And, because NHTSA actually prepared the underlying analysis for both Rollbacks, its standards fail due to the same fundamental flaws that infect EPA's: the record does not support NHTSA's claims concerning the bases for its actions.

c. Finally, in addition to undermining EPCA's primary purpose, NHTSA contravened multiple other statutes. It failed to consider the impact of its Rollback on state efforts to attain or maintain federal air quality standards, as required by the Clean Air Act; it failed to consider a reasonable set of alternatives and cumulative impacts, as required by the National Environmental Policy Act; and it failed to consult with the designated experts on threats to protected species, as required by the Endangered Species Act.

STANDING

The Agencies' actions to weaken their standards injure Petitioners in multiple ways. EPA's Revised Determination injured Petitioners' (and especially California's) interests in the robust and transparent process to which EPA committed. It also led to these Rollbacks, which the Agencies estimate will increase GHG emissions by approximately 900 million metric tons. 85 Fed. Reg. at 24,180-81. These actions will exacerbate the climate harms that Petitioners are already experiencing, including loss of sovereign territory; threats to water supplies and other natural resources; damage to state-owned parks and infrastructure; lost tax revenue resulting from harm to major industries; and increased government expenditures required to protect public health, safety, and infrastructure. ADD B-004-B-008, B-018-B-023, B-037-B-

042, B-044-B-047, B-049, B-053-B-058, B-068-B-076, B-082-B-090, B-105-B-114, B-121-B-127, B-132-B-133, B-139-B-140, B-170-B-178;⁴ *see Massachusetts*, 549 U.S. at 521-26. The Rollbacks will also hamper Petitioners' achievement of federal and state air quality goals by increasing criteria-pollutant emissions, 85 Fed. Reg. at 25,119, and by exacerbating climate change, ADD B-031-B-032, B-150-B-151. Petitioners will experience additional regulatory burdens and costs as a result. ADD B-028-B-034, B-143-B-151, B-154-B-162.

ARGUMENT

I. EPA'S ROLLBACK BEGAN WITH AN UNLAWFUL REVISED DETERMINATION AND ENDED WITH AN UNLAWFUL RULE

Over the course of efforts to roll back EPA's standards, the Administrator advanced a dizzying series of shifting justifications, asserting new ones as old ones were proven false. He alleged concerns about job losses, asserted a need for more coordination with NHTSA, claimed faster turnover of older vehicles for newer ones would reduce crash fatalities, and asserted hundreds of billions of dollars in societal costs savings, among other claims. As this labored struggle to manufacture a justification for rolling back EPA's pre-existing standards indicates, this was no reasoned decision-making process.

⁴ Standing declarations are reproduced in a separately bound addendum.

Indeed, at every step, the Administrator flouted legal requirements; reversed the agency's prior, rigorous factual findings without justification; and disregarded robust evidence that undercut the desired outcome. The end results are 1) a Revised Determination that contravenes both the agency's regulations and the record and 2) a Rollback that disregards Congress's directive to protect public health and welfare and relies on an error-ridden analysis, panned by EPA's own experts, that does not support the action. Both actions should be vacated.

A. EPA's 2018 Revised Determination Contravened Its Regulation and Was Arbitrary and Capricious

The Administrator began the process of rolling back EPA's standards with a gross failure of reasoned decision-making. His April 2018 Revised Determination 1) ignored the extensive technical findings supporting EPA's 2017 Determination that the pre-existing standards remained appropriate, including findings contained in the mandatory Technical Assessment Report; and 2) flouted an explicit requirement that the Administrator complete, and set forth in detail, assessments of eight enumerated factors.⁵

⁵ Now that EPA has completed the rulemaking for which the Revised Determination "evinced EPA's intention to begin," *California*, 940 F.3d. at 1351, review of this "preliminary, procedural, or intermediate agency action" is

1. EPA’s regulation required the Determination to be “based upon a record that includes ... a draft Technical Assessment Report” (“Report”). 40 C.F.R. § 86.1818-12(h)(2). That 1,217-page Report—produced jointly by EPA, NHTSA, and the California Air Resources Board in 2016—found that more compliance technologies existed, at “similar or lower” costs, than the Agencies had projected in 2012. JA____[EPA-HQ-OAR-2015-0827-0926_ES-2]. The Report also concluded that “the [model year] 2022-2025 standards can be achieved largely through the use of advanced gasoline vehicle technologies with modest [to]... low penetrations” of electrification, such as hybrid and electric vehicles. JA____[EPA-HQ-OAR-2015-0827-0926_ES-7]. Based on this detailed technical review, EPA found in the 2017 Determination that its existing standards remained appropriate because they were, *inter alia*, “feasible at reasonable cost” and achievable “through a number of different technology pathways reflecting predominantly the application of technologies already in commercial production.” JA____-____[EPA-HQ-OAR-2015-0827-6270_3-4].

appropriate, 5 U.S.C. § 704. *See also Yaman v. U.S. Dept. of State*, 634 F.3d 610, 613 (D.C. Cir. 2011) (when review of agency’s earlier decision is consolidated with review of its final decision, “the matter of finality” of the earlier decision “will be moot”).

By contrast, the Revised Determination referenced the substance of the Report only once, superficially,⁶ and otherwise acted as though the Report did not exist. For example, the Administrator asserted that there had not been “appropriate consideration to the effect on low-income consumers,” 83 Fed. Reg. at 16,084, entirely disregarding the Report’s robust discussion of this factor. *See* JA____-____[EPA-HQ-OAR-2015-0827-0926_6-16_to_6_23]; *see* also JA____-____[EPA-HQ-OAR-2015-5941_4-38_to_4-56]; JA____-____[EPA-HQ-OAR-2015-0827-5942_A-66_to_A-79].⁷

Thus, the Revised Determination was not “based upon” the Report that EPA’s own regulation established as a critical component of the record. 40 C.F.R. § 86.1818-12(h)(2); *see also Saudi Arabia v. Nelson*, 507 U.S. 349, 357 (1993) (“based upon” means that the object forms the “basis” or “foundation” for the act in question). Moreover, given EPA’s prior technical findings

⁶ Specifically, while discussing energy security, the Administrator asserted that “the situation of the United States is ... significantly different from its situation in 2016 when the [Report] was developed.” 83 Fed. Reg. at 16,085. He did not explain *how* the situation was different.

⁷ The Administrator likewise failed to consider the prior findings as to feasibility and economic practicability, among other factors, and provided no reasoned explanation for his changed positions. Instead, the Administrator gestured vaguely at a “significant record” that EPA had newly obtained and that purportedly created “uncertainty.” 83 Fed. Reg. at 16,078-79. But the Administrator never made that record available for public comment or specifically identified its contents.

exhaustively addressing the issues bearing on appropriateness, the 2018 Determination starkly violated EPA's obligation to provide "a reasoned explanation ... for disregarding [the] facts and circumstances that underlay" its prior action, *Encino Motorcars*, 136 S. Ct. at 2126 (cleaned up); *see also Am. Wild Horse Pres. Campaign v. Perdue*, 873 F.3d 914, 927 (D.C. Cir. 2017) (agency may not "whistle past [the] factual graveyard" and disregard previous policy and underlying record).

2. EPA's regulation also required the Administrator to "set forth in detail the bases for its determination," including his "assessment" of eight specific factors. *See* 40 C.F.R. § 86.1818-12(h)(4). The 2017 Determination exhaustively addressed each of these issues. In the Revised Determination, however, the Administrator failed to assess these factors at all; instead he made unsupported assertions of "uncertainty" and repeatedly said he would defer the assessments. *See* 83 Fed. Reg. at 16,081-82 (claims of "uncertainty" regarding technological development); *id.* at 16,083 n.21 (noting "numerous peer-reviewed studies" but deferring assessment of them); *id.* at 16,085 (deferring assessment of standards' impact on energy conservation); *id.* at 16,086 (deferring assessment of safety factor). Put simply, although the Administrator purported to determine EPA's standards were no longer appropriate, he did so

without making the assessments required to reach that determination. *See Bus. Roundtable v. SEC*, 647 F.3d 1144, 1150 (D.C. Cir. 2011) (agency “neglected its statutory obligations to assess” where it failed to even “hazard a guess” on the issue) (cleaned up).

The Administrator’s violations of the regulatory requirements and his failure to consider, let alone address, EPA’s prior findings render the Revised Determination unlawful.

B. EPA’s Rollback Is Inconsistent with the Clean Air Act

The Administrator’s disregard for legal obligations and record evidence continued with the Rollback of EPA’s standards. As shown in the following sections, vacatur is warranted because the Administrator abdicated his responsibility to exercise independent judgment, *see infra* Section I.C., and approved the Rollback based on an error-ridden analysis that fails to support the stated rationales, *see infra* Section I.D.

Vacatur is also warranted because the Administrator failed to “link the policies served by this rule to the objectives set out” in Sections 202(a) and 176 of the Clean Air Act, relying instead “on other policies” to justify the Rollback. *See Indep. U.S. Tanker Owners Comm. v. Dole*, 809 F.2d 847, 853-54 (D.C. Cir. 1987). Under Section 202(a)(1), EPA “shall” set standards to curb vehicular

emissions after it has determined that a pollutant “endanger[s] public health and welfare.” 42 U.S.C. § 7521(a)(1). Those standards “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.” *Id.* at § 7521(a)(2). The goals of these provisions are clear: 1) to protect public health and welfare from harmful air pollution; and 2) to provide sufficient lead time for the development of emission-reducing technologies while avoiding “undue economic disruption” in the auto industry, e.g., the “doubling or tripling the cost of motor vehicles.” *Motor & Equip. Mfrs. Ass’n, Inc. v. EPA (MEMA I)*, 627 F.2d 1095, 1118 (D.C. Cir. 1979). The goal of Section 176 is equally clear: to prevent federal agencies from undermining EPA-approved State Implementation Plans to achieve federal air quality standards. 42 U.S.C. § 7506(c)(1).

Yet the Administrator gave these statutory objectives little to no weight here. He virtually disregarded increases in harmful emissions and conceded that the Rollback is not necessary to provide time for technological development. Instead, the Administrator unlawfully relied on “non-statutory criteria” for “key point[s] in [his] justifications for adopting this rule,” “substitut[ing] new goals in place of the statutory objectives.” *See Indep. U.S. Tanker Owners*, 809 F.2d at

854; *see also Gresham v. Azar*, 950 F.3d 93, 104 (D.C. Cir. 2020), *cert. granted* 2020 WL 7086047 (Dec. 4, 2020).

1. The Administrator Disregarded the Massive Increase in GHG Emissions the Rollback Will Cause

EPA has repeatedly found that GHG emissions endanger public health and welfare by contributing, for example, to more frequent and intense extreme weather events, reduced water supplies, and rising sea levels that threaten coastal communities and infrastructure. 74 Fed. Reg. 66,496, 66,497-98 (Dec. 15, 2009); 80 Fed. Reg. 64,510, 64,517-20 (Oct. 23, 2015). The record here underscores the agency’s prior findings and demonstrates that the climate crisis is only growing more dire. Indeed, a recent government report—to which EPA itself contributed—concluded that without significant reductions in GHG emissions, climate-change impacts “are expected to increasingly disrupt and damage critical infrastructure and property, labor productivity, and the vitality of our communities.” JA____[EPA-HQ-OAR-0283-7438_NCA4-II_25]; *see also* JA____-____[EPA-HQ-OAR-0283-5481_15-27]; ____-____[EPA-HQ-OAR-0283-5054_303-308]; ____-____[EPA-HQ-OAR-0283-5070_AppxA_3-4].

Nonetheless, the Administrator adopted standards he estimates will *increase* GHG emissions by approximately 900 million metric tons. 85 Fed. Reg. at 25,055. His consideration of these emission increases was “cursory at best”

and did not begin to “square[]” the Rollback “with the Act.” *See Indep. U.S. Tanker Owners*, 809 F.2d at 852, 854. The Administrator even went so far as to lump the “degree of reduction of both GHG and non-GHG pollutants” in with other *non-statutory* factors EPA “*may*” consider. 85 Fed. Reg. at 25,106 (emphasis added).

In fact, the Administrator’s discussion of climate change consisted largely of adopting *NHTSA*’s environmental analysis, *see id.* at 25,053, which claimed that the Rollback’s climate impacts would be “extremely small” because of “the global and multi-sectoral nature of climate change,” *id.* at 25,163; *see also* JA___[EPA-HQ-OAR-2018-0283-0664_S-38]; 85 Fed. Reg. at 24,176 (claiming “minimal” impacts). EPA previously concluded the opposite: that reducing vehicular GHG emissions by almost the same amount—960 million metric tons—“would result in meaningful mitigation.” *See Coal. for Responsible Regulation, Inc. v. EPA*, 684 F.3d at 128 (citing 75 Fed. Reg. at 25,488-90). EPA also previously concluded that all emitters “must do their part even if their contributions” are small relative to total global emissions, 74 Fed. Reg. at 66,543, and recognized “the urgency of reducing emissions now,” 80 Fed. Reg. 64,510, 64,520 (Oct. 23, 2015). The Administrator neither acknowledged these

prior determinations nor explained his contrary conclusions here. *See also* Public Interest Petitioners' Br. at 8-12.

Section 202(a) prohibits the Administrator's fatalistic approach to the climate crisis. EPA "shall" control vehicular emissions that "cause, *or contribute to*" harmful air pollution. 42 U.S.C. § 7521(a)(1) (emphasis added). The fact that the pre-existing standards would not, by themselves, solve the climate crisis does not support the Administrator's decision to do even less. *See Massachusetts*, 549 U.S. at 526. "[T]he U.S. transportation sector emits an enormous quantity of" GHGs, and reductions from that sector "would slow the pace of global emissions increases." *Id.* at 499. By contrast, under the Administrator's approach "it is unlikely that the ... cumulative effect of emissions ... can effectively be controlled." *See Bluenwater Network v. EPA*, 370 F.3d 1, 14 (D.C. Cir. 2004).

2. The Administrator Likewise Disregarded Increases in Harmful Criteria Pollution and Failed to Perform the Required Conformity Analysis

The Administrator also acknowledged that EPA's Rollback will increase criteria pollution, 85 Fed. Reg. at 25,059-60, and projected those increases will lead to premature deaths, exacerbated asthma, and other adverse health

impacts, *id.* at 25,112-13; *see also id.* at 25,083 (Table VII-142).⁸ Again, the Administrator failed to square his action with the objectives of Section 202(a).

The Administrator's actions also violated Section 176, which required him to analyze whether the Rollback "conform[s]" to EPA-approved State Implementation Plans demonstrating how States will reduce (or maintain) criteria-pollutant levels. 42 U.S.C. § 7506(c)(1); *see also* 40 C.F.R. § 93.150(a). This requirement—and the threat of substantial sanctions for state planning failures (42 U.S.C. §§ 7407(a), 7410(m), 7509)—underscore the foundational objective of the Clean Air Act: reducing harmful air pollution. The Administrator acted with complete disregard for that goal.

His unsupported assertion that a conformity determination was not required because the Rollback "results in neither direct nor indirect emissions," 85 Fed. Reg. at 25,250, is simply wrong. Indirect emissions are those: "(1) That are caused or initiated by the Federal action and originate in the same nonattainment or maintenance area but occur at a different time or place as the action; (2) That are reasonably foreseeable; (3) That the agency can practically control; and (4) For which the agency has continuing program responsibility."

⁸ These estimates of increased pollution and adverse public health consequences are severely underestimated. *See infra* Section I.D.4.a; Public Interest Petitioners Br. at 12-18.

40 C.F.R. § 93.152. The Administrator’s admission that the Rollback will cause increased criteria-pollutant emissions satisfies the first, second, and third elements. As to the fourth, EPA clearly has continuing responsibility over mobile source emissions under Section 202.

The Administrator’s expectation “that states will evaluate” the consequences of the Rollback “in the context of state implementation plan development,” 85 Fed. Reg. at 24,858, is no excuse. The Act requires *federal agencies* to evaluate the impacts of their own actions, and the Administrator’s attempt to pass that responsibility to the States is unlawful and only underscores his indifference to Congressional intent.

3. Section 202(a)(2)’s Lead-Time Requirement Does Not Support EPA’s Rollback

The Administrator’s conclusion that more lead time is warranted does not establish the requisite “link” to Congress’s objectives, *Indep. U.S. Tanker Owners*, 809 F.2d at 854, because lead time is the period “necessary to permit the development and application of the requisite technology,” 42 U.S.C.

§ 7521(a)(2). The Administrator himself explained that no such period is needed here because the technologies required to comply with the pre-existing standards “are currently available and in production.” 85 Fed. Reg. at 25,108.

He likewise conceded that “manufacturers *today* are capable of building vehicles

that can meet” those more stringent standards. *Id.* (emphasis added); *see also id.* at 25,107, 25,131. Congress’s lead-time considerations thus provide no basis for the Rollback.

In fact, the Proposal contained no proposed lead-time findings. 83 Fed. Reg. at 43,229. In the Final Rollback, the Administrator purported to make such findings, but none of those findings are connected to the statutory text. Indeed, he interpreted Section 202(a)(2) as concerning only technological development and automaker compliance costs, 85 Fed. Reg. at 25,106, but then proceeded to claim that more lead-time was justified based on entirely unrelated factors: (1) “greater uncertainty about consumer acceptance” of technologies, *id.* at 25,108; (2) “low fuel prices” for consumers and a purportedly “pronounced market shift” to certain vehicles, *id.* at 25,116; or (3) automakers’ use of over-compliance credits, *id.* at 25,103. Far from tethering his analysis to the text, the Administrator never even reconciled the interpretation he applied with the interpretation he articulated.

This Court has previously rejected similar atextual readings of Section 202(a)(2) and should do so again here. This section concerns only the “requisite lead time to allow technological developments” and “the timing of a particular emission control regulation,” not “its social implications.” *MEMA I*, 627 F.2d

at 1118. And Congress’s reference to “compliance costs” implicates “only the cost to the motor-vehicle industry to come into compliance.” *Coal. for Responsible Regulation*, 684 F.3d at 128. Fuel prices, consumer preferences for (or acceptance of) certain vehicles, and automakers use of credits (that exist solely because automakers previously *overcomplied* with the standards) are not within the *statutory* criteria.⁹ *See also Int’l Harvester Co. v. Ruckelshaus*, 478 F.2d 615, 640 (D.C. Cir. 1973) (consumer “driving preferences of hot rodders are not to outweigh the goal of a clean environment”). In fact, claiming that more lead-time is necessary to accommodate consumer preferences contravenes Section 202(a)’s primary purpose: to *change* the market to ensure that more lower-emitting vehicles are sold. *See Advocate Health Care Network v. Stapleton*, 137 S. Ct. 1652, 1662 (2017) (rejecting “goal-defying ... statutory construction”). The Administrator’s unreasonable application of Section 202(a)(2) cannot support a lawful lead-time finding or transform non-statutory criteria into statutory ones.

⁹ The Administrator admits that EPA’s program allows over-compliance credits to be banked and traded in order to provide “manufacturers greater flexibility and lead time to address technical feasibility and cost,” 85 Fed. Reg. at 25,103-04, but never explains why the use of these credits suggests that even more flexibility or lead-time is necessary. *See also infra* at 80.

4. The Administrator Unlawfully Prioritized Non-Statutory Objectives over Those of Congress

In the end, the Administrator expressly and unlawfully “prioritize[d] non-statutory objectives to the exclusion of the statutory purpose,” *Gresham*, 950 F.3d at 104—the protection of public health and welfare through the reduction of harmful air pollution. In fact, he acknowledged that increased emissions weighed “in favor of increased stringency options”—i.e., leaving the pre-existing standards in place—and projected that the “the revised final standards will have a negative impact on air quality health outcomes.” 85 Fed. Reg. at 25,119. He nonetheless rolled back the more protective standards, pointing to an array of factors that supposedly favored weaker standards:

- 1) consumers’ ability “to purchase a new vehicle of their choice,” *id.*;
- 2) “the policy goal” of coordinating with NHTSA, *id.* at 25,120;
- 3) allegedly avoiding crash fatalities primarily based on consumers driving fewer miles when vehicles are less efficient, *id.* at 25,119;¹⁰

¹⁰ The Administrator also projected some (about 20%) of the Rollback’s purportedly avoided crash fatalities would result from (1) faster turnover of older vehicles for newer ones and (2) limiting reductions to vehicle mass. 85 Fed. Reg. at 25,119. The Administrator did not establish that his projections under these theories are statistically significant. *See infra* Section I.D.1. In any event, the 685 avoided fatalities he derives from these theories are similar to or lower than the Rollback’s (under)estimated premature mortalities (444 to 1,000)

- 4) avoiding a need for “significant changes in product lines for any manufacturer,” *id.*; and
- 5) “manufacturer compliance costs, and the related per-vehicle cost savings,” *id.*

Even if the Administrator’s findings concerning these factors were supported by the record, *but see infra* Section I.D., none of “these non-statutory criteria” link “with Congress’ stated objectives in the Act.” *Indep. U.S. Tanker Owners*, 809 F.2d at 854. Indeed, with the exception of his failed attempt to shoehorn consumer preferences into Section 202(a)(2)’s lead-time requirement, the Administrator does not even attempt to argue otherwise regarding the first four of these factors.

As to the final factor—automaker compliance costs—that is a statutory criterion when connected to required lead-time. 42 U.S.C. § 7521(a)(2). However, as shown above, the Administrator did not make a lead-time finding on this ground. Nor does the record support one. *See supra* at 40. Congress understood that “press[ing] for the development and application of improved technology,” *NRDC v. EPA*, 655 F.2d 318, 328 (D.C. Cir. 1981) (cleaned up),

from increased pollution, which *is* a statutory factor. 85 Fed. Reg. at 25,119. And the Administrator did not assert that any of his “safety” theories constituted statutory criteria.

would come with costs. Avoiding those costs for no other reason than mere avoidance is, thus, not a statutory objective. And, whatever discretion the Administrator may have to consider compliance costs outside of lead-time requirements, he “is not free to substitute new goals in place of the statutory objectives.” *Indep. U.S. Tanker Owners*, 809 F.2d at 854; *see also Oceana, Inc. v. Locke*, 670 F.3d 1238, 1242 (D.C. Cir. 2011) (rejecting interpretation that “would allow the agency to reserve to itself effectively complete discretion”).

C. EPA’s Administrator Abdicated the Obligation to Exercise Independent Judgment

The Administrator further flouted legal requirements by failing to exercise independent judgment. While he acknowledged this legal obligation and claimed to have fulfilled it, 85 Fed. Reg. at 25118-19, in reality, the Administrator “blindly adopt[ed] the conclusions” of NHTSA, *see City of Tacoma, Washington v. FERC*, 460 F.3d 53, 76 (D.C. Cir. 2006). The Administrator ignored numerous, fundamental flaws in NHTSA’s analysis identified by his own agency’s experts and, indeed, took extraordinary steps to curtail and conceal EPA staff reviews. The Administrator’s unquestioning adoption of another agency’s “clearly flawed” analysis warrants vacatur. *See Ergon-W. Virginia, Inc. v. EPA*, 896 F.3d 600, 611 (4th Cir. 2018); *see also U.S.*

Telecom Ass'n v. FCC, 359 F.3d 554, 565-66 (D.C. Cir. 2004) (recognizing risks in agency “delegation to outside entities”).

The Administrator’s failure to conduct an independent analysis began with the Proposal. Although their review was constrained because NHTSA did not provide the code for its model, EPA’s experts identified fundamental flaws with the model and the inputs NHTSA used to estimate compliance costs, including “errors and anomalies” regarding the efficacy of compliance technologies, inflated costs for certain technologies, and “dated” assumptions. JA___[EPA-HQ-OAR-2018-0283-5666_Attch5-CharmleyEmail_pdf56]; *see also NRDC v. EPA*, 954 F.3d 150, 154 n.2 (2d Cir. 2020) (noting that EPA staff “express[ed] serious concerns” about this very modeling). EPA’s experts could not “conclude that the current NHTSA analysis reflects the conclusions of the research performed by EPA over the last five years.” JA___[EPA-HQ-OAR-2018-0283-5666_Attch5-CharmleyEmail_pdf56]. EPA staff also noted that *the Department of Transportation* had drafted the portions of the preamble purporting to present “the *EPA Administrator’s* views on the appropriate level of the EPA standard, EPA’s interpretation of the Clean Air Act, EPA’s views on what factors are relevant in determining EPA’s program design and the EPA

standards.” JA___[EPA-HQ-OAR-2018-0283-5666_Attch5-
CharmleyEmail_pdf93] (emphasis added).

The Administrator’s abdication of this legal obligation persisted with the Final Rollback, as shown by interagency-review materials that EPA improperly excluded from its certified record. These materials include initial and revised drafts of the regulatory preamble, comments EPA exchanged with NHTSA on those drafts, and two EPA documents obtained and released by the Ranking Member of the Senate Committee on Environment and Public Works. *See* ECF No. 1858308, at 6-8 (Aug. 25, 2020) (further describing the materials).¹¹ These materials are properly the subject of judicial review, notwithstanding the usual rule excluding interagency-review materials from EPA’s rulemaking record. *See* 42 U.S.C. § 7607(d)(4)(B)(ii). Insofar as petitioners “challenge ... the integrity of the rulemaking process,” *Sierra Club v. Costle*, 657 F.2d 298, 389 n.450 (D.C. Cir. 1981), the Court must review materials contradicting EPA’s representation that it acted independently and applied its own technical expertise, *e.g.*, 85 Fed Reg. at 24,227. *See also Dep’t of Commerce v. New York*, 139 S. Ct. 2551, 2575 (2019) (vacating decision where “the evidence,” including extra-record material,

¹¹ This Court referred to the merits panel a motion by several petitioners to add these materials to the record. ECF No. 1867064.

“tells a story that does not match the explanation” given for the decision); *Oceana, Inc. v. Ross*, 920 F.3d 855, 865 (D.C. Cir. 2019) (“showing of bad faith or improper behavior” warrants record supplementation).

These materials reveal that EPA experts did not see most of NHTSA’s drafts of the “joint” final rulemaking documents until they went to the Office of Management and Budget in January 2020—more than a year after the close of the public comment period. JA___[ECFNo_1858308_ExhE_page4of15] (asserting no previous “opportunity to review”), ___[ECFNo_1858308_ExhE_page9of15] (noting approximately “650 pages of text” “not previously seen”). Instead, *NHTSA* had written portions of the draft in *EPA*’s “voice,” including on issues uniquely within *EPA*’s technical expertise. JA___[ECFNo_1858308_ExhE_page9of15]. In the limited window provided for them to review voluminous and highly technical material, *EPA* staff identified several “[f]actually incorrect statements & errors.” JA___[ECFNo_1858308_ExhE_page10of15]. *EPA* staff received an “unprecedented” instruction to send their interagency comments only to *NHTSA* and only in hard copy—rather than to share them with the Office of Management and Budget as they normally would. JA___[ECFNo_1858308_ExhG_page4of6]. This appeared to be an effort “to

conceal EPA comments ... critical of [NHTSA's] draft.”

JA____[ECFNo_1858308_ExhG_page2of6]; *see also* E.O. 12,866, § 6(b)(4)(D), 58 Fed. Reg. at 51,743.¹²

The remarkable exclusion of EPA staff from this “joint” rulemaking continued with NHTSA’s final draft. EPA staff had less than 48 hours to review that document. JA____[ECFNo_1858308_ExhF_page2of4]; *see also* JA____[ECFNo_1858308_ExhB_page2of1793]. In the course of this highly abbreviated and rushed review, EPA learned that “the vast majority of EPA’s comments”—“more than 250”—had not been addressed.

JA____[ECFNo_1858308_ExhF_page3of4].

The numerous fundamental errors in NHTSA’s analysis render the Rollbacks arbitrary and capricious. *See infra* Sections I.D., II.B. The EPA Administrator’s adoption of that error-filled analysis—without adequate, independent review and over the objections of EPA’s experts—exacerbated the legal errors and is an independent basis for vacatur. *City of Tacoma*, 460 F.3d at 75. Finally, the highly irregular bypassing of EPA’s technical staff also means that the deference normally due to “EPA’s evaluation of scientific data within

¹² This led to an inquiry by EPA’s Inspector General that is ongoing at the time of this briefing. *See* JA____-____[ECFNo_1858308_Exh]].

its technical expertise,” *Miss. Comm’n on Env’tl. Quality v. EPA*, 790 F.3d 138, 150 (D.C. Cir. 2015) (cleaned up), should not apply because EPA’s technical expertise was not utilized.

D. EPA’s Rollback Is Also Arbitrary and Capricious Because the Error-Ridden Analysis Fails to Support the Action

The EPA Administrator’s reliance on NHTSA’s analysis also warrants vacatur for additional, independent reasons: the analysis does not support any of the Administrator’s scattershot attempts to justify contravening the Clean Air Act’s directives. The attempts to invent a justification began with assertions about possible job losses under the pre-existing standards, 83 Fed. Reg. at 42,987, but NHTSA’s analysis found that the Rollbacks would *reduce* auto industry employment, *id.* at 43,436; 85 Fed. Reg. at 25,178. The Administrator then asserted a series of other rationales, including unfounded theories about reduced highway fatalities under weaker standards; vague and unsupported claims of automaker burdens and feasibility concerns under the pre-existing standards; baffling assertions of consumer benefits; and erroneous claims of societal benefits. In the end, although NHTSA put its thumb on the scale in favor of the Rollbacks at every turn, none of these justifications is supported by the analysis NHTSA prepared and the EPA Administrator adopted. EPA’s Rollback is a house of cards balanced precariously on “multiple rationales,” and

the failure of any one rationale warrants vacatur because there can be no certainty that the agency “would have adopted [the Rollback] absent even” one of its flawed bases.¹³ *See Nat’l Fuel Gas Supply Corp. v. FERC*, 468 F.3d 831, 839 (D.C. Cir. 2006).

1. Safety Concerns Do Not Justify the Rollbacks

The policy objective—accelerating the turnover of older vehicles for newer, safer ones—that was the primary stated rationale for the Proposal (and gives these actions their name) does not justify the Rollbacks. In fact, diverse commenters debunked the Proposal’s safety claims. JA____-____[EPA-HQ-OAR-2018-0283-5054_226-50], ____-____[NHTSA-2018-0067-12108_Attachment2_42-58], ____-____[NHTSA-2018-0067-11818_16-19]; *see also supra* at 17. And the Final Rollback reflected drastically different levels of purported safety benefits and relied almost entirely on a brand-new causation theory for its avoided fatality figures, as shown in this table:

¹³ Although this section focuses on EPA’s Rollback, NHTSA’s Rollback suffers from these same flaws (except where noted herein) because both Agencies relied on the same purportedly joint analysis. *See infra* Section II.B. Accordingly, at times this brief will refer to the Agencies’ actions collectively and to the underlying analysis as that of both Agencies although NHTSA prepared it, *see supra* Section I.C.

**Avoided Crash Fatalities Attributed to EPA’s Rollback
by the Administrator¹⁴**

Cause of Claimed Reductions in Crashes:	Proposal	Final
Faster Fleet Turnover	7,880	447
Less Reduction to Vehicle Mass	468	238
Less “Rebound” Driving	0	2,584

These radical shifts, on their own, suggest what reviewing the safety analyses reveals: the Administrator’s claimed safety benefits lack record support. In fact, in the Final Rollback, the first two theories produce fatality figures that even the Administrator does not claim are statistically significant.¹⁵ And the third safety theory requires an analytical step the Agencies have never before taken—attributing the consequences of consumers’ independent driving

¹⁴ The Agencies quantified the consequences of EPA’s and NHTSA’s Rollbacks separately due, *inter alia*, to differences in the programs. Unless otherwise specified, this section uses figures applicable to EPA’s Rollback. The data in this table comes from 83 Fed. Reg. at 43,157 (Table II-77) (Proposal); 85 Fed. Reg. at 24,842 (Table VI-273) (Final). The table also reflects the Agencies’ statement that, for the Proposal, they “measured” rebound fatalities but did not “directly attribute[]” them to the standards. 83 Fed. Reg. at 43,107.

¹⁵ These figures are also more than offset by the (artificially low) adverse health impacts projected from increased pollution due to EPA’s Rollback (which include up to 1,000 premature deaths).

decisions to the Rollbacks. None of the three theories on which the Administrator relied supports a safety rationale for EPA's Rollback.

First, the Administrator relied on a "fleet turnover" theory—that EPA's Rollback would reduce new vehicle prices, causing consumers to exchange older vehicles for newer, safer ones.¹⁶ 83 Fed. Reg. at 42,995; 85 Fed. Reg. at 24,187. As explained *supra* at 17, the thousands of avoided fleet-turnover fatalities claimed in the Proposal were illusory, and, despite attempts to inflate them, the Final Rollback's estimates are approximately 95% lower. The Administrator cannot even show that these new, final figures are statistically different from zero.

In fact, the effect of the Agencies' Rollbacks on new vehicle sales—the backbone of the fleet-turnover theory—is extraordinarily small. NHTSA's sales model, which the EPA Administrator adopted, projected that EPA's Rollback would increase new vehicle sales by only "about one percent of total sales between 2017 and 2050." 85 Fed. Reg. at 24,617. These projected impacts are minuscule in a market where annual sales normally fluctuate by several percentage points in a stable economy, and up to 10-20% in more volatile

¹⁶ The Agencies frequently refer to fleet turnover as "sales" of new vehicles and "scrappage" of older vehicles. *E.g.*, 85 Fed. Reg. at 24,217. This brief uses the simpler term "fleet turnover."

times. JA___[EPA-HQ-OAR-2018-0283-5054_198] (Fig. VI-4). The Administrator made no effort to demonstrate that this projected 1% change is statistically significant and, in fact, argued elsewhere that far greater uncertainty (and variability) in vehicle sales forecasts is inevitable given the innate uncertainty in such predictions. 85 Fed. Reg. at 24,615.

The Administrator nonetheless relied on this projected 1% increase in sales of new vehicles to claim the Rollback will avoid 447 crash fatalities over the trillions of miles driven by the hundreds of millions of model year 1977-2029 light-duty vehicles during the decades that those vehicles are on the roads. 85 Fed. Reg. at 24,842 (Table VI-273). This figure is dwarfed by the 36,560 total crash fatalities projected to occur in 2018 alone.¹⁷ Moreover, as with the sales projections that are the crux of this theory, the analysis adopted by the Administrator did not even attempt to show that the estimate of 447 avoided crash fatalities over a much longer period is statistically significant.

Further, the Administrator must explain how the data supports the fleet-turnover theory, especially because EPA previously conceded that it is “difficult, if not impossible, to disentangle the effects of the standards on

¹⁷ JA___[[https://www-fars.nhtsa.dot.gov/Main/index.aspx\[cited_at_85_Fed_Reg_at_24,823\]](https://www-fars.nhtsa.dot.gov/Main/index.aspx[cited_at_85_Fed_Reg_at_24,823])].

vehicle sales from the effects of macroeconomic or other conditions on sales.” JA___[EPA-HQ-OAR-2015-0827-0926_6-1], ___[EPA-HQ-OAR-2015-0827-0926_6-5] (finding estimates of these effects too uncertain to use). The Administrator cannot do so, however, because the modeling produced unexplained, inconsistent results that render the estimates as unreliable as EPA previously concluded they would be. For example, although the fleet-turnover theory, if true, should show reduced fatalities in every year of the analysis (because the Rollbacks purportedly result in lower new vehicle prices every year), the actual modeling of this effect projected that the Rollbacks will *increase* average fatalities over at least nine calendar years. 85 Fed. Reg. at 24,840 (Table VI-271).

Moreover, the Administrator’s fleet turnover fatality estimates are exaggerated because they rely on sales projections that are themselves exaggerated. As shown below, the compliance costs of (and thus the vehicle price increases from) more stringent standards were substantially inflated, *see infra* at 62, leading to substantially inflated projections of increased vehicle sales under weaker standards. In addition, the sales analysis relied on an erroneous assumption that consumers are much more responsive to new-vehicle price decreases than they actually are. 85 Fed. Reg. at 24,617 nn.1,641-42. NHTSA

and the EPA Administrator assumed a price elasticity of -1, meaning that for every 1% increase in new vehicle prices, new vehicles sales would decline by 1%. Yet EPA had previously criticized this very assumption because it is “old” and is a “short run” estimate inappropriate for standards with long-term effects. JA___[EPA-HQ-OAR-2015-0827-5942_A-40]. Indeed, the elasticity assumption rested on three studies that are decades-old (and were based on even older data), JA___[Kleit], ___[Bordley], ___[McCarthy[All_cited_at_24,617n1641]], and a fourth study that undermines the Agencies’ assumption because it calculated a long-range price elasticity of -0.61—39% lower than the Administrator’s assumption.

JA___[McAlinden2016_1[cited_at_24,617n1642]]. Both EPA’s Science Advisory Board and the only peer reviewer to address this issue panned the -1 price-elasticity assumption, with the peer reviewer stating that it lacks “solid grounding in economic evidence” and that elasticity should be “well below” -1. JA___[EPA-HQ-OAR-2018-0283-7659_23], ___[EPA-HQ-OAR-2018-0283-0653_B-33], ___[EPA-HQ-OAR-2018-0283-0653_B-35]. Had the analysis used an appropriate, lower price elasticity—such as the -0.2 to -0.3 figure calculated for the Proposal, 83 Fed. Reg. at 43,075—the effect of the Rollbacks on new vehicle sales, and thus on fleet-turnover fatality estimates, would have

been even smaller and even more insufficient to sustain a safety rationale for these standards.

Second, in both the Proposal and the Final Rollbacks, NHTSA and the EPA Administrator hypothesized that more stringent standards would cause automakers to produce lighter vehicles and that lighter vehicles are less safe. But the Administrator admitted that the 238 fatalities purportedly avoided by EPA's Rollback (which are spread over the decades-long lives of model year 1977-2029 vehicles) are statistically indistinguishable from zero. 85 Fed. Reg. at 24,750, 24,842; JA____-____[EPA-HQ-OAR-2018-0283-5054_266-70]; ____[NHTSA-2018-0067-11881_45].¹⁸ In other words, the record does not show that the Rollbacks will prevent *any* fatalities under this theory.

Further, the evidence demonstrates that reducing vehicle mass may actually *reduce* fatalities. In asserting otherwise, NHTSA and the EPA Administrator relied on old data—from model years 2004-2011—that reflects

¹⁸ Even the 238 figure is overstated. For one of five categories of vehicles (lighter trucks), NHTSA transposed numbers in one factor in the equation, using 0.31 where the methodology and inputs indicate the value should be 0.13. *See* 85 Fed. Reg. at 24,748. Applying the correct value reduces the difference in mass-reduction fatalities by 62 for just lighter trucks. There may be similar errors for three other vehicle categories as well, but because the Agencies did not disclose the data underlying those calculations, it is impossible to know.

outdated ways of reducing vehicle mass. Today, automakers reduce vehicle weight by, for example, replacing steel with new materials that are stronger and lighter, as both experts and industry informed the Agencies. JA____-____[NHTSA-2018-0067-5781_2-8]; ____-____[NHTSA-2018-0067-11973_1-13]; ____-____[NHTSA-2018-0067-11952_6-13]; ____-____[EPA-HQ-OAR-2018-0283-5054_270-76]. Moreover, these footprint-based standards, which vary with vehicle size, *see supra* at 10, were designed by EPA to avoid perverse incentives to make small vehicles even smaller (and thus more dangerous in collisions with large vehicles). 85 Fed. Reg. at 24,752. Instead, automakers can sensibly lighten larger vehicles, improving safety. JA____-____[NHTSA-2018-0067-5781_2-8]; ____-____[NHTSA-2018-0067-11952_9-13].

Third, with the basis for the Proposal’s purported safety benefits—purportedly avoided fleet-turnover fatalities—in tatters, NHTSA and the EPA Administrator attempted to bolster the avoided fatality numbers and rescue their safety rationale in the Final Rollbacks by attributing fatalities from “rebound” driving to their standards for the very first time. Rebound driving is the additional driving consumers choose to do when improved fuel-economy reduces the cost of driving. As the preamble acknowledged, in previous rulemakings (and in the Proposal), the Agencies had “factored” rebound

driving “into cost-benefit analyses,” 85 Fed. Reg. at 25,152, but had not attributed related fatalities to their standards. They had previously recognized that rebound driving is not “imposed on consumers by [the] standards” but, rather, results from independent consumer decisions that “the utility of more driving exceeds the marginal operating costs as well as the added crash risk it entails.” 83 Fed. Reg. at 43,107. Accordingly, in the Proposal, the Agencies “completely offset[]” rebound driving’s costs (including those from crash fatalities) with equal benefits. *Id.* Further, because rebound driving “is a consumer choice,” the Agencies attributed “[o]nly those safety impacts associated with mass reduction and those resulting from” fleet turnover—and not rebound-related safety impacts—to their standards. *Id.*

In the Final Rollback, the EPA Administrator reaffirmed that “rebound miles are not imposed on consumers by regulation” and are a “freely chosen activity resulting from reduced vehicle operational costs,” 85 Fed. Reg. at 24,825, but he nonetheless arbitrarily attributed the avoided fatalities associated with those anticipated consumer choices to EPA’s Rollback, *id.* at 25,119. The Administrator also decided to offset only 90% of rebound-driving costs, *id.* at 24,826, while inexplicably reasserting a finding that supports the previous 100% offset—namely, that “the mobility benefits [rebound driving] provides

necessarily exceed the additional operating costs and increased exposure to safety risks it entails.” *Id.* at 24,798.

Thus, the number of purportedly avoided rebound fatalities attributed to the Rollback rose from 0 to 2,584, comprising over 79% of the 3,266 lives the Administrator claimed will be saved by EPA’s Rollback, with no claim that the other 21% are statistically significant. *Id.* at 24,842 (Table VI-123).¹⁹ Notably, the Administrator did not explain why it was appropriate to attribute 100% of the purportedly avoided rebound fatalities, but only 10% of the associated benefits, to the Rollback.

Moreover, these rebound-related fatalities bear no relation to vehicle safety. Instead, the Administrator’s position here boils down to the contention that the government should *impede* mobility by making driving more expensive because less driving means fewer accidents and fatalities. He attempted to disavow this view, claiming no “intention . . . to restrict mobility or to discourage driving, based on the level of the standards,” *id.* at 25,119, presumably because the government has not promoted this policy view in other decisions, such as infrastructure investments. But the Administrator’s stated

¹⁹ This estimate of avoided rebound fatalities is significantly exaggerated by the inflated estimate of the rebound effect. *See infra* at 91.

intention is belied by his decision that it was “appropriate to consider” rebound-related fatalities as a “factor weighing toward reduced stringency” for EPA’s standards. *Id.* And without those purportedly avoided fatalities, the safety rationale for the Rollback would be based entirely on numbers the Administrator cannot show are statistically different from zero.

As shown above, the Administrator never reconciled his “safety” concerns (which are mostly about additional driving Americans might choose to do) with his complete disregard for the public health impacts of the Rollback. *See supra* Section I.B. Moreover, the Administrator’s attempts to manufacture a safety rationale for the “SAFE” rule bear numerous hallmarks of arbitrary and capricious decision-making: they are inconsistent (both between proposal and final action and within the Final Rollback itself); they depart, without adequate explanation, from prior findings and approaches; and they are unsupported by either evidence or logic.

2. The Pre-Existing Standards Remain Readily Feasible

The Administrator also purported to justify EPA’s Rollback based on costs to industry and alleged feasibility concerns with the pre-existing standards. But these rationales are just as unfounded as the purported safety benefits.

a. The Analysis Drastically Inflated the Compliance Costs of More Stringent Standards

The Administrator claimed that compliance costs to industry “would have been too high under the standards set forth in 2012,” 85 Fed. Reg. at 24,176, and that EPA’s Rollback will save automakers an average of \$977 per vehicle, *id.* at 24,181 (Table I-6). But the Administrator assumed automakers would not bear these modest compliance costs, and would instead pass them all on to consumers (*id.* at 24,596, 24,617), who would still save an average of \$678 over the lifetimes of their new vehicles, *id.* at 24,181 (Table I-6). Further, as detailed below, the estimates of compliance costs are substantially inflated.

NHTSA grossly manipulated its “Volpe Model,” which is supposed to simulate the most cost-effective technology path by which an automaker will comply with a given standard. At a high level, for each automaker and each model year, the Volpe Model surveys a menu of technologies deemed available for vehicles scheduled to be redesigned or refreshed that year and adds the technologies deemed most cost-effective until the automaker’s fleet complies with the standard being modeled. *Id.* at 24,276. Total compliance costs for each vehicle are equal to the sum of the costs of all technologies selected. For example, if the model adds two technologies to Ford’s F-150 truck to ensure compliance with a chosen standard, the compliance cost for each Ford F-150 in

that model year will be the sum of the costs of those two technologies. As expert engineers at the California Air Resources Board, EPA, and other organizations found, the iteration of the Volpe Model employed for these Rollbacks does not accurately reflect reality.

These inflated compliance costs for the pre-existing standards undermine a central claim that the Rollback was warranted and, thus, render the action arbitrary and capricious.

(1) The Modeling of the Use of High-Compression-Ratio Engine Technologies Was Wrong

In three separate ways, NHTSA prevented the Volpe Model from applying key high-compression-ratio technologies to certain types of vehicles that already have those technologies in the real world.²⁰ In part because these technologies are so cost-effective, *each* of these flaws inflated the purported cost of meeting the pre-existing standards by *billions* of dollars.²¹ Because those

²⁰ High-compression-ratio technologies (sometimes called “Atkinson” technologies) improve fuel efficiency and reduce GHG emissions by making an engine’s compression stroke (which “compresses” the gasoline and air in the engine before it is ignited) shorter than its expansion stroke (which captures the energy from igniting the gasoline and delivers it to the vehicle’s wheels).

²¹ The Agencies measured the Rollbacks’ costs and benefits using two alternative rates (3% and 7%) to discount costs and benefits realized in the future. Unless otherwise specified, this brief uses figures applying a 3%

compliance costs are inputs into the Agencies' analyses of vehicle sales, purportedly avoided crash fatalities, and other factors, correcting these enormous compliance cost errors also reduces the claimed societal benefits of the Rollbacks by billions of dollars. That is particularly noteworthy, given the Agencies' own estimates that "societal net benefits" "straddle zero." 85 Fed. Reg. at 24,176. In fact, correcting one of these errors (the third discussed below) would, by itself, render the Rollbacks net costly to society even under a 7% discount rate (which is the only discount rate for which the Agencies claimed net benefits). JA ___ - ___ [NHTSA-2018-0067-12636_1805-06], ___ - ___ [NHTSA-2018-0067-12636_1809-10] (compare "Reference Case" and "HCR2 Available" lines).

1. NHTSA committed a coding error that caused the Volpe Model to operate differently than claimed. Specifically, the Rollbacks' preamble stated that the Volpe Model allowed the application of high-compression-ratio technologies to *all* four-cylinder engines in small and mid-size vehicles, with three exceptions (pickups, vehicles that share a base engine with a pickup, and

discount rate. Additionally, this brief quantifies errors where possible, but it cannot do so for flaws where, *inter alia*, the Agencies did not run a scenario with the flaw corrected or provide enough record information to permit Petitioners' experts to quantify the impact.

vehicles already on another purportedly incompatible advanced engine path). 85 Fed. Reg. at 24,174, 24,427. However, the Volpe Model's code *prevented* it from applying high-compression-ratio technologies on 25 four-cylinder engines not covered by those exceptions.²²

This is a sizable error because these 25 engines are used on 2,580,898 vehicles in the modeled fleet, or almost 40% of vehicles that the Agencies themselves stated should be allowed to employ high-compression-ratio technologies.²³ This coding mistake exaggerated the additional compliance costs of retaining EPA's pre-existing standards by about \$5 billion.²⁴

2. The Volpe Model also arbitrarily limited application of high-compression-ratio technologies to other engines and vehicles, specifically six- and eight-cylinder engines *and* all pickups. 85 Fed. Reg. at 24,427. These

²² JA___[Model_Files] (Central Analysis/input/market_ref.xlsx, Engines tab, Columns AE-AF). The four-cylinder basic engines improperly blocked from adopting high-compression-ratio technologies are engines 111400, 111800, 111801, 112400, 112501, 211500, 211800, 212001, 212400, 212401, 221601, 221801, 222001, 222002, 222501, 222502, 241501, 252001, 252401, 252402, 253001, 1316001, 1320001, 1325001, and 1325002.

²³ See JA___[Model_Files] (Central Analysis/input/market_ref.xlsx, cross-reference and aggregate Vehicles tab, Column Z, and Engines tab) (6,578,136 qualifying vehicles).

²⁴ To calculate this difference, Petitioners' experts removed the erroneous code for the engines listed in the previous footnote and re-ran the model.

restrictions—which neither NHTSA nor EPA had ever before found warranted²⁵—prevented the Volpe Model from accurately reflecting the real world. There are abundant examples of pickups and other vehicles that use six- and eight-cylinder engines with high-compression-ratio technologies, such as the Toyota Tacoma, Dodge Ram, and various Lexus luxury sedans and SUVs. JA____[EPA-HQ-OAR-2018-0283-5456_Attachment_3_I-3] (listing examples and categories of vehicles), ____[EPA-HQ-OAR-2018-0283-5054_103], ____[EPA-HQ-OAR-2018-0283-5054_109]] (Pentastar engine, which is used on 2019 Dodge Ram). EPA staff identified these unjustified changes in modeling, calling them “not realistic” and “indefensible.” JA____-____[EPA-HQ-OAR-2018-0283-5666_Attachment_12_pdf47-63], ____[EPA-HQ-OAR-2018-0283-5666_Attachment_12_pdf65].

NHTSA and the EPA Administrator asserted that high-compression-ratio technologies inhibit performance when vehicles need to carry heavy loads, such as when towing. But they admitted that automakers have overcome this problem by allowing engines to operate without high-compression-ratio technology in those situations. 85 Fed. Reg. at 24,408, 24,426. Their suggestion

²⁵ See JA____[EPA-HQ-OAR-2015-0827-5941_2-309] (no such restrictions in mid-term evaluation), ____-____[EPA-HQ-OAR-2015-0827-0926_5-31_to_5-32], ____[EPA-HQ-OAR-2015-0827-0926_5-289] (same).

that these are not true high-compression-ratio engines because they do not operate at maximum efficiency at all times is nonsensical. *See id.* at 24,407-08. As the preamble acknowledged, these engines have improved efficiency, and, at worst, these efficiency gains are slightly smaller than in other engines. *Id.* at 24,407 (acknowledging that “the difference in vehicle application (high performance versus standard performance vehicles, towing requirements, trucks) leads to different effectiveness levels”), 24,408 (admitting that high load demands only “limit the amount of Atkinson operation”). The Volpe Model could have assigned high-compression-ratio technologies lower effectiveness in engines that sometimes need to carry large loads. Instead, it was programmed to assume counterfactually that these technologies could never be used in those engines.

This modeling “bears no rational relationship to the reality it purports to represent,” *Columbia Falls Aluminum v. EPA*, 139 F.3d 914, 923 (D.C. Cir. 1998), and the resulting analysis is contrary to the evidence, *USWAG v. EPA*, 901 F. 3d 414, 432 (D.C. Cir. 2018). The erroneous restriction on six- and eight-cylinder cars increased the alleged compliance cost savings under EPA’s Rollback by about \$5 billion. JA____-____[NHTSA-2018-0067-12636_1807-08] (compare “HCR0 and HCR1 Available Except in Pickups” to “Reference

Case”). Although the analysis did not estimate the impact of the improper restriction on pickups, that error inflated the alleged cost savings even more.

3. NHTSA and the EPA Administrator also erred in assuming that high-compression-ratio technologies could not improve beyond 2014 levels. 85 Fed. Reg. at 24,409. This is yet another inadequately justified departure from earlier technical findings, which correctly anticipated continued efficiency improvements. JA____-____[EPA-HQ-OAR-2015-0827-5941_2-34_to_2-35], ____-____[EPA-HQ-OAR-2015-0827-5941_2-308_to_2-311]. Significant advancements on 2014 high-compression-ratio technology have now made it to market. *See* 85 Fed. Reg. at 24,410 (acknowledging that 2018 Toyota Camry and Corolla have high-compression-ratio engines with efficiency-enhancing cooled exhaust gas recirculation); JA____-____[NHTSA-2018-0067-12636_470-71] (observing that the 2019 Mazda CX5 and Mazda 6 have high-compression-ratio engines with efficiency-enhancing cylinder deactivation), ____-____[EPA-HQ-OAR-2018-0283-5054_101-02], ____[NHTSA-2018-0067-12389_1], ____[NHTSA-2018-0067-12431_1] (Toyota citing the 2018 Camry). EPA staff also identified this flaw. JA____[EPA-HQ-OAR-2018-0283-5666 _Attachment_12_pdf66]. It was not corrected, and, consequently, the model does not reflect reality.

There were several readily available ways to fix this flaw. The Volpe Model contained an existing “package” of technologies designed to capture these next-generation high-compression technologies,²⁶ and NHTSA and EPA had used that package in the 2016 modeling for the Mid-Term Evaluation process. JA____-____[EPA-HQ-OAR-2015-0827-5941_2-293_to_2-308] (calling it “ATK2”). NHTSA and the EPA Administrator declined to do so here, contending its use would be “speculative” because the *exact* combination of technologies in the package have not appeared together in a marketed vehicle. 85 Fed. Reg. at 24,383, 24,409, 24,411. However, EPA’s own testing shows that high-compression-ratio engine improvements in marketed vehicles have already achieved effectiveness levels consistent with those predicted for the package. JA____[NHTSA-2018-0067-12389_2,], ____[NHTSA-2018-0067-12389_Article_Attachment_18]. Thus, the 2016 package could have been applied as a vetted projection of next-generation high-compression-ratio technologies. Alternatively, of course, NHTSA could have created—and the Administrator could have demanded—a new technology package or could have

²⁶ This package of technologies is referred to as “HCR2,” which distinguishes it from packages of earlier high-compression-ratio technologies—“HCR0” and “HCR1”—that the Agencies did allow the model to apply, although not to the extent they should have, *see supra* at 64.

allowed the Volpe Model to apply the individual next-generation technologies already in the model. JA____[EPA-HQ-OAR-2018-0283-5054_102], ____[NHTSA-2018-0067-12389_1], ____[NHTSA-2018-0067-12636_490] (listing cooled exhaust gas recirculation and advanced cylinder deactivation as technologies in the model).

Any of these paths would have reflected where technology stands now and where it is headed. Instead, NHTSA and the EPA Administrator simply abdicated their responsibilities to recognize technological advances that have *already* occurred, *see Columbia Falls Aluminum*, 139 F.3d at 923, and to “look to the future” for further advancements, *NRDC*, 655 F.2d at 328. The result was a \$18 billion inflation in compliance costs for the pre-existing standards and a \$24 billion inflation in overall net benefits for the Rollback (at a 3% discount rate). JA____-____[NHTSA-2018-0067-12636_1807-08] (compare “HCR2 Available” and “Reference Case”).

(2) The Analysis Contains Numerous Other Compliance Cost Errors

The high-compression-ratio engine flaws only scratch the surface. The California Air Resources Board and other experts identified countless other ways compliance costs of the pre-existing standards were arbitrarily inflated to make the Rollback appear more desirable. For example:

- In a departure from prior rulemakings, JA____-____[EPA-HQ-OAR-2015-0827-0926_5-15_to_5-16], NHTSA and the EPA Administrator inexplicably relied on engine efficiency data that was seven to ten years old, rather than the latest data produced by EPA’s extensive “benchmarking” studies of engines in existing vehicles.²⁷ EPA staff called the data used for the Rollback “out of date.” JA____[EPA-HQ-OAR-2018-0283-5666_Attachment_12_pdf57]; ____[ECFNo_1858308_ExhC_210]; *see also* JA____-____[EPA-HQ-OAR-2018-0283-5456_Attachment_3_I-44_to_I-50]. The use of old engine data caused the Volpe Model to systematically underestimate technologies’ efficiency and, thus, apply more technologies than necessary, falsely increasing projected compliance costs.

²⁷ *See, e.g.*, 85 Fed. Reg. at 24,341; JA____[EPA-HQ-OAR-2018-0283-7673_ANL_Model_Documentation_159] (describing that the base engine is modeled off of a model year 2013 vehicle), ____-____[NHTSA-2018-0067-12636_425] (Table VI-41) (showing that most other engine technologies are modeled off of the base engine), ____[EPA-HQ-OAR-2018-0283-7673_ANL_Model_Documentation_173] (describing that another engine is modeled off of “2010 Toyota Prius . . . data”), ____-____[NHTSA-2018-0067-11984_Rogers_16-18] (noting EPA data showing the 2016 Honda Civic “almost 10% more efficient” than NHTSA’s engine modeling predicted), ____-____[EPA-HQ-OAR-2018-0283-5836_Benchmarking_a_2016_Honda_Civic] (EPA Civic study).

- The Agencies' hybrid²⁸ powertrain data was extraordinarily outdated, such that the maximum hybrid efficiency assumed possible through 2029 falls short of real vehicles on the market today. For example, the Model coded the 2017 Toyota Camry LE Hybrid as having the most advanced hybrid powertrain possible,²⁹ but in reality, Toyota incorporated substantial powertrain improvements into the 2018 Camry LE Hybrid.³⁰ These, along with other technologies, improved the 2018 Camry LE Hybrid's fuel economy by 25% over its 2012 level, whereas the Model—which had no powertrain advances available—projects the 2029 Camry LE Hybrid will improve only 13% over the 2012 level.³¹

²⁸ Hybrids are vehicles that use two or more power sources, such as gasoline and electricity.

²⁹ JA___[Model_Files] (Central Analysis/output/CAFE_ss_ref/reports-csv/vehicles_report.csv, cell CH2535, showing Camry LE Hybrid with “SHEVPS” powertrain); 85 Fed. Reg. at 24,471 (SHEVPS is most efficient hybrid powertrain).

³⁰ *See, e.g.*, Ready for Launch: The Countdown Begins for the Highly Anticipated All-New 2018 Toyota Camry, Toyota Newsroom (June 21, 2017), <https://pressroom.toyota.com/all-new-2018-toyota-camry-launch> (describing the “next-generation Toyota Hybrid System,” including the Power Control Unit that plays a “key role” in improving the vehicle's operational efficiency).

³¹ JA___[<https://fuelconomy.gov/feg/download.shtml>] (compare 2012 Datafile, cell O549, with 2018 Datafile, cell O1085); ___[Model_Files] (Central Analysis/output/CAFE_ss_ref/reports-csv/vehicles_report.csv, cell AH37887).

- NHTSA added a \$300-per-vehicle technology called variable valve lift to all turbocharged engines (48% of the fleet), even though it provides minimal benefit to those engines and nearly all automakers use a less-expensive technology instead. JA____[NHTSA-2018-0067-11984_Rogers_12], ____[NHTSA-2018-0067-11984_Rogers_17]; see also JA____[NHTSA-2018-0067-12636_1441] (“Turbocharged Gasoline Engines” line). Neither NHTSA nor the EPA Administrator responded to comments identifying this unrealistic inflation in compliance costs. *See* 85 Fed. Reg. at 24,405.
- The Volpe Model assumed automakers would always adopt an average of \$800 of off-cycle technologies (technologies that reduce fuel consumption and GHG emissions in ways not accounted for in compliance testing) per vehicle, even though these technologies are three times more expensive³² than other available technologies. *Id.* at 24,579, 24,584 (10 g/mi

³² For example, in Model Year 2026, off-cycle technologies are projected to cost \$76 per g/mi, compared to approximately \$24 per g/mi for test-cycle technologies. JA____[Model_Files] (compare Central Analysis/output/CO2_ref/reports-csv/compliance_report.csv, Cells AI812:896/P812:896 (off-cycle technologies cost), with Cell AJ901/(2017 tailpipe emissions – 2026 tailpipe emissions), where tailpipe emissions for each model year are derived by adding average air conditioning and off-cycle credits (derived from Columns N, O, and P) to the emissions rating (Column M) (approximate test-cycle technologies cost)).

of off-cycle credits multiplied by approximately \$80 per g/mi equals approximately \$800). Exacerbating the problem, the GHG or fuel savings benefits of these off-cycle technologies were then omitted from the cost-benefit analysis. JA___[Model_Files] (Model Documentation at 194).

- Between the Proposal and Final Rollbacks, NHTSA and the EPA Administrator inexplicably reduced their production volume assumption for electric-vehicle batteries from 100,000 to 25,000 per manufacturing plant—arbitrarily excluding Tesla data entirely and ignoring other real-world production data showing that six battery manufacturing companies already had annual production capacities over 100,000 in 2017. 85 Fed. Reg. at 24,500; JA___-___[EPA-HQ-OAR-2018-0283-5456_Attachment_11_5-6]; *see also* Adv. Energy & Transp. Petitioners Br. at 6-8. This inflated battery costs by 15%. 85 Fed. Reg. at 24,502.

- The analysis marked up battery costs twice—once in the battery costs model and a second time as part of the standard retail price markup applied to all technologies—even though those markups capture many of the same costs. JA___[BatPac_Model_Documentation_ANL/CSE-19/2_82]; 85 Fed. Reg. at 24,350. The Agencies do not acknowledge or explain this double-counting.

(3) The Analysis Erroneously Modeled the Use of EPA Over-Compliance Credits

The Administrator further overestimated the cost of complying with EPA's pre-existing standards because he relied on NHTSA's erroneous modeling of the use of over-compliance credits. As discussed above (*see supra* at 10), if an automaker's fleet exceeds a given year's standards, the automaker earns credits that can be applied to offset any past debits (from under-compliance) accrued within the prior three model years or any future debits in the subsequent five model years. 40 C.F.R. §§ 86.1865-12(k)(6), 86.1865-12(k)(7)(i). Automakers can also buy or sell credits. 40 C.F.R. § 86.1865-12(k)(7). NHTSA made seven errors when modeling the use of these credits—all of which the EPA Administrator adopted when he adopted this modeling as EPA's. All of these errors artificially drove up the compliance costs of more stringent standards by forcing the Volpe Model to apply more technologies than necessary.

- First, an apparent coding mistake caused the Volpe Model to omit 27% of automakers' existing credit banks. The compliance simulation begins with the 2017 model year, *see* 85 Fed. Reg. at 24,176, 24,308, but the Volpe Model did not permit the use of any credits earned in model year

2016.³³ Correcting this error dramatically expands compliance options for manufacturers, reducing compliance costs and the net benefits of EPA's Rollback by \$7 billion.³⁴

- Second, contrary to EPA's regulations and the Administrator's claims about the model, 85 Fed. Reg. at 24,305, the Volpe Model allowed automakers to use credits only in the year they expire.³⁵
- Third, the Volpe Model pretended credit trading between automakers cannot or would not occur, even though EPA regulations allow it. JA___[EPA-HQ-OAR-2018-0283-5840_Technical_Appendix_41]. This unfounded assumption is especially egregious as applied to Tesla, which

³³ JA___[Model_Files] (Model Source Code/Volpe.Cafe/IO/InputParsers/XIMarketDataParser.cs, lines 157-166, 288, and 302; *see also* JA___[Model_Files] (Central Analysis/output/CO2_ref/debug-logs/credit_trades_sn0.csv through /credit_trades_sn8.csv, showing modeled automakers utilizing over-compliance credits earned in model years 2011-2015 (in the "eYear" column) and earned in future modeled years (model years 2017 and beyond), but not credits earned in model year 2016).

³⁴ JA___[Model_Files] (Model Source Code/Volpe.Cafe/IO/InputParsers/XIMarketDataParser.cs lines 157-166, 288, and 302 were corrected to reflect a credit bank final year of 2016, rather than 2015 (e.g., md.BankedCO2CreditsMaxYear = 2016).

³⁵ JA___[Model_Files] (Central Analysis/output/CO2_ref/debug-logs/credit_trades_sn0.csv through /credit_trades_sn8.csv, showing modeled automakers utilizing credits either in the year generated [eYear = uYear] or in the year of expiration [eYear + 5 = uYear]).

generates and sells enormous quantities of credits that allow other manufacturers to reduce compliance costs. JA___[EPA-HQ-OAR-2018-0283-7670_114] (Table 5.11). The Administrator acknowledged that credit trading is an important component of automaker compliance strategies, yet adopted modeling reflecting a fictional universe where no trading exists. *See, e.g.*, 85 Fed. Reg. at 24,220 n.98, 24,307, 24,318, 25,116.

- Fourth, the analysis ignored the technical amendments EPA issued simultaneously with the Rollback that “correct[ed] an error to ensure that automakers receive the appropriate amount of credits for electric vehicles,” thus “allow[ing] the program to be implemented as originally intended.” 85 Fed. Reg. 22,609, 22609 (April 23, 2020). This oversight cut Tesla’s estimated credits by half.

- Fifth, compounding the prior error, the Administrator inexplicably estimated that Tesla will sell only about 48,000 vehicles per year through 2029,³⁶ even though he elsewhere conceded that Tesla sold about four times that many vehicles in model years 2018 and 2019. 85 Fed. Reg. at

³⁶ JA___[Model_Files] (Central Analysis/output/CO2_ref/reports-csv/vehicles_report.csv, Column BO).

24,502. This error, together with the prior error, underestimated Tesla's available credit bank by a factor of seven.

- Sixth, the Volpe Model's algorithm did not efficiently use even the arbitrarily small bank of credits it made available to automakers. Rather, the Model projected that automakers would allow 43% of their credits, worth about \$4-7 billion, to expire unused.³⁷ Assuming that automakers would behave so irrationally defies basic economic logic.

- Seventh, the Volpe Model's credit algorithm suffered from further flaws, as revealed by a modeling scenario that assumed automakers buy and sell credits with perfect efficiency. Perfect credit trading will necessarily decrease compliance costs because it optimizes credit usage where technological improvements would be more costly. However, perfect credit trading in the Volpe Model *increases* compliance costs. This result, which the preamble itself characterizes as "counterintuitive," shows that the Model itself is fundamentally flawed. JA___[NHTSA-2018-0067-12636_1855].

³⁷ JA___[Model_Files](compare Central Analysis/input/market_ref.xlsx, showing 169,619,643 Mg of credits in bank (Cells BC3:BF19 + BJ3:BM19), and Central Analysis/output/CO2_ref/debug-logs/credit_trades_sn0.csv, showing 97,508,181 Mg of credits used (Rows > 2664, eYear = 2012-2015, uYear = 2017-2020, sum of OutRCredits) and 72,111,462 Mg unused); pricing from JA___[EPA-HQ-OAR-2015-0827-6209_Attachment_2_7], adjusted to 2018 dollars.

The Administrator neither fixed nor explained the modeling problems that led to this backwards result.

EPA acknowledges the centrality of credits to automakers' compliance strategies. 85 Fed. Reg. at 25,116. It is arbitrary for such important modeling to contain such blatant errors, including contradictions with EPA's regulations, real-world data, and simple economic logic. *See Owner-Operator Indep. Drivers Ass'n, Inc. v. Fed. Motor Carrier Safety Admin.*, 494 F.3d 188, 204 (D.C. Cir. 2007) (“[W]hen a model’s methodology is challenged, the agency must provide a complete analytic defense[.]”) (cleaned up).

b. The Remaining Claims of Feasibility Concerns Are Likewise Unsupported

Beyond the unfounded and inflated concerns about compliance costs, the Administrator also claimed that the pre-existing standards have become “infeasible” because manufacturers have used credits to comply with the standards in recent years, because consumer preferences for sport-utility and crossover vehicles make compliance with the pre-existing standards too difficult, and because the preexisting standards would require a level of electrification consumers will not accept. None of these three additional arguments is supported by the record, nor do they justify departure from the

feasibility conclusions reached by both Agencies in 2012 and confirmed in 2016 and 2017. 77 Fed. Reg. at 62,777; JA____[EPA_HQ_OAR_2018-0283-7639_1].

1. NHTSA and the EPA Administrator claimed (without support) that the stringency of emission standards was increasing faster than automakers could maintain. But automakers' performance demonstrates the opposite: that the pre-existing standards remain feasible. In the most recent years for which data is in the record, the rate of improvements *outpaced* the rate of standards' stringency increases. JA____[EPA-HQ-OAR-2018-0283-7670_123] (Fig. 5.17) (Model Years 2017 and 2018). And, across the duration of the standards, automakers have accumulated large banks of over-compliance credits. JA____[EPA-HQ-OAR-2018-0283-7670_119] (Table 5.17).

The Agencies cherry-picked outlier data from 2016 and 2017 to argue that credit use signals that the standards are infeasible. 85 Fed. Reg. at 25,184. But the credit provisions were designed specifically to enable automakers to cost-effectively smooth investments over time. That is exactly what automakers have done—overshooting the standards in some years and undershooting in others, using credits to cost-effectively average out the peaks and troughs. And because automakers earned a significant glut of credits that are slated to expire in 2021, JA____[EPA-HQ-OAR-2018-0283-7670_120], it would be irrational

for automakers *not* to use those credits now. 40 C.F.R. § 86.1865–12(k)(6)(ii); 77 Fed. Reg. at 62,788. Automakers’ use of credits in particular years demonstrates only that credits supplied the least-costly pathways to achieve compliance at that specific point in time. *See* Adv. Energy & Transp. Petitioners Br. at 14. The claim that more credit usage necessarily means automakers will have difficulty meeting future years’ standards contravenes basic “economic theory and logic.” *Ameren Servs. Co. v. FERC*, 880 F.3d 571, 578 (D.C. Cir. 2018).

Even without considering their rational use of existing credits, automakers achieved a record fleetwide emission level of 253 grams/mile, which was only 0.3% shy of the standard in model year 2018, the most recent data in the record. JA____[EPA-HQ-OAR-2018-0283-7670_123] (Fig. 5.17). Industrywide, the fleet performance deficit in model year 2018 was equivalent to only 1.8% of banked credits entering model year 2019. JA____[EPA-HQ-OAR-2018-0283-7670_114] (Table 5.11), ____[EPA-HQ-OAR-2018-0283-7670_119] (Table 5.17) (252 teragrams of banked credits versus 4.4-teragram fleet deficit).³⁸ The

³⁸ While these figures relate to EPA’s GHG program, similar facts—including credit banks that swamp minor levels of “underperformance”—are equally true of NHTSA’s fuel-economy program. JA____[https://one.nhtsa.gov/cape_pic/CAFE_PIC_home.htm][cited_at_24,615_n1638]] (credit status tab).

large credit banks demonstrate that automaker performance has *significantly exceeded* the standards established in 2012, and the Agencies have no credible argument for assuming those standards will suddenly become infeasible.

JA___[EPA-HQ-OAR-2018-0283-7670_123] (Fig. 5.17) (showing substantial fleetwide emissions over-performance over the total length of the preexisting standards);

JA___[https://one.nhtsa.gov/cafepic/CAFE_PIC_home.htm][cited_at_24,615_n1638]] (showing fuel economy over-performance at fleet performance tab; select data for all model years, total fleet, performance and standards).

2. The Administrator also adopted NHTSA's contention that consumer preferences for sport-utility and crossover vehicles make the pre-existing standards too difficult and perhaps even infeasible. 85 Fed. Reg. at 25,120, 25,184. This is similarly specious. Although the Agencies asserted that the pre-existing standards do not account "for mass-intensive increases in vehicle ride height that crossover purchasers value, the additional frontal area and higher drag at highway speeds," *id.* at 25,184, they offered no evidence supporting this departure from their prior determinations that these footprint-based standards do not "affect consumers' opportunity to purchase the size of vehicle with the

performance, utility and safety features that meets their needs,” 77 Fed. Reg. at 62,631; *see also supra* at 10, 12. In fact, the evidence showed the opposite.

First, the market shares of sport-utility and crossover vehicles subject to the car fleet standards (“car SUVs”) have increased little since 2012. JA____ [EPA-HQ-OAR-2018-0283-7670_33] (from 9.4% to 11.3% in 2019).

Second, the increased sales of sport-utility and crossover vehicles subject to the less stringent light-truck fleet standards (“truck SUVs”) have not hindered compliance with the pre-existing standards. Since 2012, automakers improved the fuel efficiency and emissions performance of car and truck SUVs at similar (or better) rates as other categories. JA__ [EPA-HQ-OAR-2018-0282-7670_33] (Table 3.2). Indeed, in 2018 these categories saw the largest improvements of any category. JA____ [EPA-HQ-OAR-2018-0282-7670_16]. The Agencies offer no reason why such improvements cannot continue.

Third, the cost-benefit analysis prepared by NHTSA and adopted by the EPA Administrator demonstrates that consumers would purchase *more* sport-utility and crossover vehicles under the pre-existing standards than under the Rollbacks.³⁹ This is because, according to the Agencies, “as fuel economy

³⁹ *See* JA__ [Model_Files] (Central Analysis/output/CO2_ref/reports-csv/vehicles_report.csv (showing, when aggregated and sorted by vehicle class

increases in light truck models, which offer consumers other desirable attributes beyond fuel economy (ride height or interior volume, for example) their relative share increases.” 85 Fed. Reg. at 24,622. Any claim that stricter standards impede demand for these vehicles therefore “runs counter to the evidence before the agency.” *Genuine Parts*, 890 F.3d at 346 (cleaned up).

Finally, although the Agencies claim that automakers use of over-compliance credits indicates infeasibility, 85 Fed. Reg. at 25,116-17, no evidence supports either that proposition, *see supra* at 80, or the contention that credit use results from increased sales of sport-utility and crossover vehicles. Indeed, in 2017 and 2018, automakers substantially reduced their use of credits, even though the standards grew more stringent and the market share of these categories remained historically high. JA____[EPA_ HQ-OAR-2018-0282-7670_123].

3. Finally, NHTSA and the EPA Administrator claimed that the pre-existing standards will require greater levels of electrification than future consumer demand will accommodate. Specifically, the Administrator projected

class (Columns AR and AS), sport-utility vehicles’ market shares in 2029 of 34.8% (pre-existing standards) and 33.0% (Rollbacks), and crossovers with 14.4% and 13.8%, respectively).

that the pre-existing standards would require model year 2030 vehicles to include 7.1% mild hybrids, 9.0% strong hybrids, 0.4% plug-in hybrids, and 5.7% battery electric vehicles.⁴⁰ 85 Fed. Reg. at 24,976 (Table VII-69). These projections are unreliable because, as explained above, they are driven by modeling that arbitrarily inflated compliance costs for conventional vehicles. *See supra* at 62.

In any event, the Administrator described the new projections for model year 2030 as differing only “slightly” from EPA’s 2017 figures, 85 Fed. Reg. at 25,107, which the agency characterized as “low levels” of electrification readily achievable by model year 2025, JA____, ____ [EPA-HQ-OAR-2015-0827-6270_4,18]. Yet again, the Administrator failed to explain his new position—that roughly similar electrification levels are somehow infeasible—and identified no evidence supporting it.

Indeed, the Administrator did not explain why sales of plug-in hybrids and battery electric vehicles—which EPA projected would reach a combined market share of 3.3% in model year 2019, JA____ [EPA_ HQ-OAR-2018-0282-

⁴⁰ Mild and strong (or full) hybrids have gasoline engines that are assisted by various electric technologies but do not recharge from external power sources. Plug-in hybrids can operate solely on their electric motors for limited ranges and can be recharged from external sources. Battery electric vehicles operate solely on electricity. *See* 85 Fed. Reg. at 24,469-24,472.

7670_54], and reach a “low,” achievable level of 5% in model year 2025, JA____-____[EPA-HQ-OAR-2015-0827-6270_4-5]—will be unable to reach a combined share of 6.1% in model year 2030. Nor could the Administrator explain his position, particularly given that consumer demand for electric vehicles is expected to grow substantially. *See* Adv. Energy & Transp. Petitioners Br. at 8-13.

3. The Rollback *Increases* Consumer Costs

The Administrator also claimed that “[t]he costs to ... automotive consumers would have been too high under the standards set forth in 2012.” 85 Fed. Reg. at 24,176. But NHTSA’s analysis (on which the Administrator relied) showed that EPA’s Rollback will *increase* total costs to consumers by an average of \$678 per vehicle. 85 Fed. Reg. at 24,181. And the real increase is certainly even greater because the analysis dramatically underestimated how much consumers will pay for fuel under the Rollbacks. Specifically, it erroneously ignored that increased fuel demand under relaxed standards (with less fuel-efficient vehicles) would drive up fuel prices. The magnitude of this error is enormous—approximately \$50 billion in additional consumer fuel costs omitted. Public Interest Petitioners Br. 23.

Although the Administrator conceded that the Rollback will cost consumers money, he nonetheless tried to justify the Rollback as beneficial to consumers by claiming that consumers value “upfront” reductions in new vehicle costs more than long term fuel cost savings. *See, e.g.*, 85 Fed. Reg. at 25,111, 25,120, 25,171. But, as detailed in the Public Interest Petitioners’ Brief at 20-22, this rationalization is arbitrary because the Administrator contradicts it elsewhere in the preamble, the analysis already applied a discount rate to future costs and benefits, and the 85% of consumers who finance their vehicles experience negligible upfront savings. The Rollback cannot be justified as a way to save consumers money because it would substantially increase consumers’ net costs.

4. The Rollback’s Costs Outweigh Its Benefits

As noted above, the Agencies originally claimed their proposed Rollbacks would have net benefits of over \$200 billion and, in fact, offered this as one of two primary justifications for the Proposal. 83 Fed. Reg. at 42,998. By the Final Rollbacks, however, the Agencies had determined that the net societal benefits were “very small” and, indeed, *negative* under a 3% discount rate for future costs and benefits. 85 Fed. Reg. at 24,176-77. Remarkably, the Administrator proceeded anyway, finalizing a rule that increases air pollution while providing

no net benefits to society. In reality, even the “very small” net benefits claimed under a 7% discount rate simply do not exist because of inflated compliance costs, *see supra* at 62, and massive errors in the cost-benefit analysis. This is yet another reason for vacatur: the EPA Administrator did not apparently understand that the emissions-increasing Rollback he approved would impose substantial net costs on society.

a. The Rollback Will Harm the Environment and Public Health Far More than the Administrator Acknowledged

The Administrator acknowledged that weakening these emission standards will damage the environment and cause premature deaths. The analysis he adopted estimates EPA’s Rollback will cause the release of 867 million metric tons of additional carbon dioxide, as well as additional emissions of other harmful pollutants, such as nitrogen oxides and particulate matter that will cause as many as 1,000 premature deaths. 85 Fed. Reg. at 25,055 (Table VII-118); 25,083 (Table VII-142). The Administrator’s willing acceptance of these impacts is confounding enough. But these impacts are understated, and the errors in this part of the analysis—both intentional and careless—further demonstrate the unlawfulness of the Administrator’s decision to weaken

entirely feasible and economically efficient standards that protect public health and welfare.

1. The analysis undervalued the economic impacts of increased GHG emissions by tens of billions of dollars by using an “interim” domestic, rather than the global, social cost of carbon. JA____[NHTSA-2018-0067-12636_at_1807]. This choice departed from prior agency practice without adequate justification. *See* 85 Fed. Reg. at 24,734; *see also* JA____-____[EPA-HQ-OAR-2018-0283-5481_104-105]. The Administrator failed to consider that climate impacts in other countries will cause damage to U.S. companies and citizens, given interrelated global economies, assets, and U.S. citizens and national security interests abroad. *See* JA____[EPA-HQ-OAR-2018-0283-5481_105]; *see also California v. Bernhardt*, 472 F. Supp. 3d 573, 613 (N.D. Cal. 2020) (holding agency reliance on interim domestic social cost of methane to be arbitrary and capricious, because the agencies ignored impacts on U.S. citizens living abroad, billions of dollars of physical assets located abroad, foreign trading partnerships and supply chains, and global migration and geopolitical security). Moreover, this “interim” estimate ignores the best available science by using a 3% discount rate, instead of a lower rate on which there is expert consensus, and omits important updates to the calculation, one

of which by itself doubles the social cost. *See* JA____[EPA-HQ-OAR-2018-0283-5481_106].

2. The Administrator also overestimated certain emissions benefits he claimed the Rollbacks will produce. As shown above, the underlying analysis overestimated both the decrease in vehicle prices, *supra* at 62, and the impact any such decrease would have on new vehicle sales, *supra* at 55. These exaggerated fleet turnover projections led to inflated claims of vehicular emission reductions from retiring older, less-efficient vehicles.⁴¹

3. The Administrator excluded significant amounts of upstream criteria pollution—equating to over a thousand more premature pollution-related fatalities and billions of dollars in health harms—by assuming, without record support, that half of the increased gasoline demand caused by the Rollback will not result in additional domestic refining. *See* Public Interest Petitioners’ Br. at 13-15.

4. The Administrator undervalued the Rollback’s pollution harms by billions of dollars and hundreds of premature deaths by conflating the harms of

⁴¹ These vehicular emission reductions are more than offset by emissions increases from other sources, such as refineries, resulting in projections of adverse public health impacts. 85 Fed. Reg. at 25,055 (Table VII-118) (GHGs), 25,059 (criteria pollutants).

electricity generation with those of petroleum refining. *See* Public Interest Petitioners' Br. at 17.

5. The Administrator committed a multibillion-dollar error by calculating the Rollback's effect on electricity emissions based on average, rather than incremental, electricity generation. *See* Public Interest Petitioners' Br. at 16.

b. An Unjustified Assumption about Additional Driving Substantially Exaggerated the Costs of Stricter Standards and the Alleged Benefits of the Rollback

NHTSA and the EPA Administrator arbitrarily doubled their estimate of the “rebound effect,” reversing prior findings without adequate justification and drastically inflating the Rollback’s purported benefits by \$25 billion. As discussed above, the rebound effect is the degree to which consumers drive more in response to the decreased cost of driving more fuel-efficient vehicles. 85 Fed. Reg. at 24,671. The size of this effect significantly affects multiple aspects of the Rollback analysis, including purported safety benefits (*see supra* at 58), emissions, road congestion, and noise. 85 Fed. Reg. at 24,671.

These two Agencies have previously estimated the rebound effect to be 10%, meaning that for every 1% decrease in the cost of driving, miles driven increase by 10% of that, i.e. by 0.1%. *See* 75 Fed. Reg. at 25,490; 77 Fed. Reg. at 62,716; JA____[EPA_HQ_OAR_2015-0827-0926_10-20]. Those estimates were

based on a robust review of the literature, with emphasis on the most relevant and reliable studies. Here, however, NHTSA and the EPA Administrator asserted a 20% rebound effect.

This new figure is based on a simple average of various studies, without considering those studies' unequal quality and relevance. *See* JA____-____[EPA-HQ_OAR-2018-0283-7659_26-27]. For instance, the Agencies ignored differences between studies of households in the United States and those in Europe, JA____[EPA-HQ-OAR-2018-0283-5842_Gillingham_Rebound_31], and differences between studies using high-quality multiple odometer measurements—widely considered one of the most rigorous types of data—and those relying on error-prone self-reported travel surveys, JA____, ____[EPA-HQ-OAR-2018-0283-5842_Gillingham_Rebound_22,28]; JA____-____[EPA-HQ-OAR-2018-0283-5054_253-54]; JA____[EPA-HQ-OAR-2018-0283-1642_2]. These irrational choices contradict the Agencies' prior approach, JA____-____[EPA-HQ-OAR-2018-0283-6174_Attachment_7_Comment_12-26], and their approach elsewhere in these Rollbacks, 85 Fed. Reg. at 25,241 (citing “very different vehicle use and driving patterns between Europe and the U.S.” to ignore EU credit data), 24,678-79 (distinguishing different types of driving data by quality). The result of this unexplained and inconsistent

decision is to drive the rebound rate up, artificially increasing the pre-existing standards' costs and reducing their benefits. JA____-____[EPA-HQ-OAR-2018-0283-5842_Gillingham_Rebound_33-34].

Four separate authors of studies cited by the Agencies warned that their work was being mischaracterized. JA____-____[EPA-HQ-OAR-2018-0283-2698], ____-____[EPA-HQ-OAR-2018-0283-4024], ____[EPA-HQ-OAR-2018-0283-3321], ____-____[EPA-HQ-OAR-2018-0283-1642]. With one limited exception,⁴² neither NHTSA nor the EPA Administrator responded to these comments. Nor did they heed EPA staff's exhortation to "critically evaluate which studies are most likely to be reflective of the rebound effect," JA____, ____[EPA-HQ-OAR-2018-0283-5666_Attachment_12_pdf120,122], or EPA's Science Advisory Board's similar criticism or its finding that the literature "suggest[ed] an effect of less than 10%," JA____-____[EPA-HQ_OAR-2018-0283-7659_26-27]; *see also id.* (urging heavier weight be given to "recent papers using strong methodology and U.S. data").

⁴² The Agencies now state the Small paper's finding as a rebound rate of 4-18% instead of 18%, still ignoring Small's comment that 4%, and not 18%, is the correct interpretation of his study. JA____[EPA-HQ-OAR-2018-0283-2698_1].

NHTSA and the EPA Administrator claimed discomfort with “making the requisite assumptions regarding which specific criteria should be used to identify relevant studies[.]” 85 Fed. Reg. at 24,677. Yet they did exactly that when it served their ends. For example, they excluded one of the most relevant rebound studies—the only study based on a policy that induced households to buy more fuel-efficient vehicles—which found no rebound effect at all, relying instead on studies based on changes in gasoline prices. *Id.* at 24,676 n. 1771 (dismissing the West 2017 study); *see also* JA____[EPA-HQ-OAR-2018-0283-5842_Gillingham_Rebound_16-17].

The new and unjustified 20% rebound-effect assumption substantially overstated the Rollbacks’ perceived benefits with respect to fuel consumption, emissions, fatalities, congestion, and noise. Overall, the 20% rebound assumption inflated net benefits for EPA’s Rollback by approximately \$25 billion. JA____[NHTSA-2018-0067-12636_1807]. Applying a justifiable 10% rebound rate instead shows that the Rollback would impose total net costs on society of \$47 billion. *Id.*

c. Overall, the Rollback is Net Costly to Society

The Administrator’s contention that the Rollback’s costs and benefits are “directionally uncertain,” 85 Fed. Reg. at 25,099, is unequivocally wrong. The

analysis he adopted showed that a net benefit would occur only under a 7% discount rate for future costs and benefits. 85 Fed. Reg. at 24,201-08 (Tables II-20 to II-23). But that tabulation does not account for the arbitrary errors and unfounded assumptions expounded above or those described by other Petitioners. *See* Public Interest Petitioners Br. at 26-36. When these errors are corrected, the Rules are unambiguously and massively net *costly* to society. *Id.*

* * *

The various rationales offered for EPA’s Rollback cannot withstand scrutiny: many are negated by the analysis the Administrator adopted; others are undermined by fundamental errors or contravened by the record; several suffer from all these flaws at once. Each one of these failed justifications warrants vacatur because the Administrator expressly relied on all these rationales, collectively, and there is no record basis to conclude he would have taken the same action “even absent” one of these “flawed rationale[s].” *Nat’l Fuel Gas Supply Corp.*, 468 F.3d at 839. Especially given that EPA’s action contravenes the core air pollution objective of Section 202(a), the absence of *any* substantiated reason for the action—and the sheer number and scale of errors in the underlying analysis—only confirm the need for vacatur.

II. NHTSA'S FUEL-ECONOMY STANDARDS ARE ALSO UNLAWFUL

NHTSA's Rollback also suffers from multiple flaws requiring vacatur. Disregarding EPCA's energy conservation mandate, NHTSA unlawfully interpreted and applied the statutory factors and improperly balanced those factors, along with non-statutory ones, ultimately failing to set standards at the "maximum feasible" level EPCA requires. In the end, NHTSA, like EPA, failed to identify a reason supported by the statute or the record that would justify its Rollback.

A. NHTSA's Rollback Contravenes EPCA's Central Objective and Relies on Unlawful Statutory Interpretations

Congress established EPCA's fuel-economy program "to provide for improved energy efficiency of motor vehicles," Pub. L. No. 94-163 § 2(5), 89 Stat. 871, 874 (1975), and reaffirmed that objective in the Energy Independence and Security Act, Pub. L. No. 110-140, 121 Stat. 1492 (2007) (stating objectives including "to increase the efficiency of ... vehicles"). Because "market forces . . . may not be strong enough to bring about the necessary fuel conservation which a national energy policy demands," *Ctr. for Auto Safety v. NHTSA*, 793 F.2d 1322, 1339 (D.C. Cir. 1986) (quoting S. Rep. No. 179 at 9 (1975)), Congress required NHTSA to set fuel-economy standards at the "maximum

feasible average fuel economy level” that manufacturers can achieve in each model year, 49 USC § 32902(a). In determining that “maximum feasible” level, NHTSA must consider four statutory factors: “technological feasibility, economic practicability, the effect of other motor vehicle standards of the Government on fuel economy, and the need of the United States to conserve energy.” 49 U.S.C. § 32902(f).

In the Rollback, NHTSA unlawfully reinterpreted three of the four statutory factors to permit *increased* energy consumption and then balanced the factors to produce standards that are not “maximum feasible” under any reasonable understanding of that phrase.⁴³ In so doing, NHTSA unlawfully disregarded—indeed, undermined—EPCA’s North Star: improving fuel efficiency to conserve energy.

⁴³ NHTSA also unlawfully interpreted the fourth factor—“the effect of other motor vehicle standards of the Government on fuel economy”—to exclude state vehicular emission standards. But that interpretation appears to have had little effect here because of earlier (unlawful) agency actions that purported to invalidate certain state standards. 84 Fed. Reg. 51,310 (Sept. 27, 2019). Those actions—and NHTSA’s unlawful interpretation—are the subject of separate petitions for review. *See* Case No. 19-1230 (lead case).

1. NHTSA Effectively Read the Need to Conserve Energy Out of the Statute

One of the four factors NHTSA must consider is “the need of the United States to conserve energy.” Nothing in the statutory text allows NHTSA to second-guess Congress and decide that there is no longer much, if any, need to reduce energy consumption. Yet, that is precisely what NHTSA did here, reinterpreting “conserve” to encompass standards that *increase* energy consumption and concluding that the Nation’s need to save energy is no longer “nearly infinite” as Congress had found. 85 Fed. Reg. at 25,144.

A dictionary contemporaneous with EPCA’s enactment shows the word “conserve” meant to “save.” *Webster’s New World Dictionary* (2d college ed. 1972). That this was Congress’s intended meaning is clear from EPCA’s direction to set “*maximum* feasible” fuel-economy standards, 49 U.S.C. § 32902(f) (emphasis added), and by its fundamental objective, reflected in the statute’s title, of conserving energy. Congress intended to “establish aggressive and effective programs for energy conservation designed to encourage the maximum efficient utilization of domestic energy resources.” H.R. Rep. No. 94-700, at 118 (1975). Especially when EPCA is read in light of the energy crisis that drove its passage, there can be no question Congress intended to impose on NHTSA an affirmative duty to *save* energy. The current absence of

an energy crisis does not impact the meaning of the statute or Congressional intent. NHTSA cannot read the need to conserve out of the statute. *See Bostock v. Clayton County*, 140 S.Ct. 1731, 1738 (2020) (“[O]nly the words on the page constitute the law adopted by Congress and approved by the President.”).

In response to comments pointing out that NHTSA was second-guessing Congress, NHTSA claimed, in the Final Rollback, that it had not determined there was *no* need to conserve energy. But this claim falls flat, as NHTSA effectively gave no consideration to the Nation’s need to conserve. This failure to honor Congress’s directive is only underscored by NHTSA’s evaluation of the four considerations it has traditionally evaluated under the “need ... to conserve energy” factor: “the consumer cost, national balance of payments, environmental, and foreign policy implications of our need for large quantities of petroleum, especially imported petroleum.” 85 Fed. Reg. at 24,214.

First, while claiming “consumer fuel costs are an important consideration,” NHTSA also suggested these costs are irrelevant to the need to conserve because “American consumers generally understand fuel costs” and tolerate “fluctuations” in those costs. *Id.* at 25,141. NHTSA then reached no conclusion about whether these “important” costs increase or decrease the

need to conserve,⁴⁴ stating only that there are “more [unspecified] tradeoffs” now than “in prior rulemakings.” *Id.* NHTSA also failed to fully consider the adverse impacts to consumers from increases in fuel prices, including those caused by the Rollback itself,⁴⁵ instead noting that any increase in fuel costs to consumers “is an increase in revenue to the U.S. oil industry.” *Id.* at 25,170.⁴⁶ But *industry* revenues are not equivalent to *consumer* fuel costs. Citing the former does not license NHTSA to ignore the latter. Further, focusing on increased industry revenues ignores the fact that even moderate increases in fuel costs reduce disposable income and negatively impact consumers, especially low-income consumers, who spend a disproportionate amount of their incomes on fuel expenses.

Second, NHTSA erroneously downgraded the national balance of payments consideration. Historically, NHTSA has considered the national balance of payments in evaluating the need to conserve energy because importing large amounts of oil can create a significant wealth transfer to oil-

⁴⁴ In fact, the Rollback will *increase* costs to consumers. *See supra* Section I.D.3.

⁴⁵ *See* Public Interest Petitioners’ Br. at 22-26 (establishing that NHTSA failed to account for billions in dollars of increased fuel prices caused by the additional consumption NHTSA admits will occur under its Rollback).

⁴⁶ Elsewhere, NHTSA admits that automobile ownership will be net costly under the Rollback. *See supra* at 62.

exporting countries and leave the United States economically and politically vulnerable. *Id.* at 24,214-15 & n.68. Now, NHTSA claims this factor is “fallow,” i.e., does not support the need to conserve, “for the foreseeable future,” due to recent decreases in oil imports. *Id.* at 24,215.

To reach this conclusion, NHTSA assumed that exports currently equal or slightly exceed imports. *Id.* NHTSA acknowledged that demand will increase under the Rollback, but assumed, without any evidence, that the increased demand will be fulfilled by domestic production, rather than imports. *Id.* Notably, elsewhere in its analysis, NHTSA made a very different assumption—that half of the additional oil would be imported—to minimize domestic emission impacts of its Rollback. *See* Public Interest Petitioners’ Br. at 13-15. Further, even if exports will exceed imports as assumed, the Rollback will narrow the difference and erode the national balance of payments. NHTSA’s inconsistent assumptions and flawed reasoning provide no support for reading the “need to conserve” out of the statute.

Third, NHTSA failed to properly consider the need to conserve in light of the environmental impacts from the increase in fuel consumption under the Rollback. NHTSA admits that, compared to the pre-existing standards, the Rollback will substantially increase emissions of multiple pollutants that cause

adverse public health consequences. 85 Fed. Reg. at 25,049 (Table VII-9), 25,054 (Table VII-116), 25,057-58 (Tables VII-120, VII-121). And NHTSA anticipates the Rollback could cause hundreds of premature deaths from these emissions. 85 Fed. Reg. at 25,081 (Table VII-140). Nonetheless, NHTSA failed to mention those environmental impacts when it considered the need to conserve. NHTSA also admitted the Rollback will result in the emission of an additional 923 million metric tons of GHGs, 85 Fed. Reg. at 24,176, but brushed that enormous increase in pollution aside, *id.* at 25,144. In doing so, NHTSA unlawfully second-guessed Congress's conservation mandate by limiting its consideration of environmental impacts. NHTSA acknowledged its approach here is inconsistent with prior rulemakings, but failed to provide a reasoned justification for the change. *Id.*; *see Encino Motorcars*, 136 S. Ct. at 2126.

Finally, NHTSA claimed that there is less need to conserve because of decreased foreign policy concerns with respect to disruptions in international oil markets. 85 Fed. Reg. at 25,169. That claim is unfounded. Weaker fuel-economy standards increase the Nation's dependence on oil, including imported oil. That, in turn, impairs energy and national security. *Id.* at 24,215; *see also* JA____-____[NHTSA-2018-0067-10718_10-11]. NHTSA has admitted that expenses related to maintaining military presence to secure imported oil

are linked to increases in oil consumption. 85 Fed. Reg. at 24,215, 25,149.

However, NHTSA failed to account for monopsony or military security costs,⁴⁷ *id.* at 25,150, in its energy security valuation, again erroneously downplaying the need to conserve.

2. NHTSA Unlawfully Construed Technological Feasibility

When deciding what fuel-economy standards are “maximum feasible,” NHTSA must also consider what is technologically feasible. 49 U.S.C. § 32902(f). Historically, NHTSA has correctly understood this to mean the standards must be *achievable*. 77 Fed. Reg. at 63,015 (“Technological feasibility” refers to whether a particular technology . . . is available or can become available . . .”). Now, however, NHTSA has implicitly reinterpreted “technological feasibility” to mean the standards should be *easy and cheap for manufacturers* to achieve. *See* 85 Fed. Reg. at 25,130-25,131.

NHTSA’s prior interpretation was consistent with the statute’s text and history. Feasible means “capable of being carried out.” H.R. Rep. No. 94-700 at 172 (1975); *see also* *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1194

⁴⁷ NHTSA has previously stated that energy security costs include “higher prices for petroleum products resulting from the effect of increased U.S. demand for imported oil on the world oil price (‘monopsony effect’).” 77 Fed. Reg. 62,624, 62,939 (2012).

(D.C. Cir. 2008). Thus, NHTSA must consider whether a particular technology exists or can become available for commercial application in the model year for which a standard is being established. *Ctr. for Auto Safety*, 793 F.2d at 1325 n.12. Fuel-economy standards are “intended to be technology forcing” because Congress recognized “that ‘market forces . . . may not be strong enough to bring about the necessary fuel conservation which a national energy policy demands.’” *Id.* at 1339.

The fuel-economy standards adopted here are less than what is “technologically feasible” under any reasonable interpretation of the term. NHTSA agrees that automakers can meet the *pre-existing* standards using existing technologies. 85 Fed. Reg. at 25,131 (“[T]he crucial question is not whether technologies exist to meet the standards—they do.”). NHTSA’s *weaker* standards do not even track the current course of technology, let alone force development of new technology. In fact, NHTSA’s own projections show that automakers would exceed the Rollback’s standards every year, *even if standards were held at model-year 2020 levels*. JA____[NHTSA-2018-0067-12636_1370] (Tables VII-52, VII-53). There is, thus, no question that this factor, if properly interpreted and applied, compels more stringent standards.

NHTSA claimed otherwise, observing that some automakers used credits to satisfy the standards in 2016 and 2017. *See* 85 Fed. Reg. at 25,117, 25,183-84. Although NHTSA refused to consider credits for future model years, it justified weakening standards based on automakers' use of compliance credits in "model years that are already final." *Id.* at 24,276 n.317. But EPCA bars NHTSA from "consider[ing], when prescribing a fuel economy standard, the trading, transferring, or availability of credits" automakers may use to comply. 49 U.S.C. § 32902(h)(3). EPCA's plain text does not qualify its prohibition by model year. *See id.* NHTSA's narrowing interpretation is impermissible because Congress spoke to this precise question. NHTSA's construction is also unreasonable, and, notably, the agency presented no textual, structural, purposive, or other defense of that construction.

3. NHTSA Failed to Properly Assess Economic Practicability

NHTSA must also consider "economic practicability." 49 U.S.C. § 32902(f). NHTSA has long interpreted this factor to mean that the standard should fall within the financial capability of the industry, but not be so stringent as to lead to significant loss of jobs or unreasonable elimination of consumer choice. *See* 83 Fed. Reg. at 43,208. In other words, in assessing what is

economically practicable, NHTSA has considered substantial impacts of the standards on both the automotive industry and the national economy.

Here, although NHTSA inflated the compliance costs of more stringent standards, *see supra* at 62, it nonetheless concluded those costs were modest—an average of \$977 per vehicle. 85 Fed. Reg. at 24,181 (Table I-6). NHTSA made no finding that those costs were beyond the capability of the industry; indeed, it assumed automakers could, and would, pass those costs on to consumers (who would still save money due to fuel savings). *See supra* at 62. NHTSA also ignored other substantial economic consequences of its Rollback, including its own conclusion that the Rollback would cause thousands of job losses within the automotive industry. *See* 85 Fed. Reg. at 25,178 (Table VIII-10) (projecting 13,474 fewer jobs in 2029 than under the pre-existing standards).

Once again, NHTSA seeks to excuse its analytical failures and avoid inconvenient facts by redefining the relevant statutory term—“economic practicability.” NHTSA placed great weight on consumer preference as a constraint on stricter standards. *See, e.g.*, 85 Fed. Reg. at 25,131-25,133, 25,174-25,175. This constraint is imaginary. The regulatory program is expressly designed to accommodate consumer preference, and NHTSA’s contrary

concerns are unsupported by any evidence. *See supra* at 82. Moreover, Congress intended NHTSA's standards to drive the market, not bend to the agency's perception of current consumer preferences. *See Ctr. for Auto Safety*, 793 F.2d at 1340 (“[I]t would clearly be impermissible for NHTSA to rely on consumer demand to such an extent that it ignored the overarching goal of fuel conservation.”).

NHTSA's attempt to import newly manufactured safety concerns into consideration of economic practicability was also flawed. 85 Fed. Reg. at 25,132. EPCA does not discuss safety concerns, and NHTSA's analysis strayed far afield from the definitions of “motor vehicle safety” in other statutes which implicate protection against design-, construction-, or performance-related risks. 49 U.S.C. § 30102(a)(9). Here, NHTSA considered not the safety implications of fuel-efficiency technologies or vehicle design, *see CEI v. NHTSA*, 956 F.2d 321, 326-27 (D.C. Cir. 1992), but rather consumer behavioral responses to the standards—specifically, the possibility of additional driving or greater utilization of older vehicles and, thus, additional fatal crashes.⁴⁸ *See supra* Section I.D.1. NHTSA has no credible argument that

⁴⁸ The Agencies rely in small part on a prediction that manufacturers would meet the pre-existing standards by reducing vehicle mass. But, the

Congress intended it to consider consumers' independent choices as part of "economic practicability," let alone that such considerations should outweigh factors within the ordinary meaning of the phrase, such as job losses in the auto industry.

4. NHTSA's Balancing Failed to Establish Maximum Feasible Standards, Contravening EPCA's Mandate

As shown above, with every interpretation and application of the statutory factors, NHTSA put its thumb on the scale—sometimes heavily—in favor of weaker standards. Not surprisingly, when NHTSA purported to balance these factors (and non-statutory ones), the resulting fuel-economy standards were not "maximum feasible" under any reasonable understanding of that phrase. In setting far weaker standards than the statute requires, NHTSA contravened EPCA's overriding mandate: to conserve energy through technology-forcing standards. 85 Fed. Reg. at 24,213, n. 51; *see also Ctr. for Biological Diversity*, 538 F.3d at 1195; *Ctr for Auto Safety*, 793 F.2d at 1339. Indeed, NHTSA admits that more stringent standards—including the standards approved in 2012—are feasible, in that the technology already exists to meet them. 85 Fed. Reg. at 25,131. And, as shown above, consumers would *save* money under those

Agencies do not assert that this would have a statistically significant effect on fatalities. *See supra* Section I.D.1.

standards, which also have far greater environmental and public health benefits.

See supra Sections. I.D.3., I.D.4.a. Most revealingly, NHTSA projects that automakers would outperform the Rollback even if the standards were held at model-year 2020 levels. JA____-____[NHTSA-2018-0067-12636_17-18]. The Rollback standards are transparently not “maximum feasible.”

NHTSA’s adoption of standards that require nothing of automakers cannot be justified by NHTSA’s unreasonable emphasis on purported consumer preference and safety factors not mentioned in the statute, NHTSA’s unlawful attempt to read these into “economic practicability” notwithstanding. Congress did not intend to subjugate energy conservation to consumer preferences and consumers’ independent decisions. NHTSA may not replace Congress’s judgment with its own. But that is precisely what NHTSA did. After manipulating and downplaying *all* of the considerations that traditionally go into an analysis of the need to conserve, *see supra* at 98, NHTSA went even further. It declined to give this factor—the reason Congress adopted EPCA—the “paramount” treatment given to it in the past. 85 Fed. Reg. at 25,145 n.2733. Instead, NHTSA asserted that this need has changed “a great deal” and “may no longer disproportionately outweigh other” considerations. *Id.* “NHTSA cannot set fuel economy standards that are contrary to Congress’s

purpose in enacting the EPCA—energy conservation.” *Ctr. for Biological Diversity*, 538 F.3d at 1197. These standards are plainly not “maximum feasible” and should be vacated.

B. NHTSA’s Fuel-Economy Standards Are Also Arbitrary and Capricious

NHTSA’s Rollback is also unlawful because the analysis NHTSA produced—upon which both NHTSA and EPA’s Administrator relied—is riddled with errors and fails to support the rationales asserted. The record does not support the claims of safety benefits (on any of the shifting theories NHTSA advanced), the gestures at feasibility concerns about the pre-existing standards, the assertions of consumer benefits, or, even, the claims that the Rollback will produce little to no net costs to society. *See supra* Section I.D. NHTSA adopted standards that, by its own admission, will increase fuel consumption and associated harmful emissions, while reducing automotive industry jobs, saving automakers nothing in per-vehicle costs (because they are presumed to pass those costs on to consumers), and costing consumers money (due to reduced fuel savings). Moreover, when some of the massive errors in NHTSA’s analysis of compliance costs and societal costs are corrected, the Rollback is demonstrably costly to society. *See supra* at 62; Public Interest

Petitioners' Br. at 26-36. Far from representing reasoned decision-making, NHTSA's Rollback, like EPA's, lacks any justification at all.

C. NHTSA Also Violated Other Statutes

In addition to contravening EPCA, NHTSA's Rollback flouted several other environmental protection statutes. NHTSA, like EPA, failed to conduct the conformity analysis required by the Clean Air Act. *See supra* Section I.B.2. In other words, NHTSA failed to assess the impacts of increased criteria-pollutant emissions on State Implementation Plans to meet or maintain federal air quality standards. NHTSA claimed such an analysis was not required because the emissions would be caused by decisions of automakers and consumers beyond its control. 85 Fed. Reg. at 25,250. But EPCA requires NHTSA to consider the environmental consequences of its fuel-economy standards and to adopt standards that force automakers to install technologies they otherwise would not. *See supra* 99, 104.

Additionally, NHTSA violated the National Environmental Policy Act by considering only action alternatives that would weaken fuel-economy standards—rather than the requisite reasonable range of alternatives—and inadequately considering the cumulative effects of its rulemaking and other recent agency action. *See* Public Interest Petitioners Br. 45-48.

Finally, NHTSA (and EPA) failed to comply with the Endangered Species Act's consultation requirement despite the likelihood that the Agencies' regulations would jeopardize endangered or threatened species or adversely affect critical habitat. *See id.* at 39-44. Each of these violations alone warrants vacatur. Combined, they highlight NHTSA's determination to push forward a rule void of legal justification without regard for its real-world impacts.

CONCLUSION

EPA's Revised Determination and both Agencies' Rollbacks should be vacated.

Dated: January 14, 2021

Respectfully submitted,

XAVIER BECERRA
Attorney General of California
ROBERT W. BYRNE
EDWARD H. OCHOA
Senior Assistant Attorneys General
GARY E. TAVETIAN
DAVID A. ZONANA
Supervising Deputy Attorneys General

/s/ M. Elaine Meckenstock

M. ELAINE MECKENSTOCK
Deputy Attorney General

Attorneys for Petitioner State of California, by and through its Governor Gavin Newsom, Attorney General Xavier Becerra, and California Air Resources Board

FOR THE STATE OF COLORADO

PHIL WEISER
Colorado Attorney General

/s/ Eric R. Olson

ERIC R. OLSON
Solicitor General
Office of the Attorney General
1300 Broadway, 10th Floor
Denver, CO 80203
Telephone: (720) 508-6548
eric.olson@coag.gov

Attorneys for Petitioner State of Colorado

FOR THE STATE OF CONNECTICUT

WILLIAM TONG
Attorney General of Connecticut
MATTHEW I. LEVINE
Assistant Attorney General

/s/ Scott N. Koschwitz

SCOTT N. KOSCHWITZ
Assistant Attorney General
165 Capitol Avenue
Hartford, CT 06106
Telephone: (860) 808-5250
Fax: (860) 808-5386
Scott.Koschwitz@ct.gov

Attorneys for Petitioner State of Connecticut

FOR THE STATE OF DELAWARE

KATHLEEN JENNINGS
Attorney General of the State of
Delaware

/s/ Kayli H. Spialter

KAYLI H. SPIALTER
CHRISTIAN WRIGHT
Deputy Attorneys General
Delaware Department of Justice
820 N. French Street, 6th Floor
Wilmington, DE 19801
Telephone: (302) 395-2604
Kayli.Spialter@delaware.gov

Attorneys for Petitioner State of Delaware

FOR THE DISTRICT OF COLUMBIA

KARL A. RACINE
Attorney General for the District of
Columbia

/s/ Loren L. AliKhan

LOREN L. ALIKHAN
Solicitor General
Office of the Attorney General for the
District of Columbia
400 6th Street, NW, Suite 8100
Washington, D.C. 20001
Telephone: (202) 727-6287
Fax: (202) 730-1864
Loren.AliKhan@dc.gov

Attorneys for Petitioner District of Columbia

FOR THE STATE OF HAWAII

CLARE E. CONNORS
Attorney General

/s/ Diane K. Taira*

DIANE K. TAIRA
KIMBERLY T. GUIDRY
Deputy Attorneys General
State of Hawaii Office of the Attorney
General
425 Queen Street
Honolulu, HI 96813
Telephone: (808) 587-3050
Diane.K.Taira@Hawaii.gov

**Application for admission pending*

Attorneys for Petitioner State of Hawaii

FOR THE STATE OF ILLINOIS

KWAME RAOUL
Attorney General of Illinois
MATTHEW J. DUNN
Chief, Environmental Enforcement/
Asbestos Litigation Division
JASON E. JAMES
Assistant Attorney General

/s/ Daniel I. Rottenberg

DANIEL I. ROTTENBERG
Assistant Attorney General
69 W. Washington St., 18th Floor
Chicago, IL 60602
Telephone: (312) 814-3816
DRottenberg@atg.state.il.us

Attorneys for Petitioner State of Illinois

FOR THE STATE OF MAINE

AARON M. FREY
Attorney General of Maine

/s/ Laura E. Jensen

LAURA E. JENSEN
Assistant Attorney General
6 State House Station
Augusta, ME 04333
Telephone: (207) 626-8868
Fax: (207) 626-8812
Laura.Jensen@maine.gov

Attorneys for Petitioner State of Maine

FOR THE STATE OF MARYLAND

BRIAN E. FROSH
Attorney General of Maryland

/s/ Cynthia M. Weisz

CYNTHIA M. WEISZ
Assistant Attorney General
Office of the Attorney General
Maryland Department of the
Environment
1800 Washington Blvd.
Baltimore, MD 21230
Telephone: (410) 537-3014
cynthia.weisz2@maryland.gov

JOHN B. HOWARD, JR.
JOSHUA M. SEGAL
STEVEN J. GOLDSTEIN
Special Assistant Attorneys General
Office of the Attorney General
200 St. Paul Place
Baltimore, MD 21202
Telephone: (410) 576-6300
jbhoward@oag.state.md.us
jsegal@oag.state.md.us
sgoldstein@oag.state.md.us

Attorneys for Petitioner State of Maryland

FOR THE COMMONWEALTH OF
MASSACHUSETTS

MAURA HEALEY
Attorney General

CHRISTOPHE COURCHESNE
Assistant Attorney General
Chief, Environmental Protection
Division

CAROL IANCU
Assistant Attorney General

MEGAN M. HERZOG

DAVID S. FRANKEL
Special Assistant Attorneys General

/s/ Matthew Ireland

MATTHEW IRELAND
Assistant Attorney General
Office of the Attorney General
Environmental Protection Division
One Ashburton Place, 18th Floor
Boston, MA 02108
Telephone: (617) 727-2200
matthew.ireland@mass.gov

*Attorneys for Petitioner Commonwealth of
Massachusetts*

FOR THE PEOPLE OF THE STATE OF
MICHIGAN

DANA NESSEL
Attorney General of Michigan

/s/ Neil D. Gordon

NEIL D. GORDON
GILLIAN E. WENER
Assistant Attorneys General
Michigan Department of Attorney
General
Environment, Natural Resources
and Agriculture Division
P.O. Box 30755
Lansing, MI 48909
Telephone: (517) 335-7664
gordonn1@michigan.gov

*Attorneys for Petitioner People of the State of
Michigan*

FOR THE STATE OF MINNESOTA

KEITH ELLISON
Attorney General of Minnesota

/s/ Peter N. Surdo

PETER N. SURDO
Special Assistant Attorney General
445 Minnesota Street, Suite 900
St. Paul, MN, 55101
Telephone: (651) 757-1061
Peter.Surdo@ag.state.mn.us

Attorneys for Petitioner State of Minnesota

FOR THE STATE OF NEVADA

AARON D. FORD
Attorney General of Nevada

/s/ Heidi Parry Stern

HEIDI PARRY STERN
Solicitor General
DANIEL P. NUBEL
Deputy Attorney General
Office of the Nevada Attorney General
100 N. Carson Street
Carson City, NV 89701
HStern@ag.nv.gov

Attorneys for Petitioner State of Nevada

FOR THE STATE OF NEW JERSEY

GURBIR S. GREWAL
Attorney General of New Jersey

/s/ Lisa Morelli

LISA MORELLI
Deputy Attorney General
25 Market St., PO Box 093
Trenton, NJ 08625-0093
Telephone: (609) 376-2745
Fax: (609) 341-5031
lisa.morelli@law.njoag.gov

Attorneys for Petitioner State of New Jersey

FOR THE STATE OF NEW MEXICO

HECTOR BALDERAS
Attorney General of New Mexico

/s/ William Grantham

WILLIAM GRANTHAM
Assistant Attorney General
State of New Mexico Office of the
Attorney General
Consumer & Environmental Protection
Division
201 Third Street NW, Suite 300
Albuquerque, NM 87102
Telephone: (505) 717-3520
wgrantham@nmag.gov

Attorneys for Petitioner State of New Mexico

FOR THE STATE OF NEW YORK

LETTIA JAMES
Attorney General of New York
STEVEN C. WU
Deputy Solicitor General
YUEH-RU CHU
Chief, Affirmative Litigation Section
Environmental Protection Bureau
AUSTIN THOMPSON
Assistant Attorney General

/s/ Gavin G. McCabe
GAVIN G. MCCABE
Assistant Attorney General
28 Liberty Street, 19th Floor
New York, NY 10005
Telephone: (212) 416-8469
gavin.mccabe@ag.ny.gov

Attorneys for Petitioner State of New York

FOR THE STATE OF NORTH CAROLINA

JOSHUA H. STEIN
Attorney General
DANIEL S. HIRSCHMAN
Senior Deputy Attorney General
FRANCISCO BENZONI
Special Deputy Attorney General

/s/ Asher P. Spiller
ASHER P. SPILLER
TAYLOR CRABTREE
Assistant Attorneys General
North Carolina Department of Justice
P.O. Box 629
Raleigh, NC 27602
Telephone: (919) 716-6400

Attorneys for Petitioner State of North Carolina

FOR THE STATE OF OREGON

ELLEN F. ROSENBLUM
Attorney General of Oregon

/s/ Paul Garrahan

PAUL GARRAHAN
Attorney-in-Charge
STEVE NOVICK
Special Assistant Attorney General
Natural Resources Section
Oregon Department of Justice
1162 Court Street NE
Salem, OR 97301-4096
Telephone: (503) 947-4593
Paul.Garrahan@doj.state.or.us
Steve.Novick@doj.state.or.us

Attorneys for Petitioner State of Oregon

FOR THE STATE OF RHODE ISLAND

PETER F. NERONHA
Attorney General of Rhode Island

/s/ Gregory S. Schultz

GREGORY S. SCHULTZ
Special Assistant Attorney General
Office of Attorney General
150 South Main Street
Providence, RI 02903
Telephone: (401) 274-4400
gschultz@riag.ri.gov

Attorneys for Petitioner State of Rhode Island

FOR THE COMMONWEALTH OF
PENNSYLVANIA

JOSH SHAPIRO
Attorney General of Pennsylvania
MICHAEL J. FISCHER
Chief Deputy Attorney General
JACOB B. BOYER
Deputy Attorney General

/s/ Ann R. Johnston

ANN R. JOHNSTON
Senior Deputy Attorney General
Office of Attorney General
1600 Arch St. Suite 300
Philadelphia, PA 19103
Telephone: (215) 560-2171
ajohnston@attorneygeneral.gov

*Attorneys for Petitioner Commonwealth of
Pennsylvania*

FOR THE STATE OF VERMONT

THOMAS J. DONOVAN, JR.
Attorney General

/s/ Nicholas F. Persampieri

NICHOLAS F. PERSAMPIERI
Assistant Attorney General
Office of the Attorney General
109 State Street
Montpelier, VT 05609
Telephone: (802) 828-3171
nick.persampieri@vermont.gov

Attorneys for Petitioner State of Vermont

FOR THE COMMONWEALTH OF VIRGINIA

MARK R. HERRING

Attorney General

PAUL KUGELMAN, JR.

Senior Assistant Attorney General

Chief, Environmental Section

/s/ Caitlin C. G. O'Dwyer

CAITLIN C. G. O'DWYER

Assistant Attorney General

Office of the Attorney General

Commonwealth of Virginia

202 North 9th Street

Richmond, VA 23219

Telephone: (804) 786-1780

godwyer@oag.state.va.us

*Attorneys for Petitioner Commonwealth of
Virginia*

FOR THE STATE OF WASHINGTON

ROBERT W. FERGUSON

Attorney General

/s/ Emily C. Nelson

EMILY C. NELSON

Assistant Attorney General

Office of the Attorney General

P.O. Box 40117

Olympia, WA 98504

Telephone: (360) 586-4607

emily.nelson@atg.wa.gov

Attorneys for Petitioner State of Washington

FOR THE STATE OF WISCONSIN

JOSHUA L. KAUL
Attorney General of Wisconsin

/s/ Jennifer L. Vandermeuse

JENNIFER L. VANDERMEUSE
GABE JOHNSON-KARP
Assistant Attorneys General
Wisconsin Department of Justice
Post Office Box 7857
Madison, WI 53702-7857
Telephone: (608) 266-7741 (JLV)
(608) 267-8904 (GJK)
Fax: (608) 267-2223
vandermeusejl@doj.state.wi.us
johnsonkarp@doj.state.wi.us

Attorneys for Petitioner State of Wisconsin

FOR THE CITY OF LOS ANGELES

MICHAEL N. FEUER
Los Angeles City Attorney
MICHAEL J. BOSTROM
Assistant City Attorney

/s/ Michael J. Bostrom

MICHAEL J. BOSTROM
Assistant City Attorney
200 N. Spring Street, 14th Floor
Los Angeles, CA 90012
Telephone: (213) 978-1867
Fax: (213) 978-2286
Michael.Bostrom@lacity.org

Attorneys for Petitioner City of Los Angeles

FOR THE CITY OF NEW YORK

JAMES E. JOHNSON
New York City Corporation Counsel
CHRISTOPHER G. KING
ALICE R. BAKER
Senior Counsel
SHIVA PRAKASH
Assistant Corporation Counsel

/s/ Christopher G. King
CHRISTOPHER G. KING
Senior Counsel
New York City Law Department
100 Church Street
New York, New York
Telephone: (212) 356-2074
Fax: (212) 356-2084
cking@law.nyc.gov

Attorneys for Petitioner City of New York

FOR THE CITY AND COUNTY OF DENVER

KRISTIN M. BRONSON
City Attorney
EDWARD J. GORMAN
LINDSAY S. CARDER
Assistant City Attorneys

/s/ Edward J. Gorman
EDWARD J. GORMAN
Assistant City Attorney
Denver City Attorney's Office
201 W. Colfax Avenue, Dept. 1207
Denver, Colorado 80202
Telephone: (720) 913-3275
Edward.Gorman@denvergov.org

*Attorneys for Petitioner City and County of
Denver*

FOR THE CITY AND COUNTY OF SAN
FRANCISCO

DENNIS J. HERRERA
City Attorney
ROBB W. KAPLA
Deputy City Attorney

/s/ Robb W. Kapla

ROBB W. KAPLA
Deputy City Attorney
City Hall, Room 234
1 Dr. Carlton B. Goodlett Place
San Francisco, California 94102-4602
Telephone: (415) 554-4746
Fax: (415) 554-4715
Robb.Kapla@sfcityatty.org

*Attorneys for Petitioner City and County of San
Francisco*

FOR THE BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

/s/ Brian C. Bunger

BRIAN C. BUNGER, District Counsel
RANDI LEIGH WALLACH
Bay Area Air Quality Mgmt. District
375 Beale Street, Suite 600
San Francisco, CA 94105
Telephone: (415) 749-4920
Fax: (415) 749-5103
BBunger@baaqmd.gov

*Attorneys for Petitioner Bay Area Air Quality
Management District*

FOR THE SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

/s/ Kathrine Pittard

KATHRINE PITTARD, District
Counsel
Sacramento Metropolitan Air Quality
Mgmt. District
777 12th Street
Sacramento, CA 95819
Telephone: (916) 874-4907
Fax: (916) 874-4899
KPittard@airquality.org

*Attorney for Petitioner Sacramento Metropolitan
Air Quality Management District*

FOR THE SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT

/s/ Bayron Gilchrist

BAYRON GILCHRIST, General Counsel
BARBARA BAIRD, Chief Deputy
Counsel
BRIAN TOMASOVIC
KATHRYN ROBERTS
South Coast Air Quality Mgmt. District
21865 Copley Dr., Diamond Bar, CA
91765
Telephone: (909) 396-3400
Fax: (909) 396-2961
BGilchrist@aqmd.gov

*Attorneys for Petitioner South Coast Air Quality
Management District*

CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing brief complies with the type-volume limitations of the applicable rules and this Court's briefing format order dated October 19, 2020 (ECF No. 1867064). According to Microsoft Word, the portions of this document not excluded by Federal Rule of Appellate Procedure 32(f) and Circuit Rule 32(e)(1) contain 21,623 words. When added to the words of the other Coordinating Petitioners' briefs, this does not exceed the 36,800 words the Court allocated to these Petitioners. I further certify that this brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type-style requirements of Federal Rule of Appellate Procedure 32(a)(6) because this document has been prepared in a proportionally spaced, 14-point typeface (Garamond).

/s/ M. Elaine Meckenstock

M. ELAINE MECKENSTOCK

Deputy Attorney General

1515 Clay Street, 20th Floor

Oakland, CA 94612

Telephone: (510) 879-0299

Fax: (510) 622-2270

Elaine.Meckenstock@doj.ca.gov

CERTIFICATE OF SERVICE

I hereby certify that on January 14, 2021, I electronically filed the foregoing brief of State and Local Government Petitioners, and accompanying Addendum, with the United States Court of Appeals for the District of Columbia Circuit via the CM/ECF system. All parties that are represented by counsel registered as CM/ECF users will be served by that system. I further certify that service will be accomplished via email for the following participant:

Diane K. Taira
State of Hawaii
Dept. of the Attorney General
425 Queen Street
Honolulu, HI 96813
Diane.K.Tairi@hawaii.gov

/s/ M. Elaine Meckenstock
M. ELAINE MECKENSTOCK
Deputy Attorney General
1515 Clay Street, 20th Floor
Oakland, CA 94612
Telephone: (510) 879-0299
Fax: (510) 622-2270
Elaine.Meckenstock@doj.ca.gov

ORAL ARGUMENT NOT YET SCHEDULED

No. 20-1145

Consolidated with Nos. 20-1167, 20-1168, 20-1169, 20-1173,
20-1174, 20-1176, 20-1177, and 20-1230

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

COMPETITIVE ENTERPRISE INSTITUTE, et al.,
Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, et al.,
Respondents.

**STATE AND LOCAL GOVERNMENT PETITIONERS' ADDENDUM OF
STATUTES, REGULATIONS, AND STANDING DECLARATIONS
VOLUME A: STATUTES AND REGULATIONS**

XAVIER BECERRA
Attorney General of
California
ROBERT W. BYRNE
EDWARD H. OCHOA
Senior Assistant
Attorneys General
GARY E. TAVETIAN
DAVID A. ZONANA
Supervising Deputy
Attorneys General

JESSICA BARCLAY-STROBEL
JULIA K. FORGIE
MEREDITH HANKINS
MICAELA M. HARMS
JENNIFER KALNINS TEMPLE
CAROLYN NELSON ROWAN
ROBERT D. SWANSON
JONATHAN A. WIENER
DAVID ZAFT
M. ELAINE MECKENSTOCK
Deputy Attorneys General
1515 Clay Street, 20th Floor
Oakland, CA 94612-0550
Telephone: (510) 879-0299
Elaine.Meckenstock@doj.ca.gov

*Attorneys for Petitioner State of California, by and through its Governor Gavin Newsom, Attorney
General Xavier Becerra, and the California Air Resources Board*

Additional parties and counsel listed on signature pages of brief filed herewith

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§ 703. Form and venue of proceeding

The form of proceeding for judicial review is the special statutory review proceeding relevant to the subject matter in a court specified by statute or, in the absence or inadequacy thereof, any applicable form of legal action, including actions for declaratory judgments or writs of prohibitory or mandatory injunction or habeas corpus, in a court of competent jurisdiction. If no special statutory review proceeding is applicable, the action for judicial review may be brought against the United States, the agency by its official title, or the appropriate officer. Except to the extent that prior, adequate, and exclusive opportunity for judicial review is provided by law, agency action is subject to judicial review in civil or criminal proceedings for judicial enforcement.

(Pub. L. 89-554, Sept. 6, 1966, 80 Stat. 392; Pub. L. 94-574, §1, Oct. 21, 1976, 90 Stat. 2721.)

HISTORICAL AND REVISION NOTES

<i>Derivation</i>	<i>U.S. Code</i>	<i>Revised Statutes and Statutes at Large</i>
.....	5 U.S.C. 1009(b).	June 11, 1946, ch. 324, §10(b), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface to the report.

AMENDMENTS

1976—Pub. L. 94-574 provided that if no special statutory review proceeding is applicable, the action for judicial review may be brought against the United States, the agency by its official title, or the appropriate officer as defendant.

§ 704. Actions reviewable

Agency action made reviewable by statute and final agency action for which there is no other adequate remedy in a court are subject to judicial review. A preliminary, procedural, or intermediate agency action or ruling not directly reviewable is subject to review on the review of the final agency action. Except as otherwise expressly required by statute, agency action otherwise final is final for the purposes of this section whether or not there has been presented or determined an application for a declaratory order, for any form of reconsideration, or, unless the agency otherwise requires by rule and provides that the action meanwhile is inoperative, for an appeal to superior agency authority.

(Pub. L. 89-554, Sept. 6, 1966, 80 Stat. 392.)

HISTORICAL AND REVISION NOTES

<i>Derivation</i>	<i>U.S. Code</i>	<i>Revised Statutes and Statutes at Large</i>
.....	5 U.S.C. 1009(c).	June 11, 1946, ch. 324, §10(c), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

§ 705. Relief pending review

When an agency finds that justice so requires, it may postpone the effective date of action taken by it, pending judicial review. On such

conditions as may be required and to the extent necessary to prevent irreparable injury, the reviewing court, including the court to which a case may be taken on appeal from or on application for certiorari or other writ to a reviewing court, may issue all necessary and appropriate process to postpone the effective date of an agency action or to preserve status or rights pending conclusion of the review proceedings.

(Pub. L. 89-554, Sept. 6, 1966, 80 Stat. 393.)

HISTORICAL AND REVISION NOTES

<i>Derivation</i>	<i>U.S. Code</i>	<i>Revised Statutes and Statutes at Large</i>
.....	5 U.S.C. 1009(d).	June 11, 1946, ch. 324, §10(d), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

§ 706. Scope of review

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—

- (1) compel agency action unlawfully withheld or unreasonably delayed; and
- (2) hold unlawful and set aside agency action, findings, and conclusions found to be—
 - (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
 - (B) contrary to constitutional right, power, privilege, or immunity;
 - (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
 - (D) without observance of procedure required by law;
 - (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or
 - (F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

(Pub. L. 89-554, Sept. 6, 1966, 80 Stat. 393.)

HISTORICAL AND REVISION NOTES

<i>Derivation</i>	<i>U.S. Code</i>	<i>Revised Statutes and Statutes at Large</i>
.....	5 U.S.C. 1009(e).	June 11, 1946, ch. 324, §10(e), 60 Stat. 243.

Standard changes are made to conform with the definitions applicable and the style of this title as outlined in the preface of this report.

ABBREVIATION OF RECORD

Pub. L. 85-791, Aug. 28, 1958, 72 Stat. 941, which authorized abbreviation of record on review or enforcement of orders of administrative agencies and review on the original papers, provided, in section 35 thereof,

that: “This Act [see Tables for classification] shall not be construed to repeal or modify any provision of the Administrative Procedure Act [see Short Title note set out preceding section 551 of this title].”

CHAPTER 8—CONGRESSIONAL REVIEW OF AGENCY RULEMAKING

Sec.	
801.	Congressional review.
802.	Congressional disapproval procedure.
803.	Special rule on statutory, regulatory, and judicial deadlines.
804.	Definitions.
805.	Judicial review.
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807.	Exemption for monetary policy.
808.	Effective date of certain rules.

§ 801. Congressional review

(a)(1)(A) Before a rule can take effect, the Federal agency promulgating such rule shall submit to each House of the Congress and to the Comptroller General a report containing—

- (i) a copy of the rule;
- (ii) a concise general statement relating to the rule, including whether it is a major rule; and
- (iii) the proposed effective date of the rule.

(B) On the date of the submission of the report under subparagraph (A), the Federal agency promulgating the rule shall submit to the Comptroller General and make available to each House of Congress—

- (i) a complete copy of the cost-benefit analysis of the rule, if any;
- (ii) the agency’s actions relevant to sections 603, 604, 605, 607, and 609;
- (iii) the agency’s actions relevant to sections 202, 203, 204, and 205 of the Unfunded Mandates Reform Act of 1995; and
- (iv) any other relevant information or requirements under any other Act and any relevant Executive orders.

(C) Upon receipt of a report submitted under subparagraph (A), each House shall provide copies of the report to the chairman and ranking member of each standing committee with jurisdiction under the rules of the House of Representatives or the Senate to report a bill to amend the provision of law under which the rule is issued.

(2)(A) The Comptroller General shall provide a report on each major rule to the committees of jurisdiction in each House of the Congress by the end of 15 calendar days after the submission or publication date as provided in section 802(b)(2). The report of the Comptroller General shall include an assessment of the agency’s compliance with procedural steps required by paragraph (1)(B).

(B) Federal agencies shall cooperate with the Comptroller General by providing information relevant to the Comptroller General’s report under subparagraph (A).

(3) A major rule relating to a report submitted under paragraph (1) shall take effect on the latest of—

- (A) the later of the date occurring 60 days after the date on which—
 - (i) the Congress receives the report submitted under paragraph (1); or

(ii) the rule is published in the Federal Register, if so published;

(B) if the Congress passes a joint resolution of disapproval described in section 802 relating to the rule, and the President signs a veto of such resolution, the earlier date—

- (i) on which either House of Congress votes and fails to override the veto of the President; or
- (ii) occurring 30 session days after the date on which the Congress received the veto and objections of the President; or

(C) the date the rule would have otherwise taken effect, if not for this section (unless a joint resolution of disapproval under section 802 is enacted).

(4) Except for a major rule, a rule shall take effect as otherwise provided by law after submission to Congress under paragraph (1).

(5) Notwithstanding paragraph (3), the effective date of a rule shall not be delayed by operation of this chapter beyond the date on which either House of Congress votes to reject a joint resolution of disapproval under section 802.

(b)(1) A rule shall not take effect (or continue), if the Congress enacts a joint resolution of disapproval, described under section 802, of the rule.

(2) A rule that does not take effect (or does not continue) under paragraph (1) may not be reissued in substantially the same form, and a new rule that is substantially the same as such a rule may not be issued, unless the reissued or new rule is specifically authorized by a law enacted after the date of the joint resolution disapproving the original rule.

(c)(1) Notwithstanding any other provision of this section (except subject to paragraph (3)), a rule that would not take effect by reason of subsection (a)(3) may take effect, if the President makes a determination under paragraph (2) and submits written notice of such determination to the Congress.

(2) Paragraph (1) applies to a determination made by the President by Executive order that the rule should take effect because such rule is—

- (A) necessary because of an imminent threat to health or safety or other emergency;
- (B) necessary for the enforcement of criminal laws;
- (C) necessary for national security; or
- (D) issued pursuant to any statute implementing an international trade agreement.

(3) An exercise by the President of the authority under this subsection shall have no effect on the procedures under section 802 or the effect of a joint resolution of disapproval under this section.

(d)(1) In addition to the opportunity for review otherwise provided under this chapter, in the case of any rule for which a report was submitted in accordance with subsection (a)(1)(A) during the period beginning on the date occurring—

- (A) in the case of the Senate, 60 session days, or
- (B) in the case of the House of Representatives, 60 legislative days,

before the date the Congress adjourns a session of Congress through the date on which the same

1978—Subsec. (c). Pub. L. 95-632 designated existing provision as par. (1), and in par. (1) as so designated, redesignated pars. (1) to (5) as subpars. (A) to (E), respectively, and subpars. (A) and (B) of subpar. (E), as so redesignated, as cls. (i) and (ii), respectively, substituted “paragraph” for “subsection” in provision preceding subpar. (A), as so redesignated, “endangered or threatened species of fish or wildlife” for “endangered species or threatened species” in subpar. (D), as so redesignated, “subparagraphs (C), (D), and (E) of this paragraph” for “paragraphs (3), (4), and (5) of this subsection” in cl. (i) of subpar. (E), as so redesignated, “clause (i) and this clause” for “subparagraph (A) and this subparagraph” in cl. (ii) of subpar. (E), as so redesignated, and added par. (2).

1977—Subsec. (c). Pub. L. 95-212, §1(1), inserted provisions that States in which the State fish and wildlife agencies do not possess the broad authority to conserve all resident species of fish and wildlife which the Secretary determines to be threatened or endangered may nevertheless qualify for cooperative agreement funds if they satisfy all other requirements and have plans to devote immediate attention to those species most urgently in need of conservation programs.

Subsec. (i). Pub. L. 95-212, §1(2), substituted provisions authorizing appropriations of \$10,000,000 to cover the period ending Sept. 30, 1977, and \$16,000,000 to cover the period beginning Oct. 1, 1977, and ending Sept. 30, 1981, for provisions authorizing appropriations of not to exceed \$10,000,000 through the fiscal year ending June 30, 1977.

COOPERATIVE AGREEMENTS WITH STATES UNAFFECTED
BY 1981 AMENDMENT OF MARINE MAMMAL PROTECTION
ACT

Nothing in the amendment of section 1379 of this title by section 4(a) of Pub. L. 97-58 to be construed as affecting in any manner any cooperative agreement entered into by a State under subsec. (c) of this section before, on, or after Oct. 9, 1981, see section 4(b) of Pub. L. 97-58, set out as a note under section 1379 of this title.

§ 1536. Interagency cooperation

(a) Federal agency actions and consultations

(1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this chapter. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 1533 of this title.

(2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an “agency action”) is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

(3) Subject to such guidelines as the Secretary may establish, a Federal agency shall consult with the Secretary on any prospective agency

action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species.

(4) Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under section 1533 of this title or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. This paragraph does not require a limitation on the commitment of resources as described in subsection (d).

(b) Opinion of Secretary

(1)(A) Consultation under subsection (a)(2) with respect to any agency action shall be concluded within the 90-day period beginning on the date on which initiated or, subject to subparagraph (B), within such other period of time as is mutually agreeable to the Secretary and the Federal agency.

(B) In the case of an agency action involving a permit or license applicant, the Secretary and the Federal agency may not mutually agree to conclude consultation within a period exceeding 90 days unless the Secretary, before the close of the 90th day referred to in subparagraph (A)—

(i) if the consultation period proposed to be agreed to will end before the 150th day after the date on which consultation was initiated, submits to the applicant a written statement setting forth—

(I) the reasons why a longer period is required,

(II) the information that is required to complete the consultation, and

(III) the estimated date on which consultation will be completed; or

(ii) if the consultation period proposed to be agreed to will end 150 or more days after the date on which consultation was initiated, obtains the consent of the applicant to such period.

The Secretary and the Federal agency may mutually agree to extend a consultation period established under the preceding sentence if the Secretary, before the close of such period, obtains the consent of the applicant to the extension.

(2) Consultation under subsection (a)(3) shall be concluded within such period as is agreeable to the Secretary, the Federal agency, and the applicant concerned.

(3)(A) Promptly after conclusion of consultation under paragraph (2) or (3) of subsection (a), the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary’s opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.

(B) Consultation under subsection (a)(3), and an opinion issued by the Secretary incident to such consultation, regarding an agency action shall be treated respectively as a consultation under subsection (a)(2), and as an opinion issued after consultation under such subsection, regarding that action if the Secretary reviews the action before it is commenced by the Federal agency and finds, and notifies such agency, that no significant changes have been made with respect to the action and that no significant change has occurred regarding the information used during the initial consultation.

(4) If after consultation under subsection (a)(2), the Secretary concludes that—

(A) the agency action will not violate such subsection, or offers reasonable and prudent alternatives which the Secretary believes would not violate such subsection;

(B) the taking of an endangered species or a threatened species incidental to the agency action will not violate such subsection; and

(C) if an endangered species or threatened species of a marine mammal is involved, the taking is authorized pursuant to section 1371(a)(5) of this title;

the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that—

(i) specifies the impact of such incidental taking on the species,

(ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact,

(iii) in the case of marine mammals, specifies those measures that are necessary to comply with section 1371(a)(5) of this title with regard to such taking, and

(iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii).

(c) Biological assessment

(1) To facilitate compliance with the requirements of subsection (a)(2), each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into and for which no construction has begun on November 10, 1978, request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action. Such assessment shall be completed within 180 days after the date on which initiated (or within such other period as is mutually agreed to by the Secretary and such agency, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of

the proposed extension and the reasons therefor) and, before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(2) Any person who may wish to apply for an exemption under subsection (g) of this section for that action may conduct a biological assessment to identify any endangered species or threatened species which is likely to be affected by such action. Any such biological assessment must, however, be conducted in cooperation with the Secretary and under the supervision of the appropriate Federal agency.

(d) Limitation on commitment of resources

After initiation of consultation required under subsection (a)(2), the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2) of this section.

(e) Endangered Species Committee

(1) There is established a committee to be known as the Endangered Species Committee (hereinafter in this section referred to as the "Committee").

(2) The Committee shall review any application submitted to it pursuant to this section and determine in accordance with subsection (h) of this section whether or not to grant an exemption from the requirements of subsection (a)(2) of this section for the action set forth in such application.

(3) The Committee shall be composed of seven members as follows:

(A) The Secretary of Agriculture.

(B) The Secretary of the Army.

(C) The Chairman of the Council of Economic Advisors.

(D) The Administrator of the Environmental Protection Agency.

(E) The Secretary of the Interior.

(F) The Administrator of the National Oceanic and Atmospheric Administration.

(G) The President, after consideration of any recommendations received pursuant to subsection (g)(2)(B) shall appoint one individual from each affected State, as determined by the Secretary, to be a member of the Committee for the consideration of the application for exemption for an agency action with respect to which such recommendations are made, not later than 30 days after an application is submitted pursuant to this section.

(4)(A) Members of the Committee shall receive no additional pay on account of their service on the Committee.

(B) While away from their homes or regular places of business in the performance of services for the Committee, members of the Committee shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Gov-

ernment service are allowed expenses under section 5703 of title 5.

(5)(A) Five members of the Committee or their representatives shall constitute a quorum for the transaction of any function of the Committee, except that, in no case shall any representative be considered in determining the existence of a quorum for the transaction of any function of the Committee if that function involves a vote by the Committee on any matter before the Committee.

(B) The Secretary of the Interior shall be the Chairman of the Committee.

(C) The Committee shall meet at the call of the Chairman or five of its members.

(D) All meetings and records of the Committee shall be open to the public.

(6) Upon request of the Committee, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Committee to assist it in carrying out its duties under this section.

(7)(A) The Committee may for the purpose of carrying out its duties under this section hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Committee deems advisable.

(B) When so authorized by the Committee, any member or agent of the Committee may take any action which the Committee is authorized to take by this paragraph.

(C) Subject to the Privacy Act [5 U.S.C. 552a], the Committee may secure directly from any Federal agency information necessary to enable it to carry out its duties under this section. Upon request of the Chairman of the Committee, the head of such Federal agency shall furnish such information to the Committee.

(D) The Committee may use the United States mails in the same manner and upon the same conditions as a Federal agency.

(E) The Administrator of General Services shall provide to the Committee on a reimbursable basis such administrative support services as the Committee may request.

(8) In carrying out its duties under this section, the Committee may promulgate and amend such rules, regulations, and procedures, and issue and amend such orders as it deems necessary.

(9) For the purpose of obtaining information necessary for the consideration of an application for an exemption under this section the Committee may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents.

(10) In no case shall any representative, including a representative of a member designated pursuant to paragraph (3)(G) of this subsection, be eligible to cast a vote on behalf of any member.

(f) Promulgation of regulations; form and contents of exemption application

Not later than 90 days after November 10, 1978, the Secretary shall promulgate regulations which set forth the form and manner in which applications for exemption shall be submitted to the Secretary and the information to be contained in such applications. Such regulations shall require that information submitted in an

application by the head of any Federal agency with respect to any agency action include, but not be limited to—

(1) a description of the consultation process carried out pursuant to subsection (a)(2) of this section between the head of the Federal agency and the Secretary; and

(2) a statement describing why such action cannot be altered or modified to conform with the requirements of subsection (a)(2) of this section.

(g) Application for exemption; report to Committee

(1) A Federal agency, the Governor of the State in which an agency action will occur, if any, or a permit or license applicant may apply to the Secretary for an exemption for an agency action of such agency if, after consultation under subsection (a)(2), the Secretary's opinion under subsection (b) indicates that the agency action would violate subsection (a)(2). An application for an exemption shall be considered initially by the Secretary in the manner provided for in this subsection, and shall be considered by the Committee for a final determination under subsection (h) after a report is made pursuant to paragraph (5). The applicant for an exemption shall be referred to as the "exemption applicant" in this section.

(2)(A) An exemption applicant shall submit a written application to the Secretary, in a form prescribed under subsection (f), not later than 90 days after the completion of the consultation process; except that, in the case of any agency action involving a permit or license applicant, such application shall be submitted not later than 90 days after the date on which the Federal agency concerned takes final agency action with respect to the issuance of the permit or license. For purposes of the preceding sentence, the term "final agency action" means (i) a disposition by an agency with respect to the issuance of a permit or license that is subject to administrative review, whether or not such disposition is subject to judicial review; or (ii) if administrative review is sought with respect to such disposition, the decision resulting after such review. Such application shall set forth the reasons why the exemption applicant considers that the agency action meets the requirements for an exemption under this subsection.

(B) Upon receipt of an application for exemption for an agency action under paragraph (1), the Secretary shall promptly (i) notify the Governor of each affected State, if any, as determined by the Secretary, and request the Governors so notified to recommend individuals to be appointed to the Endangered Species Committee for consideration of such application; and (ii) publish notice of receipt of the application in the Federal Register, including a summary of the information contained in the application and a description of the agency action with respect to which the application for exemption has been filed.

(3) The Secretary shall within 20 days after the receipt of an application for exemption, or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary—

(A) determine that the Federal agency concerned and the exemption applicant have—

(i) carried out the consultation responsibilities described in subsection (a) in good faith and made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which would not violate subsection (a)(2);

(ii) conducted any biological assessment required by subsection (c); and

(iii) to the extent determinable within the time provided herein, refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d); or

(B) deny the application for exemption because the Federal agency concerned or the exemption applicant have not met the requirements set forth in subparagraph (A)(i), (ii), and (iii).

The denial of an application under subparagraph (B) shall be considered final agency action for purposes of chapter 7 of title 5.

(4) If the Secretary determines that the Federal agency concerned and the exemption applicant have met the requirements set forth in paragraph (3)(A)(i), (ii), and (iii) he shall, in consultation with the Members of the Committee, hold a hearing on the application for exemption in accordance with sections 554, 555, and 556 (other than subsection (b)(1) and (2) thereof) of title 5 and prepare the report to be submitted pursuant to paragraph (5).

(5) Within 140 days after making the determinations under paragraph (3) or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary, the Secretary shall submit to the Committee a report discussing—

(A) the availability of reasonable and prudent alternatives to the agency action, and the nature and extent of the benefits of the agency action and of alternative courses of action consistent with conserving the species or the critical habitat;

(B) a summary of the evidence concerning whether or not the agency action is in the public interest and is of national or regional significance;

(C) appropriate reasonable mitigation and enhancement measures which should be considered by the Committee; and

(D) whether the Federal agency concerned and the exemption applicant refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d).

(6) To the extent practicable within the time required for action under subsection (g) of this section, and except to the extent inconsistent with the requirements of this section, the consideration of any application for an exemption under this section and the conduct of any hearing under this subsection shall be in accordance with sections 554, 555, and 556 (other than subsection (b)(3) of section 556) of title 5.

(7) Upon request of the Secretary, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of

such agency to the Secretary to assist him in carrying out his duties under this section.

(8) All meetings and records resulting from activities pursuant to this subsection shall be open to the public.

(h) Grant of exemption

(1) The Committee shall make a final determination whether or not to grant an exemption within 30 days after receiving the report of the Secretary pursuant to subsection (g)(5). The Committee shall grant an exemption from the requirements of subsection (a)(2) for an agency action if, by a vote of not less than five of its members voting in person—

(A) it determines on the record, based on the report of the Secretary, the record of the hearing held under subsection (g)(4) and on such other testimony or evidence as it may receive, that—

(i) there are no reasonable and prudent alternatives to the agency action;

(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;

(iii) the action is of regional or national significance; and

(iv) neither the Federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources prohibited by subsection (d); and

(B) it establishes such reasonable mitigation and enhancement measures, including, but not limited to, live propagation, transplantation, and habitat acquisition and improvement, as are necessary and appropriate to minimize the adverse effects of the agency action upon the endangered species, threatened species, or critical habitat concerned.

Any final determination by the Committee under this subsection shall be considered final agency action for purposes of chapter 7 of title 5.

(2)(A) Except as provided in subparagraph (B), an exemption for an agency action granted under paragraph (1) shall constitute a permanent exemption with respect to all endangered or threatened species for the purposes of completing such agency action—

(i) regardless whether the species was identified in the biological assessment; and

(ii) only if a biological assessment has been conducted under subsection (c) with respect to such agency action.

(B) An exemption shall be permanent under subparagraph (A) unless—

(i) the Secretary finds, based on the best scientific and commercial data available, that such exemption would result in the extinction of a species that was not the subject of consultation under subsection (a)(2) or was not identified in any biological assessment conducted under subsection (c), and

(ii) the Committee determines within 60 days after the date of the Secretary's finding that the exemption should not be permanent.

If the Secretary makes a finding described in clause (i), the Committee shall meet with re-

spect to the matter within 30 days after the date of the finding.

(i) Review by Secretary of State; violation of international treaty or other international obligation of United States

Notwithstanding any other provision of this chapter, the Committee shall be prohibited from considering for exemption any application made to it, if the Secretary of State, after a review of the proposed agency action and its potential implications, and after hearing, certifies, in writing, to the Committee within 60 days of any application made under this section that the granting of any such exemption and the carrying out of such action would be in violation of an international treaty obligation or other international obligation of the United States. The Secretary of State shall, at the time of such certification, publish a copy thereof in the Federal Register.

(j) Exemption for national security reasons

Notwithstanding any other provision of this chapter, the Committee shall grant an exemption for any agency action if the Secretary of Defense finds that such exemption is necessary for reasons of national security.

(k) Exemption decision not considered major Federal action; environmental impact statement

An exemption decision by the Committee under this section shall not be a major Federal action for purposes of the National Environmental Policy Act of 1969 [42 U.S.C. 4321 et seq.]: *Provided*, That an environmental impact statement which discusses the impacts upon endangered species or threatened species or their critical habitats shall have been previously prepared with respect to any agency action exempted by such order.

(l) Committee order granting exemption; cost of mitigation and enhancement measures; report by applicant to Council on Environmental Quality

(1) If the Committee determines under subsection (h) that an exemption should be granted with respect to any agency action, the Committee shall issue an order granting the exemption and specifying the mitigation and enhancement measures established pursuant to subsection (h) which shall be carried out and paid for by the exemption applicant in implementing the agency action. All necessary mitigation and enhancement measures shall be authorized prior to the implementing of the agency action and funded concurrently with all other project features.

(2) The applicant receiving such exemption shall include the costs of such mitigation and enhancement measures within the overall costs of continuing the proposed action. Notwithstanding the preceding sentence the costs of such measures shall not be treated as project costs for the purpose of computing benefit-cost or other ratios for the proposed action. Any applicant may request the Secretary to carry out such mitigation and enhancement measures. The costs incurred by the Secretary in carrying out any such measures shall be paid by the applicant receiving the exemption. No later than

one year after the granting of an exemption, the exemption applicant shall submit to the Council on Environmental Quality a report describing its compliance with the mitigation and enhancement measures prescribed by this section. Such a report shall be submitted annually until all such mitigation and enhancement measures have been completed. Notice of the public availability of such reports shall be published in the Federal Register by the Council on Environmental Quality.

(m) Notice requirement for citizen suits not applicable

The 60-day notice requirement of section 1540(g) of this title shall not apply with respect to review of any final determination of the Committee under subsection (h) of this section granting an exemption from the requirements of subsection (a)(2) of this section.

(n) Judicial review

Any person, as defined by section 1532(13) of this title, may obtain judicial review, under chapter 7 of title 5, of any decision of the Endangered Species Committee under subsection (h) in the United States Court of Appeals for (1) any circuit wherein the agency action concerned will be, or is being, carried out, or (2) in any case in which the agency action will be, or is being, carried out outside of any circuit, the District of Columbia, by filing in such court within 90 days after the date of issuance of the decision, a written petition for review. A copy of such petition shall be transmitted by the clerk of the court to the Committee and the Committee shall file in the court the record in the proceeding, as provided in section 2112 of title 28. Attorneys designated by the Endangered Species Committee may appear for, and represent the Committee in any action for review under this subsection.

(o) Exemption as providing exception on taking of endangered species

Notwithstanding sections 1533(d) and 1538(a)(1)(B) and (C) of this title, sections 1371 and 1372 of this title, or any regulation promulgated to implement any such section—

(1) any action for which an exemption is granted under subsection (h) shall not be considered to be a taking of any endangered species or threatened species with respect to any activity which is necessary to carry out such action; and

(2) any taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iv) shall not be considered to be a prohibited taking of the species concerned.

(p) Exemptions in Presidentially declared disaster areas

In any area which has been declared by the President to be a major disaster area under the Disaster Relief and Emergency Assistance Act [42 U.S.C. 5121 et seq.], the President is authorized to make the determinations required by subsections (g) and (h) of this section for any project for the repair or replacement of a public facility substantially as it existed prior to the disaster under section 405 or 406 of the Disaster Relief and Emergency Assistance Act [42 U.S.C.

5171 or 5172], and which the President determines (1) is necessary to prevent the recurrence of such a natural disaster and to reduce the potential loss of human life, and (2) to involve an emergency situation which does not allow the ordinary procedures of this section to be followed. Notwithstanding any other provision of this section, the Committee shall accept the determinations of the President under this subsection.

(Pub. L. 93-205, § 7, Dec. 28, 1973, 87 Stat. 892; Pub. L. 95-632, § 3, Nov. 10, 1978, 92 Stat. 3752; Pub. L. 96-159, § 4, Dec. 28, 1979, 93 Stat. 1226; Pub. L. 97-304, §§4(a), 8(b), Oct. 13, 1982, 96 Stat. 1417, 1426; Pub. L. 99-659, title IV, §411(b), (c), Nov. 14, 1986, 100 Stat. 3741, 3742; Pub. L. 100-707, title I, § 109(g), Nov. 23, 1988, 102 Stat. 4709.)

REFERENCES IN TEXT

This chapter, referred to in subsecs. (a)(1), (i), and (j), was in the original “this Act”, meaning Pub. L. 93-205, Dec. 28, 1973, 81 Stat. 884, known as the Endangered Species Act of 1973, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 1531 of this title and Tables.

The Privacy Act, referred to in subsec. (e)(7)(C), is probably a reference to section 552a of Title 5, Government Organization and Employees. See Short Title note set out under section 552a of Title 5.

The National Environmental Policy Act of 1969, referred to in subsec. (k), is Pub. L. 91-190, Jan. 1, 1970, 83 Stat. 852, as amended, which is classified generally to chapter 55 (§4321 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 4321 of Title 42 and Tables.

The Disaster Relief and Emergency Assistance Act, referred to in subsec. (p), is Pub. L. 93-288, May 22, 1974, 88 Stat. 143, as amended, known as the Robert T. Stafford Disaster Relief and Emergency Assistance Act, which is classified principally to chapter 68 (§5121 et seq.) of Title 42. For complete classification of this Act to the Code, see Short Title note set out under section 5121 of Title 42 and Tables.

AMENDMENTS

1988—Subsec. (p). Pub. L. 100-707 substituted “the Disaster Relief and Emergency Assistance Act” for “the Disaster Relief Act of 1974” and “section 405 or 406 of the Disaster Relief and Emergency Assistance Act” for “section 401 or 402 of the Disaster Relief Act of 1974”.

1986—Subsec. (b)(4)(C). Pub. L. 99-659, §411(b)(1)–(3), added subpar. (C).

Subsec. (b)(4)(iii), (iv). Pub. L. 99-659, §411(b)(4)–(6), added cl. (iii), redesignated former cl. (iii) as (iv), and in cl. (iv), as so redesignated, inserted reference to cl. (iii).

Subsec. (o). Pub. L. 99-659, §411(c)(1), in introductory provisions, inserted “, sections 1371 and 1372 of this title,” and substituted “any” for “either” after “implement”.

Subsec. (o)(2). Pub. L. 99-659, §411(c)(2), substituted “subsection (b)(4)(iv)” for “subsection (b)(4)(iii)” and inserted “prohibited” before “taking of the species”.

1982—Subsec. (a)(3), (4). Pub. L. 97-304, §4(a)(1), added par. (3) and redesignated former par. (3) as (4).

Subsec. (b). Pub. L. 97-304, §4(a)(2), incorporated existing provisions into pars. (1)(A) and (3)(A) and added pars. (1)(B), (2), (3)(B), and (4).

Subsec. (c)(1). Pub. L. 97-304, §4(a)(3), inserted “, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of the proposed extension and the reasons therefor” after “agency” in parenthetical provision.

Subsec. (e)(10). Pub. L. 97-304, §4(a)(4), struck out provision that, except in the case of a member designated pursuant to paragraph (3)(G) of this subsection, no member could designate any person to serve as his or her representative unless that person was, at the time of such designation, holding a Federal office the appointment to which was subject to the advice and consent of the United States Senate.

Subsec. (g)(1). Pub. L. 97-304, §4(a)(5)(B), substituted “An application for an exemption shall be considered initially by the Secretary in the manner provided for in this subsection, and shall be considered by the Committee for a final determination under subsection (h) after a report is made pursuant to paragraph (5)” for “An application for an exemption shall be considered initially by a review board in the manner provided in this subsection, and shall be considered by the Endangered Species Committee for a final determination under subsection (h) after a report is made by the review board”.

Subsec. (g)(2)(A). Pub. L. 97-304, §4(a)(5)(C)(i), substituted “An exemption applicant shall submit a written application to the Secretary, in a form prescribed under subsection (f), not later than 90 days after the completion of the consultation process; except that, in the case of any agency action involving a permit or license applicant, such application shall be submitted not later than 90 days after the date on which the Federal agency concerned takes final agency action with respect to the issuance of the permit or license” for “An exemption applicant shall submit a written application to the Secretary, in a form prescribed under subsection (f) of this section, not later than 90 days after the completion of the consultation process; or, in the case of any agency action involving a permit or license applicant, not later than 90 days after the date on which the Federal agency concerned takes final agency action, for purposes of chapter 7 of title 5, with respect to the issuance of the permit or license” and inserted provision that, “For purposes of the preceding sentence, the term ‘final agency action’ means (i) a disposition by an agency with respect to the issuance of a permit or license that is subject to administrative review, whether or not such disposition is subject to judicial review; or (ii) if administrative review is sought with respect to such disposition, the decision resulting after such review.”

Subsec. (g)(2)(B). Pub. L. 97-304, §4(a)(5)(C)(ii), inserted “(i)” after “the Secretary shall promptly”, struck out “to the review board to be established under paragraph (3) and” after “individuals to be appointed” in cl. (i) as so designated, and added cl. (ii).

Subsec. (g)(3). Pub. L. 97-304, §4(a)(5)(D), (E), redesignated par. (5) as (3) and substituted provisions directing the Secretary, within 20 days after the receipt of an application for exemption, or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary, to (A) determine that the Federal agency concerned and the exemption applicant have (i) carried out the consultation responsibilities described in subsection (a) of this section in good faith and made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which would not violate subsection (a)(2) of this section, (ii) conducted any biological assessment required by subsection (c) of this section, and (iii) to the extent determinable within the time provided herein, refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d) of this section, or (B) deny the application for exemption because the Federal agency concerned or the exemption applicant have not met the requirements set forth in subparagraph (A)(i), (ii), and (iii), and providing that the denial of an application under subparagraph (B) shall be considered final agency action for purposes of chapter 7 of title 5, for provisions placing upon the review board appointed under former par. (3) the duty to make a full review of the consultation carried out under subsection (a)(2) of this section, and within 60 days after its appointment or within such

longer time as was mutually agreed upon between the exemption applicant and the Secretary, to make a determination, by a majority vote, (A) whether an irresolvable conflict existed and (B) whether the Federal agency concerned and such exemption applicant had (i) carried out its consultation responsibilities as described in subsection (a) of this section in good faith and made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which would not violate subsection (a)(2) of this section, (ii) conducted any biological assessment required of it by subsection (c) of this section, and (iii) refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d) of this section, and providing that any determination by the review board that an irresolvable conflict did not exist or that the Federal agency concerned or the exemption applicant had not met its respective requirements under subclause (i), (ii), or (iii) was to be considered final agency action for purposes of chapter 7 of title 5. Former par. (3), providing for the establishment and functions of a review board to consider applications for exemptions and to submit reports to the Endangered Species Committee, was struck out.

Subsec. (g)(4). Pub. L. 97-304, §4(a)(5)(D), (F), redesignated par. (6) as (4) and substituted "If the Secretary determines that the Federal agency concerned and the exemption applicant have met the requirements set forth in paragraph (3)(A)(i), (ii), and (iii) he shall, in consultation with the Members of the Committee, hold a hearing on the application for exemption in accordance with sections 554, 555, and 556 (other than subsection (b)(1) and (2) thereof) of title 5 and prepare the report to be submitted pursuant to paragraph (5)" for "If the review board determines that an irresolvable conflict exists and makes positive determinations under subclauses (i), (ii), and (iii) of paragraph (5), it shall proceed to prepare the report to be submitted under paragraph (7)". Former par. (4), directing the Secretary to submit the application to the review board immediately after its appointment under paragraph (3), and to submit to the review board, in writing, his views and recommendations with respect to the application within 60 days after receiving a copy of any application under paragraph (2), was struck out.

Subsec. (g)(5). Pub. L. 97-304, §4(a)(5)(G), redesignated par. (7) as (5) and substituted "Within 140 days after making the determinations under paragraph (3) or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary, the Secretary shall submit" for "Within 180 days after making the determinations under paragraph (6), the review board shall submit" in the provisions preceding subpar. (A), and added subpar. (D). Former par. (5) redesignated (3) and amended.

Subsec. (g)(6). Pub. L. 97-304, §4(a)(5)(H), redesignated par. (8) as (6). Former par. (6) redesignated (4) and amended.

Subsec. (g)(7). Pub. L. 97-304, §4(a)(5)(I), redesignated par. (10) as (7) and substituted "Upon request of the Secretary, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Secretary to assist him in carrying out his duties under this section" for "Upon request of a review board, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the review board to assist it in carry out its duties under this section". Former par. (7) redesignated (5) and amended.

Subsec. (g)(8). Pub. L. 97-304, §4(a)(5)(J), redesignated par. (12) as (8) and substituted "records resulting from activities pursuant to this subsection" for "records of review boards". Former par. (8) redesignated (6).

Subsec. (g)(9). Pub. L. 97-304, §4(a)(5)(D), struck out par. (9) which had provided that the review board, in carrying out its duties, could (A) sit and act at such times and places, take such testimony, and receive such evidence, as the review board deemed advisable, (B) subject to the Privacy Act of 1974 [5 U.S.C. 552a], re-

quest of any Federal agency or applicant information necessary to enable it to carry out such duties, and upon such request the head of such Federal agency would furnish such information to the review board, and (C) use the United States mails in the same manner and upon the same conditions as a Federal agency.

Subsec. (g)(10). Pub. L. 97-304, §4(a)(5)(I), redesignated par. (10) as (7).

Subsec. (g)(11). Pub. L. 97-304, §4(a)(5)(D), struck out par. (11) which had provided that the Administrator of the General Services Administration provide to a review board, on a reimbursable basis, such administrative support services as the review board requested.

Subsec. (g)(12). Pub. L. 97-304, §4(a)(5)(J), redesignated par. (12) as (8).

Subsec. (h)(1). Pub. L. 97-304, §4(a)(6), substituted "within 30 days after receiving the report of the Secretary pursuant to subsection (g)(5)" for "within 90 days of receiving the report of the review board under subsection (g)(7)" in provisions preceding subpar. (A), substituted "report of the Secretary, the record of the hearing held under subsection (g)(4) and on such other testimony" for "report of the review board and on such other testimony" in subpar. (A) preceding cl. (i), and added cl. (iv).

Subsec. (o). Pub. L. 97-304, §4(a)(7), substituted "Notwithstanding sections 1533(d) and 1538(a)(1)(B) and (C) of this title or any regulation promulgated to implement either such section (1) any action for which an exemption is granted under subsection (h) shall not be considered to be a taking of any endangered species or threatened species with respect to any activity which is necessary to carry out such action; and (2) any taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iii) shall not be considered to be a taking of the species concerned" for "Notwithstanding sections 1533(d) and 1538(a) of this title or any regulations promulgated pursuant to such sections, any action for which an exemption is granted under subsection (h) of this section shall not be considered a taking of any endangered or threatened species with respect to any activity which is necessary to carry out such action".

Subsec. (q). Pub. L. 97-304, §8(b), struck out subsec. (q) which authorized appropriations of \$600,000 for each of fiscal years 1979, 1980, 1981, and 1982 in carrying out functions under subsecs. (e), (f), (g), and (h) of this section. See section 1542(c) of this title.

1979—Subsec. (a). Pub. L. 96-159, §4(1), designated existing provisions as par. (1); struck out third sentence requirement that each Federal agency, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (referred to as "agency action") did not jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which was determined by the Secretary, after consultation as appropriate with the affected States, to be critical, unless the agency was granted an exemption for such action by the Committee pursuant to subsec. (h) of this section; and added pars. (2) and (3), incorporating former third sentence provisions.

Subsec. (b). Pub. L. 96-159, §4(2), (3), substituted "he believes would not violate subsection (a)(2) of this section and" for "he believes would avoid jeopardizing the continued existence of any endangered or threatened species or adversely modifying the critical habitat of such species, and which" before "can be taken" and introductory "subsection (a)(2) of this section" for "subsection (a) of this section".

Subsec. (c). Pub. L. 96-159, §4(3), (4), substituted "subsection (a)(2)" for "subsec. (a)" of this section, designated existing provisions as so amended par. (1), and added par. (2).

Subsec. (d). Pub. L. 96-159, §4(3), (5), substituted introductory words "subsection (a)(2)" for "subsection (a)" of this section and "alternative measures which would not violate subsection (a)(2)" for "alternative measures which would avoid jeopardizing the continued

existence of any endangered or threatened species or adversely modifying or destroying the critical habitat of any such species”.

Subsecs. (e)(2), (f). Pub. L. 96-159, §4(3), substituted “subsection (a)(2)” for “subsection (a)”.

Subsec. (g)(1). Pub. L. 96-159, §4(3), (6), substituted in first sentence “subsection (a)(2)” for “subsection (a)” of this section and “agency action would violate subsection (a)(2)” for “agency action may jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify the critical habitat of such species”.

Subsec. (g)(2)(A). Pub. L. 96-159, §4(7), required exemption applicant, to submit a written application, in the case of any agency action involving a permit or license applicant, not later than 90 days after the date on which the Federal agency concerned takes final agency action, for purposes of chapter 7 of Title 5, with respect to the issuance of the permit or license.

Subsec. (g)(3). Pub. L. 96-159, §4(8), added subpar. (B), and redesignated former subpar. (B) as (C).

Subsec. (g)(5). Pub. L. 96-159, §4(3), (9), substituted in introductory text and cl. (i) “subsection (a)(2)” for “subsection (a)” of this section; redesignated as cls. (A) and (B) former cls. (i) and (ii); inserted in cl. (B) “the Federal agency concerned and” before “such exemption applicant”; redesignated as subcls. (i) to (iii) former subcls. (A) to (C); substituted in subcl. (i) “agency action which would not violate subsection (a)(2) of this section” for “agency action which will avoid jeopardizing the continued existence of an endangered or threatened species or result in the adverse modification or destruction of a critical habitat”; and substituted in last sentence “the Federal agency concerned or the exemption applicant has not met its respective requirements under subclause (i), (ii), or (iii)” for “the exemption applicant has not met the requirements of subparagraph (A), (B), or (C)” preceding “shall be considered final agency action”.

Subsec. (g)(6). Pub. L. 96-159, §4(10), substituted “subclauses (i), (ii), and (iii)” for “subparagraphs (A), (B), and (C)” of paragraph (5).

Subsec. (h)(1). Pub. L. 96-159, §4(3), substituted “subsection (a)(2)” for “subsection (a)” of this section.

Subsec. (h)(2). Pub. L. 96-159, §4(11), in subpar. (A), substituted “paragraph (1)” for “subsection (h) of this section”, inserted cl. (i), incorporated existing provisions in text designated cl. (ii), inserting thereto “with respect to such agency action”; in subpar. (B), incorporated existing provision in cl. (i), inserted findings provision respecting the extinction of a species that was not: the subject of consultation or identified in any biological assessment under subsec. (a)(2) or (c) of this section, added cl. (ii), deleted prior requirement for a Committee determination within 30 days of the Secretary’s finding that an exemption would result in extinction of the species whether to grant an exemption for the agency notwithstanding such finding, and superseded the same with requirement that the Committee meet with respect to the matter within 30 days after the date of such a finding.

Subsec. (m). Pub. L. 96-159, §4(3), substituted “subsection (a)(2)” for “subsection (a)” of this section.

Subsec. (q). Pub. L. 96-159, §4(12), authorized appropriations of \$600,000 for fiscal years 1980 through 1982, and deleted appropriations authorization of \$300,000 for period beginning Oct. 1, 1979, and ending Mar. 3, 1980, and requirement that the Chairman of the Committee report to the Congress before end of fiscal year 1979 with respect to adequacy of the budget authority.

1978—Subsec. (a). Pub. L. 95-632 designated existing provision as subsec. (a), inserted reference to agency action, substituted “adverse modification” for “modification”, and provided for the grant of an exemption for agency action by the Endangered Species Committee pursuant to subsec. (h) of this section.

Subsecs. (b) to (q). Pub. L. 95-632 added subsecs. (b) to (q).

DEFERRAL OF AGENCY ACTION

Pub. L. 105-18, title II, §3003, June 12, 1997, 111 Stat. 176, provided that:

“(a) CONSULTATION AND CONFERENCING.—As provided by regulations issued under the Endangered Species Act (16 U.S.C. 1531 et seq.) for emergency situations, formal consultation or conferencing under section 7(a)(2) or section 7(a)(4) of the Act [16 U.S.C. 1536(a)(2), (4)] for any action authorized, funded or carried out by any Federal agency to repair a Federal or non-Federal flood control project, facility or structure may be deferred by the Federal agency authorizing, funding or carrying out the action, if the agency determines that the repair is needed to respond to an emergency causing an imminent threat to human lives and property in 1996 or 1997. Formal consultation or conferencing shall be deferred until the imminent threat to human lives and property has been abated. For purposes of this section, the term repair shall include preventive and remedial measures to restore the project, facility or structure to remove an imminent threat to human lives and property.

“(b) REASONABLE AND PRUDENT MEASURES.—Any reasonable and prudent measures specified under section 7 of the Endangered Species Act (16 U.S.C. 1536) to minimize the impact of an action taken under this section shall be related both in nature and extent to the effect of the action taken to repair the flood control project, facility or structure.”

TRANSLOCATION OF CALIFORNIA SEA OTTERS

Pub. L. 99-625, §1, Nov. 7, 1986, 100 Stat. 3500, provided that:

“(a) DEFINITIONS.—For purposes of this section—

“(1) The term ‘Act’ means the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).

“(2) The term ‘agency action’ has the meaning given that term in section 7(a)(2) of the Act [16 U.S.C. 1536(a)(2)].

“(3) The term ‘experimental population’ means the population of sea otters provided for under a plan developed under subsection (b).

“(4) The phrase ‘parent population’ means the population of sea otters existing in California on the date on which proposed regulations setting forth a proposed plan under subsection (b) are issued.

“(5) The phrase ‘prospective action’ refers to any prospective agency action that—

“(A) may affect either the experimental population or the parent population; and

“(B) has evolved to the point where meaningful consultation under section 7(a)(2) or (3) of the Act [16 U.S.C. 1536(a)(2), (3)] can take place.

“(6) The term ‘Secretary’ means the Secretary of the Interior.

“(7) The term ‘Service’ means the United States Fish and Wildlife Service.

“(b) PLAN SPECIFICATIONS.—The Secretary may develop and implement, in accordance with this section, a plan for the relocation and management of a population of California sea otters from the existing range of the parent population to another location. The plan, which must be developed by regulation and administered by the Service in cooperation with the appropriate State agency, shall include the following:

“(1) The number, age, and sex of sea otters proposed to be relocated.

“(2) The manner in which the sea otters will be captured, translocated, released, monitored, and protected.

“(3) The specification of a zone (hereinafter referred to as the ‘translocation zone’) to which the experimental population will be relocated. The zone must have appropriate characteristics for furthering the conservation of the species.

“(4) The specification of a zone (hereinafter referred to as the ‘management zone’) that—

“(A) surrounds the translocation zone; and

“(B) does not include the existing range of the parent population or adjacent range where expansion is necessary for the recovery of the species.

The purpose of the management zone is to (i) facilitate the management of sea otters and the contain-

ment of the experimental population within the translocation zone, and (ii) to prevent, to the maximum extent feasible, conflict with other fishery resources within the management zone by the experimental population. Any sea otter found within the management zone shall be treated as a member of the experimental population. The Service shall use all feasible non-lethal means and measures to capture any sea otter found within the management zone and return it to either the translocation zone or to the range of the parent population.

“(5) Measures, including an adequate funding mechanism, to isolate and contain the experimental population.

“(6) A description of the relationship of the implementation of the plan to the status of the species under the Act and to determinations of the Secretary under section 7 of the Act [16 U.S.C. 1536].

“(c) STATUS OF MEMBERS OF THE EXPERIMENTAL POPULATION.—(1) Any member of the experimental population shall be treated while within the translocation zone as a threatened species for purposes of the Act, except that—

“(A) section 7 of the Act [16 U.S.C. 1536] shall only apply to agency actions that—

“(i) are undertaken within the translocation zone,

“(ii) are not defense-related agency actions, and

“(iii) are initiated after the date of the enactment of this section [Nov. 7, 1986]; and

“(B) with respect to defense-related actions within the translocation zone, members of the experimental population shall be treated as members of a species that is proposed to be listed under section 4 of the Act [16 U.S.C. 1533].

For purposes of this paragraph, the term ‘defense-related agency action’ means an agency action proposed to be carried out directly by a military department.

“(2) For purposes of section 7 of the Act [16 U.S.C. 1536], any member of the experimental population shall be treated while within the management zone as a member of a species that is proposed to be listed under section 4 of the Act [16 U.S.C. 1533]. Section 9 of the Act [16 U.S.C. 1538] applies to members of the experimental population; except that any incidental taking of such a member during the course of an otherwise lawful activity within the management zone, may not be treated as a violation of the Act or the Marine Mammal Protection Act of 1972 [16 U.S.C. 1361 et seq.].

“(d) IMPLEMENTATION OF PLAN.—The Secretary shall implement the plan developed under subsection (b)—

“(1) after the Secretary provides an opinion under section 7(b) of the Act [16 U.S.C. 1536(b)] regarding each prospective action for which consultation was initiated by a Federal agency or requested by a prospective permit or license applicant before April 1, 1986; or

“(2) if no consultation under section 7(a)(2) or (3) regarding any prospective action is initiated or requested by April 1, 1986, at any time after that date.

“(e) CONSULTATION AND EFFECT OF OPINION.—A Federal agency shall promptly consult with the Secretary, under section 7(a)(3) of the Act [16 U.S.C. 1536(a)(3)], at the request of, and in cooperation with, any permit or license applicant regarding any prospective action. The time limitations applicable to consultations under section 7(a)(2) of the Act apply to consultations under the preceding sentence. In applying section 7(b)(3)(B) with respect to an opinion on a prospective action that is provided after consultation under section 7(a)(3), that opinion shall be treated as the opinion issued after consultation under section 7(a)(2) unless the Secretary finds, after notice and opportunity for comment in accordance with section 553 of title 5, United States Code, that a significant change has been made with respect to the action or that a significant change has occurred regarding the information used during the initial consultation. The interested party may petition the Secretary to make a finding under the preceding sentence. The Secretary may implement any reasonable and pru-

dent alternatives specified in any opinion referred to in this subsection through appropriate agreements with any such Federal agency, prospective permit or license applicant, or other interested party.

“(f) CONSTRUCTION.—For purposes of implementing the plan, no act by the Service, an authorized State agency, or an authorized agent of the Service or such an agency with respect to a sea otter that is necessary to effect the relocation or management of any sea otter under the plan may be treated as a violation of any provision of the Act or the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.).”

§ 1537. International cooperation

(a) Financial assistance

As a demonstration of the commitment of the United States to the worldwide protection of endangered species and threatened species, the President may, subject to the provisions of section 1306 of title 31, use foreign currencies accruing to the United States Government under the Food for Peace Act [7 U.S.C. 1691 et seq.] or any other law to provide to any foreign country (with its consent) assistance in the development and management of programs in that country which the Secretary determines to be necessary or useful for the conservation of any endangered species or threatened species listed by the Secretary pursuant to section 1533 of this title. The President shall provide assistance (which includes, but is not limited to, the acquisition, by lease or otherwise, of lands, waters, or interests therein) to foreign countries under this section under such terms and conditions as he deems appropriate. Whenever foreign currencies are available for the provision of assistance under this section, such currencies shall be used in preference to funds appropriated under the authority of section 1542 of this title.

(b) Encouragement of foreign programs

In order to carry out further the provisions of this chapter, the Secretary, through the Secretary of State, shall encourage—

(1) foreign countries to provide for the conservation of fish or wildlife and plants including endangered species and threatened species listed pursuant to section 1533 of this title;

(2) the entering into of bilateral or multilateral agreements with foreign countries to provide for such conservation; and

(3) foreign persons who directly or indirectly take fish or wildlife or plants in foreign countries or on the high seas for importation into the United States for commercial or other purposes to develop and carry out with such assistance as he may provide, conservation practices designed to enhance such fish or wildlife or plants and their habitat.

(c) Personnel

After consultation with the Secretary of State, the Secretary may—

(1) assign or otherwise make available any officer or employee of his department for the purpose of cooperating with foreign countries and international organizations in developing personnel resources and programs which promote the conservation of fish or wildlife or plants; and

(2) conduct or provide financial assistance for the educational training of foreign person-

the preservation and enhancement of the environment.

(Pub. L. 91-190, title I, § 101, Jan. 1, 1970, 83 Stat. 852.)

COMMISSION ON POPULATION GROWTH AND THE AMERICAN FUTURE

Pub. L. 91-213, §§1-9, Mar. 16, 1970, 84 Stat. 67-69, established the Commission on Population Growth and the American Future to conduct and sponsor such studies and research and make such recommendations as might be necessary to provide information and education to all levels of government in the United States, and to our people regarding a broad range of problems associated with population growth and their implications for America's future; prescribed the composition of the Commission; provided for the appointment of its members, and the designation of a Chairman and Vice Chairman; required a majority of the members of the Commission to constitute a quorum, but allowed a lesser number to conduct hearings; prescribed the compensation of members of the Commission; required the Commission to conduct an inquiry into certain prescribed aspects of population growth in the United States and its foreseeable social consequences; provided for the appointment of an Executive Director and other personnel and prescribed their compensation; authorized the Commission to enter into contracts with public agencies, private firms, institutions, and individuals for the conduct of research and surveys, the preparation of reports, and other activities necessary to the discharge of its duties, and to request from any Federal department or agency any information and assistance it deems necessary to carry out its functions; required the General Services Administration to provide administrative services for the Commission on a reimbursable basis; required the Commission to submit an interim report to the President and the Congress one year after it was established and to submit its final report two years after Mar. 16, 1970; terminated the Commission sixty days after the date of the submission of its final report; and authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, such amounts as might be necessary to carry out the provisions of Pub. L. 91-213.

EXECUTIVE ORDER No. 11507

Ex. Ord. No. 11507, eff. Feb. 4, 1970, 35 F.R. 2573, which related to prevention, control, and abatement of air and water pollution at federal facilities was superseded by Ex. Ord. No. 11752, eff. Dec. 17, 1973, 38 F.R. 34793, formerly set out below.

EXECUTIVE ORDER No. 11752

Ex. Ord. No. 11752, Dec. 17, 1973, 38 F.R. 34793, which related to the prevention, control, and abatement of environmental pollution at Federal facilities, was revoked by Ex. Ord. No. 12088, Oct. 13, 1978, 43 F.R. 47707, set out as a note under section 4321 of this title.

§ 4332. Cooperation of agencies; reports; availability of information; recommendations; international and national coordination of efforts

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall—

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by subchapter II of this chapter, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, and shall accompany the proposal through the existing agency review processes;

(D) Any detailed statement required under subparagraph (C) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or official, if:

- (i) the State agency or official has statewide jurisdiction and has the responsibility for such action,
- (ii) the responsible Federal official furnishes guidance and participates in such preparation,
- (iii) the responsible Federal official independently evaluates such statement prior to its approval and adoption, and
- (iv) after January 1, 1976, the responsible Federal official provides early notification to, and solicits the views of, any other State or any Federal land management entity of any action or any alternative thereto which may have significant impacts upon such State or affected Federal land management entity and, if there is any disagreement on such impacts, prepares a written assessment of such impacts and views for incorporation into such detailed statement.

The procedures in this subparagraph shall not relieve the Federal official of his responsibility

ities for the scope, objectivity, and content of the entire statement or of any other responsibility under this chapter; and further, this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.¹

(E) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;

(F) recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;

(G) make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;

(H) initiate and utilize ecological information in the planning and development of resource-oriented projects; and

(I) assist the Council on Environmental Quality established by subchapter II of this chapter.

(Pub. L. 91-190, title I, § 102, Jan. 1, 1970, 83 Stat. 853; Pub. L. 94-83, Aug. 9, 1975, 89 Stat. 424.)

AMENDMENTS

1975—Subpars. (D) to (I). Pub. L. 94-83 added subpar. (D) and redesignated former subpars. (D) to (H) as (E) to (I), respectively.

CERTAIN COMMERCIAL SPACE LAUNCH ACTIVITIES

Pub. L. 104-88, title IV, § 401, Dec. 29, 1995, 109 Stat. 955, provided that: "The licensing of a launch vehicle or launch site operator (including any amendment, extension, or renewal of the license) under [former] chapter 701 of title 49, United States Code [now chapter 509 (§50901 et seq.) of Title 51, National and Commercial Space Programs], shall not be considered a major Federal action for purposes of section 102(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(C)) if—

"(1) the Department of the Army has issued a permit for the activity; and

"(2) the Army Corps of Engineers has found that the activity has no significant impact."

EX. ORD. NO. 13352. FACILITATION OF COOPERATIVE CONSERVATION

Ex. Ord. No. 13352, Aug. 26, 2004, 69 F.R. 52989, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

SECTION 1. *Purpose.* The purpose of this order is to ensure that the Departments of the Interior, Agriculture, Commerce, and Defense and the Environmental Protection Agency implement laws relating to the environment and natural resources in a manner that promotes cooperative conservation, with an emphasis on appropriate inclusion of local participation in Federal decisionmaking, in accordance with their respective agency missions, policies, and regulations.

SEC. 2. *Definition.* As used in this order, the term "cooperative conservation" means actions that relate to

use, enhancement, and enjoyment of natural resources, protection of the environment, or both, and that involve collaborative activity among Federal, State, local, and tribal governments, private for-profit and nonprofit institutions, other nongovernmental entities and individuals.

SEC. 3. *Federal Activities.* To carry out the purpose of this order, the Secretaries of the Interior, Agriculture, Commerce, and Defense and the Administrator of the Environmental Protection Agency shall, to the extent permitted by law and subject to the availability of appropriations and in coordination with each other as appropriate:

(a) carry out the programs, projects, and activities of the agency that they respectively head that implement laws relating to the environment and natural resources in a manner that:

(i) facilitates cooperative conservation;

(ii) takes appropriate account of and respects the interests of persons with ownership or other legally recognized interests in land and other natural resources;

(iii) properly accommodates local participation in Federal decisionmaking; and

(iv) provides that the programs, projects, and activities are consistent with protecting public health and safety;

(b) report annually to the Chairman of the Council on Environmental Quality on actions taken to implement this order; and

(c) provide funding to the Office of Environmental Quality Management Fund (42 U.S.C. 4375) for the Conference for which section 4 of this order provides.

SEC. 4. *White House Conference on Cooperative Conservation.* The Chairman of the Council on Environmental Quality shall, to the extent permitted by law and subject to the availability of appropriations:

(a) convene not later than 1 year after the date of this order, and thereafter at such times as the Chairman deems appropriate, a White House Conference on Cooperative Conservation (Conference) to facilitate the exchange of information and advice relating to (i) cooperative conservation and (ii) means for achievement of the purpose of this order; and

(b) ensure that the Conference obtains information in a manner that seeks from Conference participants their individual advice and does not involve collective judgment or consensus advice or deliberation.

SEC. 5. *General Provision.* This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, instrumentalities or entities, its officers, employees or agents, or any other person.

GEORGE W. BUSH.

§ 4332a. Repealed. Pub. L. 114-94, div. A, title I, § 1304(j)(2), Dec. 4, 2015, 129 Stat. 1386

Section, Pub. L. 112-141, div. A, title I, § 1319, July 6, 2012, 126 Stat. 551, related to accelerated decisionmaking in environmental reviews.

EFFECTIVE DATE OF REPEAL

Repeal effective Oct. 1, 2015, see section 1003 of Pub. L. 114-94, set out as an Effective Date of 2015 Amendment note under section 5313 of Title 5, Government Organization and Employees.

§ 4333. Conformity of administrative procedures to national environmental policy

All agencies of the Federal Government shall review their present statutory authority, administrative regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of this chapter

¹ So in original. The period probably should be a semicolon.

ble of recommending plans for implementation of national primary and secondary ambient air quality standards, for provisions authorizing Federal grants for the purpose of expediting the establishment of air quality standards and provisions requiring the designated State agency to be capable of recommending standards of air quality and plans for implementation thereof, respectively, and struck out subsec. (b) which authorized establishment of air quality planning commissions.

§ 7407. Air quality control regions

(a) Responsibility of each State for air quality; submission of implementation plan

Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State.

(b) Designated regions

For purposes of developing and carrying out implementation plans under section 7410 of this title—

(1) an air quality control region designated under this section before December 31, 1970, or a region designated after such date under subsection (c), shall be an air quality control region; and

(2) the portion of such State which is not part of any such designated region shall be an air quality control region, but such portion may be subdivided by the State into two or more air quality control regions with the approval of the Administrator.

(c) Authority of Administrator to designate regions; notification of Governors of affected States

The Administrator shall, within 90 days after December 31, 1970, after consultation with appropriate State and local authorities, designate as an air quality control region any interstate area or major intrastate area which he deems necessary or appropriate for the attainment and maintenance of ambient air quality standards. The Administrator shall immediately notify the Governors of the affected States of any designation made under this subsection.

(d) Designations

(1) Designations generally

(A) Submission by Governors of initial designations following promulgation of new or revised standards

By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 7409 of this title, the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State, designating as—

(i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,

(ii) attainment, any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant, or

(iii) unclassifiable, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

The Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.

(B) Promulgation by EPA of designations

(i) Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.

(ii) In making the promulgations required under clause (i), the Administrator may make such modifications as the Administrator deems necessary to the designations of the areas (or portions thereof) submitted under subparagraph (A) (including to the boundaries of such areas or portions thereof). Whenever the Administrator intends to make a modification, the Administrator shall notify the State and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate. The Administrator shall give such notification no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto. If the Governor fails to submit the list in whole or in part, as required under subparagraph (A), the Administrator shall promulgate the designation that the Administrator deems appropriate for any area (or portion thereof) not designated by the State.

(iii) If the Governor of any State, on the Governor's own motion, under subparagraph (A), submits a list of areas (or portions thereof) in the State designated as nonattainment, attainment, or unclassifiable, the Administrator shall act on such designations in accordance with the procedures under paragraph (3) (relating to redesignation).

(iv) A designation for an area (or portion thereof) made pursuant to this subsection shall remain in effect until the area (or portion thereof) is redesignated pursuant to paragraph (3) or (4).

(C) Designations by operation of law

(i) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(A), (B), or (C) of this subsection (as in effect immediately before November 15, 1990) is designated, by operation of law, as a nonattainment area for such pollutant with in the meaning of subparagraph (A)(i).

(ii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(E) (as in effect immediately before November 15, 1990) is designated by operation of law, as an attainment area for such pollutant within the meaning of subparagraph (A)(ii).

(iii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(D) (as in effect immediately before November 15, 1990) is designated, by operation of law, as an unclassifiable area for such pollutant within the meaning of subparagraph (A)(iii).

(2) Publication of designations and redesignations

(A) The Administrator shall publish a notice in the Federal Register promulgating any designation under paragraph (1) or (5), or announcing any designation under paragraph (4), or promulgating any redesignation under paragraph (3).

(B) Promulgation or announcement of a designation under paragraph (1), (4) or (5) shall not be subject to the provisions of sections 553 through 557 of title 5 (relating to notice and comment), except nothing herein shall be construed as precluding such public notice and comment whenever possible.

(3) Redesignation

(A) Subject to the requirements of subparagraph (E), and on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate, the Administrator may at any time notify the Governor of any State that available information indicates that the designation of any area or portion of an area within the State or interstate area should be revised. In issuing such notification, which shall be public, to the Governor, the Administrator shall provide such information as the Administrator may have available explaining the basis for the notice.

(B) No later than 120 days after receiving a notification under subparagraph (A), the Governor shall submit to the Administrator such redesignation, if any, of the appropriate area (or areas) or portion thereof within the State or interstate area, as the Governor considers appropriate.

(C) No later than 120 days after the date described in subparagraph (B) (or paragraph (1)(B)(iii)), the Administrator shall promulgate the redesignation, if any, of the area or portion thereof, submitted by the Governor in accordance with subparagraph (B), making such modifications as the Administrator may deem necessary, in the same manner and under the same procedure as is applicable under clause (ii) of paragraph (1)(B), except that the phrase “60 days” shall be substituted for the phrase “120 days” in that clause. If the Governor does not submit, in accordance with subparagraph (B), a redesignation for an area (or portion thereof) identified by the Administrator under subparagraph (A), the Administrator shall promulgate such redesignation, if any, that the Administrator deems appropriate.

(D) The Governor of any State may, on the Governor’s own motion, submit to the Administrator a revised designation of any area or portion thereof within the State. Within 18 months of receipt of a complete State redesignation submittal, the Administrator shall approve or deny such redesignation. The submission of a redesignation by a Governor shall not affect the effectiveness or enforceability of the applicable implementation plan for the State.

(E) The Administrator may not promulgate a redesignation of a nonattainment area (or portion thereof) to attainment unless—

(i) the Administrator determines that the area has attained the national ambient air quality standard;

(ii) the Administrator has fully approved the applicable implementation plan for the area under section 7410(k) of this title;

(iii) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and applicable Federal air pollutant control regulations and other permanent and enforceable reductions;

(iv) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 7505a of this title; and

(v) the State containing such area has met all requirements applicable to the area under section 7410 of this title and part D.

(F) The Administrator shall not promulgate any redesignation of any area (or portion thereof) from nonattainment to unclassifiable.

(4) Nonattainment designations for ozone, carbon monoxide and particulate matter (PM-10)

(A) Ozone and carbon monoxide

(i) Within 120 days after November 15, 1990, each Governor of each State shall submit to the Administrator a list that designates, affirms or reaffirms the designation of, or redesignates (as the case may be), all areas (or portions thereof) of the Governor’s State as attainment, nonattainment, or unclassifiable with respect to the national ambient air quality standards for ozone and carbon monoxide.

(ii) No later than 120 days after the date the Governor is required to submit the list of areas (or portions thereof) required under clause (i) of this subparagraph, the Administrator shall promulgate such designations, making such modifications as the Administrator may deem necessary, in the same manner, and under the same procedure, as is applicable under clause (ii) of paragraph (1)(B), except that the phrase “60 days” shall be substituted for the phrase “120 days” in that clause. If the Governor does not submit, in accordance with clause (i) of this subparagraph, a designation for an area (or portion thereof), the Administrator shall promulgate the designation that the Administrator deems appropriate.

(iii) No nonattainment area may be redesignated as an attainment area under this subparagraph.

(iv) Notwithstanding paragraph (1)(C)(ii) of this subsection, if an ozone or carbon monoxide nonattainment area located within a metropolitan statistical area or consolidated metropolitan statistical area (as established by the Bureau of the Census) is classified under part D of this subchapter as a Serious, Severe, or Extreme Area, the boundaries of such area are hereby revised (on the date 45 days after such classification) by operation of law to include the entire metropolitan statistical area or consolidated metropolitan statistical area, as the case may be, unless within such 45-day period the Governor (in consultation with State and local air pollution control agencies) notifies the Administrator that additional time is necessary to evaluate the application of clause (v). Whenever a Governor has submitted such a notice to the Administrator, such boundary revision shall occur on the later of the date 8 months after such classification or 14 months after November 15, 1990, unless the Governor makes the finding referred to in clause (v), and the Administrator concurs in such finding, within such period. Except as otherwise provided in this paragraph, a boundary revision under this clause or clause (v) shall apply for purposes of any State implementation plan revision required to be submitted after November 15, 1990.

(v) Whenever the Governor of a State has submitted a notice under clause (iv), the Governor, in consultation with State and local air pollution control agencies, shall undertake a study to evaluate whether the entire metropolitan statistical area or consolidated metropolitan statistical area should be included within the nonattainment area. Whenever a Governor finds and demonstrates to the satisfaction of the Administrator, and the Administrator concurs in such finding, that with respect to a portion of a metropolitan statistical area or consolidated metropolitan statistical area, sources in the portion do not contribute significantly to violation of the national ambient air quality standard, the Administrator shall approve the Governor's request to exclude such portion from the nonattainment area. In making such finding, the Governor and the Administrator shall consider factors such as population density, traffic congestion, commercial development, industrial development, meteorological conditions, and pollution transport.

(B) PM-10 designations

By operation of law, until redesignation by the Administrator pursuant to paragraph (3)—

(i) each area identified in 52 Federal Register 29383 (Aug. 7, 1987) as a Group I area (except to the extent that such identification was modified by the Administrator before November 15, 1990) is designated nonattainment for PM-10;

(ii) any area containing a site for which air quality monitoring data show a violation of the national ambient air quality standard for PM-10 before January 1, 1989

(as determined under part 50, appendix K of title 40 of the Code of Federal Regulations) is hereby designated nonattainment for PM-10; and

(iii) each area not described in clause (i) or (ii) is hereby designated unclassifiable for PM-10.

Any designation for particulate matter (measured in terms of total suspended particulates) that the Administrator promulgated pursuant to this subsection (as in effect immediately before November 15, 1990) shall remain in effect for purposes of implementing the maximum allowable increases in concentrations of particulate matter (measured in terms of total suspended particulates) pursuant to section 7473(b) of this title, until the Administrator determines that such designation is no longer necessary for that purpose.

(5) Designations for lead

The Administrator may, in the Administrator's discretion at any time the Administrator deems appropriate, require a State to designate areas (or portions thereof) with respect to the national ambient air quality standard for lead in effect as of November 15, 1990, in accordance with the procedures under subparagraphs (A) and (B) of paragraph (1), except that in applying subparagraph (B)(i) of paragraph (1) the phrase "2 years from the date of promulgation of the new or revised national ambient air quality standard" shall be replaced by the phrase "1 year from the date the Administrator notifies the State of the requirement to designate areas with respect to the standard for lead".

(6) Designations

(A) Submission

Notwithstanding any other provision of law, not later than February 15, 2004, the Governor of each State shall submit designations referred to in paragraph (1) for the July 1997 PM_{2.5} national ambient air quality standards for each area within the State, based on air quality monitoring data collected in accordance with any applicable Federal reference methods for the relevant areas.

(B) Promulgation

Notwithstanding any other provision of law, not later than December 31, 2004, the Administrator shall, consistent with paragraph (1), promulgate the designations referred to in subparagraph (A) for each area of each State for the July 1997 PM_{2.5} national ambient air quality standards.

(7) Implementation plan for regional haze

(A) In general

Notwithstanding any other provision of law, not later than 3 years after the date on which the Administrator promulgates the designations referred to in paragraph (6)(B) for a State, the State shall submit, for the entire State, the State implementation plan revisions to meet the requirements promulgated by the Administrator under section

7492(e)(1) of this title (referred to in this paragraph as “regional haze requirements”).

(B) No preclusion of other provisions

Nothing in this paragraph precludes the implementation of the agreements and recommendations stemming from the Grand Canyon Visibility Transport Commission Report dated June 1996, including the submission of State implementation plan revisions by the States of Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, or Wyoming by December 31, 2003, for implementation of regional haze requirements applicable to those States.

(e) Redesignation of air quality control regions

(1) Except as otherwise provided in paragraph (2), the Governor of each State is authorized, with the approval of the Administrator, to redesignate from time to time the air quality control regions within such State for purposes of efficient and effective air quality management. Upon such redesignation, the list under subsection (d) shall be modified accordingly.

(2) In the case of an air quality control region in a State, or part of such region, which the Administrator finds may significantly affect air pollution concentrations in another State, the Governor of the State in which such region, or part of a region, is located may redesignate from time to time the boundaries of so much of such air quality control region as is located within such State only with the approval of the Administrator and with the consent of all Governors of all States which the Administrator determines may be significantly affected.

(3) No compliance date extension granted under section 7413(d)(5)¹ of this title (relating to coal conversion) shall cease to be effective by reason of the regional limitation provided in section 7413(d)(5)¹ of this title if the violation of such limitation is due solely to a redesignation of a region under this subsection.

(July 14, 1955, ch. 360, title I, §107, as added Pub. L. 91-604, §4(a), Dec. 31, 1970, 84 Stat. 1678; amended Pub. L. 95-95, title I, §103, Aug. 7, 1977, 91 Stat. 687; Pub. L. 101-549, title I, §101(a), Nov. 15, 1990, 104 Stat. 2399; Pub. L. 108-199, div. G, title IV, §425(a), Jan. 23, 2004, 118 Stat. 417.)

REFERENCES IN TEXT

Section 7413 of this title, referred to in subsec. (e)(3), was amended generally by Pub. L. 101-549, title VII, §701, Nov. 15, 1990, 104 Stat. 2672, and, as so amended, subsec. (d) of section 7413 no longer relates to final compliance orders.

CODIFICATION

Section was formerly classified to section 1857c-2 of this title.

PRIOR PROVISIONS

A prior section 107 of act July 14, 1955, as added Nov. 21, 1967, Pub. L. 90-148, §2, 81 Stat. 490, related to air quality control regions and was classified to section 1857c-2 of this title, prior to repeal by Pub. L. 91-604.

Another prior section 107 of act July 14, 1955, as added Dec. 17, 1963, Pub. L. 88-206, §1, 77 Stat. 399, was renumbered section 111 by Pub. L. 90-148 and is classified to section 7411 of this title.

¹ See References in Text note below.

AMENDMENTS

2004—Subsec. (d)(6), (7). Pub. L. 108-199 added pars. (6) and (7).

1990—Subsec. (d). Pub. L. 101-549 amended subsec. (d) generally, substituting present provisions for provisions which required States to submit lists of regions not in compliance on Aug. 7, 1977, with certain air quality standards to be submitted to the Administrator, and which authorized States to revise and resubmit such lists from time to time.

1977—Subsecs. (d), (e). Pub. L. 95-95 added subsecs. (d) and (e).

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

OZONE AND PARTICULATE MATTER STANDARDS

Pub. L. 108-199, div. G, title IV, §425(b), Jan. 23, 2004, 118 Stat. 417, provided that: “Except as provided in paragraphs (6) and (7) of section 107(d) of the Clean Air Act [subsec. (d)(6), (7) of this section] (as added by subsection (a)), section 6101, subsections (a) and (b) of section 6102, and section 6103 of the Transportation Equity Act for the 21st Century [Pub. L. 105-178] (42 U.S.C. 7407 note; 112 Stat. 463), as in effect on the day before the date of enactment of this Act [Jan. 23, 2004], shall remain in effect.”

Pub. L. 105-178, title VI, June 9, 1998, 112 Stat. 463, as amended by Pub. L. 109-59, title VI, §6012(a), Aug. 10, 2005, 119 Stat. 1882, provided that:

“SEC. 6101. FINDINGS AND PURPOSE.

“(a) The Congress finds that—

“(1) there is a lack of air quality monitoring data for fine particle levels, measured as PM_{2.5}, in the United States and the States should receive full funding for the monitoring efforts;

“(2) such data would provide a basis for designating areas as attainment or nonattainment for any PM_{2.5} national ambient air quality standards pursuant to the standards promulgated in July 1997;

“(3) the President of the United States directed the Administrator of the Environmental Protection Agency (referred to in this title as the ‘Administrator’) in a memorandum dated July 16, 1997, to complete the next periodic review of the particulate matter national ambient air quality standards by July 2002 in order to determine ‘whether to revise or maintain the standards’;

“(4) the Administrator has stated that 3 years of air quality monitoring data for fine particle levels, measured as PM_{2.5} and performed in accordance with any applicable Federal reference methods, is appropriate for designating areas as attainment or nonattainment pursuant to the July 1997 promulgated standards; and

“(5) the Administrator has acknowledged that in drawing boundaries for attainment and nonattainment areas for the July 1997 ozone national air quality standards, Governors would benefit from considering implementation guidance from EPA on drawing area boundaries.

“(b) The purposes of this title are—

“(1) to ensure that 3 years of air quality monitoring data regarding fine particle levels are gathered for use in the determination of area attainment or nonattainment designations respecting any PM_{2.5} national ambient air quality standards;

“(2) to ensure that the Governors have adequate time to consider implementation guidance from EPA on drawing area boundaries prior to submitting area designations respecting the July 1997 ozone national ambient air quality standards;

“(3) to ensure that the schedule for implementation of the July 1997 revisions of the ambient air quality standards for particulate matter and the schedule for

the Environmental Protection Agency's visibility regulations related to regional haze are consistent with the timetable for implementation of such particulate matter standards as set forth in the President's Implementation Memorandum dated July 16, 1997.

“SEC. 6102. PARTICULATE MATTER MONITORING PROGRAM.

“(a) Through grants under section 103 of the Clean Air Act [42 U.S.C. 7403] the Administrator of the Environmental Protection Agency shall use appropriated funds no later than fiscal year 2000 to fund 100 percent of the cost of the establishment, purchase, operation and maintenance of a PM_{2.5} monitoring network necessary to implement the national ambient air quality standards for PM_{2.5} under section 109 of the Clean Air Act [42 U.S.C. 7409]. This implementation shall not result in a diversion or reprogramming of funds from other Federal, State or local Clean Air Act activities. Any funds previously diverted or reprogrammed from section 105 Clean Air Act [42 U.S.C. 7405] grants for PM_{2.5} monitors must be restored to State or local air programs in fiscal year 1999.

“(b) EPA and the States, consistent with their respective authorities under the Clean Air Act [42 U.S.C. 7401 et seq.], shall ensure that the national network (designated in subsection (a)) which consists of the PM_{2.5} monitors necessary to implement the national ambient air quality standards is established by December 31, 1999.

“(c)(1) The Governors shall be required to submit designations referred to in section 107(d)(1) of the Clean Air Act [42 U.S.C. 7407(d)(1)] for each area following promulgation of the July 1997 PM_{2.5} national ambient air quality standard within 1 year after receipt of 3 years of air quality monitoring data performed in accordance with any applicable Federal reference methods for the relevant areas. Only data from the monitoring network designated in subsection (a) and other Federal reference method PM_{2.5} monitors shall be considered for such designations. Nothing in the previous sentence shall be construed as affecting the Governor's authority to designate an area initially as nonattainment, and the Administrator's authority to promulgate the designation of an area as nonattainment, under section 107(d)(1) of the Clean Air Act, based on its contribution to ambient air quality in a nearby nonattainment area.

“(2) For any area designated as nonattainment for the July 1997 PM_{2.5} national ambient air quality standard in accordance with the schedule set forth in this section, notwithstanding the time limit prescribed in paragraph (2) of section 169B(e) of the Clean Air Act [42 U.S.C. 7492(e)(2)], the Administrator shall require State implementation plan revisions referred to in such paragraph (2) to be submitted at the same time as State implementation plan revisions referred to in section 172 of the Clean Air Act [42 U.S.C. 7502] implementing the revised national ambient air quality standard for fine particulate matter are required to be submitted. For any area designated as attainment or unclassifiable for such standard, the Administrator shall require the State implementation plan revisions referred to in such paragraph (2) to be submitted 1 year after the area has been so designated. The preceding provisions of this paragraph shall not preclude the implementation of the agreements and recommendations set forth in the Grand Canyon Visibility Transport Commission Report dated June 1996.

“(d) The Administrator shall promulgate the designations referred to in section 107(d)(1) of the Clean Air Act [42 U.S.C. 7407(d)(1)] for each area following promulgation of the July 1997 PM_{2.5} national ambient air quality standard by the earlier of 1 year after the initial designations required under subsection (c)(1) are required to be submitted or December 31, 2005.

“(e) FIELD STUDY.—Not later than 2 years after the date of enactment of the SAFETEA-LU [Aug. 10, 2005], the Administrator shall—

“(1) conduct a field study of the ability of the PM_{2.5} Federal Reference Method to differentiate those particles that are larger than 2.5 micrometers in diameter;

“(2) develop a Federal reference method to measure directly particles that are larger than 2.5 micrometers in diameter without reliance on subtracting from coarse particle measurements those particles that are equal to or smaller than 2.5 micrometers in diameter;

“(3) develop a method of measuring the composition of coarse particles; and

“(4) submit a report on the study and responsibilities of the Administrator under paragraphs (1) through (3) to—

“(A) the Committee on Energy and Commerce of the House of Representatives; and

“(B) the Committee on Environment and Public Works of the Senate.

“SEC. 6103. OZONE DESIGNATION REQUIREMENTS.

“(a) The Governors shall be required to submit the designations referred to in section 107(d)(1) of the Clean Air Act [42 U.S.C. 7407(d)(1)] within 2 years following the promulgation of the July 1997 ozone national ambient air quality standards.

“(b) The Administrator shall promulgate final designations no later than 1 year after the designations required under subsection (a) are required to be submitted.

“SEC. 6104. ADDITIONAL PROVISIONS.

“Nothing in sections 6101 through 6103 shall be construed by the Administrator of Environmental Protection Agency or any court, State, or person to affect any pending litigation or to be a ratification of the ozone or PM_{2.5} standards.”

PENDING ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95-95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub. L. 95-95, see section 406(a) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7408. Air quality criteria and control techniques

(a) Air pollutant list; publication and revision by Administrator; issuance of air quality criteria for air pollutants

(1) For the purpose of establishing national primary and secondary ambient air quality standards, the Administrator shall within 30 days after December 31, 1970, publish, and shall from time to time thereafter revise, a list which includes each air pollutant—

(A) emissions of which, in his judgment, cause or contribute to air pollution which may

reasonably be anticipated to endanger public health or welfare;

(B) the presence of which in the ambient air results from numerous or diverse mobile or stationary sources; and

(C) for which air quality criteria had not been issued before December 31, 1970 but for which he plans to issue air quality criteria under this section.

(2) The Administrator shall issue air quality criteria for an air pollutant within 12 months after he has included such pollutant in a list under paragraph (1). Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities. The criteria for an air pollutant, to the extent practicable, shall include information on—

(A) those variable factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant;

(B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and

(C) any known or anticipated adverse effects on welfare.

(b) Issuance by Administrator of information on air pollution control techniques; standing consulting committees for air pollutants; establishment; membership

(1) Simultaneously with the issuance of criteria under subsection (a), the Administrator shall, after consultation with appropriate advisory committees and Federal departments and agencies, issue to the States and appropriate air pollution control agencies information on air pollution control techniques, which information shall include data relating to the cost of installation and operation, energy requirements, emission reduction benefits, and environmental impact of the emission control technology. Such information shall include such data as are available on available technology and alternative methods of prevention and control of air pollution. Such information shall also include data on alternative fuels, processes, and operating methods which will result in elimination or significant reduction of emissions.

(2) In order to assist in the development of information on pollution control techniques, the Administrator may establish a standing consulting committee for each air pollutant included in a list published pursuant to subsection (a)(1), which shall be comprised of technically qualified individuals representative of State and local governments, industry, and the academic community. Each such committee shall submit, as appropriate, to the Administrator information related to that required by paragraph (1).

(c) Review, modification, and reissuance of criteria or information

The Administrator shall from time to time review, and, as appropriate, modify, and reissue

any criteria or information on control techniques issued pursuant to this section. Not later than six months after August 7, 1977, the Administrator shall revise and reissue criteria relating to concentrations of NO₂ over such period (not more than three hours) as he deems appropriate. Such criteria shall include a discussion of nitric and nitrous acids, nitrites, nitrates, nitrosamines, and other carcinogenic and potentially carcinogenic derivatives of oxides of nitrogen.

(d) Publication in Federal Register; availability of copies for general public

The issuance of air quality criteria and information on air pollution control techniques shall be announced in the Federal Register and copies shall be made available to the general public.

(e) Transportation planning and guidelines

The Administrator shall, after consultation with the Secretary of Transportation, and after providing public notice and opportunity for comment, and with State and local officials, within nine months after November 15, 1990,¹ and periodically thereafter as necessary to maintain a continuous transportation-air quality planning process, update the June 1978 Transportation-Air Quality Planning Guidelines and publish guidance on the development and implementation of transportation and other measures necessary to demonstrate and maintain attainment of national ambient air quality standards. Such guidelines shall include information on—

(1) methods to identify and evaluate alternative planning and control activities;

(2) methods of reviewing plans on a regular basis as conditions change or new information is presented;

(3) identification of funds and other resources necessary to implement the plan, including interagency agreements on providing such funds and resources;

(4) methods to assure participation by the public in all phases of the planning process; and

(5) such other methods as the Administrator determines necessary to carry out a continuous planning process.

(f) Information regarding processes, procedures, and methods to reduce or control pollutants in transportation; reduction of mobile source related pollutants; reduction of impact on public health

(1) The Administrator shall publish and make available to appropriate Federal, State, and local environmental and transportation agencies not later than one year after November 15, 1990, and from time to time thereafter—

(A) information prepared, as appropriate, in consultation with the Secretary of Transportation, and after providing public notice and opportunity for comment, regarding the formulation and emission reduction potential of transportation control measures related to criteria pollutants and their precursors, including, but not limited to—

(i) programs for improved public transit;

(ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use

¹ See Codification note below.

by, passenger buses or high occupancy vehicles;

(iii) employer-based transportation management plans, including incentives;

(iv) trip-reduction ordinances;

(v) traffic flow improvement programs that achieve emission reductions;

(vi) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;

(vii) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;

(viii) programs for the provision of all forms of high-occupancy, shared-ride services;

(ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;

(x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;

(xi) programs to control extended idling of vehicles;

(xii) programs to reduce motor vehicle emissions, consistent with subchapter II, which are caused by extreme cold start conditions;

(xiii) employer-sponsored programs to permit flexible work schedules;

(xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;

(xv) programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and

(xvi) program to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.²

(B) information on additional methods or strategies that will contribute to the reduction of mobile source related pollutants during periods in which any primary ambient air quality standard will be exceeded and during episodes for which an air pollution alert, warning, or emergency has been declared;

(C) information on other measures which may be employed to reduce the impact on public health or protect the health of sensitive or susceptible individuals or groups; and

(D) information on the extent to which any process, procedure, or method to reduce or

control such air pollutant may cause an increase in the emissions or formation of any other pollutant.

(2) In publishing such information the Administrator shall also include an assessment of—

(A) the relative effectiveness of such processes, procedures, and methods;

(B) the potential effect of such processes, procedures, and methods on transportation systems and the provision of transportation services; and

(C) the environmental, energy, and economic impact of such processes, procedures, and methods.

(g) Assessment of risks to ecosystems

The Administrator may assess the risks to ecosystems from exposure to criteria air pollutants (as identified by the Administrator in the Administrator's sole discretion).

(h) RACT/BACT/LAER clearinghouse

The Administrator shall make information regarding emission control technology available to the States and to the general public through a central database. Such information shall include all control technology information received pursuant to State plan provisions requiring permits for sources, including operating permits for existing sources.

(July 14, 1955, ch. 360, title I, § 108, as added Pub. L. 91-604, §4(a), Dec. 31, 1970, 84 Stat. 1678; amended Pub. L. 95-95, title I, §§104, 105, title IV, §401(a), Aug. 7, 1977, 91 Stat. 689, 790; Pub. L. 101-549, title I, §§108(a)-(c), (o), 111, Nov. 15, 1990, 104 Stat. 2465, 2466, 2469, 2470; Pub. L. 105-362, title XV, §1501(b), Nov. 10, 1998, 112 Stat. 3294.)

CODIFICATION

November 15, 1990, referred to in subsec. (e), was in the original "enactment of the Clean Air Act Amendments of 1989", and was translated as meaning the date of the enactment of Pub. L. 101-549, popularly known as the Clean Air Act Amendments of 1990, to reflect the probable intent of Congress.

Section was formerly classified to section 1857c-3 of this title.

PRIOR PROVISIONS

A prior section 108 of act July 14, 1955, was renumbered section 115 by Pub. L. 91-604 and is classified to section 7415 of this title.

AMENDMENTS

1998—Subsec. (f)(3), (4). Pub. L. 105-362 struck out par. (3), which required reports by the Secretary of Transportation and the Administrator to be submitted to Congress by Jan. 1, 1993, and every 3 years thereafter, reviewing and analyzing existing State and local air quality related transportation programs, evaluating achievement of goals, and recommending changes to existing programs, and par. (4), which required that in each report after the first report the Secretary of Transportation include a description of the actions taken to implement the changes recommended in the preceding report.

1990—Subsec. (e). Pub. L. 101-549, §108(a), inserted first sentence and struck out former first sentence which read as follows: "The Administrator shall, after consultation with the Secretary of Transportation and the Secretary of Housing and Urban Development and State and local officials and within 180 days after August 7, 1977, and from time to time thereafter, publish guidelines on the basic program elements for the planning process assisted under section 7505 of this title."

² So in original. The period probably should be a semicolon.

Subsec. (f)(1). Pub. L. 101-549, §108(b), in introductory provisions, substituted present provisions for provisions relating to Federal agencies, States, and air pollution control agencies within either 6 months or one year after Aug. 7, 1977.

Subsec. (f)(1)(A). Pub. L. 101-549, §108(b), substituted present provisions for provisions relating to information prepared in cooperation with Secretary of Transportation, regarding processes, procedures, and methods to reduce certain pollutants.

Subsec. (f)(3), (4). Pub. L. 101-549, §111, added pars. (3) and (4).

Subsec. (g). Pub. L. 101-549, §108(o), added subsec. (g).

Subsec. (h). Pub. L. 101-549, §108(c), added subsec. (h). 1977—Subsec. (a)(1)(A). Pub. L. 95-95, §401(a), substituted “emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare” for “which in his judgment has an adverse effect on public health or welfare”.

Subsec. (b)(1). Pub. L. 95-95, §104(a), substituted “cost of installation and operation, energy requirements, emission reduction benefits, and environmental impact of the emission control technology” for “technology and costs of emission control”.

Subsec. (c). Pub. L. 95-95, §104(b), inserted provision directing the Administrator, not later than six months after Aug. 7, 1977, to revise and reissue criteria relating to concentrations of NO₂ over such period (not more than three hours) as he deems appropriate, with the criteria to include a discussion of nitric and nitrous acids, nitrites, nitrates, nitrosamines, and other carcinogenic and potentially carcinogenic derivatives of oxides of nitrogen.

Subsecs. (e), (f). Pub. L. 95-95, §105, added subsecs. (e) and (f).

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7409. National primary and secondary ambient air quality standards

(a) Promulgation

(1) The Administrator—

(A) within 30 days after December 31, 1970, shall publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard for each air pollutant for which air quality criteria have been issued prior to such date; and

(B) after a reasonable time for interested persons to submit written comments thereon (but no later than 90 days after the initial publication of such proposed standards) shall by regulation promulgate such proposed national primary and secondary ambient air quality

standards with such modifications as he deems appropriate.

(2) With respect to any air pollutant for which air quality criteria are issued after December 31, 1970, the Administrator shall publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant. The procedure provided for in paragraph (1)(B) of this subsection shall apply to the promulgation of such standards.

(b) Protection of public health and welfare

(1) National primary ambient air quality standards, prescribed under subsection (a) shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health. Such primary standards may be revised in the same manner as promulgated.

(2) Any national secondary ambient air quality standard prescribed under subsection (a) shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. Such secondary standards may be revised in the same manner as promulgated.

(c) National primary ambient air quality standard for nitrogen dioxide

The Administrator shall, not later than one year after August 7, 1977, promulgate a national primary ambient air quality standard for NO₂ concentrations over a period of not more than 3 hours unless, based on the criteria issued under section 7408(c) of this title, he finds that there is no significant evidence that such a standard for such a period is requisite to protect public health.

(d) Review and revision of criteria and standards; independent scientific review committee; appointment; advisory functions

(1) Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 7408 of this title and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with section 7408 of this title and subsection (b) of this section. The Administrator may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.

(2)(A) The Administrator shall appoint an independent scientific review committee composed of seven members including at least one member of the National Academy of Sciences, one physician, and one person representing State air pollution control agencies.

(B) Not later than January 1, 1980, and at five-year intervals thereafter, the committee referred to in subparagraph (A) shall complete a review of the criteria published under section 7408 of this title and the national primary and

secondary ambient air quality standards promulgated under this section and shall recommend to the Administrator any new national ambient air quality standards and revisions of existing criteria and standards as may be appropriate under section 7408 of this title and subsection (b) of this section.

(C) Such committee shall also (i) advise the Administrator of areas in which additional knowledge is required to appraise the adequacy and basis of existing, new, or revised national ambient air quality standards, (ii) describe the research efforts necessary to provide the required information, (iii) advise the Administrator on the relative contribution to air pollution concentrations of natural as well as anthropogenic activity, and (iv) advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such national ambient air quality standards.

(July 14, 1955, ch. 360, title I, § 109, as added Pub. L. 91-604, § 4(a), Dec. 31, 1970, 84 Stat. 1679; amended Pub. L. 95-95, title I, § 106, Aug. 7, 1977, 91 Stat. 691.)

CODIFICATION

Section was formerly classified to section 1857c-4 of this title.

PRIOR PROVISIONS

A prior section 109 of act July 14, 1955, was renumbered section 116 by Pub. L. 91-604 and is classified to section 7416 of this title.

AMENDMENTS

1977—Subsec. (c). Pub. L. 95-95, § 106(b), added subsec. (c).

Subsec. (d). Pub. L. 95-95, § 106(a), added subsec. (d).

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

TERMINATION OF ADVISORY COMMITTEES

Advisory committees established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a committee established by the Congress, its duration is otherwise provided for by law. See section 14 of Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 776, set out in the Appendix to Title 5, Government Organization and Employees.

ROLE OF SECONDARY STANDARDS

Pub. L. 101-549, title VIII, § 817, Nov. 15, 1990, 104 Stat. 2697, provided that:

“(a) REPORT.—The Administrator shall request the National Academy of Sciences to prepare a report to the Congress on the role of national secondary ambient air quality standards in protecting welfare and the environment. The report shall:

“(1) include information on the effects on welfare and the environment which are caused by ambient concentrations of pollutants listed pursuant to section 108 [42 U.S.C. 7408] and other pollutants which may be listed;

“(2) estimate welfare and environmental costs incurred as a result of such effects;

“(3) examine the role of secondary standards and the State implementation planning process in preventing such effects;

“(4) determine ambient concentrations of each such pollutant which would be adequate to protect welfare and the environment from such effects;

“(5) estimate the costs and other impacts of meeting secondary standards; and

“(6) consider other means consistent with the goals and objectives of the Clean Air Act [42 U.S.C. 7401 et seq.] which may be more effective than secondary standards in preventing or mitigating such effects.

“(b) SUBMISSION TO CONGRESS; COMMENTS; AUTHORIZATION.—(1) The report shall be transmitted to the Congress not later than 3 years after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990].

“(2) At least 90 days before issuing a report the Administrator shall provide an opportunity for public comment on the proposed report. The Administrator shall include in the final report a summary of the comments received on the proposed report.

“(3) There are authorized to be appropriated such sums as are necessary to carry out this section.”

§ 7410. State implementation plans for national primary and secondary ambient air quality standards

(a) Adoption of plan by State; submission to Administrator; content of plan; revision; new sources; indirect source review program; supplemental or intermittent control systems

(1) Each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator, within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof) under section 7409 of this title for any air pollutant, a plan which provides for implementation, maintenance, and enforcement of such primary standard in each air quality control region (or portion thereof) within such State. In addition, such State shall adopt and submit to the Administrator (either as a part of a plan submitted under the preceding sentence or separately) within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national ambient air quality secondary standard (or revision thereof), a plan which provides for implementation, maintenance, and enforcement of such secondary standard in each air quality control region (or portion thereof) within such State. Unless a separate public hearing is provided, each State shall consider its plan implementing such secondary standard at the hearing required by the first sentence of this paragraph.

(2) Each implementation plan submitted by a State under this chapter shall be adopted by the

State after reasonable notice and public hearing. Each such plan shall—

(A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this chapter;

(B) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to—

(i) monitor, compile, and analyze data on ambient air quality, and

(ii) upon request, make such data available to the Administrator;

(C) include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D;

(D) contain adequate provisions—

(i) prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will—

(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or

(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility,

(ii) insuring compliance with the applicable requirements of sections 7426 and 7415 of this title (relating to interstate and international pollution abatement);

(E) provide (i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof), (ii) requirements that the State comply with the requirements respecting State boards under section 7428 of this title, and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;

(F) require, as may be prescribed by the Administrator—

(i) the installation, maintenance, and replacement of equipment, and the implementa-

tion of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,

(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and

(iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this chapter, which reports shall be available at reasonable times for public inspection;

(G) provide for authority comparable to that in section 7603 of this title and adequate contingency plans to implement such authority;

(H) provide for revision of such plan—

(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and

(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this chapter;

(I) in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D (relating to nonattainment areas);

(J) meet the applicable requirements of section 7421 of this title (relating to consultation), section 7427 of this title (relating to public notification), and part C (relating to prevention of significant deterioration of air quality and visibility protection);

(K) provide for—

(i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and

(ii) the submission, upon request, of data related to such air quality modeling to the Administrator;

(L) require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this chapter, a fee sufficient to cover—

(i) the reasonable costs of reviewing and acting upon any application for such a permit, and

(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),

until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under subchapter V; and

(M) provide for consultation and participation by local political subdivisions affected by the plan.

(3)(A) Repealed. Pub. L. 101-549, title I, § 101(d)(1), Nov. 15, 1990, 104 Stat. 2409.

(B) As soon as practicable, the Administrator shall, consistent with the purposes of this chapter and the Energy Supply and Environmental Coordination Act of 1974 [15 U.S.C. 791 et seq.], review each State's applicable implementation plans and report to the State on whether such plans can be revised in relation to fuel burning stationary sources (or persons supplying fuel to such sources) without interfering with the attainment and maintenance of any national ambient air quality standard within the period permitted in this section. If the Administrator determines that any such plan can be revised, he shall notify the State that a plan revision may be submitted by the State. Any plan revision which is submitted by the State shall, after public notice and opportunity for public hearing, be approved by the Administrator if the revision relates only to fuel burning stationary sources (or persons supplying fuel to such sources), and the plan as revised complies with paragraph (2) of this subsection. The Administrator shall approve or disapprove any revision no later than three months after its submission.

(C) Neither the State, in the case of a plan (or portion thereof) approved under this subsection, nor the Administrator, in the case of a plan (or portion thereof) promulgated under subsection (c), shall be required to revise an applicable implementation plan because one or more exemptions under section 7418 of this title (relating to Federal facilities), enforcement orders under section 7413(d)¹ of this title, suspensions under subsection (f) or (g) (relating to temporary energy or economic authority), orders under section 7419 of this title (relating to primary nonferrous smelters), or extensions of compliance in decrees entered under section 7413(e)¹ of this title (relating to iron- and steel-producing operations) have been granted, if such plan would have met the requirements of this section if no such exemptions, orders, or extensions had been granted.

(4) Repealed. Pub. L. 101-549, title I, § 101(d)(2), Nov. 15, 1990, 104 Stat. 2409.

(5)(A)(i) Any State may include in a State implementation plan, but the Administrator may not require as a condition of approval of such plan under this section, any indirect source review program. The Administrator may approve and enforce, as part of an applicable implementation plan, an indirect source review program which the State chooses to adopt and submit as part of its plan.

(ii) Except as provided in subparagraph (B), no plan promulgated by the Administrator shall include any indirect source review program for any air quality control region, or portion thereof.

(iii) Any State may revise an applicable implementation plan approved under this subsection to suspend or revoke any such program included in such plan, provided that such plan meets the requirements of this section.

(B) The Administrator shall have the authority to promulgate, implement and enforce regulations under subsection (c) respecting indirect

source review programs which apply only to federally assisted highways, airports, and other major federally assisted indirect sources and federally owned or operated indirect sources.

(C) For purposes of this paragraph, the term "indirect source" means a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution. Such term includes parking lots, parking garages, and other facilities subject to any measure for management of parking supply (within the meaning of subsection (c)(2)(D)(ii)), including regulation of existing off-street parking but such term does not include new or existing on-street parking. Direct emissions sources or facilities at, within, or associated with, any indirect source shall not be deemed indirect sources for the purpose of this paragraph.

(D) For purposes of this paragraph the term "indirect source review program" means the facility-by-facility review of indirect sources of air pollution, including such measures as are necessary to assure, or assist in assuring, that a new or modified indirect source will not attract mobile sources of air pollution, the emissions from which would cause or contribute to air pollution concentrations—

(i) exceeding any national primary ambient air quality standard for a mobile source-related air pollutant after the primary standard attainment date, or

(ii) preventing maintenance of any such standard after such date.

(E) For purposes of this paragraph and paragraph (2)(B), the term "transportation control measure" does not include any measure which is an "indirect source review program".

(6) No State plan shall be treated as meeting the requirements of this section unless such plan provides that in the case of any source which uses a supplemental, or intermittent control system for purposes of meeting the requirements of an order under section 7413(d)¹ of this title or section 7419 of this title (relating to primary nonferrous smelter orders), the owner or operator of such source may not temporarily reduce the pay of any employee by reason of the use of such supplemental or intermittent or other dispersion dependent control system.

(b) Extension of period for submission of plans

The Administrator may, wherever he determines necessary, extend the period for submission of any plan or portion thereof which implements a national secondary ambient air quality standard for a period not to exceed 18 months from the date otherwise required for submission of such plan.

(c) Preparation and publication by Administrator of proposed regulations setting forth implementation plan; transportation regulations study and report; parking surcharge; suspension authority; plan implementation

(1) The Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator—

(A) finds that a State has failed to make a required submission or finds that the plan or plan revision submitted by the State does not

¹ See References in Text note below.

satisfy the minimum criteria established under subsection (k)(1)(A), or

(B) disapproves a State implementation plan submission in whole or in part,

unless the State corrects the deficiency, and the Administrator approves the plan or plan revision, before the Administrator promulgates such Federal implementation plan.

(2)(A) Repealed. Pub. L. 101-549, title I, §101(d)(3)(A), Nov. 15, 1990, 104 Stat. 2409.

(B) No parking surcharge regulation may be required by the Administrator under paragraph (1) of this subsection as a part of an applicable implementation plan. All parking surcharge regulations previously required by the Administrator shall be void upon June 22, 1974. This subparagraph shall not prevent the Administrator from approving parking surcharges if they are adopted and submitted by a State as part of an applicable implementation plan. The Administrator may not condition approval of any implementation plan submitted by a State on such plan's including a parking surcharge regulation.

(C) Repealed. Pub. L. 101-549, title I, §101(d)(3)(B), Nov. 15, 1990, 104 Stat. 2409.

(D) For purposes of this paragraph—

(i) The term “parking surcharge regulation” means a regulation imposing or requiring the imposition of any tax, surcharge, fee, or other charge on parking spaces, or any other area used for the temporary storage of motor vehicles.

(ii) The term “management of parking supply” shall include any requirement providing that any new facility containing a given number of parking spaces shall receive a permit or other prior approval, issuance of which is to be conditioned on air quality considerations.

(iii) The term “preferential bus/carpool lane” shall include any requirement for the setting aside of one or more lanes of a street or highway on a permanent or temporary basis for the exclusive use of buses or carpools, or both.

(E) No standard, plan, or requirement, relating to management of parking supply or preferential bus/carpool lanes shall be promulgated after June 22, 1974, by the Administrator pursuant to this section, unless such promulgation has been subjected to at least one public hearing which has been held in the area affected and for which reasonable notice has been given in such area. If substantial changes are made following public hearings, one or more additional hearings shall be held in such area after such notice.

(3) Upon application of the chief executive officer of any general purpose unit of local government, if the Administrator determines that such unit has adequate authority under State or local law, the Administrator may delegate to such unit the authority to implement and enforce within the jurisdiction of such unit any part of a plan promulgated under this subsection. Nothing in this paragraph shall prevent the Administrator from implementing or enforcing any applicable provision of a plan promulgated under this subsection.

(4) Repealed. Pub. L. 101-549, title I, §101(d)(3)(C), Nov. 15, 1990, 104 Stat. 2409.

(5)(A) Any measure in an applicable implementation plan which requires a toll or other charge

for the use of a bridge located entirely within one city shall be eliminated from such plan by the Administrator upon application by the Governor of the State, which application shall include a certification by the Governor that he will revise such plan in accordance with subparagraph (B).

(B) In the case of any applicable implementation plan with respect to which a measure has been eliminated under subparagraph (A), such plan shall, not later than one year after August 7, 1977, be revised to include comprehensive measures to:

(i) establish, expand, or improve public transportation measures to meet basic transportation needs, as expeditiously as is practicable; and

(ii) implement transportation control measures necessary to attain and maintain national ambient air quality standards,

and such revised plan shall, for the purpose of implementing such comprehensive public transportation measures, include requirements to use (insofar as is necessary) Federal grants, State or local funds, or any combination of such grants and funds as may be consistent with the terms of the legislation providing such grants and funds. Such measures shall, as a substitute for the tolls or charges eliminated under subparagraph (A), provide for emissions reductions equivalent to the reductions which may reasonably be expected to be achieved through the use of the tolls or charges eliminated.

(C) Any revision of an implementation plan for purposes of meeting the requirements of subparagraph (B) shall be submitted in coordination with any plan revision required under part D.

(d), (e) Repealed. Pub. L. 101-549, title I, § 101(d)(4), (5), Nov. 15, 1990, 104 Stat. 2409

(f) National or regional energy emergencies; determination by President

(1) Upon application by the owner or operator of a fuel burning stationary source, and after notice and opportunity for public hearing, the Governor of the State in which such source is located may petition the President to determine that a national or regional energy emergency exists of such severity that—

(A) a temporary suspension of any part of the applicable implementation plan or of any requirement under section 7651j of this title (concerning excess emissions penalties or offsets) may be necessary, and

(B) other means of responding to the energy emergency may be inadequate.

Such determination shall not be delegable by the President to any other person. If the President determines that a national or regional energy emergency of such severity exists, a temporary emergency suspension of any part of an applicable implementation plan or of any requirement under section 7651j of this title (concerning excess emissions penalties or offsets) adopted by the State may be issued by the Governor of any State covered by the President's determination under the condition specified in paragraph (2) and may take effect immediately.

(2) A temporary emergency suspension under this subsection shall be issued to a source only if the Governor of such State finds that—

(A) there exists in the vicinity of such source a temporary energy emergency involving high levels of unemployment or loss of necessary energy supplies for residential dwellings; and

(B) such unemployment or loss can be totally or partially alleviated by such emergency suspension.

Not more than one such suspension may be issued for any source on the basis of the same set of circumstances or on the basis of the same emergency.

(3) A temporary emergency suspension issued by a Governor under this subsection shall remain in effect for a maximum of four months or such lesser period as may be specified in a disapproval order of the Administrator, if any. The Administrator may disapprove such suspension if he determines that it does not meet the requirements of paragraph (2).

(4) This subsection shall not apply in the case of a plan provision or requirement promulgated by the Administrator under subsection (c) of this section, but in any such case the President may grant a temporary emergency suspension for a four month period of any such provision or requirement if he makes the determinations and findings specified in paragraphs (1) and (2).

(5) The Governor may include in any temporary emergency suspension issued under this subsection a provision delaying for a period identical to the period of such suspension any compliance schedule (or increment of progress) to which such source is subject under section 1857c-10¹ of this title, as in effect before August 7, 1977, or section 7413(d)¹ of this title, upon a finding that such source is unable to comply with such schedule (or increment) solely because of the conditions on the basis of which a suspension was issued under this subsection.

(g) Governor's authority to issue temporary emergency suspensions

(1) In the case of any State which has adopted and submitted to the Administrator a proposed plan revision which the State determines—

(A) meets the requirements of this section, and

(B) is necessary (i) to prevent the closing for one year or more of any source of air pollution, and (ii) to prevent substantial increases in unemployment which would result from such closing, and

which the Administrator has not approved or disapproved under this section within 12 months of submission of the proposed plan revision, the Governor may issue a temporary emergency suspension of the part of the applicable implementation plan for such State which is proposed to be revised with respect to such source. The determination under subparagraph (B) may not be made with respect to a source which would close without regard to whether or not the proposed plan revision is approved.

(2) A temporary emergency suspension issued by a Governor under this subsection shall remain in effect for a maximum of four months or such lesser period as may be specified in a disapproval order of the Administrator. The Administrator may disapprove such suspension if

he determines that it does not meet the requirements of this subsection.

(3) The Governor may include in any temporary emergency suspension issued under this subsection a provision delaying for a period identical to the period of such suspension any compliance schedule (or increment of progress) to which such source is subject under section 1857c-10¹ of this title as in effect before August 7, 1977, or under section 7413(d)¹ of this title upon a finding that such source is unable to comply with such schedule (or increment) solely because of the conditions on the basis of which a suspension was issued under this subsection.

(h) Publication of comprehensive document for each State setting forth requirements of applicable implementation plan

(1) Not later than 5 years after November 15, 1990, and every 3 years thereafter, the Administrator shall assemble and publish a comprehensive document for each State setting forth all requirements of the applicable implementation plan for such State and shall publish notice in the Federal Register of the availability of such documents.

(2) The Administrator may promulgate such regulations as may be reasonably necessary to carry out the purpose of this subsection.

(i) Modification of requirements prohibited

Except for a primary nonferrous smelter order under section 7419 of this title, a suspension under subsection (f) or (g) (relating to emergency suspensions), an exemption under section 7418 of this title (relating to certain Federal facilities), an order under section 7413(d)¹ of this title (relating to compliance orders), a plan promulgation under subsection (c), or a plan revision under subsection (a)(3); no order, suspension, plan revision, or other action modifying any requirement of an applicable implementation plan may be taken with respect to any stationary source by the State or by the Administrator.

(j) Technological systems of continuous emission reduction on new or modified stationary sources; compliance with performance standards

As a condition for issuance of any permit required under this subchapter, the owner or operator of each new or modified stationary source which is required to obtain such a permit must show to the satisfaction of the permitting authority that the technological system of continuous emission reduction which is to be used at such source will enable it to comply with the standards of performance which are to apply to such source and that the construction or modification and operation of such source will be in compliance with all other requirements of this chapter.

(k) Environmental Protection Agency action on plan submissions

(1) Completeness of plan submissions

(A) Completeness criteria

Within 9 months after November 15, 1990, the Administrator shall promulgate minimum criteria that any plan submission must meet before the Administrator is required to

act on such submission under this subsection. The criteria shall be limited to the information necessary to enable the Administrator to determine whether the plan submission complies with the provisions of this chapter.

(B) Completeness finding

Within 60 days of the Administrator's receipt of a plan or plan revision, but no later than 6 months after the date, if any, by which a State is required to submit the plan or revision, the Administrator shall determine whether the minimum criteria established pursuant to subparagraph (A) have been met. Any plan or plan revision that a State submits to the Administrator, and that has not been determined by the Administrator (by the date 6 months after receipt of the submission) to have failed to meet the minimum criteria established pursuant to subparagraph (A), shall on that date be deemed by operation of law to meet such minimum criteria.

(C) Effect of finding of incompleteness

Where the Administrator determines that a plan submission (or part thereof) does not meet the minimum criteria established pursuant to subparagraph (A), the State shall be treated as not having made the submission (or, in the Administrator's discretion, part thereof).

(2) Deadline for action

Within 12 months of a determination by the Administrator (or a determination deemed by operation of law) under paragraph (1) that a State has submitted a plan or plan revision (or, in the Administrator's discretion, part thereof) that meets the minimum criteria established pursuant to paragraph (1), if applicable (or, if those criteria are not applicable, within 12 months of submission of the plan or revision), the Administrator shall act on the submission in accordance with paragraph (3).

(3) Full and partial approval and disapproval

In the case of any submittal on which the Administrator is required to act under paragraph (2), the Administrator shall approve such submittal as a whole if it meets all of the applicable requirements of this chapter. If a portion of the plan revision meets all the applicable requirements of this chapter, the Administrator may approve the plan revision in part and disapprove the plan revision in part. The plan revision shall not be treated as meeting the requirements of this chapter until the Administrator approves the entire plan revision as complying with the applicable requirements of this chapter.

(4) Conditional approval

The Administrator may approve a plan revision based on a commitment of the State to adopt specific enforceable measures by a date certain, but not later than 1 year after the date of approval of the plan revision. Any such conditional approval shall be treated as a disapproval if the State fails to comply with such commitment.

(5) Calls for plan revisions

Whenever the Administrator finds that the applicable implementation plan for any area is substantially inadequate to attain or maintain the relevant national ambient air quality standard, to mitigate adequately the inter-state pollutant transport described in section 7506a of this title or section 7511c of this title, or to otherwise comply with any requirement of this chapter, the Administrator shall require the State to revise the plan as necessary to correct such inadequacies. The Administrator shall notify the State of the inadequacies, and may establish reasonable deadlines (not to exceed 18 months after the date of such notice) for the submission of such plan revisions. Such findings and notice shall be public. Any finding under this paragraph shall, to the extent the Administrator deems appropriate, subject the State to the requirements of this chapter to which the State was subject when it developed and submitted the plan for which such finding was made, except that the Administrator may adjust any dates applicable under such requirements as appropriate (except that the Administrator may not adjust any attainment date prescribed under part D, unless such date has elapsed).

(6) Corrections

Whenever the Administrator determines that the Administrator's action approving, disapproving, or promulgating any plan or plan revision (or part thereof), area designation, redesignation, classification, or reclassification was in error, the Administrator may in the same manner as the approval, disapproval, or promulgation revise such action as appropriate without requiring any further submission from the State. Such determination and the basis thereof shall be provided to the State and public.

(l) Plan revisions

Each revision to an implementation plan submitted by a State under this chapter shall be adopted by such State after reasonable notice and public hearing. The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 7501 of this title), or any other applicable requirement of this chapter.

(m) Sanctions

The Administrator may apply any of the sanctions listed in section 7509(b) of this title at any time (or at any time after) the Administrator makes a finding, disapproval, or determination under paragraphs (1) through (4), respectively, of section 7509(a) of this title in relation to any plan or plan item (as that term is defined by the Administrator) required under this chapter, with respect to any portion of the State the Administrator determines reasonable and appropriate, for the purpose of ensuring that the requirements of this chapter relating to such plan or plan item are met. The Administrator shall, by rule, establish criteria for exercising his authority under the previous sentence with respect to any deficiency referred to in section 7509(a) of

this title to ensure that, during the 24-month period following the finding, disapproval, or determination referred to in section 7509(a) of this title, such sanctions are not applied on a statewide basis where one or more political subdivisions covered by the applicable implementation plan are principally responsible for such deficiency.

(n) Savings clauses

(1) Existing plan provisions

Any provision of any applicable implementation plan that was approved or promulgated by the Administrator pursuant to this section as in effect before November 15, 1990, shall remain in effect as part of such applicable implementation plan, except to the extent that a revision to such provision is approved or promulgated by the Administrator pursuant to this chapter.

(2) Attainment dates

For any area not designated nonattainment, any plan or plan revision submitted or required to be submitted by a State—

(A) in response to the promulgation or revision of a national primary ambient air quality standard in effect on November 15, 1990, or

(B) in response to a finding of substantial inadequacy under subsection (a)(2) (as in effect immediately before November 15, 1990),

shall provide for attainment of the national primary ambient air quality standards within 3 years of November 15, 1990, or within 5 years of issuance of such finding of substantial inadequacy, whichever is later.

(3) Retention of construction moratorium in certain areas

In the case of an area to which, immediately before November 15, 1990, the prohibition on construction or modification of major stationary sources prescribed in subsection (a)(2)(I) (as in effect immediately before November 15, 1990) applied by virtue of a finding of the Administrator that the State containing such area had not submitted an implementation plan meeting the requirements of section 7502(b)(6) of this title (relating to establishment of a permit program) (as in effect immediately before November 15, 1990) or 7502(a)(1) of this title (to the extent such requirements relate to provision for attainment of the primary national ambient air quality standard for sulfur oxides by December 31, 1982) as in effect immediately before November 15, 1990, no major stationary source of the relevant air pollutant or pollutants shall be constructed or modified in such area until the Administrator finds that the plan for such area meets the applicable requirements of section 7502(c)(5) of this title (relating to permit programs) or subpart 5 of part D (relating to attainment of the primary national ambient air quality standard for sulfur dioxide), respectively.

(o) Indian tribes

If an Indian tribe submits an implementation plan to the Administrator pursuant to section 7601(d) of this title, the plan shall be reviewed in accordance with the provisions for review set

forth in this section for State plans, except as otherwise provided by regulation promulgated pursuant to section 7601(d)(2) of this title. When such plan becomes effective in accordance with the regulations promulgated under section 7601(d) of this title, the plan shall become applicable to all areas (except as expressly provided otherwise in the plan) located within the exterior boundaries of the reservation, notwithstanding the issuance of any patent and including rights-of-way running through the reservation.

(p) Reports

Any State shall submit, according to such schedule as the Administrator may prescribe, such reports as the Administrator may require relating to emission reductions, vehicle miles traveled, congestion levels, and any other information the Administrator may deem necessary to assess the development² effectiveness, need for revision, or implementation of any plan or plan revision required under this chapter.

(July 14, 1955, ch. 360, title I, §110, as added Pub. L. 91-604, §4(a), Dec. 31, 1970, 84 Stat. 1680; amended Pub. L. 93-319, §4, June 22, 1974, 88 Stat. 256; Pub. L. 95-95, title I, §§107, 108, Aug. 7, 1977, 91 Stat. 691, 693; Pub. L. 95-190, §14(a)(1)-(6), Nov. 16, 1977, 91 Stat. 1399; Pub. L. 97-23, §3, July 17, 1981, 95 Stat. 142; Pub. L. 101-549, title I, §§101(b)-(d), 102(h), 107(c), 108(d), title IV, §412, Nov. 15, 1990, 104 Stat. 2404-2408, 2422, 2464, 2466, 2634.)

REFERENCES IN TEXT

The Energy Supply and Environmental Coordination Act of 1974, referred to in subsec. (a)(3)(B), is Pub. L. 93-319, June 22, 1974, 88 Stat. 246, as amended, which is classified principally to chapter 16C (§791 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 791 of Title 15 and Tables.

Section 7413 of this title, referred to in subsecs. (a)(3)(C), (6), (f)(5), (g)(3), and (i), was amended generally by Pub. L. 101-549, title VII, §701, Nov. 15, 1990, 104 Stat. 2672, and, as so amended, subsecs. (d) and (e) of section 7413 no longer relates to final compliance orders and steel industry compliance extension, respectively.

Section 1857c-10 of this title, as in effect before August 7, 1977, referred to in subsecs. (f)(5) and (g)(3), was in the original "section 119, as in effect before the date of the enactment of this paragraph", meaning section 119 of act July 14, 1955, ch. 360, title I, as added June 22, 1974, Pub. L. 93-319, §3, 88 Stat. 248, (which was classified to section 1857c-10 of this title) as in effect prior to the enactment of subsecs. (f)(5) and (g)(3) of this section by Pub. L. 95-95, §107, Aug. 7, 1977, 91 Stat. 691, effective Aug. 7, 1977. Section 112(b)(1) of Pub. L. 95-95 repealed section 119 of act July 14, 1955, ch. 360, title I, as added by Pub. L. 93-319, and provided that all references to such section 119 in any subsequent enactment which supersedes Pub. L. 93-319 shall be construed to refer to section 113(d) of the Clean Air Act and to paragraph (5) thereof in particular which is classified to section 7413(d)(5) of this title. Section 7413 of this title was subsequently amended generally by Pub. L. 101-549, title VII, §701, Nov. 15, 1990, 104 Stat. 2672, see note above. Section 117(b) of Pub. L. 95-95 added a new section 119 of act July 14, 1955, which is classified to section 7419 of this title.

CODIFICATION

Section was formerly classified to section 1857c-5 of this title.

² So in original. Probably should be followed by a comma.

PRIOR PROVISIONS

A prior section 110 of act July 14, 1955, was renumbered section 117 by Pub. L. 91-604 and is classified to section 7417 of this title.

AMENDMENTS

1990—Subsec. (a)(1). Pub. L. 101-549, §101(d)(8), substituted “3 years (or such shorter period as the Administrator may prescribe)” for “nine months” in two places.

Subsec. (a)(2). Pub. L. 101-549, §101(b), amended par. (2) generally, substituting present provisions for provisions setting the time within which the Administrator was to approve or disapprove a plan or portion thereof and listing the conditions under which the plan or portion thereof was to be approved after reasonable notice and hearing.

Subsec. (a)(3)(A). Pub. L. 101-549, §101(d)(1), struck out subpar. (A) which directed Administrator to approve any revision of an implementation plan if it met certain requirements and had been adopted by the State after reasonable notice and public hearings.

Subsec. (a)(3)(D). Pub. L. 101-549, §101(d)(1), struck out subpar. (D) which directed that certain implementation plans be revised to include comprehensive measures and requirements.

Subsec. (a)(4). Pub. L. 101-549, §101(d)(2), struck out par. (4) which set forth requirements for review procedure.

Subsec. (c)(1). Pub. L. 101-549, §102(h), amended par. (1) generally, substituting present provisions for provisions relating to preparation and publication of regulations setting forth an implementation plan, after opportunity for a hearing, upon failure of a State to make required submission or revision.

Subsec. (c)(2)(A). Pub. L. 101-549, §101(d)(3)(A), struck out subpar. (A) which required a study and report on necessity of parking surcharge, management of parking supply, and preferential bus/carpool lane regulations to achieve and maintain national primary ambient air quality standards.

Subsec. (c)(2)(C). Pub. L. 101-549, §101(d)(3)(B), struck out subpar. (C) which authorized suspension of certain regulations and requirements relating to management of parking supply.

Subsec. (c)(4). Pub. L. 101-549, §101(d)(3)(C), struck out par. (4) which permitted Governors to temporarily suspend measures in implementation plans relating to retrofits, gas rationing, and reduction of on-street parking.

Subsec. (c)(5)(B). Pub. L. 101-549, §101(d)(3)(D), struck out “(including the written evidence required by part D),” after “include comprehensive measures”.

Subsec. (d). Pub. L. 101-549, §101(d)(4), struck out subsec. (d) which defined an applicable implementation plan for purposes of this chapter.

Subsec. (e). Pub. L. 101-549, §101(d)(5), struck out subsec. (e) which permitted an extension of time for attainment of a national primary ambient air quality standard.

Subsec. (f)(1). Pub. L. 101-549, §412, inserted “or of any requirement under section 7651j of this title (concerning excess emissions penalties or offsets)” in subpar. (A) and in last sentence.

Subsec. (g)(1). Pub. L. 101-549, §101(d)(6), substituted “12 months of submission of the proposed plan revision” for “the required four month period” in closing provisions.

Subsec. (h)(1). Pub. L. 101-549, §101(d)(7), substituted “5 years after November 15, 1990, and every three years thereafter” for “one year after August 7, 1977, and annually thereafter” and struck out at end “Each such document shall be revised as frequently as practicable but not less often than annually.”

Subsecs. (k) to (n). Pub. L. 101-549, §101(c), added subsecs. (k) to (n).

Subsec. (o). Pub. L. 101-549, §107(c), added subsec. (o).

Subsec. (p). Pub. L. 101-549, §108(d), added subsec. (p).

1981—Subsec. (a)(3)(C). Pub. L. 97-23 inserted reference to extensions of compliance in decrees entered

under section 7413(e) of this title (relating to iron- and steel-producing operations).

1977—Subsec. (a)(2)(A). Pub. L. 95-95, §108(a)(1), substituted “(A) except as may be provided in subparagraph (I)(i) in the case of a plan” for “(A)(i) in the case of a plan”.

Subsec. (a)(2)(B). Pub. L. 95-95, §108(a)(2), substituted “transportation controls, air quality maintenance plans, and preconstruction review of direct sources of air pollution as provided in subparagraph (D)” for “land use and transportation controls”.

Subsec. (a)(2)(D). Pub. L. 95-95, §108(a)(3), substituted “it includes a program to provide for the enforcement of emission limitations and regulation of the modification, construction, and operation of any stationary source, including a permit program as required in parts C and D and a permit or equivalent program for any major emitting facility, within such region as necessary to assure (i) that national ambient air quality standards are achieved and maintained, and (ii) a procedure” for “it includes a procedure”.

Subsec. (a)(2)(E). Pub. L. 95-95, §108(a)(4), substituted “it contains adequate provisions (i) prohibiting any stationary source within the State from emitting any air pollutant in amounts which will (I) prevent attainment or maintenance by any other State of any such national primary or secondary ambient air quality standard, or (II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility, and (ii) insuring compliance with the requirements of section 7426 of this title, relating to interstate pollution abatement” for “it contains adequate provisions for intergovernmental cooperation, including measures necessary to insure that emissions of air pollutants from sources located in any air quality control region will not interfere with the attainment or maintenance of such primary or secondary standard in any portion of such region outside of such State or in any other air quality control region”.

Subsec. (a)(2)(F). Pub. L. 95-95, §108(a)(5), added cl. (vi).

Subsec. (a)(2)(H). Pub. L. 95-190, §14(a)(1), substituted “1977;” for “1977”.

Pub. L. 95-95, §108(a)(6), inserted “except as provided in paragraph (3)(C),” after “or (ii)” and “or to otherwise comply with any additional requirements established under the Clean Air Act Amendments of 1977” after “to achieve the national ambient air quality primary or secondary standard which it implements”.

Subsec. (a)(2)(I). Pub. L. 95-95, §108(b), added subpar. (I).

Subsec. (a)(2)(J). Pub. L. 95-190, §14(a)(2), substituted “; and” for “, and”.

Pub. L. 95-95, §108(b), added subpar. (J).

Subsec. (a)(2)(K). Pub. L. 95-95, §108(b) added subpar. (K).

Subsec. (a)(3)(C). Pub. L. 95-95, §108(c), added subpar. (C).

Subsec. (a)(3)(D). Pub. L. 95-190, §14(a)(4), added subpar. (D).

Subsec. (a)(5). Pub. L. 95-95, §108(e), added par. (5).

Subsec. (a)(5)(D). Pub. L. 95-190, §14(a)(3), struck out “preconstruction or premodification” before “review”.

Subsec. (a)(6). Pub. L. 95-95, §108(e), added par. (6).

Subsec. (c)(1). Pub. L. 95-95, §108(d)(1), (2), substituted “plan which meets the requirements of this section” for “plan for any national ambient air quality primary or secondary standard within the time prescribed” in subpar. (A) and, in provisions following subpar. (C), directed that any portion of a plan relating to any measure described in first sentence of 7421 of this title (relating to consultation) or the consultation process required under such section 7421 of this title not be required to be promulgated before the date eight months after such date required for submission.

Subsec. (c)(3) to (5). Pub. L. 95-95, §108(d)(3), added pars. (3) to (5).

Subsec. (d). Pub. L. 95-95, §108(f), substituted “and which implements the requirements of this section” for

“and which implements a national primary or secondary ambient air quality standard in a State”.

Subsec. (f). Pub. L. 95-95, §107(a), substituted provisions relating to the handling of national or regional energy emergencies for provisions relating to the postponement of compliance by stationary sources or classes of moving sources with any requirement of applicable implementation plans.

Subsec. (g). Pub. L. 95-95, §108(g), added subsec. (g) relating to publication of comprehensive document.

Pub. L. 95-95, §107(b), added subsec. (g) relating to Governor's authority to issue temporary emergency suspensions.

Subsec. (h). Pub. L. 95-190, §14(a)(5), redesignated subsec. (g), added by Pub. L. 95-95, §108(g), as (h). Former subsec. (h) redesignated (i).

Subsec. (i). Pub. L. 95-190, §14(a)(5), redesignated subsec. (h), added by Pub. L. 95-95, §108(g), as (i). Former subsec. (i) redesignated (j) and amended.

Subsec. (j). Pub. L. 95-190 §14(a)(5), (6), redesignated subsec. (i), added by Pub. L. 95-95, §108(g), as (j) and in subsec. (j) as so redesignated, substituted “will enable such source” for “at such source will enable it”.

1974—Subsec. (a)(3). Pub. L. 93-319, §4(a), designated existing provisions as subpar. (A) and added subpar. (B).

Subsec. (c). Pub. L. 93-319, §4(b), designated existing provisions as par. (1) and existing pars. (1), (2), and (3) as subpars. (A), (B), and (C), respectively, of such redesignated par. (1), and added par. (2).

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

PENDING ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95-95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub. L. 95-95, see section 406(a) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF IMPLEMENTATION PLANS APPROVED AND IN EFFECT PRIOR TO AUG. 7, 1977

Nothing in the Clean Air Act Amendments of 1977 [Pub. L. 95-95] to affect any requirement of an approved implementation plan under this section or any other provision in effect under this chapter before Aug. 7, 1977, until modified or rescinded in accordance with this chapter as amended by the Clean Air Act Amendments of 1977, see section 406(c) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

SAVINGS PROVISION

Pub. L. 91-604, §16, Dec. 31, 1970, 84 Stat. 1713, provided that:

“(a)(1) Any implementation plan adopted by any State and submitted to the Secretary of Health, Education, and Welfare, or to the Administrator pursuant to the Clean Air Act [this chapter] prior to enactment of this Act [Dec. 31, 1970] may be approved under section 110 of the Clean Air Act [this section] (as amended by this Act) [Pub. L. 91-604] and shall remain in effect, unless the Administrator determines that such implementation plan, or any portion thereof, is not consistent with applicable requirements of the Clean Air Act [this chapter] (as amended by this Act) and will not provide for the attainment of national primary ambient air quality standards in the time required by such Act. If the Administrator so determines, he shall, within 90 days after promulgation of any national ambient air quality standards pursuant to section 109(a) of the Clean Air Act [section 7409(a) of this title], notify the State and specify in what respects changes are needed to meet the additional requirements of such Act, including requirements to implement national secondary ambient air quality standards. If such changes are not adopted by the State after public hearings and within six months after such notification, the Administrator shall promulgate such changes pursuant to section 110(c) of such Act [subsec. (c) of this section].

“(2) The amendments made by section 4(b) [amending sections 7403 and 7415 of this title] shall not be construed as repealing or modifying the powers of the Administrator with respect to any conference convened under section 108(d) of the Clean Air Act [section 7415 of this title] before the date of enactment of this Act [Dec. 31, 1970].

“(b) Regulations or standards issued under this title II of the Clean Air Act [subchapter II of this chapter] prior to the enactment of this Act [Dec. 31, 1970] shall continue in effect until revised by the Administrator consistent with the purposes of such Act [this chapter].”

FEDERAL ENERGY ADMINISTRATOR

“Federal Energy Administrator”, for purposes of this chapter, to mean Administrator of Federal Energy Administration established by Pub. L. 93-275, May 7, 1974, 88 Stat. 97, which is classified to section 761 et seq. of Title 15, Commerce and Trade, but with the term to mean any officer of the United States designated as such by the President until Federal Energy Administrator takes office and after Federal Energy Administration ceases to exist, see section 798 of Title 15, Commerce and Trade.

Federal Energy Administration terminated and functions vested by law in Administrator thereof transferred to Secretary of Energy (unless otherwise specifically provided) by sections 7151(a) and 7293 of this title.

§ 7411. Standards of performance for new stationary sources

(a) Definitions

For purposes of this section:

(1) The term “standard of performance” means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

(2) The term “new source” means any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source.

of the area as an attainment area. The failure of any area redesignated as an attainment area to maintain the national ambient air quality standard concerned shall not result in a requirement that the State revise its State implementation plan unless the Administrator, in the Administrator's discretion, requires the State to submit a revised State implementation plan.

(July 14, 1955, ch. 360, title I, §175A, as added Pub. L. 101-549, title I, §102(e), Nov. 15, 1990, 104 Stat. 2418.)

§ 7506. Limitations on certain Federal assistance

(a), (b) Repealed. Pub. L. 101-549, title I, § 110(4), Nov. 15, 1990, 104 Stat. 2470

(c) Activities not conforming to approved or promulgated plans

(1) No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved or promulgated under section 7410 of this title. No metropolitan planning organization designated under section 134 of title 23, shall give its approval to any project, program, or plan which does not conform to an implementation plan approved or promulgated under section 7410 of this title. The assurance of conformity to such an implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality. Conformity to an implementation plan means—

(A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

(B) that such activities will not—

(i) cause or contribute to any new violation of any standard in any area;

(ii) increase the frequency or severity of any existing violation of any standard in any area; or

(iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

The determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel and congestion estimates as determined by the metropolitan planning organization or other agency authorized to make such estimates.

(2) Any transportation plan or program developed pursuant to title 23 or chapter 53 of title 49 shall implement the transportation provisions of any applicable implementation plan approved under this chapter applicable to all or part of the area covered by such transportation plan or program. No Federal agency may approve, accept or fund any transportation plan, program or project unless such plan, program or project has been found to conform to any applicable implementation plan in effect under this chapter. In particular—

(A) no transportation plan or transportation improvement program may be adopted by a

metropolitan planning organization designated under title 23 or chapter 53 of title 49, or be found to be in conformity by a metropolitan planning organization until a final determination has been made that emissions expected from implementation of such plans and programs are consistent with estimates of emissions from motor vehicles and necessary emissions reductions contained in the applicable implementation plan, and that the plan or program will conform to the requirements of paragraph (1)(B);

(B) no metropolitan planning organization or other recipient of funds under title 23 or chapter 53 of title 49 shall adopt or approve a transportation improvement program of projects until it determines that such program provides for timely implementation of transportation control measures consistent with schedules included in the applicable implementation plan;

(C) a transportation project may be adopted or approved by a metropolitan planning organization or any recipient of funds designated under title 23 or chapter 53 of title 49, or found in conformity by a metropolitan planning organization or approved, accepted, or funded by the Department of Transportation only if it meets either the requirements of subparagraph (D) or the following requirements—

(i) such a project comes from a conforming plan and program;

(ii) the design concept and scope of such project have not changed significantly since the conformity finding regarding the plan and program from which the project derived; and

(iii) the design concept and scope of such project at the time of the conformity determination for the program was adequate to determine emissions.

(D) Any project not referred to in subparagraph (C) shall be treated as conforming to the applicable implementation plan only if it is demonstrated that the projected emissions from such project, when considered together with emissions projected for the conforming transportation plans and programs within the nonattainment area, do not cause such plans and programs to exceed the emission reduction projections and schedules assigned to such plans and programs in the applicable implementation plan.

(E) The appropriate metropolitan planning organization shall redetermine conformity of existing transportation plans and programs not later than 2 years after the date on which the Administrator—

(i) finds a motor vehicle emissions budget to be adequate in accordance with section 93.118(e)(4) of title 40, Code of Federal Regulations (as in effect on October 1, 2004);

(ii) approves an implementation plan that establishes a motor vehicle emissions budget if that budget has not yet been determined to be adequate in accordance with clause (i); or

(iii) promulgates an implementation plan that establishes or revises a motor vehicle emissions budget.

(3) Until such time as the implementation plan revision referred to in paragraph (4)(C)¹ is approved, conformity of such plans, programs, and projects will be demonstrated if—

(A) the transportation plans and programs—

(i) are consistent with the most recent estimates of mobile source emissions;

(ii) provide for the expeditious implementation of transportation control measures in the applicable implementation plan; and

(iii) with respect to ozone and carbon monoxide nonattainment areas, contribute to annual emissions reductions consistent with sections 7511a(b)(1) and 7512a(a)(7) of this title; and

(B) the transportation projects—

(i) come from a conforming transportation plan and program as defined in subparagraph (A) or for 12 months after November 15, 1990, from a transportation program found to conform within 3 years prior to November 15, 1990; and

(ii) in carbon monoxide nonattainment areas, eliminate or reduce the severity and number of violations of the carbon monoxide standards in the area substantially affected by the project.

With regard to subparagraph (B)(ii), such determination may be made as part of either the conformity determination for the transportation program or for the individual project taken as a whole during the environmental review phase of project development.

(4) CRITERIA AND PROCEDURES FOR DETERMINING CONFORMITY.—

(A) IN GENERAL.—The Administrator shall promulgate, and periodically update, criteria and procedures for determining conformity (except in the case of transportation plans, programs, and projects) of, and for keeping the Administrator informed about, the activities referred to in paragraph (1).

(B) TRANSPORTATION PLANS, PROGRAMS, AND PROJECTS.—The Administrator, with the concurrence of the Secretary of Transportation, shall promulgate, and periodically update, criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects.

(C) CIVIL ACTION TO COMPEL PROMULGATION.—A civil action may be brought against the Administrator and the Secretary of Transportation under section 7604 of this title to compel promulgation of such criteria and procedures and the Federal district court shall have jurisdiction to order such promulgation.

(D) The procedures and criteria shall, at a minimum—

(i) address the consultation procedures to be undertaken by metropolitan planning organizations and the Secretary of Transportation with State and local air quality agencies and State departments of transportation before such organizations and the Secretary make conformity determinations;

(ii) address the appropriate frequency for making conformity determinations, but the frequency for making conformity determina-

tions on updated transportation plans and programs shall be every 4 years, except in a case in which—

(I) the metropolitan planning organization elects to update a transportation plan or program more frequently; or

(II) the metropolitan planning organization is required to determine conformity in accordance with paragraph (2)(E); and

(iii) address how conformity determinations will be made with respect to maintenance plans.

(E) INCLUSION OF CRITERIA AND PROCEDURES IN SIP.—Not later than 2 years after August 10, 2005, the procedures under subparagraph (A) shall include a requirement that each State include in the State implementation plan criteria and procedures for consultation required by subparagraph (D)(i), and enforcement and enforceability (pursuant to sections 93.125(c) and 93.122(a)(4)(ii) of title 40, Code of Federal Regulations) in accordance with the Administrator's criteria and procedures for consultation, enforcement and enforceability.

(F) Compliance with the rules of the Administrator for determining the conformity of transportation plans, programs, and projects funded or approved under title 23 or chapter 53 of title 49 to State or Federal implementation plans shall not be required for traffic signal synchronization projects prior to the funding, approval or implementation of such projects. The supporting regional emissions analysis for any conformity determination made with respect to a transportation plan, program, or project shall consider the effect on emissions of any such project funded, approved, or implemented prior to the conformity determination.

(5) APPLICABILITY.—This subsection shall apply only with respect to—

(A) a nonattainment area and each pollutant for which the area is designated as a nonattainment area; and

(B) an area that was designated as a nonattainment area but that was later redesignated by the Administrator as an attainment area and that is required to develop a maintenance plan under section 7505a of this title with respect to the specific pollutant for which the area was designated nonattainment.

(6) Notwithstanding paragraph 5,² this subsection shall not apply with respect to an area designated nonattainment under section 7407(d)(1) of this title until 1 year after that area is first designated nonattainment for a specific national ambient air quality standard. This paragraph only applies with respect to the national ambient air quality standard for which an area is newly designated nonattainment and does not affect the area's requirements with respect to all other national ambient air quality standards for which the area is designated nonattainment or has been redesignated from nonattainment to attainment with a maintenance plan pursuant to section 7505a¹ of this title (including any pre-existing national ambient air

¹ See References in Text note below.

² So in original. Probably should be "paragraph (5)".

quality standard for a pollutant for which a new or revised standard has been issued).

(7) CONFORMITY HORIZON FOR TRANSPORTATION PLANS.—

(A) IN GENERAL.—Each conformity determination required under this section for a transportation plan under section 134(i) of title 23 or section 5303(i) of title 49 shall require a demonstration of conformity for the period ending on either the final year of the transportation plan, or at the election of the metropolitan planning organization, after consultation with the air pollution control agency and solicitation of public comments and consideration of such comments, the longest of the following periods:

(i) The first 10-year period of any such transportation plan.

(ii) The latest year in the implementation plan applicable to the area that contains a motor vehicle emission budget.

(iii) The year after the completion date of a regionally significant project if the project is included in the transportation improvement program or the project requires approval before the subsequent conformity determination.

(B) REGIONAL EMISSIONS ANALYSIS.—The conformity determination shall be accompanied by a regional emissions analysis for the last year of the transportation plan and for any year shown to exceed emission budgets by a prior analysis, if such year extends beyond the applicable period as determined under subparagraph (A).

(C) EXCEPTION.—In any case in which an area has a revision to an implementation plan under section 7505a(b) of this title and the Administrator has found the motor vehicles emissions budgets from that revision to be adequate in accordance with section 93.118(e)(4) of title 40, Code of Federal Regulations (as in effect on October 1, 2004), or has approved the revision, the demonstration of conformity at the election of the metropolitan planning organization, after consultation with the air pollution control agency and solicitation of public comments and consideration of such comments, shall be required to extend only through the last year of the implementation plan required under section 7505a(b) of this title.

(D) EFFECT OF ELECTION.—Any election by a metropolitan planning organization under this paragraph shall continue in effect until the metropolitan planning organization elects otherwise.

(E) AIR POLLUTION CONTROL AGENCY DEFINED.—In this paragraph, the term “air pollution control agency” means an air pollution control agency (as defined in section 7602(b) of this title) that is responsible for developing plans or controlling air pollution within the area covered by a transportation plan.

(8) SUBSTITUTION OF TRANSPORTATION CONTROL MEASURES.—

(A) IN GENERAL.—Transportation control measures that are specified in an implementation plan may be replaced or added to the implementation plan with alternate or additional transportation control measures—

(i) if the substitute measures achieve equivalent or greater emissions reductions than the control measure to be replaced, as demonstrated with an emissions impact analysis that is consistent with the current methodology used for evaluating the replaced control measure in the implementation plan;

(ii) if the substitute control measures are implemented—

(I) in accordance with a schedule that is consistent with the schedule provided for control measures in the implementation plan; or

(II) if the implementation plan date for implementation of the control measure to be replaced has passed, as soon as practicable after the implementation plan date but not later than the date on which emission reductions are necessary to achieve the purpose of the implementation plan;

(iii) if the substitute and additional control measures are accompanied with evidence of adequate personnel and funding and authority under State or local law to implement, monitor, and enforce the control measures;

(iv) if the substitute and additional control measures were developed through a collaborative process that included—

(I) participation by representatives of all affected jurisdictions (including local air pollution control agencies, the State air pollution control agency, and State and local transportation agencies);

(II) consultation with the Administrator; and

(III) reasonable public notice and opportunity for comment; and

(v) if the metropolitan planning organization, State air pollution control agency, and the Administrator concur with the equivalency of the substitute or additional control measures.

(B) ADOPTION.—(i) Concurrence by the metropolitan planning organization, State air pollution control agency and the Administrator as required by subparagraph (A)(v) shall constitute adoption of the substitute or additional control measures so long as the requirements of subparagraphs (A)(i), (A)(ii), (A)(iii) and (A)(iv) are met.

(ii) Once adopted, the substitute or additional control measures become, by operation of law, part of the State implementation plan and become federally enforceable.

(iii) Within 90 days of its concurrence under subparagraph (A)(v), the State air pollution control agency shall submit the substitute or additional control measure to the Administrator for incorporation in the codification of the applicable implementation plan. Notwithstanding³ any other provision of this chapter, no additional State process shall be necessary to support such revision to the applicable plan.

(C) NO REQUIREMENT FOR EXPRESS PERMISSION.—The substitution or addition of a trans-

³ So in original. Probably should be “Notwithstanding”.

portation control measure in accordance with this paragraph and the funding or approval of such a control measure shall not be contingent on the existence of any provision in the applicable implementation plan that expressly permits such a substitution or addition.

(D) NO REQUIREMENT FOR NEW CONFORMITY DETERMINATION.—The substitution or addition of a transportation control measure in accordance with this paragraph shall not require—

- (i) a new conformity determination for the transportation plan; or
- (ii) a revision of the implementation plan.

(E) CONTINUATION OF CONTROL MEASURE BEING REPLACED.—A control measure that is being replaced by a substitute control measure under this paragraph shall remain in effect until the substitute control measure is adopted by the State pursuant to subparagraph (B).

(F) EFFECT OF ADOPTION.—Adoption of a substitute control measure shall constitute rescission of the previously applicable control measure.

(9) LAPSE OF CONFORMITY.—If a conformity determination required under this subsection for a transportation plan under section 134(i) of title 23 or section 5303(i) of title 49 or a transportation improvement program under section 134(j) of such title 23 or under section 5303(j) of such title 49 is not made by the applicable deadline and such failure is not corrected by additional measures to either reduce motor vehicle emissions sufficient to demonstrate compliance with the requirements of this subsection within 12 months after such deadline or other measures sufficient to correct such failures, the transportation plan shall lapse.

(10) LAPSE.—In this subsection, the term “lapse” means that the conformity determination for a transportation plan or transportation improvement program has expired, and thus there is no currently conforming transportation plan or transportation improvement program.

(d) Priority of achieving and maintaining national primary ambient air quality standards

Each department, agency, or instrumentality of the Federal Government having authority to conduct or support any program with air-quality related transportation consequences shall give priority in the exercise of such authority, consistent with statutory requirements for allocation among States or other jurisdictions, to the implementation of those portions of plans prepared under this section to achieve and maintain the national primary ambient air-quality standard. This paragraph extends to, but is not limited to, authority exercised under chapter 53 of title 49, title 23, and the Housing and Urban Development Act.

(July 14, 1955, ch. 360, title I, § 176, as added Pub. L. 95–95, title I, § 129(b), Aug. 7, 1977, 91 Stat. 749; amended Pub. L. 95–190, § 14(a)(59), Nov. 16, 1977, 91 Stat. 1403; Pub. L. 101–549, title I, §§ 101(f), 110(4), Nov. 15, 1990, 104 Stat. 2409, 2470; Pub. L. 104–59, title III, § 305(b), Nov. 28, 1995, 109 Stat. 580; Pub. L. 104–260, § 1, Oct. 9, 1996, 110 Stat. 3175; Pub. L. 106–377, § 1(a)(1) [title III], Oct. 27, 2000, 114 Stat. 1441, 1441A–44; Pub. L. 109–59, title VI, § 6011(a)–(f), Aug. 10, 2005, 119 Stat. 1878–1881.)

REFERENCES IN TEXT

Paragraph (4) of subsec. (c), referred to in subsec. (c)(3), was amended by Pub. L. 109–59, title VI, § 6011(f), Aug. 10, 2005, 119 Stat. 1881, to redesignate subpar. (C) as (E), strike it out, and add new subpars. (C) and (E). See 2005 Amendment notes below.

Section 7505a of this title, referred to in subsec. (c)(6), was in the original “section 175(A)” and was translated as reading “section 175A”, meaning section 175A of act July 14, 1955, which is classified to section 7505a of this title, to reflect the probable intent of Congress.

The Housing and Urban Development Act, referred to in subsec. (d), may be the name for a series of acts sharing the same name but enacted in different years by Pub. L. 89–117, Aug. 10, 1965, 79 Stat. 451; Pub. L. 90–448, Aug. 1, 1968, 82 Stat. 476; Pub. L. 91–152, Dec. 24, 1969, 83 Stat. 379; and Pub. L. 91–609, Dec. 31, 1970, 84 Stat. 1770, respectively. For complete classification of these Acts to the Code, see Short Title notes set out under section 1701 of Title 12, Banks and Banking, and Tables.

CODIFICATION

In subsecs. (c)(2) and (d), “chapter 53 of title 49” substituted for “the Urban Mass Transportation Act [49 App. U.S.C. 1601 et seq.]” and in subsec. (c)(4)(F) substituted for “Federal Transit Act” on authority of Pub. L. 103–272, § 6(b), July 5, 1994, 108 Stat. 1378 (the first section of which enacted subtitles II, III, and V to X of Title 49, Transportation), and of Pub. L. 102–240, title III, § 3003(b), Dec. 18, 1991, 105 Stat. 2088, which provided that references in laws to the Urban Mass Transportation Act of 1964 be deemed to be references to the Federal Transit Act.

AMENDMENTS

2005—Subsec. (c)(2)(E). Pub. L. 109–59, § 6011(a), added subpar. (E).

Subsec. (c)(4). Pub. L. 109–59, § 6011(f)(1)–(3), inserted par. (4) and subpar. (A) headings, in first sentence substituted “The Administrator shall promulgate, and periodically update,” for “No later than one year after November 15, 1990, the Administrator shall promulgate”, designated second sentence as subpar. (B), inserted heading, substituted “The Administrator, with the concurrence of the Secretary of Transportation, shall promulgate, and periodically update,” for “No later than one year after November 15, 1990, the Administrator, with the concurrence of the Secretary of Transportation, shall promulgate”, designated third sentence as subpar. (C), inserted heading, substituted “A civil action” for “A suit”, and redesignated former subpars. (B) to (D) as (D) to (F), respectively.

Subsec. (c)(4)(B)(ii). Pub. L. 109–59, § 6011(b), amended cl. (ii) generally. Prior to amendment, cl. (ii) read as follows: “address the appropriate frequency for making conformity determinations, but in no case shall such determinations for transportation plans and programs be less frequent than every three years; and”.

Subsec. (c)(4)(E). Pub. L. 109–59, § 6011(f)(4), added subpar. (E) and struck out former subpar. (E) which read as follows: “Such procedures shall also include a requirement that each State shall submit to the Administrator and the Secretary of Transportation within 24 months of November 15, 1990, a revision to its implementation plan that includes criteria and procedures for assessing the conformity of any plan, program, or project subject to the conformity requirements of this subsection.”

Subsec. (c)(7) to (10). Pub. L. 109–59, § 6011(c)–(e), added pars. (7) to (10).

2000—Subsec. (c)(6). Pub. L. 106–377 added par. (6).

1996—Subsec. (c)(4)(D). Pub. L. 104–260 added subpar. (D).

1995—Subsec. (c)(5). Pub. L. 104–59 added par. (5).

1990—Subsecs. (a), (b). Pub. L. 101–549, § 110(4), struck out subsec. (a) which related to approval of projects or award of grants, and subsec. (b) which related to implementation of approved or promulgated plans.

Subsec. (c). Pub. L. 101–549, § 101(f), designated existing provisions as par. (1), struck out “(1)”, “(2)”, “(3)”,

and “(4)” before “engage in”, “support in”, “license or”, and “approve, any”, respectively, substituted “conform to an implementation plan after it” for “conform to a plan after it”, “conform to an implementation plan approved” for “conform to a plan approved”, and “conformity to such an implementation plan shall” for “conformity to such a plan shall”, inserted “Conformity to an implementation plan means—” followed immediately by subpars. (A) and (B) and closing provisions relating to determination of conformity being based on recent estimates of emissions and the determination of such estimates, and added pars. (2) to (4).

1977—Subsec. (a)(1). Pub. L. 95-190 inserted “national” before “primary”.

REGULATIONS

Pub. L. 109-59, title VI, §6011(g), Aug. 10, 2005, 119 Stat. 1882, provided that: “Not later than 2 years after the date of enactment of this Act [Aug. 10, 2005], the Administrator of the Environmental Protection Agency shall promulgate revised regulations to implement the changes made by this section [amending this section].”

§ 7506a. Interstate transport commissions

(a) Authority to establish interstate transport regions

Whenever, on the Administrator’s own motion or by petition from the Governor of any State, the Administrator has reason to believe that the interstate transport of air pollutants from one or more States contributes significantly to a violation of a national ambient air quality standard in one or more other States, the Administrator may establish, by rule, a transport region for such pollutant that includes such States. The Administrator, on the Administrator’s own motion or upon petition from the Governor of any State, or upon the recommendation of a transport commission established under subsection (b), may—

(1) add any State or portion of a State to any region established under this subsection whenever the Administrator has reason to believe that the interstate transport of air pollutants from such State significantly contributes to a violation of the standard in the transport region, or

(2) remove any State or portion of a State from the region whenever the Administrator has reason to believe that the control of emissions in that State or portion of the State pursuant to this section will not significantly contribute to the attainment of the standard in any area in the region.

The Administrator shall approve or disapprove any such petition or recommendation within 18 months of its receipt. The Administrator shall establish appropriate proceedings for public participation regarding such petitions and motions, including notice and comment.

(b) Transport commissions

(1) Establishment

Whenever the Administrator establishes a transport region under subsection (a), the Administrator shall establish a transport commission comprised of (at a minimum) each of the following members:

(A) The Governor of each State in the region or the designee of each such Governor.

(B) The Administrator or the Administrator’s designee.

(C) The Regional Administrator (or the Administrator’s designee) for each Regional Office for each Environmental Protection Agency Region affected by the transport region concerned.

(D) An air pollution control official representing each State in the region, appointed by the Governor.

Decisions of, and recommendations and requests to, the Administrator by each transport commission may be made only by a majority vote of all members other than the Administrator and the Regional Administrators (or designees thereof).

(2) Recommendations

The transport commission shall assess the degree of interstate transport of the pollutant or precursors to the pollutant throughout the transport region, assess strategies for mitigating the interstate pollution, and recommend to the Administrator such measures as the Commission determines to be necessary to ensure that the plans for the relevant States meet the requirements of section 7410(a)(2)(D) of this title. Such commission shall not be subject to the provisions of the Federal Advisory Committee Act (5 U.S.C. App.).

(c) Commission requests

A transport commission established under subsection (b) may request the Administrator to issue a finding under section 7410(k)(5) of this title that the implementation plan for one or more of the States in the transport region is substantially inadequate to meet the requirements of section 7410(a)(2)(D) of this title. The Administrator shall approve, disapprove, or partially approve and partially disapprove such a request within 18 months of its receipt and, to the extent the Administrator approves such request, issue the finding under section 7410(k)(5) of this title at the time of such approval. In acting on such request, the Administrator shall provide an opportunity for public participation and shall address each specific recommendation made by the commission. Approval or disapproval of such a request shall constitute final agency action within the meaning of section 7607(b) of this title.

(July 14, 1955, ch. 360, title I, §176A, as added Pub. L. 101-549, title I, §102(f)(1), Nov. 15, 1990, 104 Stat. 2419.)

REFERENCES IN TEXT

The Federal Advisory Committee Act, referred to in subsec. (b)(2), is Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 770, as amended, which is set out in the Appendix to Title 5, Government Organization and Employees.

§ 7507. New motor vehicle emission standards in nonattainment areas

Notwithstanding section 7543(a) of this title, any State which has plan provisions approved under this part may adopt and enforce for any model year standards relating to control of emissions from new motor vehicles or new motor vehicle engines and take such other actions as are referred to in section 7543(a) of this title respecting such vehicles if—

(1) such standards are identical to the California standards for which a waiver has been granted for such model year, and

(2) California and such State adopt such standards at least two years before commencement of such model year (as determined by regulations of the Administrator).

Nothing in this section or in subchapter II of this chapter shall be construed as authorizing any such State to prohibit or limit, directly or indirectly, the manufacture or sale of a new motor vehicle or motor vehicle engine that is certified in California as meeting California standards, or to take any action of any kind to create, or have the effect of creating, a motor vehicle or motor vehicle engine different than a motor vehicle or engine certified in California under California standards (a "third vehicle") or otherwise create such a "third vehicle".

(July 14, 1955, ch. 360, title I, §177, as added Pub. L. 95-95, title I, §129(b), Aug. 7, 1977, 91 Stat. 750; amended Pub. L. 101-549, title II, §232, Nov. 15, 1990, 104 Stat. 2529.)

AMENDMENTS

1990—Pub. L. 101-549 added sentence at end prohibiting States from limiting or prohibiting sale or manufacture of new vehicles or engines certified in California as having met California standards and from taking any actions where effect of those actions would be to create a "third vehicle".

§ 7508. Guidance documents

The Administrator shall issue guidance documents under section 7408 of this title for purposes of assisting States in implementing requirements of this part respecting the lowest achievable emission rate. Such a document shall be published not later than nine months after August 7, 1977, and shall be revised at least every two years thereafter.

(July 14, 1955, ch. 360, title I, §178, as added Pub. L. 95-95, title I, §129(b), Aug. 7, 1977, 91 Stat. 750.)

§ 7509. Sanctions and consequences of failure to attain

(a) State failure

For any implementation plan or plan revision required under this part (or required in response to a finding of substantial inadequacy as described in section 7410(k)(5) of this title), if the Administrator—

(1) finds that a State has failed, for an area designated nonattainment under section 7407(d) of this title, to submit a plan, or to submit 1 or more of the elements (as determined by the Administrator) required by the provisions of this chapter applicable to such an area, or has failed to make a submission for such an area that satisfies the minimum criteria established in relation to any such element under section 7410(k) of this title,

(2) disapproves a submission under section 7410(k) of this title, for an area designated nonattainment under section 7407 of this title, based on the submission's failure to meet one or more of the elements required by the provisions of this chapter applicable to such an area,

(3)(A) determines that a State has failed to make any submission as may be required under this chapter, other than one described under paragraph (1) or (2), including an adequate maintenance plan, or has failed to make any submission, as may be required under this chapter, other than one described under paragraph (1) or (2), that satisfies the minimum criteria established in relation to such submission under section 7410(k)(1)(A) of this title, or

(B) disapproves in whole or in part a submission described under subparagraph (A), or

(4) finds that any requirement of an approved plan (or approved part of a plan) is not being implemented,

unless such deficiency has been corrected within 18 months after the finding, disapproval, or determination referred to in paragraphs (1), (2), (3), and (4), one of the sanctions referred to in subsection (b) shall apply, as selected by the Administrator, until the Administrator determines that the State has come into compliance, except that if the Administrator finds a lack of good faith, sanctions under both paragraph (1) and paragraph (2) of subsection (b) shall apply until the Administrator determines that the State has come into compliance. If the Administrator has selected one of such sanctions and the deficiency has not been corrected within 6 months thereafter, sanctions under both paragraph (1) and paragraph (2) of subsection (b) shall apply until the Administrator determines that the State has come into compliance. In addition to any other sanction applicable as provided in this section, the Administrator may withhold all or part of the grants for support of air pollution planning and control programs that the Administrator may award under section 7405 of this title.

(b) Sanctions

The sanctions available to the Administrator as provided in subsection (a) are as follows:

(1) Highway sanctions

(A) The Administrator may impose a prohibition, applicable to a nonattainment area, on the approval by the Secretary of Transportation of any projects or the awarding by the Secretary of any grants, under title 23 other than projects or grants for safety where the Secretary determines, based on accident or other appropriate data submitted by the State, that the principal purpose of the project is an improvement in safety to resolve a demonstrated safety problem and likely will result in a significant reduction in, or avoidance of, accidents. Such prohibition shall become effective upon the selection by the Administrator of this sanction.

(B) In addition to safety, projects or grants that may be approved by the Secretary, notwithstanding the prohibition in subparagraph (A), are the following—

(i) capital programs for public transit;

(ii) construction or restriction of certain roads or lanes solely for the use of passenger buses or high occupancy vehicles;

(iii) planning for requirements for employers to reduce employee work-trip-related vehicle emissions;

(iv) highway ramp metering, traffic signalization, and related programs that improve traffic flow and achieve a net emission reduction;

(v) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit operations;

(vi) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use, through road use charges, tolls, parking surcharges, or other pricing mechanisms, vehicle restricted zones or periods, or vehicle registration programs;

(vii) programs for breakdown and accident scene management, nonrecurring congestion, and vehicle information systems, to reduce congestion and emissions; and

(viii) such other transportation-related programs as the Administrator, in consultation with the Secretary of Transportation, finds would improve air quality and would not encourage single occupancy vehicle capacity.

In considering such measures, the State should seek to ensure adequate access to downtown, other commercial, and residential areas, and avoid increasing or relocating emissions and congestion rather than reducing them.

(2) Offsets

In applying the emissions offset requirements of section 7503 of this title to new or modified sources or emissions units for which a permit is required under this part, the ratio of emission reductions to increased emissions shall be at least 2 to 1.

(c) Notice of failure to attain

(1) As expeditiously as practicable after the applicable attainment date for any nonattainment area, but not later than 6 months after such date, the Administrator shall determine, based on the area's air quality as of the attainment date, whether the area attained the standard by that date.

(2) Upon making the determination under paragraph (1), the Administrator shall publish a notice in the Federal Register containing such determination and identifying each area that the Administrator has determined to have failed to attain. The Administrator may revise or supplement such determination at any time based on more complete information or analysis concerning the area's air quality as of the attainment date.

(d) Consequences for failure to attain

(1) Within 1 year after the Administrator publishes the notice under subsection (c)(2) (relating to notice of failure to attain), each State containing a nonattainment area shall submit a revision to the applicable implementation plan meeting the requirements of paragraph (2) of this subsection.

(2) The revision required under paragraph (1) shall meet the requirements of section 7410 of this title and section 7502 of this title. In addition, the revision shall include such additional measures as the Administrator may reasonably

prescribe, including all measures that can be feasibly implemented in the area in light of technological achievability, costs, and any nonair quality and other air quality-related health and environmental impacts.

(3) The attainment date applicable to the revision required under paragraph (1) shall be the same as provided in the provisions of section 7502(a)(2) of this title, except that in applying such provisions the phrase "from the date of the notice under section 7509(c)(2) of this title" shall be substituted for the phrase "from the date such area was designated nonattainment under section 7407(d) of this title" and for the phrase "from the date of designation as nonattainment".

(July 14, 1955, ch. 360, title I, § 179, as added Pub. L. 101-549, title I, § 102(g), Nov. 15, 1990, 104 Stat. 2420.)

§ 7509a. International border areas

(a) Implementation plans and revisions

Notwithstanding any other provision of law, an implementation plan or plan revision required under this chapter shall be approved by the Administrator if—

(1) such plan or revision meets all the requirements applicable to it under the¹ chapter other than a requirement that such plan or revision demonstrate attainment and maintenance of the relevant national ambient air quality standards by the attainment date specified under the applicable provision of this chapter, or in a regulation promulgated under such provision, and

(2) the submitting State establishes to the satisfaction of the Administrator that the implementation plan of such State would be adequate to attain and maintain the relevant national ambient air quality standards by the attainment date specified under the applicable provision of this chapter, or in a regulation promulgated under such provision, but for emissions emanating from outside of the United States.

(b) Attainment of ozone levels

Notwithstanding any other provision of law, any State that establishes to the satisfaction of the Administrator that, with respect to an ozone nonattainment area in such State, such State would have attained the national ambient air quality standard for ozone by the applicable attainment date, but for emissions emanating from outside of the United States, shall not be subject to the provisions of section 7511(a)(2) or (5) of this title or section 7511d of this title.

(c) Attainment of carbon monoxide levels

Notwithstanding any other provision of law, any State that establishes to the satisfaction of the Administrator, with respect to a carbon monoxide nonattainment area in such State, that such State has attained the national ambient air quality standard for carbon monoxide by the applicable attainment date, but for emissions emanating from outside of the United States, shall not be subject to the provisions of section 7512(b)(2) or (9)² of this title.

¹ So in original. Probably should be "this".

² So in original. Section 7512(b) of this title does not contain a par. (9).

SUBPART 6—SAVINGS PROVISIONS

§ 7515. General savings clause

Each regulation, standard, rule, notice, order and guidance promulgated or issued by the Administrator under this chapter, as in effect before November 15, 1990, shall remain in effect according to its terms, except to the extent otherwise provided under this chapter, inconsistent with any provision of this chapter, or revised by the Administrator. No control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before November 15, 1990, in any area which is a non-attainment area for any air pollutant may be modified after November 15, 1990, in any manner unless the modification insures equivalent or greater emission reductions of such air pollutant.

(July 14, 1955, ch. 360, title I, §193, as added Pub. L. 101-549, title I, §108(l), Nov. 15, 1990, 104 Stat. 2469.)

SUBCHAPTER II—EMISSION STANDARDS
FOR MOVING SOURCES

PART A—MOTOR VEHICLE EMISSION AND FUEL
STANDARDS

§ 7521. Emission standards for new motor vehicles or new motor vehicle engines

(a) Authority of Administrator to prescribe by regulation

Except as otherwise provided in subsection (b)—

(1) The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such standards shall be applicable to such vehicles and engines for their useful life (as determined under subsection (d), relating to useful life of vehicles for purposes of certification), whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control such pollution.

(2) 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 consideration to the cost of compliance within such period.

(3)(A) IN GENERAL.—(i) Unless the standard is changed as provided in subparagraph (B), regulations under paragraph (1) of this subsection applicable to emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter from classes or categories of heavy-duty vehicles or engines manufactured during or after model year 1983 shall contain standards which reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such

standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology.

(ii) In establishing classes or categories of vehicles or engines for purposes of regulations under this paragraph, the Administrator may base such classes or categories on gross vehicle weight, horsepower, type of fuel used, or other appropriate factors.

(B) REVISED STANDARDS FOR HEAVY DUTY TRUCKS.—(i) On the basis of information available to the Administrator concerning the effects of air pollutants emitted from heavy-duty vehicles or engines and from other sources of mobile source related pollutants on the public health and welfare, and taking costs into account, the Administrator may promulgate regulations under paragraph (1) of this subsection revising any standard promulgated under, or before the date of, the enactment of the Clean Air Act Amendments of 1990 (or previously revised under this subparagraph) and applicable to classes or categories of heavy-duty vehicles or engines.

(ii) Effective for the model year 1998 and thereafter, the regulations under paragraph (1) of this subsection applicable to emissions of oxides of nitrogen (NO_x) from gasoline and diesel-fueled heavy duty trucks shall contain standards which provide that such emissions may not exceed 4.0 grams per brake horsepower hour (gbh).

(C) LEAD TIME AND STABILITY.—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.

(D) REBUILDING PRACTICES.—The Administrator shall study the practice of rebuilding heavy-duty engines and the impact rebuilding has on engine emissions. On the basis of that study and other information available to the Administrator, the Administrator may prescribe requirements to control rebuilding practices, including standards applicable to emissions from any rebuilt heavy-duty engines (whether or not the engine is past its statutory useful life), which in the Administrator's judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare taking costs into account. Any regulation shall take effect after a period the Administrator finds necessary to permit the development and application of the requisite control measures, giving appropriate consideration to the cost of compliance within the period and energy and safety factors.

(E) MOTORCYCLES.—For purposes of this paragraph, motorcycles and motorcycle engines shall be treated in the same manner as heavy-duty vehicles and engines (except as otherwise permitted under section 7525(f)(1)¹ of this title) unless the Administrator promulgates a rule reclassifying motorcycles as light-duty vehicles within the meaning of this section or unless the Administrator promulgates regulations under subsection (a) applying standards applicable to the emission of air pollutants from motorcycles as a separate class or category. In any case in

¹ See References in Text note below.

which such standards are promulgated for such emissions from motorcycles as a separate class or category, the Administrator, in promulgating such standards, shall consider the need to achieve equivalency of emission reductions between motorcycles and other motor vehicles to the maximum extent practicable.

(4)(A) Effective with respect to vehicles and engines manufactured after model year 1978, no emission control device, system, or element of design shall be used in a new motor vehicle or new motor vehicle engine for purposes of complying with requirements prescribed under this subchapter if such device, system, or element of design will cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function.

(B) In determining whether an unreasonable risk exists under subparagraph (A), the Administrator shall consider, among other factors, (i) whether and to what extent the use of any device, system, or element of design causes, increases, reduces, or eliminates emissions of any unregulated pollutants; (ii) available methods for reducing or eliminating any risk to public health, welfare, or safety which may be associated with the use of such device, system, or element of design, and (iii) the availability of other devices, systems, or elements of design which may be used to conform to requirements prescribed under this subchapter without causing or contributing to such unreasonable risk. The Administrator shall include in the consideration required by this paragraph all relevant information developed pursuant to section 7548 of this title.

(5)(A) If the Administrator promulgates final regulations which define the degree of control required and the test procedures by which compliance could be determined for gasoline vapor recovery of uncontrolled emissions from the fueling of motor vehicles, the Administrator shall, after consultation with the Secretary of Transportation with respect to motor vehicle safety, prescribe, by regulation, fill pipe standards for new motor vehicles in order to insure effective connection between such fill pipe and any vapor recovery system which the Administrator determines may be required to comply with such vapor recovery regulations. In promulgating such standards the Administrator shall take into consideration limits on fill pipe diameter, minimum design criteria for nozzle retainer lips, limits on the location of the unleaded fuel restrictors, a minimum access zone surrounding a fill pipe, a minimum pipe or nozzle insertion angle, and such other factors as he deems pertinent.

(B) Regulations prescribing standards under subparagraph (A) shall not become effective until the introduction of the model year for which it would be feasible to implement such standards, taking into consideration the restraints of an adequate leadtime for design and production.

(C) Nothing in subparagraph (A) shall (i) prevent the Administrator from specifying different nozzle and fill neck sizes for gasoline with additives and gasoline without additives or (ii) permit the Administrator to require a specific location, configuration, modeling, or styling of the

motor vehicle body with respect to the fuel tank fill neck or fill nozzle clearance envelope.

(D) For the purpose of this paragraph, the term "fill pipe" shall include the fuel tank fill pipe, fill neck, fill inlet, and closure.

(6) ONBOARD VAPOR RECOVERY.—Within 1 year after November 15, 1990, the Administrator shall, after consultation with the Secretary of Transportation regarding the safety of vehicle-based ("onboard") systems for the control of vehicle refueling emissions, promulgate standards under this section requiring that new light-duty vehicles manufactured beginning in the fourth model year after the model year in which the standards are promulgated and thereafter shall be equipped with such systems. The standards required under this paragraph shall apply to a percentage of each manufacturer's fleet of new light-duty vehicles beginning with the fourth model year after the model year in which the standards are promulgated. The percentage shall be as specified in the following table:

IMPLEMENTATION SCHEDULE FOR ONBOARD VAPOR RECOVERY REQUIREMENTS

Model year commencing after standards promulgated	Percentage*
Fourth	40
Fifth	80
After Fifth	100

*Percentages in the table refer to a percentage of the manufacturer's sales volume.

The standards shall require that such systems provide a minimum evaporative emission capture efficiency of 95 percent. The requirements of section 7511a(b)(3) of this title (relating to stage II gasoline vapor recovery) for areas classified under section 7511 of this title as moderate for ozone shall not apply after promulgation of such standards and the Administrator may, by rule, revise or waive the application of the requirements of such section 7511a(b)(3) of this title for areas classified under section 7511 of this title as Serious, Severe, or Extreme for ozone, as appropriate, after such time as the Administrator determines that onboard emissions control systems required under this paragraph are in widespread use throughout the motor vehicle fleet.

(b) Emissions of carbon monoxide, hydrocarbons, and oxides of nitrogen; annual report to Congress; waiver of emission standards; research objectives

(1)(A) The regulations under subsection (a) applicable to emissions of carbon monoxide and hydrocarbons from light-duty vehicles and engines manufactured during model years 1977 through 1979 shall contain standards which provide that such emissions from such vehicles and engines may not exceed 1.5 grams per vehicle mile of hydrocarbons and 15.0 grams per vehicle mile of carbon monoxide. The regulations under subsection (a) applicable to emissions of carbon monoxide from light-duty vehicles and engines manufactured during the model year 1980 shall contain standards which provide that such emissions may not exceed 7.0 grams per vehicle mile. The regulations under subsection (a) applicable to emissions of hydrocarbons from light-duty

vehicles and engines manufactured during or after model year 1980 shall contain standards which require a reduction of at least 90 percent from emissions of such pollutant allowable under the standards under this section applicable to light-duty vehicles and engines manufactured in model year 1970. Unless waived as provided in paragraph (5),¹ regulations under subsection (a) applicable to emissions of carbon monoxide from light-duty vehicles and engines manufactured during or after the model year 1981 shall contain standards which require a reduction of at least 90 percent from emissions of such pollutant allowable under the standards under this section applicable to light-duty vehicles and engines manufactured in model year 1970.

(B) The regulations under subsection (a) applicable to emissions of oxides of nitrogen from light-duty vehicles and engines manufactured during model years 1977 through 1980 shall contain standards which provide that such emissions from such vehicles and engines may not exceed 2.0 grams per vehicle mile. The regulations under subsection (a) applicable to emissions of oxides of nitrogen from light-duty vehicles and engines manufactured during the model year 1981 and thereafter shall contain standards which provide that such emissions from such vehicles and engines may not exceed 1.0 gram per vehicle mile. The Administrator shall prescribe standards in lieu of those required by the preceding sentence, which provide that emissions of oxides of nitrogen may not exceed 2.0 grams per vehicle mile for any light-duty vehicle manufactured during model years 1981 and 1982 by any manufacturer whose production, by corporate identity, for calendar year 1976 was less than three hundred thousand light-duty motor vehicles worldwide if the Administrator determines that—

(i) the ability of such manufacturer to meet emission standards in the 1975 and subsequent model years was, and is, primarily dependent upon technology developed by other manufacturers and purchased from such manufacturers; and

(ii) such manufacturer lacks the financial resources and technological ability to develop such technology.

(C) The Administrator may promulgate regulations under subsection (a)(1) revising any standard prescribed or previously revised under this subsection, as needed to protect public health or welfare, taking costs, energy, and safety into account. Any revised standard shall require a reduction of emissions from the standard that was previously applicable. Any such revision under this subchapter may provide for a phase-in of the standard. It is the intent of Congress that the numerical emission standards specified in subsections (a)(3)(B)(ii), (g), (h), and (i) shall not be modified by the Administrator after November 15, 1990, for any model year before the model year 2004.

(2) Emission standards under paragraph (1), and measurement techniques on which such standards are based (if not promulgated prior to November 15, 1990), shall be promulgated by regulation within 180 days after November 15, 1990.

(3) For purposes of this part—

(A)(i) The term “model year” with reference to any specific calendar year means the manufacturer’s annual production period (as determined by the Administrator) which includes January 1 of such calendar year. If the manufacturer has no annual production period, the term “model year” shall mean the calendar year.

(ii) For the purpose of assuring that vehicles and engines manufactured before the beginning of a model year were not manufactured for purposes of circumventing the effective date of a standard required to be prescribed by subsection (b), the Administrator may prescribe regulations defining “model year” otherwise than as provided in clause (i).

(B) Repealed. Pub. L. 101-549, title II, §230(1), Nov. 15, 1990, 104 Stat. 2529.

(C) The term “heavy duty vehicle” means a truck, bus, or other vehicle manufactured primarily for use on the public streets, roads, and highways (not including any vehicle operated exclusively on a rail or rails) which has a gross vehicle weight (as determined under regulations promulgated by the Administrator) in excess of six thousand pounds. Such term includes any such vehicle which has special features enabling off-street or off-highway operation and use.

(3)² Upon the petition of any manufacturer, the Administrator, after notice and opportunity for public hearing, may waive the standard required under subparagraph (B) of paragraph (1) to not exceed 1.5 grams of oxides of nitrogen per vehicle mile for any class or category of light-duty vehicles or engines manufactured by such manufacturer during any period of up to four model years beginning after the model year 1980 if the manufacturer demonstrates that such waiver is necessary to permit the use of an innovative power train technology, or innovative emission control device or system, in such class or category of vehicles or engines and that such technology or system was not utilized by more than 1 percent of the light-duty vehicles sold in the United States in the 1975 model year. Such waiver may be granted only if the Administrator determines—

(A) that such waiver would not endanger public health,

(B) that there is a substantial likelihood that the vehicles or engines will be able to comply with the applicable standard under this section at the expiration of the waiver, and

(C) that the technology or system has a potential for long-term air quality benefit and has the potential to meet or exceed the average fuel economy standard applicable under the Energy Policy and Conservation Act [42 U.S.C. 6201 et seq.] upon the expiration of the waiver.

No waiver under this subparagraph³ granted to any manufacturer shall apply to more than 5 percent of such manufacturer’s production or

² So in original. Probably should be “(4)”.

³ So in original. Probably should be “paragraph”.

more than fifty thousand vehicles or engines, whichever is greater.

(c) Feasibility study and investigation by National Academy of Sciences; reports to Administrator and Congress; availability of information

(1) The Administrator shall undertake to enter into appropriate arrangements with the National Academy of Sciences to conduct a comprehensive study and investigation of the technological feasibility of meeting the emissions standards required to be prescribed by the Administrator by subsection (b) of this section.

(2) Of the funds authorized to be appropriated to the Administrator by this chapter, such amounts as are required shall be available to carry out the study and investigation authorized by paragraph (1) of this subsection.

(3) In entering into any arrangement with the National Academy of Sciences for conducting the study and investigation authorized by paragraph (1) of this subsection, the Administrator shall request the National Academy of Sciences to submit semiannual reports on the progress of its study and investigation to the Administrator and the Congress, beginning not later than July 1, 1971, and continuing until such study and investigation is completed.

(4) The Administrator shall furnish to such Academy at its request any information which the Academy deems necessary for the purpose of conducting the investigation and study authorized by paragraph (1) of this subsection. For the purpose of furnishing such information, the Administrator may use any authority he has under this chapter (A) to obtain information from any person, and (B) to require such person to conduct such tests, keep such records, and make such reports respecting research or other activities conducted by such person as may be reasonably necessary to carry out this subsection.

(d) Useful life of vehicles

The Administrator shall prescribe regulations under which the useful life of vehicles and engines shall be determined for purposes of subsection (a)(1) of this section and section 7541 of this title. Such regulations shall provide that except where a different useful life period is specified in this subchapter useful life shall—

(1) in the case of light duty vehicles and light duty vehicle engines and light-duty trucks up to 3,750 lbs. LVW and up to 6,000 lbs. GVWR, be a period of use of five years or fifty thousand miles (or the equivalent), whichever first occurs, except that in the case of any requirement of this section which first becomes applicable after November 15, 1990, where the useful life period is not otherwise specified for such vehicles and engines, the period shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs, with testing for purposes of in-use compliance under section 7541 of this title up to (but not beyond) 7 years or 75,000 miles (or the equivalent), whichever first occurs;

(2) in the case of any other motor vehicle or motor vehicle engine (other than motorcycles or motorcycle engines), be a period of use set forth in paragraph (1) unless the Administrator determines that a period of use of

greater duration or mileage is appropriate; and

(3) in the case of any motorcycle or motorcycle engine, be a period of use the Administrator shall determine.

(e) New power sources or propulsion systems

In the event of a new power source or propulsion system for new motor vehicles or new motor vehicle engines is submitted for certification pursuant to section 7525(a) of this title, the Administrator may postpone certification until he has prescribed standards for any air pollutants emitted by such vehicle or engine which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger the public health or welfare but for which standards have not been prescribed under subsection (a).

(f) ⁴ High altitude regulations

(1) The high altitude regulation in effect with respect to model year 1977 motor vehicles shall not apply to the manufacture, distribution, or sale of 1978 and later model year motor vehicles. Any future regulation affecting the sale or distribution of motor vehicles or engines manufactured before the model year 1984 in high altitude areas of the country shall take effect no earlier than model year 1981.

(2) Any such future regulation applicable to high altitude vehicles or engines shall not require a percentage of reduction in the emissions of such vehicles which is greater than the required percentage of reduction in emissions from motor vehicles as set forth in subsection (b). This percentage reduction shall be determined by comparing any proposed high altitude emission standards to high altitude emissions from vehicles manufactured during model year 1970. In no event shall regulations applicable to high altitude vehicles manufactured before the model year 1984 establish a numerical standard which is more stringent than that applicable to vehicles certified under non-high altitude conditions.

(3) Section 7607(d) of this title shall apply to any high altitude regulation referred to in paragraph (2) and before promulgating any such regulation, the Administrator shall consider and make a finding with respect to—

(A) the economic impact upon consumers, individual high altitude dealers, and the automobile industry of any such regulation, including the economic impact which was experienced as a result of the regulation imposed during model year 1977 with respect to high altitude certification requirements;

(B) the present and future availability of emission control technology capable of meeting the applicable vehicle and engine emission requirements without reducing model availability; and

(C) the likelihood that the adoption of such a high altitude regulation will result in any significant improvement in air quality in any area to which it shall apply.

⁴ Another subsec. (f) is set out after subsec. (m).

(g) Light-duty trucks up to 6,000 lbs. GVWR and light-duty vehicles; standards for model years after 1993

(1) NMHC, CO, and NO_x

Effective with respect to the model year 1994 and thereafter, the regulations under subsection (a) applicable to emissions of non-methane hydrocarbons (NMHC), carbon monoxide (CO), and oxides of nitrogen (NO_x) from

light-duty trucks (LDTs) of up to 6,000 lbs. gross vehicle weight rating (GVWR) and light-duty vehicles (LDVs) shall contain standards which provide that emissions from a percentage of each manufacturer's sales volume of such vehicles and trucks shall comply with the levels specified in table G. The percentage shall be as specified in the implementation schedule below:

TABLE G—EMISSION STANDARDS FOR NMHC, CO, AND NO_x FROM LIGHT-DUTY TRUCKS OF UP TO 6,000 LBS. GVWR AND LIGHT-DUTY VEHICLES

Vehicle type	Column A			Column B		
	(5 yrs/50,000 mi)			(10 yrs/100,000 mi)		
	NMHC	CO	NO _x	NMHC	CO	NO _x
LDTs (0-3,750 lbs. LVW) and light-duty vehicles	0.25	3.4	0.4*	0.31	4.2	0.6*
LDTs (3,751-5,750 lbs. LVW)	0.32	4.4	0.7**	0.40	5.5	0.97

Standards are expressed in grams per mile (gpm). For standards under column A, for purposes of certification under section 7525 of this title, the applicable useful life shall be 5 years or 50,000 miles (or the equivalent), whichever first occurs.

For standards under column B, for purposes of certification under section 7525 of this title, the applicable useful life shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs.

*In the case of diesel-fueled LDTs (0-3,750 lvw) and light-duty vehicles, before the model year 2004, in lieu of the 0.4 and 0.6 standards for NO_x, the applicable standards for NO_x shall be 1.0 gpm for a useful life of 5 years or 50,000 miles (or the equivalent), whichever first occurs, and 1.25 gpm for a useful life of 10 years or 100,000 miles (or the equivalent) whichever first occurs.

**This standard does not apply to diesel-fueled LDTs (3,751-5,750 lbs. LVW).

IMPLEMENTATION SCHEDULE FOR TABLE G STANDARDS

Model year	Percentage*
1994	40
1995	80
after 1995	100

*Percentages in the table refer to a percentage of each manufacturer's sales volume.

(2) PM Standard

Effective with respect to model year 1994 and thereafter in the case of light-duty vehicles, and effective with respect to the model year 1995 and thereafter in the case of light-duty trucks (LDTs) of up to 6,000 lbs. gross vehicle weight rating (GVWR), the regulations under subsection (a) applicable to emissions of particulate matter (PM) from such vehicles and trucks shall contain standards which provide that such emissions from a percentage of each manufacturer's sales volume of such vehicles and trucks shall not exceed the levels specified in the table below. The percentage shall be as specified in the Implementation Schedule below.

PM STANDARD FOR LDTs OF UP TO 6,000 LBS. GVWR

Useful life period	Standard
5/50,000	0.08 gpm
10/100,000	0.10 gpm

The applicable useful life, for purposes of certification under section 7525 of this title and for purposes of in-use compliance under section 7541 of this title, shall be 5 years or 50,000 miles (or the equivalent), whichever first occurs, in the case of the 5/50,000 standard.

The applicable useful life, for purposes of certification under section 7525 of this title and for purposes of in-use compliance under section 7541 of this title, shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs in the case of the 10/100,000 standard.

IMPLEMENTATION SCHEDULE FOR PM STANDARDS

Model year	Light-duty vehicles	LDTs
1994	40%*	
1995	80%*	40%*
1996	100%*	80%*
after 1996	100%*	100%*

*Percentages in the table refer to a percentage of each manufacturer's sales volume.

(h) Light-duty trucks of more than 6,000 lbs. GVWR; standards for model years after 1995

Effective with respect to the model year 1996 and thereafter, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC), carbon monoxide (CO), oxides of nitrogen (NO_x), and particulate matter (PM) from light-duty trucks (LDTs) of more than 6,000 lbs. gross vehicle weight rating (GVWR) shall contain standards which provide that emissions from a specified percentage of each manufacturer's sales volume of such trucks shall comply with the levels specified in table H. The specified percentage shall be 50 percent in model year 1996 and 100 percent thereafter.

TABLE H—EMISSION STANDARDS FOR NMHC AND CO FROM GASOLINE AND DIESEL FUELED LIGHT-DUTY TRUCKS OF MORE THAN 6,000 LBS. GVWR

LDT Test weight	Column A			Column B			
	(5 yrs/50,000 mi)			(11 yrs/120,000 mi)			
	NMHC	CO	NO _x	NMHC	CO	NO _x	PM
3,751–5,750 lbs. TW	0.32	4.4	0.7*	0.46	6.4	0.98	0.10
Over 5,750 lbs. TW	0.39	5.0	1.1*	0.56	7.3	1.53	0.12

Standards are expressed in grams per mile (GPM).
 For standards under column A, for purposes of certification under section 7525 of this title, the applicable useful life shall be 5 years or 50,000 miles (or the equivalent) whichever first occurs.
 For standards under column B, for purposes of certification under section 7525 of this title, the applicable useful life shall be 11 years or 120,000 miles (or the equivalent), whichever first occurs.
 *Not applicable to diesel-fueled LDTs.

(i) Phase II study for certain light-duty vehicles and light-duty trucks

(1) The Administrator, with the participation of the Office of Technology Assessment, shall study whether or not further reductions in emissions from light-duty vehicles and light-duty trucks should be required pursuant to this subchapter. The study shall consider whether to establish with respect to model years commencing after January 1, 2003, the standards and useful life period for gasoline and diesel-fueled light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less specified in the following table:

TABLE 3—PENDING EMISSION STANDARDS FOR GASOLINE AND DIESEL FUELED LIGHT-DUTY VEHICLES AND LIGHT-DUTY TRUCKS 3,750 LBS. LVW OR LESS

Pollutant	Emission level*
NMHC	0.125 GPM
NO _x	0.2 GPM
CO	1.7 GPM

*Emission levels are expressed in grams per mile (GPM). For vehicles and engines subject to this subsection for purposes of subsection (d) and any reference thereto, the useful life of such vehicles and engines shall be a period of 10 years or 100,000 miles (or the equivalent), whichever first occurs.

Such study shall also consider other standards and useful life periods which are more stringent or less stringent than those set forth in table 3 (but more stringent than those referred to in subsections (g) and (h)).

(2)(A) As part of the study under paragraph (1), the Administrator shall examine the need for further reductions in emissions in order to attain or maintain the national ambient air quality standards, taking into consideration the waiver provisions of section 7543(b) of this title. As part of such study, the Administrator shall also examine—

- (i) the availability of technology (including the costs thereof), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for meeting more stringent emission standards than those provided in subsections (g) and (h) for model years commencing not earlier than after January 1, 2003, and not later than model year 2006, including the lead time and safety and energy impacts of meeting more stringent emission standards; and
- (ii) the need for, and cost effectiveness of, obtaining further reductions in emissions from

such light-duty vehicles and light-duty trucks, taking into consideration alternative means of attaining or maintaining the national primary ambient air quality standards pursuant to State implementation plans and other requirements of this chapter, including their feasibility and cost effectiveness.

(B) The Administrator shall submit a report to Congress no later than June 1, 1997, containing the results of the study under this subsection, including the results of the examination conducted under subparagraph (A). Before submission of such report the Administrator shall provide a reasonable opportunity for public comment and shall include a summary of such comments in the report to Congress.

(3)(A) Based on the study under paragraph (1) the Administrator shall determine, by rule, within 3 calendar years after the report is submitted to Congress, but not later than December 31, 1999, whether—

- (i) there is a need for further reductions in emissions as provided in paragraph (2)(A);
- (ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and
- (iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii).

The rulemaking under this paragraph shall commence within 3 months after submission of the report to Congress under paragraph (2)(B).

(B) If the Administrator determines under subparagraph (A) that—

- (i) there is no need for further reductions in emissions as provided in paragraph (2)(A);
- (ii) the technology for meeting more stringent emission standards will not be available as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); or
- (iii) obtaining further reductions in emissions from such vehicles will not be needed or

cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall not promulgate more stringent standards than those in effect pursuant to subsections (g) and (h). Nothing in this paragraph shall prohibit the Administrator from exercising the Administrator's authority under subsection (a) to promulgate more stringent standards for light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less at any other time thereafter in accordance with subsection (a).

(C) If the Administrator determines under subparagraph (A) that—

(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall either promulgate the standards (and useful life periods) set forth in Table 3 in paragraph (1) or promulgate alternative standards (and useful life periods) which are more stringent than those referred to in subsections (g) and (h). Any such standards (or useful life periods) promulgated by the Administrator shall take effect with respect to any such vehicles or engines no earlier than the model year 2003 but not later than model year 2006, as determined by the Administrator in the rule.

(D) Nothing in this paragraph shall be construed by the Administrator or by a court as a presumption that any standards (or useful life period) set forth in Table 3 shall be promulgated in the rulemaking required under this paragraph. The action required of the Administrator in accordance with this paragraph shall be treated as a nondiscretionary duty for purposes of section 7604(a)(2) of this title (relating to citizen suits).

(E) Unless the Administrator determines not to promulgate more stringent standards as provided in subparagraph (B) or to postpone the effective date of standards referred to in Table 3 in paragraph (1) or to establish alternative standards as provided in subparagraph (C), effective with respect to model years commencing after January 1, 2003, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC), oxides of nitrogen (NO_x), and carbon monoxide (CO) from motor vehicles and motor vehicle engines in the classes specified in Table 3 in paragraph (1) above shall contain standards which provide that emissions may not exceed the pending emission levels specified in Table 3 in paragraph (1).

(j) Cold CO standard

(1) Phase I

Not later than 12 months after November 15, 1990, the Administrator shall promulgate regu-

lations under subsection (a) of this section applicable to emissions of carbon monoxide from 1994 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit. The regulations shall contain standards which provide that emissions of carbon monoxide from a manufacturer's vehicles when operated at 20 degrees Fahrenheit may not exceed, in the case of light-duty vehicles, 10.0 grams per mile, and in the case of light-duty trucks, a level comparable in stringency to the standard applicable to light-duty vehicles. The standards shall take effect after model year 1993 according to a phase-in schedule which requires a percentage of each manufacturer's sales volume of light-duty vehicles and light-duty trucks to comply with applicable standards after model year 1993. The percentage shall be as specified in the following table:

PHASE-IN SCHEDULE FOR COLD START STANDARDS

Model Year	Percentage
1994	40
1995	80
1996 and after	100

(2) Phase II

(A) Not later than June 1, 1997, the Administrator shall complete a study assessing the need for further reductions in emissions of carbon monoxide and the maximum reductions in such emissions achievable from model year 2001 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit.

(B)(i) If as of June 1, 1997, 6 or more nonattainment areas have a carbon monoxide design value of 9.5 ppm or greater, the regulations under subsection (a)(1) of this section applicable to emissions of carbon monoxide from model year 2002 and later model year light-duty vehicles and light-duty trucks shall contain standards which provide that emissions of carbon monoxide from such vehicles and trucks when operated at 20 degrees Fahrenheit may not exceed 3.4 grams per mile (gpm) in the case of light-duty vehicles and 4.4 grams per mile (gpm) in the case of light-duty trucks up to 6,000 GVWR and a level comparable in stringency in the case of light-duty trucks 6,000 GVWR and above.

(ii) In determining for purposes of this subparagraph whether 6 or more nonattainment areas have a carbon monoxide design value of 9.5 ppm or greater, the Administrator shall exclude the areas of Steubenville, Ohio, and Oshkosh, Wisconsin.

(3) Useful-life for phase I and phase II standards

In the case of the standards referred to in paragraphs (1) and (2), for purposes of certification under section 7525 of this title and in-use compliance under section 7541 of this title, the applicable useful life period shall be 5 years or 50,000 miles, whichever first occurs, except that the Administrator may extend such useful life period (for purposes of section 7525 of this title, or section 7541 of this title,

or both) if he determines that it is feasible for vehicles and engines subject to such standards to meet such standards for a longer useful life. If the Administrator extends such useful life period, the Administrator may make an appropriate adjustment of applicable standards for such extended useful life. No such extended useful life shall extend beyond the useful life period provided in regulations under subsection (d).

(4) Heavy-duty vehicles and engines

The Administrator may also promulgate regulations under subsection (a)(1) applicable to emissions of carbon monoxide from heavy-duty vehicles and engines when operated at cold temperatures.

(k) Control of evaporative emissions

The Administrator shall promulgate (and from time to time revise) regulations applicable to evaporative emissions of hydrocarbons from all gasoline-fueled motor vehicles—

- (1) during operation; and
- (2) over 2 or more days of nonuse;

under ozone-prone summertime conditions (as determined by regulations of the Administrator). The regulations shall take effect as expeditiously as possible and shall require the greatest degree of emission reduction achievable by means reasonably expected to be available for production during any model year to which the regulations apply, giving appropriate consideration to fuel volatility, and to cost, energy, and safety factors associated with the application of the appropriate technology. The Administrator shall commence a rulemaking under this subsection within 12 months after November 15, 1990. If final regulations are not promulgated under this subsection within 18 months after November 15, 1990, the Administrator shall submit a statement to the Congress containing an explanation of the reasons for the delay and a date certain for promulgation of such final regulations in accordance with this chapter. Such date certain shall not be later than 15 months after the expiration of such 18 month deadline.

(l) Mobile source-related air toxics

(1) Study

Not later than 18 months after November 15, 1990, the Administrator shall complete a study of the need for, and feasibility of, controlling emissions of toxic air pollutants which are unregulated under this chapter and associated with motor vehicles and motor vehicle fuels, and the need for, and feasibility of, controlling such emissions and the means and measures for such controls. The study shall focus on those categories of emissions that pose the greatest risk to human health or about which significant uncertainties remain, including emissions of benzene, formaldehyde, and 1,3 butadiene. The proposed report shall be available for public review and comment and shall include a summary of all comments.

(2) Standards

Within 54 months after November 15, 1990, the Administrator shall, based on the study under paragraph (1), promulgate (and from

time to time revise) regulations under subsection (a)(1) or section 7545(c)(1) of this title containing reasonable requirements to control hazardous air pollutants from motor vehicles and motor vehicle fuels. The regulations shall contain standards for such fuels or vehicles, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration the standards established under subsection (a), the availability and costs of the technology, and noise, energy, and safety factors, and lead time. Such regulations shall not be inconsistent with standards under subsection (a). The regulations shall, at a minimum, apply to emissions of benzene and formaldehyde.

(m) Emissions control diagnostics

(1) Regulations

Within 18 months after November 15, 1990, the Administrator shall promulgate regulations under subsection (a) requiring manufacturers to install on all new light duty vehicles and light duty trucks diagnostics systems capable of—

(A) accurately identifying for the vehicle's useful life as established under this section, emission-related systems deterioration or malfunction, including, at a minimum, the catalytic converter and oxygen sensor, which could cause or result in failure of the vehicles to comply with emission standards established under this section,

(B) alerting the vehicle's owner or operator to the likely need for emission-related components or systems maintenance or repair,

(C) storing and retrieving fault codes specified by the Administrator, and

(D) providing access to stored information in a manner specified by the Administrator.

The Administrator may, in the Administrator's discretion, promulgate regulations requiring manufacturers to install such onboard diagnostic systems on heavy-duty vehicles and engines.

(2) Effective date

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.

(3) State inspection

The Administrator shall by regulation require States that have implementation plans containing motor vehicle inspection and maintenance programs to amend their plans within 2 years after promulgation of such regulations to provide for inspection of onboard diagnostics systems (as prescribed by regulations

under paragraph (1) of this subsection) and for the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems. Such regulations shall not be inconsistent with the provisions for warranties promulgated under section 7541(a) and (b) of this title.

(4) Specific requirements

In promulgating regulations under this subsection, the Administrator shall require—

(A) that any connectors through which the emission control diagnostics system is accessed for inspection, diagnosis, service, or repair shall be standard and uniform on all motor vehicles and motor vehicle engines;

(B) that access to the emission control diagnostics system through such connectors shall be unrestricted and shall not require any access code or any device which is only available from a vehicle manufacturer; and

(C) that the output of the data from the emission control diagnostics system through such connectors shall be usable without the need for any unique decoding information or device.

(5) Information availability

The Administrator, by regulation, shall require (subject to the provisions of section 7542(c) of this title regarding the protection of methods or processes entitled to protection as trade secrets) manufacturers to provide promptly to any person engaged in the repairing or servicing of motor vehicles or motor vehicle engines, and the Administrator for use by any such persons, with any and all information needed to make use of the emission control diagnostics system prescribed under this subsection and such other information including instructions for making emission related diagnosis and repairs. No such information may be withheld under section 7542(c) of this title if that information is provided (directly or indirectly) by the manufacturer to franchised dealers or other persons engaged in the repair, diagnosing, or servicing of motor vehicles or motor vehicle engines. Such information shall also be available to the Administrator, subject to section 7542(c) of this title, in carrying out the Administrator's responsibilities under this section.

(f) ⁵ Model years after 1990

For model years prior to model year 1994, the regulations under subsection (a) applicable to buses other than those subject to standards under section 7554 of this title shall contain a standard which provides that emissions of particulate matter (PM) from such buses may not exceed the standards set forth in the following table:

PM STANDARD FOR BUSES	
Model year	Standard*
1991	0.25
1992	0.25
1993 and thereafter	0.10

*Standards are expressed in grams per brake horsepower hour (g/bhp/hr).

⁵ So in original. Probably should be "(n)".

(July 14, 1955, ch. 360, title II, §202, as added Pub. L. 89-272, title I, §101(8), Oct. 20, 1965, 79 Stat. 992; amended Pub. L. 90-148, §2, Nov. 21, 1967, 81 Stat. 499; Pub. L. 91-604, §6(a), Dec. 31, 1970, 84 Stat. 1690; Pub. L. 93-319, §5, June 22, 1974, 88 Stat. 258; Pub. L. 95-95, title II, §§201, 202(b), 213(b), 214(a), 215-217, 224(a), (b), (g), title IV, §401(d), Aug. 7, 1977, 91 Stat. 751-753, 758-761, 765, 767, 769, 791; Pub. L. 95-190, §14(a)(60)-(65), (b)(5), Nov. 16, 1977, 91 Stat. 1403, 1405; Pub. L. 101-549, title II, §§201-207, 227(b), 230(1)-(5), Nov. 15, 1990, 104 Stat. 2472-2481, 2507, 2529.)

REFERENCES IN TEXT

The enactment of the Clean Air Act Amendments of 1990, referred to in subsec. (a)(3)(B), probably means the enactment of Pub. L. 101-549, Nov. 15, 1990, 104 Stat. 2399, which was approved Nov. 15, 1990. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

Section 7525(f)(1) of this title, referred to in subsec. (a)(3)(E), was redesignated section 7525(f) of this title by Pub. L. 101-549, title II, §230(8), Nov. 15, 1990, 104 Stat. 2529.

Paragraph (5) of subsec. (b), referred to in subsec. (b)(1)(A), related to waivers for model years 1981 and 1982, and was repealed by Pub. L. 101-549, title II, §230(3), Nov. 15, 1990, 104 Stat. 2529. See 1990 Amendment note below.

The Energy Policy and Conservation Act, referred to in subsec. (b)(3)(C), is Pub. L. 94-163, Dec. 22, 1975, 89 Stat. 871, as amended, which is classified principally to chapter 77 (§6201 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6201 of this title and Tables.

CODIFICATION

Section was formerly classified to section 1857f-1 of this title.

AMENDMENTS

1990—Subsec. (a)(3)(A). Pub. L. 101-549, §201(1), added subpar. (A) and struck out former subpar. (A) which related to promulgation of regulations applicable to reduction of emissions from heavy-duty vehicles or engines manufactured during and after model year 1979 in the case of carbon monoxide, hydrocarbons, and oxides of nitrogen, and from vehicles manufactured during and after model year 1981 in the case of particulate matter.

Subsec. (a)(3)(B). Pub. L. 101-549, §201(1), added subpar. (B) and struck out former subpar. (B) which read as follows: "During the period of June 1 through December 31, 1978, in the case of hydrocarbons and carbon monoxide, or during the period of June 1 through December 31, 1980, in the case of oxides of nitrogen, and during each period of June 1 through December 31 of each third year thereafter, the Administrator may, after notice and opportunity for a public hearing promulgate regulations revising any standard prescribed as provided in subparagraph (A)(ii) for any class or category of heavy-duty vehicles or engines. Such standard shall apply only for the period of three model years beginning four model years after the model year in which such revised standard is promulgated. In revising any standard under this subparagraph for any such three model year period, the Administrator shall determine the maximum degree of emission reduction which can be achieved by means reasonably expected to be available for production of such period and shall prescribe a revised emission standard in accordance with such determination. Such revised standard shall require a reduction of emissions from any standard which applies in the previous model year."

Subsec. (a)(3)(C). Pub. L. 101-549, §201(1), added subpar. (C) and struck out former subpar. (C) which read as follows: "Action revising any standard for any period may be taken by the Administrator under subparagraph (B) only if he finds—

“(i) that compliance with the emission standards otherwise applicable for such model year cannot be achieved by technology, processes, operating methods, or other alternatives reasonably expected to be available for production for such model year without increasing cost or decreasing fuel economy to an excessive and unreasonable degree; and

“(ii) the National Academy of Sciences has not, pursuant to its study and investigation under subsection (c), issued a report substantially contrary to the findings of the Administrator under clause (i).”

Subsec. (a)(3)(D). Pub. L. 101-549, §201(1), added subpar. (D) and struck out former subpar. (D) which read as follows: “A report shall be made to the Congress with respect to any standard revised under subparagraph (B) which shall contain—

“(i) a summary of the health effects found, or believed to be associated with, the pollutant covered by such standard,

“(ii) an analysis of the cost-effectiveness of other strategies for attaining and maintaining national ambient air quality standards and carrying out regulations under part C of subchapter I (relating to significant deterioration) in relation to the cost-effectiveness for such purposes of standards which, but for such revision, would apply.

“(iii) a summary of the research and development efforts and progress being made by each manufacturer for purposes of meeting the standards promulgated as provided in subparagraph (A)(ii) or, if applicable, subparagraph (E), and

“(iv) specific findings as to the relative costs of compliance, and relative fuel economy, which may be expected to result from the application for any model year of such revised standard and the application for such model year of the standard, which, but for such revision, would apply.”

Subsec. (a)(3)(E), (F). Pub. L. 101-549, §201, redesignated subpar. (F) as (E), inserted heading, and struck out former subpar. (E) which read as follows:

“(i) The Administrator shall conduct a continuing pollutant-specific study concerning the effects of each air pollutant emitted from heavy-duty vehicles or engines and from other sources of mobile source related pollutants on the public health and welfare. The results of such study shall be published in the Federal Register and reported to the Congress not later than June 1, 1978, in the case of hydrocarbons and carbon monoxide, and June 1, 1980, in the case of oxides of nitrogen, and before June 1 of each third year thereafter.

“(ii) On the basis of such study and such other information as is available to him (including the studies under section 7548 of this title), the Administrator may, after notice and opportunity for a public hearing, promulgate regulations under paragraph (1) of this subsection changing any standard prescribed in subparagraph (A)(ii) (or revised under subparagraph (B) or previously changed under this subparagraph). No such changed standard shall apply for any model year before the model year four years after the model year during which regulations containing such changed standard are promulgated.”

Subsec. (a)(4)(A), (B). Pub. L. 101-549, §227(b), substituted “requirements prescribed under this subchapter” for “standards prescribed under this subsection”.

Subsec. (a)(6). Pub. L. 101-549, §202, amended par. (6) generally. Prior to amendment, par. (6) read as follows: “The Administrator shall determine the feasibility and desirability of requiring new motor vehicles to utilize onboard hydrocarbon control technology which would avoid the necessity of gasoline vapor recovery of uncontrolled emissions emanating from the fueling of motor vehicles. The Administrator shall compare the costs and effectiveness of such technology to that of implementing and maintaining vapor recovery systems (taking into consideration such factors as fuel economy, economic costs of such technology, administrative burdens, and equitable distribution of costs). If the Administrator finds that it is feasible and desirable to

employ such technology, he shall, after consultation with the Secretary of Transportation with respect to motor vehicle safety, prescribe, by regulation, standards requiring the use of onboard hydrocarbon technology which shall not become effective until the introduction to the model year for which it would be feasible to implement such standards, taking into consideration compliance costs and the restraints of an adequate lead time for design and production.”

Subsec. (b)(1)(C). Pub. L. 101-549, §203(c), amended subpar. (C) generally. Prior to amendment, subpar. (C) read as follows: “Effective with respect to vehicles and engines manufactured after model year 1978 (or in the case of heavy-duty vehicles or engines, such later model year as the Administrator determines is the earliest feasible model year), the test procedure promulgated under paragraph (2) for measurement of evaporative emissions of hydrocarbons shall require that such emissions be measured from the vehicle or engine as a whole. Regulations to carry out this subparagraph shall be promulgated not later than two hundred and seventy days after August 7, 1977.”

Subsec. (b)(2). Pub. L. 101-549, §203(d), amended par. (2) generally. Prior to amendment, par. (2) read as follows: “Emission standards under paragraph (1), and measurement techniques on which such standards are based (if not promulgated prior to December 31, 1970), shall be prescribed by regulation within 180 days after such date.”

Subsec. (b)(3). Pub. L. 101-549, §230(4), redesignated par. (6) relating to waiver of standards for oxides of nitrogen as par. (3), struck out subpar. (A) designation before “Upon the petition”, redesignated former cls. (i) to (iii) as subpars. (A) to (C), respectively, and struck out former subpar. (B) which authorized the Administrator to waive the standard under subsec. (b)(1)(B) of this section for emissions of oxides of nitrogen from light-duty vehicles and engines beginning in model year 1981 after providing notice and opportunity for a public hearing, and set forth conditions under which a waiver could be granted.

Subsec. (b)(3)(B). Pub. L. 101-549, §230(1), in the par. (3) defining terms for purposes of this part struck out subpar. (B) which defined “light duty vehicles and engines”.

Subsec. (b)(4). Pub. L. 101-549, §230(2), struck out par. (4) which read as follows: “On July 1 of 1971, and of each year thereafter, the Administrator shall report to the Congress with respect to the development of systems necessary to implement the emission standards established pursuant to this section. Such reports shall include information regarding the continuing effects of such air pollutants subject to standards under this section on the public health and welfare, the extent and progress of efforts being made to develop the necessary systems, the costs associated with development and application of such systems, and following such hearings as he may deem advisable, any recommendations for additional congressional action necessary to achieve the purposes of this chapter. In gathering information for the purposes of this paragraph and in connection with any hearing, the provisions of section 7607(a) of this title (relating to subpenas) shall apply.”

Subsec. (b)(5). Pub. L. 101-549, §230(3), struck out par. (5) which related to waivers for model years 1981 and 1982 of the effective date of the emissions standard required under par. (1)(A) for carbon monoxide applicable to light-duty vehicles and engines manufactured in those model years.

Subsec. (b)(6). Pub. L. 101-549, §230(4), redesignated par. (6) as (3).

Subsec. (b)(7). Pub. L. 101-549, §230(5), struck out par. (7) which read as follows: “The Congress hereby declares and establishes as a research objective, the development of propulsion systems and emission control technology to achieve standards which represent a reduction of at least 90 per centum from the average emissions of oxides of nitrogen actually measured from light duty motor vehicles manufactured in model year 1971 not subject to any Federal or State emission

standard for oxides of nitrogen. The Administrator shall, by regulations promulgated within one hundred and eighty days after August 7, 1977, require each manufacturer whose sales represent at least 0.5 per centum of light duty motor vehicle sales in the United States, to build and, on a regular basis, demonstrate the operation of light duty motor vehicles that meet this research objective, in addition to any other applicable standards or requirements for other pollutants under this chapter. Such demonstration vehicles shall be submitted to the Administrator no later than model year 1979 and in each model year thereafter. Such demonstration shall, in accordance with applicable regulations, to the greatest extent possible, (A) be designed to encourage the development of new powerplant and emission control technologies that are fuel efficient, (B) assure that the demonstration vehicles are or could reasonably be expected to be within the productive capability of the manufacturers, and (C) assure the utilization of optimum engine, fuel, and emission control systems."

Subsec. (d). Pub. L. 101-549, §203(b)(1), substituted "provide that except where a different useful life period is specified in this subchapter" for "provide that".

Subsec. (d)(1). Pub. L. 101-549, §203(b)(2), (3), inserted "and light-duty trucks up to 3,750 lbs. LVW and up to 6,000 lbs. GVWR" after "engines" and substituted for semicolon at end " , except that in the case of any requirement of this section which first becomes applicable after November 15, 1990, where the useful life period is not otherwise specified for such vehicles and engines, the period shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs, with testing for purposes of in-use compliance under section 7541 of this title up to (but not beyond) 7 years or 75,000 miles (or the equivalent), whichever first occurs;"

Subsec. (f). Pub. L. 101-549, §207(b), added (after subsec. (m) at end) subsec. (f) relating to regulations applicable to buses for model years after 1990.

Subsecs. (g) to (i). Pub. L. 101-549, §203(a), added subsecs. (g) to (i).

Subsecs. (j) to (m). Pub. L. 101-549, §§204-207(a), added subsecs. (j) to (m).

1977—Subsec. (a)(1). Pub. L. 95-190, §14(a)(60), restructured subsec. (a) by providing for designation of par. (1) to precede "The Administrator" in place of "Except as".

Pub. L. 95-95, §401(d)(1), substituted "Except as otherwise provided in subsection (b) the Administrator" for "The Administrator", "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare" for "causes or contributes to, or is likely to cause or contribute to, air pollution which endangers the public health or welfare", and "useful life (as determined under subsection (d), relating to useful life of vehicles for purposes of certification), whether such vehicles and engines are designed as complete systems or incorporate devices" for "useful life (as determined under subsection (d)) whether such vehicles and engines are designed as complete systems or incorporated devices".

Subsec. (a)(2). Pub. L. 95-95, §214(a), substituted "prescribed under paragraph (1) of this subsection" for "prescribed under this subsection".

Subsec. (a)(3). Pub. L. 95-95, §224(a), added par. (3).

Subsec. (a)(3)(B). Pub. L. 95-190, §14(a)(61), (62), substituted provisions setting forth applicable periods of from June 1 through Dec. 31, 1978, June 1 through Dec. 31, 1980, and during each period of June 1 through Dec. 31 of each third year thereafter, for provisions setting forth applicable periods of from June 1 through Dec. 31, 1979, and during each period of June 1 through Dec. 31 of each third year after 1979, and substituted "from any" for "of from any".

Subsec. (a)(3)(E). Pub. L. 95-190, §14(a)(63), substituted "1978, in the case of hydrocarbons and carbon monoxide, and June 1, 1980, in the case of oxides of nitrogen" for "1979".

Subsec. (a)(4). Pub. L. 95-95, §214(a), added par. (4).

Subsec. (a)(5). Pub. L. 95-95, §215, added par. (5).

Subsec. (a)(6). Pub. L. 95-95, §216, added par. (6).

Subsec. (b)(1)(A). Pub. L. 95-95, §201(a), substituted provisions setting the standards for emissions from light-duty vehicles and engines manufactured during the model years 1977 through 1980 for provisions which had set the standards for emissions from light-duty vehicles and engines manufactured during the model years 1975 and 1976, substituted "model year 1980" for "model year 1977" in provisions requiring a reduction of at least 90 per centum from the emissions allowable under standards for model year 1970, and inserted provisions that, unless waived as provided in par. (5), the standards for vehicles and engines manufactured during or after the model year 1981 represent a reduction of at least 90 per centum from the emissions allowable under standards for model year 1970.

Subsec. (b)(1)(B). Pub. L. 95-190, §14(a)(64), (65), substituted "calendar year 1976" for "model year 1976" and in cl. (i) substituted "other" for "United States".

Pub. L. 95-95, §201(b), substituted provisions setting the standards for emissions from light-duty vehicles and engines manufactured during the model years 1977 through 1980 for provisions which had set the standards for emissions from light-duty vehicles and engines manufactured during the model years 1975 through 1977, substituted provisions that the standards for model years 1981 and after allow emissions of no more than 1.0 gram per vehicle mile for provisions that the standards for model year 1978 and after require a reduction of at least 90 per centum from the average of emissions actually measured from light-duty vehicles manufactured during model year 1971 which were not subject to any Federal or State emission standards for oxides of nitrogen, and inserted provisions directing the Administrator to prescribe separate standards for model years 1981 and 1982 for manufacturers whose production, by corporate identity, for model year 1976 was less than three hundred thousand light-duty motor vehicles worldwide if the manufacturer's capability to meet emission standards depends upon United States technology and if the manufacturer cannot develop one.

Subsec. (b)(1)(C). Pub. L. 95-95, §217, added subpar. (C).

Subsec. (b)(3)(C). Pub. L. 95-95, §224(b), added subpar. (C).

Subsec. (b)(5). Pub. L. 95-95, §201(c), substituted provisions setting up a procedure under which a manufacturer may apply for a waiver for model years 1981 and 1982 of the effective date of the emission standards for carbon monoxide required by par. (1)(A) for provisions which had set up a procedure under which a manufacturer, after Jan. 1, 1975, could apply for a one-year suspension of the effective date of any emission standard required by par. (1)(A) for model year 1977.

Subsec. (b)(6). Pub. L. 95-95, §201(c), added par. (6).

Subsec. (b)(7). Pub. L. 95-95, §202(b), added par. (7).

Subsec. (d)(2). Pub. L. 95-95, §224(g), as amended by Pub. L. 95-190, §14(b)(5), to correct typographical error in directory language, inserted "(other than motorcycles or motorcycle engines)" after "motor vehicle or motor vehicle engine".

Subsec. (d)(3). Pub. L. 95-95, §224(g), added par. (3).

Subsec. (e). Pub. L. 95-95, §401(d)(2), substituted "which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger" for "which cause or contribute to, or are likely to cause or contribute to, air pollution which endangers".

Subsec. (f). Pub. L. 95-95, §213(b), added subsec. (f).

1974—Subsec. (b)(1)(A). Pub. L. 93-319, §5(a), substituted "model year 1977" for "model year 1975" in provisions requiring a reduction of at least 90 per centum from the emissions allowable under standards for model year 1970 and inserted provisions covering regulations for model years 1975 and 1976.

Subsec. (b)(1)(B). Pub. L. 93-319, §5(b), substituted "model year 1978" for "model year 1976" in provisions requiring a reduction of at least 90 per centum from the average of emissions actually measured from vehicles manufactured during model year 1971 and inserted provisions covering regulations for model years 1975, 1976, and 1977.

Subsec. (b)(5). Pub. L. 93-319, §5(c), (d), substituted in subpar. (A), “At any time after January 1, 1975” for “At any time after January 1, 1972”, “with respect to such manufacturer for light-duty vehicles and engines manufactured in model year 1977” for “with respect to such manufacturer”, “sixty days” for “60 days”, “paragraph (1)(A) of this subsection” for “paragraph (1)(A)”, and “vehicles and engines manufactured during model year 1977” for “vehicles and engines manufactured during model year 1975”, redesignated subpars. (C) to (E) as (B) to (D), respectively, and struck out former subpar. (B) which had allowed manufacturers, at any time after Jan. 1, 1973, to file with the Administrator an application requesting a 1-year suspension of the effective date of any emission standard required by subsec. (b)(1)(B) with respect to such manufacturer.

1970—Subsec. (a). Pub. L. 91-604 redesignated existing provisions as par. (1), substituted Administrator for Secretary as the issuing authority for standards, inserted references to the useful life of engines, and substituted the emission of any air pollutant for the emission of any kind of substance as the subject to be regulated, and added par. (2).

Subsec. (b). Pub. L. 91-604 added subsec. (b). Former subsec. (b) redesignated as par. (2) of subsec. (a).

Subsecs. (c) to (e). Pub. L. 91-604 added subsecs. (c) to (e).

1967—Pub. L. 90-148 reenacted section without change.

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

STUDY ON OXIDES OF NITROGEN FROM LIGHT-DUTY VEHICLES

Pub. L. 95-95, title II, §202(a), Aug. 7, 1977, 91 Stat. 753, provided that the Administrator of the Environmental Protection Agency conduct a study of the public health implications of attaining an emission standard on oxides of nitrogen from light-duty vehicles of 0.4 gram per vehicle mile, the cost and technological capability of attaining such standard, and the need for such a standard to protect public health or welfare and that the Administrator submit a report of such study to the Congress, together with recommendations not later than July 1, 1980.

STUDY OF CARBON MONOXIDE INTRUSION INTO SUSTAINED-USE VEHICLES

Pub. L. 95-95, title II, §226, Aug. 7, 1977, 91 Stat. 769, provided that the Administrator, in conjunction with the Secretary of Transportation, study the problem of carbon monoxide intrusion into the passenger area of sustained-use motor vehicles and that within one year the Administrator report to the Congress respecting the results of such study.

CONTINUING COMPREHENSIVE STUDIES AND INVESTIGATIONS BY NATIONAL ACADEMY OF SCIENCES

Pub. L. 95-95, title IV, §403(f), Aug. 7, 1977, 91 Stat. 793, provided that: “The Administrator of the Environ-

mental Protection Agency shall undertake to enter into appropriate arrangements with the National Academy of Sciences to conduct continuing comprehensive studies and investigations of the effects on public health and welfare of emissions subject to section 202(a) of the Clean Air Act [subsec. (a) of this section] (including sulfur compounds) and the technological feasibility of meeting emission standards required to be prescribed by the Administrator by section 202(b) of such Act [subsec. (b) of this section]. The Administrator shall report to the Congress within six months of the date of enactment of this section [Aug. 7, 1977] and each year thereafter regarding the status of the contractual arrangements and conditions necessary to implement this paragraph.”

[For termination, effective May 15, 2000, of provisions relating to annual report to Congress in section 403(f) of Pub. L. 95-95, set out above, see section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance, and the 2nd item on page 165 of House Document No. 103-7.]

STUDY ON EMISSION OF SULFUR-BEARING COMPOUNDS FROM MOTOR VEHICLES AND MOTOR VEHICLE AND AIRCRAFT ENGINES

Pub. L. 95-95, title IV, §403(g), Aug. 7, 1977, 91 Stat. 793, provided that the Administrator of the Environmental Protection Agency conduct a study and report to the Congress by the date one year after Aug. 7, 1977, on the emission of sulfur-bearing compounds from motor vehicles and motor vehicle engines and aircraft engines.

EX. ORD. NO. 13432. COOPERATION AMONG AGENCIES IN PROTECTING THE ENVIRONMENT WITH RESPECT TO GREENHOUSE GAS EMISSIONS FROM MOTOR VEHICLES, NONROAD VEHICLES, AND NONROAD ENGINES

Ex. Ord. No. 13432, May 14, 2007, 72 F.R. 27717, as amended by Ex. Ord. No. 13693, §16(e), Mar. 19, 2015, 80 F.R. 15881, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

SECTION 1. *Policy.* It is the policy of the United States to ensure the coordinated and effective exercise of the authorities of the President and the heads of the Department of Transportation, the Department of Energy, and the Environmental Protection Agency to protect the environment with respect to greenhouse gas emissions from motor vehicles, nonroad vehicles, and nonroad engines, in a manner consistent with sound science, analysis of benefits and costs, public safety, and economic growth.

SEC. 2. *Definitions.* As used in this order:

(a) “agencies” refers to the Department of Transportation, the Department of Energy, and the Environmental Protection Agency, and all units thereof, and “agency” refers to any of them;

(b) “alternative fuels” has the meaning specified for that term in section 301(2) of the Energy Policy Act of 1992 (42 U.S.C. 13211(2));

(c) “authorities” include the Clean Air Act (42 U.S.C. 7401-7671q), the Energy Policy Act of 1992 (Public Law 102-486), the Energy Policy Act of 2005 (Public Law 109-58), the Energy Policy and Conservation Act (Public Law 94-163), and any other current or future laws or regulations that may authorize or require any of the agencies to take regulatory action that directly or indirectly affects emissions of greenhouse gases from motor vehicles;

(d) “greenhouse gases” means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride [sic], and sulfur hexafluoride;

(e) “motor vehicle” has the meaning specified for that term in section 216(2) of the Clean Air Act (42 U.S.C. 7550(2));

(f) “nonroad engine” has the meaning specified for that term in section 216(10) of the Clean Air Act (42 U.S.C. 7550(10));

(g) “nonroad vehicle” has the meaning specified for that term in section 216(11) of the Clean Air Act (42 U.S.C. 7550(11));

(h) “regulation” has the meaning specified for that term in section 3(d) of Executive Order 12866 of September 30, 1993, as amended (Executive Order 12866); and

(i) “regulatory action” has the meaning specified for that term in section 3(e) of Executive Order 12866.

SEC. 3. *Coordination Among the Agencies.* In carrying out the policy set forth in section 1 of this order, the head of an agency undertaking a regulatory action that can reasonably be expected to directly regulate emissions, or to substantially and predictably affect emissions, of greenhouse gases from motor vehicles, nonroad vehicles, nonroad engines, or the use of motor vehicle fuels, including alternative fuels, shall:

(a) undertake such a regulatory action, to the maximum extent permitted by law and determined by the head of the agency to be practicable, jointly with the other agencies;

(b) in undertaking such a regulatory action, consider, in accordance with applicable law, information and recommendations provided by the other agencies;

(c) in undertaking such a regulatory action, exercise authority vested by law in the head of such agency effectively, in a manner consistent with the effective exercise by the heads of the other agencies of the authority vested in them by law; and

(d) obtain, to the extent permitted by law, concurrence or other views from the heads of the other agencies during the development and preparation of the regulatory action and prior to any key decision points during that development and preparation process, and in no event later than 30 days prior to publication of such action.

SEC. 4. *Duties of the Heads of Agencies.* (a) To implement this order, the head of each agency shall:

(1) designate appropriate personnel within the agency to (i) direct the agency’s implementation of this order, (ii) ensure that the agency keeps the other agencies and the Office of Management and Budget informed of the agency regulatory actions to which section 3 refers, and (iii) coordinate such actions with the agencies;

(2) in coordination as appropriate with the Committee on Climate Change Science and Technology, continue to conduct and share research designed to advance technologies to further the policy set forth in section 1 of this order;

(3) facilitate the sharing of personnel and the sharing of information among the agencies to further the policy set forth in section 1 of this order;

(4) coordinate with the other agencies to avoid duplication of requests to the public for information from the public in the course of undertaking such regulatory action, consistent with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*); and

(5) consult with the Secretary of Agriculture whenever a regulatory action will have a significant effect on agriculture related to the production or use of ethanol, biodiesel, or other renewable fuels, including actions undertaken in whole or in part based on authority or requirements in title XV of the Energy Policy Act of 2005, or the amendments made by such title, or when otherwise appropriate or required by law.

(b) To implement this order, the heads of the agencies acting jointly may allocate as appropriate among the agencies administrative responsibilities relating to regulatory actions to which section 3 refers, such as publication of notices in the Federal Register and receipt of comments in response to notices.

SEC. 5. *Duties of the Director of the Office of Management and Budget and the Chairman of the Council on Environmental Quality.* (a) The Director of the Office of Management and Budget, with such assistance from the Chairman of the Council on Environmental Quality as the Director may require, shall monitor the implementation of this order by the heads of the agencies and shall report thereon to the President from time to time, and not less often than semiannually, with any recommendations of the Director for strengthening the implementation of this order.

(b) To implement this order and further the policy set forth in section 1, the Director of the Office of Management and Budget may require the heads of the agencies to submit reports to, and coordinate with, such Office on matters related to this order.

SEC. 6. *General Provisions.* (a) This order shall be implemented in accordance with applicable law and subject to the availability of appropriations.

(b) This order shall not be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating to budget, administrative, and legislative proposals.

(c) This order is not intended to, and does not, create any right, benefit or privilege, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, instrumentalities, or entities, its officers or employees, or any other person.

§ 7522. Prohibited acts

(a) Enumerated prohibitions

The following acts and the causing thereof are prohibited—

(1) in the case of a manufacturer of new motor vehicles or new motor vehicle engines for distribution in commerce, the sale, or the offering for sale, or the introduction, or delivery for introduction, into commerce, or (in the case of any person, except as provided by regulation of the Administrator), the importation into the United States, of any new motor vehicle or new motor vehicle engine, manufactured after the effective date of regulations under this part which are applicable to such vehicle or engine unless such vehicle or engine is covered by a certificate of conformity issued (and in effect) under regulations prescribed under this part or part C in the case of clean-fuel vehicles (except as provided in subsection (b));

(2)(A) for any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information required under section 7542 of this title;

(B) for any person to fail or refuse to permit entry, testing or inspection authorized under section 7525(c) of this title or section 7542 of this title;

(C) for any person to fail or refuse to perform tests, or have tests performed as required under section 7542 of this title;

(D) for any manufacturer to fail to make information available as provided by regulation under section 7521(m)(5) of this title;

(3)(A) for any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser; or

(B) for any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter, and

such section 1905, and substituted “Administrator” for “Secretary”.

1967—Pub. L. 90-148 reenacted section without change.

§ 7543. State standards

(a) Prohibition

No State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the 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.

(b) Waiver

(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.

(2) 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 paragraph (1).

(3) In the case of any new motor vehicle or new motor vehicle engine to which State standards apply pursuant to a waiver granted under paragraph (1), compliance with such State standards shall be treated as compliance with applicable Federal standards for purposes of this subchapter.

(c) Certification of vehicle parts or engine parts

Whenever a regulation with respect to any motor vehicle part or motor vehicle engine part is in effect under section 7541(a)(2) of this title, no State or political subdivision thereof shall adopt or attempt to enforce any standard or any requirement of certification, inspection, or approval which relates to motor vehicle emissions and is applicable to the same aspect of such part. The preceding sentence shall not apply in the case of a State with respect to which a waiver is in effect under subsection (b).

(d) Control, regulation, or restrictions on registered or licensed motor vehicles

Nothing in this part shall preclude or deny to any State or political subdivision thereof the

right otherwise to control, regulate, or restrict the use, operation, or movement of registered or licensed motor vehicles.

(e) Nonroad engines or vehicles

(1) Prohibition on certain State standards

No State or any political subdivision thereof shall adopt or attempt to enforce any standard or other requirement relating to the control of emissions from either of the following new nonroad engines or nonroad vehicles subject to regulation under this chapter—

(A) New engines which are used in construction equipment or vehicles or used in farm equipment or vehicles and which are smaller than 175 horsepower.

(B) New locomotives or new engines used in locomotives.

Subsection (b) shall not apply for purposes of this paragraph.

(2) Other nonroad engines or vehicles

(A) In the case of any nonroad vehicles or engines other than those referred to in subparagraph (A) or (B) of paragraph (1), the Administrator shall, after notice and opportunity for public hearing, authorize California to adopt and enforce standards and other requirements relating to the control of emissions from such vehicles or engines if California determines that California standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards. No such authorization shall be granted if the Administrator finds that—

(i) the determination of California is arbitrary and capricious,

(ii) California does not need such California standards to meet compelling and extraordinary conditions, or

(iii) California standards and accompanying enforcement procedures are not consistent with this section.

(B) Any State other than California which has plan provisions approved under part D of subchapter I may adopt and enforce, after notice to the Administrator, for any period, standards relating to control of emissions from nonroad vehicles or engines (other than those referred to in subparagraph (A) or (B) of paragraph (1)) and take such other actions as are referred to in subparagraph (A) of this paragraph respecting such vehicles or engines if—

(i) such standards and implementation and enforcement are identical, for the period concerned, to the California standards authorized by the Administrator under subparagraph (A), and

(ii) California and such State adopt such standards at least 2 years before commencement of the period for which the standards take effect.

The Administrator shall issue regulations to implement this subsection.

(July 14, 1955, ch. 360, title II, §209, formerly §208, as added Pub. L. 90-148, §2, Nov. 21, 1967, 81 Stat. 501; renumbered and amended Pub. L. 91-604, §§8(a), 11(a)(2)(A), 15(c)(2), Dec. 31, 1970, 84 Stat. 1694, 1705, 1713; Pub. L. 95-95, title II, §207,

221, Aug. 7, 1977, 91 Stat. 755, 762; Pub. L. 101-549, title II, §222(b), Nov. 15, 1990, 104 Stat. 2502.)

CODIFICATION

Section was formerly classified to section 1857f-6a of this title.

PRIOR PROVISIONS

A prior section 209 of act July 14, 1955, as added Nov. 21, 1967, Pub. L. 90-148, §2, 81 Stat. 502, was renumbered section 210 by Pub. L. 91-604 and is classified to section 7544 of this title.

Another prior section 209 of act July 14, 1955, ch. 360, title II, as added Oct. 20, 1965, Pub. L. 89-272, title I, §101(8), 79 Stat. 995, related to appropriations for the fiscal years ending June 30, 1966, 1967, 1968, and 1969, and was classified to section 1857f-8 of this title, prior to repeal by Pub. L. 89-675, §2(b), Oct. 15, 1966, 80 Stat. 954.

AMENDMENTS

1990—Subsec. (e). Pub. L. 101-549 added subsec. (e).

1977—Subsec. (b). Pub. L. 95-95, §207, designated existing provisions as par. (1), substituted “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” for “March 30, 1966, unless he finds that such State does not require standards more stringent than applicable Federal standards to meet compelling the extraordinary conditions or that such State standards and accompanying enforcement procedures are not consistent with section 7521(a) of this title”, added subpars. (A), (B), and (C), and added pars. (2) and (3).

Subsecs. (c), (d). Pub. L. 95-95, §221, added subsec. (c) and redesignated former subsec. (c) as (d).

1970—Subsec. (a). Pub. L. 91-604, §11(a)(2)(A), substituted “part” for “subchapter”.

Subsec. (b). Pub. L. 91-604, §15(c)(2), substituted “Administrator” for “Secretary”.

Subsec. (c). Pub. L. 91-604, §11(a)(2)(A), substituted “part” for “subchapter”.

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7544. State grants

The Administrator is authorized to make grants to appropriate State agencies in an amount up to two-thirds of the cost of developing and maintaining effective vehicle emission devices and systems inspection and emission testing and control programs, except that—

(1) no such grant shall be made for any part of any State vehicle inspection program which does not directly relate to the cost of the air pollution control aspects of such a program;

(2) no such grant shall be made unless the Secretary of Transportation has certified to

the Administrator that such program is consistent with any highway safety program developed pursuant to section 402 of title 23; and

(3) no such grant shall be made unless the program includes provisions designed to insure that emission control devices and systems on vehicles in actual use have not been discontinued or rendered inoperative.

Grants may be made under this section by way of reimbursement in any case in which amounts have been expended by the State before the date on which any such grant was made.

(July 14, 1955, ch. 360, title II, §210, formerly §209, as added Pub. L. 90-148, §2, Nov. 21, 1967, 81 Stat. 502; renumbered and amended Pub. L. 91-604, §§8(a), 10(b), Dec. 31, 1970, 84 Stat. 1694, 1700; Pub. L. 95-95, title II, §204, Aug. 7, 1977, 91 Stat. 754.)

CODIFICATION

Section was formerly classified to section 1857f-6b of this title.

PRIOR PROVISIONS

A prior section 210 of act July 14, 1955, was renumbered section 211 by Pub. L. 91-604 and is classified to section 7545 of this title.

AMENDMENTS

1977—Pub. L. 95-95 inserted provision allowing grants to be made by way of reimbursement in any case in which amounts have been expended by States before the date on which the grants were made.

1970—Pub. L. 91-604, §10(b), substituted provisions authorizing the Administrator to make grants to appropriate State agencies for the development and maintenance of effective vehicle emission devices and systems inspection and emission testing and control programs, for provisions authorizing the Secretary to make grants to appropriate State air pollution control agencies for the development of meaningful uniform motor vehicle emission device inspection and emission testing programs.

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

§ 7545. Regulation of fuels

(a) Authority of Administrator to regulate

The Administrator may by regulation designate any fuel or fuel additive (including any fuel or fuel additive used exclusively in nonroad engines or nonroad vehicles) and, after such date or dates as may be prescribed by him, no manufacturer or processor of any such fuel or additive may sell, offer for sale, or introduce into commerce such fuel or additive unless the Administrator has registered such fuel or additive in accordance with subsection (b) of this section.

(b) Registration requirement

(1) For the purpose of registration of fuels and fuel additives, the Administrator shall require—

(A) the manufacturer of any fuel to notify him as to the commercial identifying name and manufacturer of any additive contained in such fuel; the range of concentration of any additive in the fuel; and the purpose-in-use of any such additive; and

emption shall (A) promptly notify the Administrator of such exemption and the justification therefor; (B) review the necessity for each such exemption annually; and (C) report to the Administrator annually all such exemptions in effect. Exemptions granted pursuant to this section shall be for a period not to exceed one year. Additional exemptions may be granted for periods not to exceed one year upon the making of a new determination by the head of the Federal agency concerned.

(2) The Administrator may, by rule or regulation, exempt any or all Federal agencies from any or all of the provisions of this Order with respect to any class or classes of contracts, grants, or loans, which (A) involve less than specified dollar amounts, or (B) have a minimal potential impact upon the environment, or (C) involve persons who are not prime contractors or direct recipients of Federal assistance by way of contracts, grants, or loans.

(b) Federal agencies shall reconsider any exemption granted under subsection (a) whenever requested to do so by the Administrator.

(c) The Administrator shall annually notify the President and the Congress of all exemptions granted, or in effect, under this Order during the preceding year.

SEC. 9. *Related Actions.* The imposition of any sanction or penalty under or pursuant to this Order shall not relieve any person of any legal duty to comply with any provisions of the Air Act or the Water Act.

SEC. 10. *Applicability.* This Order shall not apply to contracts, grants, or loans involving the use of facilities located outside the United States.

SEC. 11. *Uniformity.* Rules, regulations, standards, and guidelines issued pursuant to this order and section 508 of the Water Act [33 U.S.C. 1368] shall, to the maximum extent feasible, be uniform with regulations issued pursuant to this order, Executive Order No. 11602 of June 29, 1971 [formerly set out above], and section 306 of the Air Act [this section].

SEC. 12. *Order Superseded.* Executive Order No. 11602 of June 29, 1971, is hereby superseded.

RICHARD NIXON.

§ 7607. Administrative proceedings and judicial review

(a) Administrative subpoenas; confidentiality; witnesses

In connection with any determination under section 7410(f) of this title, or for purposes of obtaining information under section 7521(b)(4)¹ or 7545(c)(3) of this title, any investigation, monitoring, reporting requirement, entry, compliance inspection, or administrative enforcement proceeding under the² chapter (including but not limited to section 7413, section 7414, section 7420, section 7429, section 7477, section 7524, section 7525, section 7542, section 7603, or section 7606 of this title),³ the Administrator may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and he may administer oaths. Except for emission data, upon a showing satisfactory to the Administrator by such owner or operator that such papers, books, documents, or information or particular part thereof, if made public, would divulge trade secrets or secret processes of such owner or operator, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18, except that such paper, book, document, or information may be dis-

¹ See References in Text note below.

² So in original. Probably should be "this".

³ So in original.

closed to other officers, employees, or authorized representatives of the United States concerned with carrying out this chapter, to persons carrying out the National Academy of Sciences' study and investigation provided for in section 7521(c) of this title, or when relevant in any proceeding under this chapter. Witnesses summoned shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpoena served upon any person under this subparagraph,⁴ the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Administrator to appear and produce papers, books, and documents before the Administrator, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(b) Judicial review

(1) A petition for review of action of the Administrator in promulgating any national primary or secondary ambient air quality standard, any emission standard or requirement under section 7412 of this title, any standard of performance or requirement under section 7411 of this title,³ any standard under section 7521 of this title (other than a standard required to be prescribed under section 7521(b)(1) of this title), any determination under section 7521(b)(5)¹ of this title, any control or prohibition under section 7545 of this title, any standard under section 7571 of this title, any rule issued under section 7413, 7419, or under section 7420 of this title, or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. A petition for review of the Administrator's action in approving or promulgating any implementation plan under section 7410 of this title or section 7411(d) of this title, any order under section 7411(j) of this title, under section 7412 of this title, under section 7419 of this title, or under section 7420 of this title, or his action under section 1857c-10(c)(2)(A), (B), or (C) of this title (as in effect before August 7, 1977) or under regulations thereunder, or revising regulations for enhanced monitoring and compliance certification programs under section 7414(a)(3) of this title, or any other final action of the Administrator under this chapter (including any denial or disapproval by the Administrator under subchapter I of this chapter) which is locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit. Notwithstanding the preceding sentence a petition for review of any action referred to in such sentence may be filed only in the United States Court of Appeals for the District of Columbia if such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and pub-

⁴ So in original. Probably should be "subsection,".

lishes that such action is based on such a determination. Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.

(2) Action of the Administrator with respect to which review could have been obtained under paragraph (1) shall not be subject to judicial review in civil or criminal proceedings for enforcement. Where a final decision by the Administrator defers performance of any nondiscretionary statutory action to a later time, any person may challenge the deferral pursuant to paragraph (1).

(c) Additional evidence

In any judicial proceeding in which review is sought of a determination under this chapter required to be made on the record after notice and opportunity for hearing, if any party applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, in such manner and upon such terms and conditions as to⁵ the court may deem proper. The Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken and he shall file such modified or new findings, and his recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.

(d) Rulemaking

(1) This subsection applies to—

(A) the promulgation or revision of any national ambient air quality standard under section 7409 of this title,

(B) the promulgation or revision of an implementation plan by the Administrator under section 7410(c) of this title,

(C) the promulgation or revision of any standard of performance under section 7411 of this title, or emission standard or limitation under section 7412(d) of this title, any standard under section 7412(f) of this title, or any regulation under section 7412(g)(1)(D) and (F) of this title, or any regulation under section 7412(m) or (n) of this title.

(D) the promulgation of any requirement for solid waste combustion under section 7429 of this title,

(E) the promulgation or revision of any regulation pertaining to any fuel or fuel additive under section 7545 of this title,

(F) the promulgation or revision of any aircraft emission standard under section 7571 of this title,

(G) the promulgation or revision of any regulation under subchapter IV–A of this chapter (relating to control of acid deposition),

(H) promulgation or revision of regulations pertaining to primary nonferrous smelter orders under section 7419 of this title (but not including the granting or denying of any such order),

(I) promulgation or revision of regulations under subchapter VI of this chapter (relating to stratosphere and ozone protection),

(J) promulgation or revision of regulations under part C of subchapter I of this chapter (relating to prevention of significant deterioration of air quality and protection of visibility),

(K) promulgation or revision of regulations under section 7521 of this title and test procedures for new motor vehicles or engines under section 7525 of this title, and the revision of a standard under section 7521(a)(3) of this title,

(L) promulgation or revision of regulations for noncompliance penalties under section 7420 of this title,

(M) promulgation or revision of any regulations promulgated under section 7541 of this title (relating to warranties and compliance by vehicles in actual use),

(N) action of the Administrator under section 7426 of this title (relating to interstate pollution abatement),

(O) the promulgation or revision of any regulation pertaining to consumer and commercial products under section 7511b(e) of this title,

(P) the promulgation or revision of any regulation pertaining to field citations under section 7413(d)(3) of this title,

(Q) the promulgation or revision of any regulation pertaining to urban buses or the clean-fuel vehicle, clean-fuel fleet, and clean fuel programs under part C of subchapter II of this chapter,

(R) the promulgation or revision of any regulation pertaining to nonroad engines or nonroad vehicles under section 7547 of this title,

(S) the promulgation or revision of any regulation relating to motor vehicle compliance program fees under section 7552 of this title,

(T) the promulgation or revision of any regulation under subchapter IV–A of this chapter (relating to acid deposition),

(U) the promulgation or revision of any regulation under section 7511b(f) of this title pertaining to marine vessels, and

(V) such other actions as the Administrator may determine.

The provisions of section 553 through 557 and section 706 of title 5 shall not, except as expressly provided in this subsection, apply to actions to which this subsection applies. This subsection shall not apply in the case of any rule or circumstance referred to in subparagraphs (A) or (B) of subsection 553(b) of title 5.

⁵ So in original. The word “to” probably should not appear.

(2) Not later than the date of proposal of any action to which this subsection applies, the Administrator shall establish a rulemaking docket for such action (hereinafter in this subsection referred to as a “rule”). Whenever a rule applies only within a particular State, a second (identical) docket shall be simultaneously established in the appropriate regional office of the Environmental Protection Agency.

(3) In the case of any rule to which this subsection applies, notice of proposed rulemaking shall be published in the Federal Register, as provided under section 553(b) of title 5, shall be accompanied by a statement of its basis and purpose and shall specify the period available for public comment (hereinafter referred to as the “comment period”). The notice of proposed rulemaking shall also state the docket number, the location or locations of the docket, and the times it will be open to public inspection. The statement of basis and purpose shall include a summary of—

(A) the factual data on which the proposed rule is based;

(B) the methodology used in obtaining the data and in analyzing the data; and

(C) the major legal interpretations and policy considerations underlying the proposed rule.

The statement shall also set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by the Scientific Review Committee established under section 7409(d) of this title and the National Academy of Sciences, and, if the proposal differs in any important respect from any of these recommendations, an explanation of the reasons for such differences. All data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule.

(4)(A) The rulemaking docket required under paragraph (2) shall be open for inspection by the public at reasonable times specified in the notice of proposed rulemaking. Any person may copy documents contained in the docket. The Administrator shall provide copying facilities which may be used at the expense of the person seeking copies, but the Administrator may waive or reduce such expenses in such instances as the public interest requires. Any person may request copies by mail if the person pays the expenses, including personnel costs to do the copying.

(B)(i) Promptly upon receipt by the agency, all written comments and documentary information on the proposed rule received from any person for inclusion in the docket during the comment period shall be placed in the docket. The transcript of public hearings, if any, on the proposed rule shall also be included in the docket promptly upon receipt from the person who transcribed such hearings. All documents which become available after the proposed rule has been published and which the Administrator determines are of central relevance to the rulemaking shall be placed in the docket as soon as possible after their availability.

(ii) The drafts of proposed rules submitted by the Administrator to the Office of Management

and Budget for any interagency review process prior to proposal of any such rule, all documents accompanying such drafts, and all written comments thereon by other agencies and all written responses to such written comments by the Administrator shall be placed in the docket no later than the date of proposal of the rule. The drafts of the final rule submitted for such review process prior to promulgation and all such written comments thereon, all documents accompanying such drafts, and written responses thereto shall be placed in the docket no later than the date of promulgation.

(5) In promulgating a rule to which this subsection applies (i) the Administrator shall allow any person to submit written comments, data, or documentary information; (ii) the Administrator shall give interested persons an opportunity for the oral presentation of data, views, or arguments, in addition to an opportunity to make written submissions; (iii) a transcript shall be kept of any oral presentation; and (iv) the Administrator shall keep the record of such proceeding open for thirty days after completion of the proceeding to provide an opportunity for submission of rebuttal and supplementary information.

(6)(A) The promulgated rule shall be accompanied by (i) a statement of basis and purpose like that referred to in paragraph (3) with respect to a proposed rule and (ii) an explanation of the reasons for any major changes in the promulgated rule from the proposed rule.

(B) The promulgated rule shall also be accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period.

(C) The promulgated rule may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of such promulgation.

(7)(A) The record for judicial review shall consist exclusively of the material referred to in paragraph (3), clause (i) of paragraph (4)(B), and subparagraphs (A) and (B) of paragraph (6).

(B) Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section). Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

(8) The sole forum for challenging procedural determinations made by the Administrator under this subsection shall be in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section) at the time of the substantive review of the rule. No interlocutory appeals shall be permitted with respect to such procedural determinations. In reviewing alleged procedural errors, the court may invalidate the rule only if the errors were so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made.

(9) In the case of review of any action of the Administrator to which this subsection applies, the court may reverse any such action found to be—

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege, or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; or

(D) without observance of procedure required by law, if (i) such failure to observe such procedure is arbitrary or capricious, (ii) the requirement of paragraph (7)(B) has been met, and (iii) the condition of the last sentence of paragraph (8) is met.

(10) Each statutory deadline for promulgation of rules to which this subsection applies which requires promulgation less than six months after date of proposal may be extended to not more than six months after date of proposal by the Administrator upon a determination that such extension is necessary to afford the public, and the agency, adequate opportunity to carry out the purposes of this subsection.

(11) The requirements of this subsection shall take effect with respect to any rule the proposal of which occurs after ninety days after August 7, 1977.

(e) Other methods of judicial review not authorized

Nothing in this chapter shall be construed to authorize judicial review of regulations or orders of the Administrator under this chapter, except as provided in this section.

(f) Costs

In any judicial proceeding under this section, the court may award costs of litigation (including reasonable attorney and expert witness fees) whenever it determines that such award is appropriate.

(g) Stay, injunction, or similar relief in proceedings relating to noncompliance penalties

In any action respecting the promulgation of regulations under section 7420 of this title or the administration or enforcement of section 7420 of this title no court shall grant any stay, injunctive, or similar relief before final judgment by such court in such action.

(h) Public participation

It is the intent of Congress that, consistent with the policy of subchapter II of chapter 5 of

title 5, the Administrator in promulgating any regulation under this chapter, including a regulation subject to a deadline, shall ensure a reasonable period for public participation of at least 30 days, except as otherwise expressly provided in section⁶ 7407(d), 7502(a), 7511(a) and (b), and 7512(a) and (b) of this title.

(July 14, 1955, ch. 360, title III, §307, as added Pub. L. 91-604, §12(a), Dec. 31, 1970, 84 Stat. 1707; amended Pub. L. 92-157, title III, §302(a), Nov. 18, 1971, 85 Stat. 464; Pub. L. 93-319, §6(c), June 22, 1974, 88 Stat. 259; Pub. L. 95-95, title III, §§303(d), 305(a), (c), (f)-(h), Aug. 7, 1977, 91 Stat. 772, 776, 777; Pub. L. 95-190, §14(a)(79), (80), Nov. 16, 1977, 91 Stat. 1404; Pub. L. 101-549, title I, §§108(p), 110(5), title III, §302(g), (h), title VII, §§702(c), 703, 706, 707(h), 710(b), Nov. 15, 1990, 104 Stat. 2469, 2470, 2574, 2681-2684.)

REFERENCES IN TEXT

Section 7521(b)(4) of this title, referred to in subsec. (a), was repealed by Pub. L. 101-549, title II, §230(2), Nov. 15, 1990, 104 Stat. 2529.

Section 7521(b)(5) of this title, referred to in subsec. (b)(1), was repealed by Pub. L. 101-549, title II, §230(3), Nov. 15, 1990, 104 Stat. 2529.

Section 1857c-10(c)(2)(A), (B), or (C) of this title (as in effect before August 7, 1977), referred to in subsec. (b)(1), was in the original “section 119(c)(2)(A), (B), or (C) (as in effect before the date of enactment of the Clean Air Act Amendments of 1977)”, meaning section 119 of act July 14, 1955, ch. 360, title I, as added June 22, 1974, Pub. L. 93-319, §3, 88 Stat. 248, (which was classified to section 1857c-10 of this title) as in effect prior to the enactment of Pub. L. 95-95, Aug. 7, 1977, 91 Stat. 691, effective Aug. 7, 1977. Section 112(b)(1) of Pub. L. 95-95 repealed section 119 of act July 14, 1955, ch. 360, title I, as added by Pub. L. 93-319, and provided that all references to such section 119 in any subsequent enactment which supersedes Pub. L. 93-319 shall be construed to refer to section 113(d) of the Clean Air Act and to paragraph (5) thereof in particular which is classified to subsec. (d)(5) of section 7413 of this title. Section 7413(d) of this title was subsequently amended generally by Pub. L. 101-549, title VII, §701, Nov. 15, 1990, 104 Stat. 2672, and, as so amended, no longer relates to final compliance orders. Section 117(b) of Pub. L. 95-95 added a new section 119 of act July 14, 1955, which is classified to section 7419 of this title.

Part C of subchapter I of this chapter, referred to in subsec. (d)(1)(J), was in the original “subtitle C of title I”, and was translated as reading “part C of title I” to reflect the probable intent of Congress, because title I does not contain subtitles.

CODIFICATION

In subsec. (h), “subchapter II of chapter 5 of title 5” was substituted for “the Administrative Procedures Act” on authority of Pub. L. 89-554, §7(b), Sept. 6, 1966, 80 Stat. 631, the first section of which enacted Title 5, Government Organization and Employees.

Section was formerly classified to section 1857h-5 of this title.

PRIOR PROVISIONS

A prior section 307 of act July 14, 1955, was renumbered section 314 by Pub. L. 91-604 and is classified to section 7614 of this title.

Another prior section 307 of act July 14, 1955, ch. 360, title III, formerly §14, as added Dec. 17, 1963, Pub. L. 88-206, §1, 77 Stat. 401, was renumbered section 307 by Pub. L. 89-272, renumbered section 310 by Pub. L. 90-148, and renumbered section 317 by Pub. L. 91-604, and is set out as a Short Title note under section 7401 of this title.

⁶ So in original. Probably should be “sections”.

AMENDMENTS

1990—Subsec. (a). Pub. L. 101-549, §703, struck out par. (1) designation at beginning, inserted provisions authorizing issuance of subpoenas and administration of oaths for purposes of investigations, monitoring, reporting requirements, entries, compliance inspections, or administrative enforcement proceedings under this chapter, and struck out “or section 7521(b)(5)” after “section 7410(f)”.

Subsec. (b)(1). Pub. L. 101-549, §706(2), which directed amendment of second sentence by striking “under section 7413(d) of this title” immediately before “under section 7419 of this title”, was executed by striking “under section 7413(d) of this title,” before “under section 7419 of this title”, to reflect the probable intent of Congress.

Pub. L. 101-549, §706(1), inserted at end: “The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.”

Pub. L. 101-549, §702(c), inserted “or revising regulations for enhanced monitoring and compliance certification programs under section 7414(a)(3) of this title,” before “or any other final action of the Administrator”.

Pub. L. 101-549, §302(g), substituted “section 7412” for “section 7412(c)”.

Subsec. (b)(2). Pub. L. 101-549, §707(h), inserted sentence at end authorizing challenge to deferrals of performance of nondiscretionary statutory actions.

Subsec. (d)(1)(C). Pub. L. 101-549, §110(5)(A), amended subpar. (C) generally. Prior to amendment, subpar. (C) read as follows: “the promulgation or revision of any standard of performance under section 7411 of this title or emission standard under section 7412 of this title.”

Subsec. (d)(1)(D), (E). Pub. L. 101-549, §302(h), added subpar. (D) and redesignated former subpar. (D) as (E). Former subpar. (E) redesignated (F).

Subsec. (d)(1)(F). Pub. L. 101-549, §302(h), redesignated subpar. (E) as (F). Former subpar. (F) redesignated (G).

Pub. L. 101-549, §110(5)(B), amended subpar. (F) generally. Prior to amendment, subpar. (F) read as follows: “promulgation or revision of regulations pertaining to orders for coal conversion under section 7413(d)(5) of this title (but not including orders granting or denying any such orders)”.

Subsec. (d)(1)(G), (H). Pub. L. 101-549, §302(h), redesignated subpars. (F) and (G) as (G) and (H), respectively. Former subpar. (H) redesignated (I).

Subsec. (d)(1)(I). Pub. L. 101-549, §710(b), which directed that subpar. (H) be amended by substituting “subchapter VI of this chapter” for “part B of subchapter I of this chapter”, was executed by making the substitution in subpar. (I), to reflect the probable intent of Congress and the intervening redesignation of subpar. (H) as (I) by Pub. L. 101-549, §302(h), see below.

Pub. L. 101-549, §302(h), redesignated subpar. (H) as (I). Former subpar. (I) redesignated (J).

Subsec. (d)(1)(J) to (M). Pub. L. 101-549, §302(h), redesignated subpars. (I) to (L) as (J) to (M), respectively. Former subpar. (M) redesignated (N).

Subsec. (d)(1)(N). Pub. L. 101-549, §302(h), redesignated subpar. (M) as (N). Former subpar. (N) redesignated (O).

Pub. L. 101-549, §110(5)(C), added subpar. (N) and redesignated former subpar. (N) as (U).

Subsec. (d)(1)(O) to (T). Pub. L. 101-549, §302(h), redesignated subpars. (N) to (S) as (O) to (T), respectively. Former subpar. (T) redesignated (U).

Pub. L. 101-549, §110(5)(C), added subpars. (O) to (T).

Subsec. (d)(1)(U). Pub. L. 101-549, §302(h), redesignated subpar. (T) as (U). Former subpar. (U) redesignated (V).

Pub. L. 101-549, §110(5)(C), redesignated former subpar. (N) as (U).

Subsec. (d)(1)(V). Pub. L. 101-549, §302(h), redesignated subpar. (U) as (V).

Subsec. (h). Pub. L. 101-549, §108(p), added subsec. (h).

1977—Subsec. (b)(1). Pub. L. 95-190 in text relating to filing of petitions for review in the United States Court of Appeals for the District of Columbia inserted provision respecting requirements under sections 7411 and 7412 of this title, and substituted provisions authorizing review of any rule issued under section 7413, 7419, or 7420 of this title, for provisions authorizing review of any rule or order issued under section 7420 of this title, relating to noncompliance penalties, and in text relating to filing of petitions for review in the United States Court of Appeals for the appropriate circuit inserted provision respecting review under section 7411(j), 7412(c), 7413(d), or 7419 of this title, provision authorizing review under section 1857c-10(c)(2)(A), (B), or (C) to the period prior to Aug. 7, 1977, and provisions authorizing review of denials or disapprovals by the Administrator under subchapter I of this chapter.

Pub. L. 95-95, §305(c), (h), inserted rules or orders issued under section 7420 of this title (relating to noncompliance penalties) and any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter to the enumeration of actions of the Administrator for which a petition for review may be filed only in the United States Court of Appeals for the District of Columbia, added the approval or promulgation by the Administrator of orders under section 7420 of this title, or any other final action of the Administrator under this chapter which is locally or regionally applicable to the enumeration of actions by the Administrator for which a petition for review may be filed only in the United States Court of Appeals for the appropriate circuit, inserted provision that petitions otherwise capable of being filed in the Court of Appeals for the appropriate circuit may be filed only in the Court of Appeals for the District of Columbia if the action is based on a determination of nationwide scope, and increased from 30 days to 60 days the period during which the petition must be filed.

Subsec. (d). Pub. L. 95-95, §305(a), added subsec. (d).

Subsec. (e). Pub. L. 95-95, §303(d), added subsec. (e).

Subsec. (f). Pub. L. 95-95, §305(f), added subsec. (f).

Subsec. (g). Pub. L. 95-95, §305(g), added subsec. (g).

1974—Subsec. (b)(1). Pub. L. 93-319 inserted reference to the Administrator’s action under section 1857c-10(c)(2)(A), (B), or (C) of this title or under regulations thereunder and substituted reference to the filing of a petition within 30 days from the date of promulgation, approval, or action for reference to the filing of a petition within 30 days from the date of promulgation or approval.

1971—Subsec. (a)(1). Pub. L. 92-157 substituted reference to section “7545(c)(3)” for “7545(c)(4)” of this title.

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

TERMINATION OF ADVISORY COMMITTEES

Advisory committees established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a committee established by the Congress, its duration is otherwise provided for by law. See section 14 of Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 776, set out in the Appendix to Title 5, Government Organization and Employees.

PENDING ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other

officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95-95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub. L. 95-95, see section 406(a) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7608. Mandatory licensing

Whenever the Attorney General determines, upon application of the Administrator—

(1) that—

(A) in the implementation of the requirements of section 7411, 7412, or 7521 of this title, a right under any United States letters patent, which is being used or intended for public or commercial use and not otherwise reasonably available, is necessary to enable any person required to comply with such limitation to so comply, and

(B) there are no reasonable alternative methods to accomplish such purpose, and

(2) that the unavailability of such right may result in a substantial lessening of competition or tendency to create a monopoly in any line of commerce in any section of the country,

the Attorney General may so certify to a district court of the United States, which may issue an order requiring the person who owns such patent to license it on such reasonable terms and conditions as the court, after hearing, may determine. Such certification may be made to the district court for the district in which the person owning the patent resides, does business, or is found.

(July 14, 1955, ch. 360, title III, §308, as added Pub. L. 91-604, §12(a), Dec. 31, 1970, 84 Stat. 1708.)

CODIFICATION

Section was formerly classified to section 1857h-6 of this title.

PRIOR PROVISIONS

A prior section 308 of act July 14, 1955, was renumbered section 315 by Pub. L. 91-604 and is classified to section 7615 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect

immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7609. Policy review

(a) Environmental impact

The Administrator shall review and comment in writing on the environmental impact of any matter relating to duties and responsibilities granted pursuant to this chapter or other provisions of the authority of the Administrator, contained in any (1) legislation proposed by any Federal department or agency, (2) newly authorized Federal projects for construction and any major Federal agency action (other than a project for construction) to which section 4332(2)(C) of this title applies, and (3) proposed regulations published by any department or agency of the Federal Government. Such written comment shall be made public at the conclusion of any such review.

(b) Unsatisfactory legislation, action, or regulation

In the event the Administrator determines that any such legislation, action, or regulation is unsatisfactory from the standpoint of public health or welfare or environmental quality, he shall publish his determination and the matter shall be referred to the Council on Environmental Quality.

(July 14, 1955, ch. 360, title III, §309, as added Pub. L. 91-604, §12(a), Dec. 31, 1970, 84 Stat. 1709.)

CODIFICATION

Section was formerly classified to section 1857h-7 of this title.

PRIOR PROVISIONS

A prior section 309 of act July 14, 1955, ch. 360, title III, formerly §13, as added Dec. 17, 1963, Pub. L. 88-206, §1, 77 Stat. 401; renumbered §306, Oct. 20, 1965, Pub. L. 89-272, title I, §101(4), 79 Stat. 992; renumbered §309, Nov. 21, 1967, Pub. L. 90-148, §2, 81 Stat. 506; renumbered §316, Dec. 31, 1970, Pub. L. 91-604, §12(a), 84 Stat. 1705, related to appropriations and was classified to section 1857l of this title, prior to repeal by section 306 of Pub. L. 95-95. See section 7626 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7610. Other authority

(a) Authority and responsibilities under other laws not affected

Except as provided in subsection (b) of this section, this chapter shall not be construed as

“(I) PERIOD.—Action under paragraph (5) of section 2503 which was begun under subparagraph (A) shall be completed within 24 months of the date of publication of an advance notice of proposed rulemaking or a notice of proposed rulemaking. If the Secretary determines that there is a need for delay and if the public comment period is closed, the Secretary may extend the date for completion for not more than 6 months and shall publish in the Federal Register a notice stating the reasons for the extension and setting a date certain for completion of the action. The extension of the completion date shall not be considered agency action subject to judicial review.

“(II) ACTION.—A rulemaking under paragraph (5) of section 2503 shall be considered completed when the Secretary promulgates a final rule with standards on improved head injury protection.

“(C) STANDARD.—The Secretary may, as part of any action taken under section 2503, amend any motor vehicle safety standard or establish a new standard under the National Traffic and Motor Vehicle Safety Act of 1966 ([formerly] 15 U.S.C. 1381 et seq.).

“SEC. 2503. MATTERS BEFORE THE SECRETARY.

“The Secretary shall address the following matters in accordance with section 2502:

“(1) Protection against unreasonable risk of roll-overs of passenger cars, multipurpose passenger vehicles, and trucks with a gross vehicle weight rating of 8,500 pounds or less and an unloaded vehicle weight of 5,500 pounds or less.

“(2) Extension of passenger car side impact protection to multipurpose passenger vehicles and trucks with a gross vehicle weight rating of 8,500 pounds or less and an unloaded vehicle weight of 5,500 pounds or less.

“(3) Safety of child booster seats used in passenger cars and other appropriate motor vehicles.

“(4) Improved design for safety belts.

“(5) Improved head impact protection from interior components of passenger cars (i.e. roof rails, pillars, and front headers).

“[SECS. 2504, 2505. Repealed. Pub. L. 103–272, §7(b), July 5, 1994, 108 Stat. 1379.]

“SEC. 2506. REAR SEATBELTS.

“The Secretary shall expend such portion of the funds authorized to be appropriated under the Motor Vehicle Information and Cost Savings Act ([formerly] 15 U.S.C. 1901 et seq.), for fiscal year 1993, as the Secretary deems necessary for the purpose of disseminating information to consumers regarding the manner in which passenger cars may be retrofitted with lap and shoulder rear seatbelts.

“SEC. 2507. BRAKE PERFORMANCE STANDARDS FOR PASSENGER CARS.

“Not later than December 31, 1993, the Secretary, in accordance with the National Traffic and Motor Vehicle Safety Act of 1966 [formerly 15 U.S.C. 1381 et seq.], shall publish an advance notice of proposed rulemaking to consider the need for any additional brake performance standards for passenger cars, including antilock brake standards. The Secretary shall complete such rulemaking (in accordance with section 2502(b)(2)(B)(ii)) not later than 36 months from the date of initiation of such advance notice of proposed rulemaking. In order to facilitate and encourage innovation and early application of economical and effective antilock brake systems for all such vehicles, the Secretary shall, as part of the rulemaking, consider any such brake system adopted by a manufacturer.

“[SEC. 2508. Repealed. Pub. L. 103–272, §7(b), July 5, 1994, 108 Stat. 1379.]

“SEC. 2509. HEAD INJURY IMPACT STUDY.

“The Secretary, in the case of any head injury protection matters not subject to section 2503(5) for which

the Secretary is on the date of enactment of this Act [Dec. 18, 1991] examining the need for rulemaking and is conducting research, shall provide a report to Congress by the end of fiscal year 1993 identifying those matters and their status. The report shall include a statement of any actions planned toward initiating such rulemaking no later than fiscal year 1994 or 1995 through use of either an advance notice of proposed rulemaking or a notice of proposed rulemaking and completing such rulemaking as soon as possible thereafter.”

FUEL SYSTEM INTEGRITY STANDARD

Pub. L. 93–492, title I, §108, Oct. 27, 1974, 88 Stat. 1482, provided that:

“(a) RATIFICATION OF STANDARD.—Federal Motor Vehicle Safety Standard Number 301 (49 CFR 571.301–75; Docket No. 73–20, Notice 2) as published on March 21, 1974 (39 F.R. 10588–10590) shall take effect on the dates prescribed in such standard (as so published).

“(b) AMENDMENT OR REPEAL OF STANDARD.—The Secretary may amend the standard described in subsection (a) in order to correct technical errors in the standard, and may amend or repeal such standard if he determines such amendment or repeal will not diminish the level of motor vehicle safety.”

EX. ORD. NO. 11357. ADMINISTRATION OF TRAFFIC AND MOTOR VEHICLE SAFETY THROUGH NATIONAL HIGHWAY SAFETY BUREAU AND ITS DIRECTOR

Ex. Ord. No. 11357, June 6, 1967, 32 F.R. 8225, provided: By virtue of the authority vested in me as President of the United States by Section 201 of the Highway Safety Act of 1966, as amended (80 Stat. 735, 943) [set out as a note under section 401 of Title 23, Highways], and by Section 3(f)(3) of the Department of Transportation Act (80 Stat. 932) [former 49 U.S.C. 1652(f)(3)], it is hereby ordered that the provisions of the National Traffic and Motor Vehicle Safety Act of 1966, as amended (80 Stat. 718, 943) [formerly 15 U.S.C. 1381 et seq.], shall be carried out through the National Highway Safety Bureau and the Director thereof.

LYNDON B. JOHNSON.

§ 30102. Definitions

(a) GENERAL DEFINITIONS.—In this chapter—

(1) “covered rental vehicle” means a motor vehicle that—

(A) has a gross vehicle weight rating of 10,000 pounds or less;

(B) is rented without a driver for an initial term of less than 4 months; and

(C) is part of a motor vehicle fleet of 35 or more motor vehicles that are used for rental purposes by a rental company.

(2) “dealer” means a person selling and distributing new motor vehicles or motor vehicle equipment primarily to purchasers that in good faith purchase the vehicles or equipment other than for resale.

(3) “defect” includes any defect in performance, construction, a component, or material of a motor vehicle or motor vehicle equipment.

(4) “distributor” means a person primarily selling and distributing motor vehicles or motor vehicle equipment for resale.

(5) “interstate commerce” means commerce between a place in a State and a place in another State or between places in the same State through another State.

(6) “manufacturer” means a person—

(A) manufacturing or assembling motor vehicles or motor vehicle equipment; or

(B) importing motor vehicles or motor vehicle equipment for resale.

(7) “motor vehicle” means a vehicle driven or drawn by mechanical power and manufactured primarily for use on public streets, roads, and highways, but does not include a vehicle operated only on a rail line.

(8) “motor vehicle equipment” means—

(A) any system, part, or component of a motor vehicle as originally manufactured;

(B) any similar part or component manufactured or sold for replacement or improvement of a system, part, or component, or as an accessory or addition to a motor vehicle; or

(C) any device or an article or apparel, including a motorcycle helmet and excluding medicine or eyeglasses prescribed by a licensed practitioner, that—

(i) is not a system, part, or component of a motor vehicle; and

(ii) is manufactured, sold, delivered, or offered to be sold for use on public streets, roads, and highways with the apparent purpose of safeguarding users of motor vehicles against risk of accident, injury, or death.

(9) “motor vehicle safety” means the performance of a motor vehicle or motor vehicle equipment in a way that protects the public against unreasonable risk of accidents occurring because of the design, construction, or performance of a motor vehicle, and against unreasonable risk of death or injury in an accident, and includes nonoperational safety of a motor vehicle.

(10) “motor vehicle safety standard” means a minimum standard for motor vehicle or motor vehicle equipment performance.

(11) “rental company” means a person who—

(A) is engaged in the business of renting covered rental vehicles; and

(B) uses for rental purposes a motor vehicle fleet of 35 or more covered rental vehicles, on average, during the calendar year.

(12) “State” means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

(13) “United States district court” means a district court of the United States, a United States court for Guam, the Virgin Islands, and American Samoa, and the district court for the Northern Mariana Islands.

(b) LIMITED DEFINITIONS.—(1) In sections 30117(b), 30118–30121, and 30166(f) of this title—

(A) “adequate repair” does not include repair resulting in substantially impaired operation of a motor vehicle or motor vehicle equipment;

(B) “first purchaser” means the first purchaser of a motor vehicle or motor vehicle equipment other than for resale;

(C) “original equipment” means motor vehicle equipment (including a tire) installed in or on a motor vehicle at the time of delivery to the first purchaser;

(D) “replacement equipment” means motor vehicle equipment (including a tire) that is not original equipment;

(E) a brand name owner of a tire marketed under a brand name not owned by the manufacturer of the tire is deemed to be the manufacturer of the tire;

(F) a defect in original equipment, or non-compliance of original equipment with a motor vehicle safety standard prescribed under this chapter, is deemed to be a defect or noncompliance of the motor vehicle in or on which the equipment was installed at the time of delivery to the first purchaser;

(G) a manufacturer of a motor vehicle in or on which original equipment was installed when delivered to the first purchaser is deemed to be the manufacturer of the equipment; and

(H) a retreader of a tire is deemed to be the manufacturer of the tire.

(2) The Secretary of Transportation may prescribe regulations changing paragraph (1)(C), (D), (F), or (G) of this subsection.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 941; Pub. L. 112–141, div. C, title I, §31201, July 6, 2012, 126 Stat. 757; Pub. L. 114–94, div. B, title XXIV, §24109(b), Dec. 4, 2015, 129 Stat. 1706.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
30102(a)(1) ..	15:1391(7).	Sept. 9, 1966, Pub. L. 89–563, §102(1)–(3), (5)–(9), (11), (12), 80 Stat. 718, 719.
	15:1391(10).	Sept. 9, 1966, Pub. L. 89–563, §102(10), 80 Stat. 718; restated Oct. 27, 1974, Pub. L. 93–492, §110(a), 88 Stat. 1484.
	49 App.:1655(a)(6)(A).	Oct. 15, 1966, Pub. L. 89–670, §6(a)(6)(A), 80 Stat. 938.
30102(a)(2) ..	15:1391(11).	
30102(a)(3) ..	15:1391(6).	
30102(a)(4) ..	15:1391(9).	
30102(a)(5) ..	15:1391(5).	
30102(a)(6) ..	15:1391(3).	
30102(a)(7) ..	15:1391(4).	Sept. 9, 1966, Pub. L. 89–563, §102(4), 80 Stat. 718; restated May 22, 1970, Pub. L. 91–265, §2, 84 Stat. 262.
30102(a)(8) ..	15:1391(1).	
30102(a)(9) ..	15:1391(2).	
30102(a)(10) ..	15:1391(8).	
30102(a)(11) ..	15:1391(12).	
30102(b)	15:1419.	Sept. 9, 1966, Pub. L. 89–563, 80 Stat. 718, §159; added Oct. 27, 1974, Pub. L. 93–492, §102(a), 88 Stat. 1476.

In subsection (a), the definitions apply to the entire chapter because of references in 15:1421–1431 applying 15:1391–1420 to 15:1421–1431. Before clause (1), the words “As used” are omitted as surplus. In clause (1), the text of 15:1391(10) and 49 App.:1655(a)(6)(A) is omitted as surplus because the complete name of the Secretary of Transportation is used the first time the term appears in a section. The words “selling and distributing” are substituted for “who is engaged in the sale and distribution of” to eliminate unnecessary words. The word “purposes” is omitted as surplus. In clause (3), the words “selling and distributing” are substituted for “engaged in the sale and distribution of” to eliminate unnecessary words. In clause (5)(A), the words “manufacturing or assembling” are substituted for “engaged in the manufacturing or assembling of” to eliminate unnecessary words. In clause (7), the words “physician or other duly” and “drivers, passengers, and other” are omitted as surplus. In clause (8), the words “is also protected” and “to persons” are omitted as unnecessary. In clause (9), the words “which is practicable, which meets the need for motor vehicle safety and which provides objective criteria” are omitted as unnecessary because of 15:1392(a) which is restated in section 30111 of

the revised title. In clauses (10) and (11), the words “the Northern Mariana Islands” are added because of section 502(a)(2) of the Covenant to Establish a Commonwealth of the Northern Mariana Islands in Political Union with the United States of America, as enacted by the Act of March 24, 1976 (Public Law 94-241, 90 Stat. 268), and as proclaimed to be in effect by the President on January 9, 1978 (Proc. No. 4534, Oct. 24, 1977, 42 F.R. 56593). The words “the Canal Zone” are omitted because of the Panama Canal Treaty of 1977. In clause (10), the word “means” is substituted for “includes” as being more appropriate. The words “a State of the United States” are substituted for “each of the several States” for consistency. The words “the Commonwealth of” are omitted as surplus. In clause (11), the word “Federal” is omitted as surplus. The words “of the Commonwealth of Puerto Rico” are omitted as unnecessary because the district court of Puerto Rico is a district court of the United States under 28:119.

In subsection (b)(1), before clause (A), the words “The term” and “the term” are omitted as surplus. In clause (B), the words “of a motor vehicle or motor vehicle equipment” are added for clarity. In clause (E), the words “to be” are added for consistency. The words “marketed under such brand name” are omitted as surplus. In clause (F), the words “a motor vehicle safety standard prescribed under this chapter” are added for clarity and consistency. The word “noncompliance” is substituted for “failure to comply” for consistency in the chapter. In clause (G), the words “(rather than the manufacturer of such equipment)” are omitted as surplus. The words “deemed to be” are substituted for “considered” for consistency. In clause (H), the words “which have been” are omitted as surplus.

Subsection (b)(2) is substituted for “Except as otherwise provided in regulations of the Secretary” for clarity and because of the restatement.

AMENDMENTS

2015—Subsec. (a)(1). Pub. L. 114-94, § 24109(b)(3), added par. (1). Former par. (1) redesignated (2).

Subsec. (a)(2) to (10). Pub. L. 114-94, § 24109(b)(2), redesignated pars. (1) to (9) as (2) to (10), respectively. Former par. (10) redesignated (12).

Subsec. (a)(11). Pub. L. 114-94, § 24109(b)(4), added par. (11). Former par. (11) redesignated (13).

Subsec. (a)(12), (13). Pub. L. 114-94, § 24109(b)(1), redesignated pars. (10) and (11) as (12) and (13), respectively.

2012—Subsec. (a)(7)(C). Pub. L. 112-141 amended subpar. (C) generally. Prior to amendment, subpar. (C) read as follows: “any device or an article or apparel (except medicine or eyeglasses prescribed by a licensed practitioner) that is not a system, part, or component of a motor vehicle and is manufactured, sold, delivered, offered, or intended to be used only to safeguard motor vehicles and highway users against risk of accident, injury, or death.”

EFFECTIVE DATE OF 2015 AMENDMENT

Pub. L. 114-94, div. B, title XXIV, § 24109(k), Dec. 4, 2015, 129 Stat. 1709, provided that: “The amendments made by this section [amending this section and sections 30120, 30122, and 30166 of this title] shall take effect on the date that is 180 days after the date of enactment of this Act [Dec. 4, 2015].”

EFFECTIVE DATE OF 2012 AMENDMENT

Amendment by Pub. L. 112-141 effective Oct. 1, 2012, see section 3(a) of Pub. L. 112-141, set out as an Effective and Termination Dates of 2012 Amendment note under section 101 of Title 23, Highways.

RULE OF CONSTRUCTION

Pub. L. 114-94, div. B, title XXIV, § 24109(i), Dec. 4, 2015, 129 Stat. 1708, provided that: “Nothing in this section [amending this section and sections 30120, 30122, and 30166 of this title and enacting provisions set out as notes under this section and section 30101 of this title] or the amendments made by this section—

“(1) may be construed to create or increase any liability, including for loss of use, for a manufacturer as a result of having manufactured or imported a motor vehicle subject to a notification of defect or noncompliance under subsection (b) or (c) of section 30118 of title 49, United States Code; or

“(2) shall supersede or otherwise affect the contractual obligations, if any, between such a manufacturer and a rental company (as defined in section 30102(a) of title 49, United States Code).”

RULEMAKING

Pub. L. 114-94, div. B, title XXIV, § 24109(j), Dec. 4, 2015, 129 Stat. 1708, provided that: “The Secretary [probably means Secretary of Transportation] may promulgate rules, as appropriate, to implement this section [amending this section and sections 30120, 30122, and 30166 of this title and enacting provisions set out as notes under this section and section 30101 of this title] and the amendments made by this section.”

LOW-SPEED ELECTRIC BICYCLES

Pub. L. 107-319, § 2, Dec. 4, 2002, 116 Stat. 2776, provided that: “For purposes of motor vehicle safety standards issued and enforced pursuant to chapter 301 of title 49, United States Code, a low-speed electric bicycle (as defined in section 38(b) of the Consumer Product Safety Act [15 U.S.C. 2085(b)]) shall not be considered a motor vehicle as defined by section 30102[(a)](6) [now 30102(a)(7)] of title 49, United States Code.”

§ 30103. Relationship to other laws

(a) UNIFORMITY OF REGULATIONS.—The Secretary of Transportation may not prescribe a safety regulation related to a motor vehicle subject to subchapter I of chapter 135 of this title that differs from a motor vehicle safety standard prescribed under this chapter. However, the Secretary may prescribe, for a motor vehicle operated by a carrier subject to subchapter I of chapter 135, a safety regulation that imposes a higher standard of performance after manufacture than that required by an applicable standard in effect at the time of manufacture.

(b) PREEMPTION.—(1) When a motor vehicle safety standard is in effect under this chapter, a State or a political subdivision of a State may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter. However, the United States Government, a State, or a political subdivision of a State may prescribe a standard for a motor vehicle or motor vehicle equipment obtained for its own use that imposes a higher performance requirement than that required by the otherwise applicable standard under this chapter.

(2) A State may enforce a standard that is identical to a standard prescribed under this chapter.

(c) ANTITRUST LAWS.—This chapter does not—

(1) exempt from the antitrust laws conduct that is unlawful under those laws; or

(2) prohibit under the antitrust laws conduct that is lawful under those laws.

(d) WARRANTY OBLIGATIONS AND ADDITIONAL LEGAL RIGHTS AND REMEDIES.—Sections 30117(b), 30118-30121, 30166(f), and 30167(a) and (b) of this title do not establish or affect a warranty obligation under a law of the United States or a State. A remedy under those sections and sec-

“(A) is in drivable condition;
“(B) has been continuously insured consistent with the applicable State law and registered to the same owner for a period of not less than 1 year immediately prior to such trade-in;
“(C) was manufactured less than 25 years before the date of the trade-in; and
“(D) in the case of an automobile, has a combined fuel economy value of 18 miles per gallon or less;
“(8) the term ‘new fuel efficient automobile’ means an automobile described in paragraph (1), (2), (3), or (4)—
“(A) the equitable or legal title of which has not been transferred to any person other than the ultimate purchaser;
“(B) that carries a manufacturer’s suggested retail price of \$45,000 or less;
“(C) that—
“(i) in the case of passenger automobiles, category 1 trucks, or category 2 trucks, is certified to applicable standards under section 86.1811-04 of title 40, Code of Federal Regulations; or
“(ii) in the case of category 3 trucks, is certified to the applicable vehicle or engine standards under section 86.1816-08, 86-007-11 [probably means 86.007-11], or 86.008-10 of title 40, Code of Federal Regulations; and
“(D) that has the combined fuel economy value of at least—
“(i) 22 miles per gallon for a passenger automobile;
“(ii) 18 miles per gallon for a category 1 truck; or
“(iii) 15 miles per gallon for a category 2 truck;
“(9) the term ‘Program’ means the Consumer Assistance to Recycle and Save Program established by this section;
“(10) the term ‘qualifying lease’ means a lease of an automobile for a period of not less than 5 years;
“(11) the term ‘scrapage value’ means the amount received by the dealer for a vehicle upon transferring title of such vehicle to the person responsible for ensuring the dismantling and destroying of the vehicle;
“(12) the term ‘Secretary’ means the Secretary of Transportation acting through the National Highway Traffic Safety Administration;
“(13) the term ‘ultimate purchaser’ means, with respect to any new automobile, the first person who in good faith purchases such automobile for purposes other than resale;
“(14) the term ‘vehicle identification number’ means the 17 character number used by the automobile industry to identify individual automobiles; and
“(15) the term ‘voucher’ means an electronic transfer of funds to a dealer based on an eligible transaction under this program.
“(j) APPROPRIATION.—There is hereby appropriated to the Secretary of Transportation \$1,000,000,000, of which up to \$50,000,000 is available for administration, to remain available until expended to carry out this section.”

§ 32902. Average fuel economy standards

(a) PRESCRIPTION OF STANDARDS BY REGULATION.—At least 18 months before the beginning of each model year, the Secretary of Transportation shall prescribe by regulation average fuel economy standards for automobiles manufactured by a manufacturer in that model year. Each standard shall be the maximum feasible average fuel economy level that the Secretary decides the manufacturers can achieve in that model year.

(b) STANDARDS FOR AUTOMOBILES AND CERTAIN OTHER VEHICLES.—

(1) IN GENERAL.—The Secretary of Transportation, after consultation with the Secretary

of Energy and the Administrator of the Environmental Protection Agency, shall prescribe separate average fuel economy standards for—

(A) passenger automobiles manufactured by manufacturers in each model year beginning with model year 2011 in accordance with this subsection;

(B) non-passenger automobiles manufactured by manufacturers in each model year beginning with model year 2011 in accordance with this subsection; and

(C) work trucks and commercial medium-duty or heavy-duty on-highway vehicles in accordance with subsection (k).

(2) FUEL ECONOMY STANDARDS FOR AUTOMOBILES.—

(A) AUTOMOBILE FUEL ECONOMY AVERAGE FOR MODEL YEARS 2011 THROUGH 2020.—The Secretary shall prescribe a separate average fuel economy standard for passenger automobiles and a separate average fuel economy standard for non-passenger automobiles for each model year beginning with model year 2011 to achieve a combined fuel economy average for model year 2020 of at least 35 miles per gallon for the total fleet of passenger and non-passenger automobiles manufactured for sale in the United States for that model year.

(B) AUTOMOBILE FUEL ECONOMY AVERAGE FOR MODEL YEARS 2021 THROUGH 2030.—For model years 2021 through 2030, the average fuel economy required to be attained by each fleet of passenger and non-passenger automobiles manufactured for sale in the United States shall be the maximum feasible average fuel economy standard for each fleet for that model year.

(C) PROGRESS TOWARD STANDARD REQUIRED.—In prescribing average fuel economy standards under subparagraph (A), the Secretary shall prescribe annual fuel economy standard increases that increase the applicable average fuel economy standard ratably beginning with model year 2011 and ending with model year 2020.

(3) AUTHORITY OF THE SECRETARY.—The Secretary shall—

(A) prescribe by regulation separate average fuel economy standards for passenger and non-passenger automobiles based on 1 or more vehicle attributes related to fuel economy and express each standard in the form of a mathematical function; and

(B) issue regulations under this title prescribing average fuel economy standards for at least 1, but not more than 5, model years.

(4) MINIMUM STANDARD.—In addition to any standard prescribed pursuant to paragraph (3), each manufacturer shall also meet the minimum standard for domestically manufactured passenger automobiles, which shall be the greater of—

(A) 27.5 miles per gallon; or

(B) 92 percent of the average fuel economy projected by the Secretary for the combined domestic and non-domestic passenger automobile fleets manufactured for sale in the United States by all manufacturers in the model year, which projection shall be pub-

lished in the Federal Register when the standard for that model year is promulgated in accordance with this section.

(c) AMENDING PASSENGER AUTOMOBILE STANDARDS.—The Secretary of Transportation may prescribe regulations amending the standard under subsection (b) of this section for a model year to a level that the Secretary decides is the maximum feasible average fuel economy level for that model year. Section 553 of title 5 applies to a proceeding to amend the standard. However, any interested person may make an oral presentation and a transcript shall be taken of that presentation.

(d) EXEMPTIONS.—(1) Except as provided in paragraph (3) of this subsection, on application of a manufacturer that manufactured (whether in the United States or not) fewer than 10,000 passenger automobiles in the model year 2 years before the model year for which the application is made, the Secretary of Transportation may exempt by regulation the manufacturer from a standard under subsection (b) or (c) of this section. An exemption for a model year applies only if the manufacturer manufactures (whether in the United States or not) fewer than 10,000 passenger automobiles in the model year. The Secretary may exempt a manufacturer only if the Secretary—

(A) finds that the applicable standard under those subsections is more stringent than the maximum feasible average fuel economy level that the manufacturer can achieve; and

(B) prescribes by regulation an alternative average fuel economy standard for the passenger automobiles manufactured by the exempted manufacturer that the Secretary decides is the maximum feasible average fuel economy level for the manufacturers to which the alternative standard applies.

(2) An alternative average fuel economy standard the Secretary of Transportation prescribes under paragraph (1)(B) of this subsection may apply to an individually exempted manufacturer, to all automobiles to which this subsection applies, or to classes of passenger automobiles, as defined under regulations of the Secretary, manufactured by exempted manufacturers.

(3) Notwithstanding paragraph (1) of this subsection, an importer registered under section 30141(c) of this title may not be exempted as a manufacturer under paragraph (1) for a motor vehicle that the importer—

(A) imports; or

(B) brings into compliance with applicable motor vehicle safety standards prescribed under chapter 301 of this title for an individual under section 30142 of this title.

(4) The Secretary of Transportation may prescribe the contents of an application for an exemption.

(e) EMERGENCY VEHICLES.—(1) In this subsection, “emergency vehicle” means an automobile manufactured primarily for use—

(A) as an ambulance or combination ambulance-hearse;

(B) by the United States Government or a State or local government for law enforcement; or

(C) for other emergency uses prescribed by regulation by the Secretary of Transportation.

(2) A manufacturer may elect to have the fuel economy of an emergency vehicle excluded in applying a fuel economy standard under subsection (a), (b), (c), or (d) of this section. The election is made by providing written notice to the Secretary of Transportation and to the Administrator of the Environmental Protection Agency.

(f) CONSIDERATIONS ON DECISIONS ON MAXIMUM FEASIBLE AVERAGE FUEL ECONOMY.—When deciding maximum feasible average fuel economy under this section, the Secretary of Transportation shall consider technological feasibility, economic practicability, the effect of other motor vehicle standards of the Government on fuel economy, and the need of the United States to conserve energy.

(g) REQUIREMENTS FOR OTHER AMENDMENTS.—(1) The Secretary of Transportation may prescribe regulations amending an average fuel economy standard prescribed under subsection (a) or (d) of this section if the amended standard meets the requirements of subsection (a) or (d), as appropriate.

(2) When the Secretary of Transportation prescribes an amendment under this section that makes an average fuel economy standard more stringent, the Secretary shall prescribe the amendment (and submit the amendment to Congress when required under subsection (c)(2) of this section) at least 18 months before the beginning of the model year to which the amendment applies.

(h) LIMITATIONS.—In carrying out subsections (c), (f), and (g) of this section, the Secretary of Transportation—

(1) may not consider the fuel economy of dedicated automobiles;

(2) shall consider dual fueled automobiles to be operated only on gasoline or diesel fuel; and

(3) may not consider, when prescribing a fuel economy standard, the trading, transferring, or availability of credits under section 32903.

(i) CONSULTATION.—The Secretary of Transportation shall consult with the Secretary of Energy in carrying out this section and section 32903 of this title.

(j) SECRETARY OF ENERGY COMMENTS.—(1) Before issuing a notice proposing to prescribe or amend an average fuel economy standard under subsection (a), (c), or (g) of this section, the Secretary of Transportation shall give the Secretary of Energy at least 10 days from the receipt of the notice during which the Secretary of Energy may, if the Secretary of Energy concludes that the proposed standard would adversely affect the conservation goals of the Secretary of Energy, provide written comments to the Secretary of Transportation about the impact of the standard on those goals. To the extent the Secretary of Transportation does not revise a proposed standard to take into account comments of the Secretary of Energy on any adverse impact of the standard, the Secretary of Transportation shall include those comments in the notice.

(2) Before taking final action on a standard or an exemption from a standard under this sec-

tion, the Secretary of Transportation shall notify the Secretary of Energy and provide the Secretary of Energy a reasonable time to comment.

(k) COMMERCIAL MEDIUM- AND HEAVY-DUTY ON-HIGHWAY VEHICLES AND WORK TRUCKS.—

(1) STUDY.—Not later than 1 year after the National Academy of Sciences publishes the results of its study under section 108 of the Ten-in-Ten Fuel Economy Act, the Secretary of Transportation, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, shall examine the fuel efficiency of commercial medium- and heavy-duty on-highway vehicles and work trucks and determine—

(A) the appropriate test procedures and methodologies for measuring the fuel efficiency of such vehicles and work trucks;

(B) the appropriate metric for measuring and expressing commercial medium- and heavy-duty on-highway vehicle and work truck fuel efficiency performance, taking into consideration, among other things, the work performed by such on-highway vehicles and work trucks and types of operations in which they are used;

(C) the range of factors, including, without limitation, design, functionality, use, duty cycle, infrastructure, and total overall energy consumption and operating costs that affect commercial medium- and heavy-duty on-highway vehicle and work truck fuel efficiency; and

(D) such other factors and conditions that could have an impact on a program to improve commercial medium- and heavy-duty on-highway vehicle and work truck fuel efficiency.

(2) RULEMAKING.—Not later than 24 months after completion of the study required under paragraph (1), the Secretary, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, by regulation, shall determine in a rule-making proceeding how to implement a commercial medium- and heavy-duty on-highway vehicle and work truck fuel efficiency improvement program designed to achieve the maximum feasible improvement, and shall adopt and implement appropriate test methods, measurement metrics, fuel economy standards, and compliance and enforcement protocols that are appropriate, cost-effective, and technologically feasible for commercial medium- and heavy-duty on-highway vehicles and work trucks. The Secretary may prescribe separate standards for different classes of vehicles under this subsection.

(3) LEAD-TIME; REGULATORY STABILITY.—The commercial medium- and heavy-duty on-highway vehicle and work truck fuel economy standard adopted pursuant to this subsection shall provide not less than—

(A) 4 full model years of regulatory lead-time; and

(B) 3 full model years of regulatory stability.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1059; Pub. L. 110-140, title I, §§102, 104(b)(1), Dec. 19, 2007, 121 Stat. 1498, 1503.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32902(a)	15:2002(b).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §502(a)(1), (3)-(c), (e) (1st sentence), (f), (h); added Dec. 22, 1975, Pub. L. 94-163, §301, 89 Stat. 902, 903, 905; Oct. 10, 1980, Pub. L. 96-425, §§3(a)(1), 7, 8(c), 94 Stat. 1821, 1828.
32902(b)	15:2002(a)(1), (3).	
32902(c)(1) ..	15:2002(a)(4) (words before 5th comma), (h).	
32902(c)(2) ..	15:2002(a)(4) (words after 5th comma), (5).	
32902(d)	15:1397 (note).	Oct. 31, 1988, Pub. L. 100-562, §2(f), 102 Stat. 2825.
32902(e)	15:2002(c). 15:2002(g).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §502(g); added Oct. 10, 1980, Pub. L. 96-425, §7, 94 Stat. 1828.
32902(f)	15:2002(e) (1st sentence).	
32902(g)	15:2002(f).	
32902(h)	15:2002(e) (last sentence).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §§502(e) (last sentence), 513(g)(2)(B); added Oct. 14, 1988, Pub. L. 100-494, §6(a), (c), 102 Stat. 2450, 2452; Oct. 24, 1992, Pub. L. 102-486, §403(2), (5)(G)(ii)(II), (III), 106 Stat. 2876, 2878.
32902(i)	15:2013(g)(2)(B). 15:2002(i) (1st sentence).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §502(i), (j); added Aug. 4, 1977, Pub. L. 95-91, §305, 91 Stat. 580; Oct. 10, 1980, Pub. L. 96-425, §7, 94 Stat. 1828.
32902(j)	15:2002(i) (2d, last sentences), (j).	

In subsection (a), the words “Any standard applicable to a model year under this subsection shall be prescribed” are omitted as surplus. The words “which begins more than 30 months after December 22, 1975” are omitted as executed.

In subsection (b), the text of 15:2002(a)(1) (related to model years before 1985) and (3) is omitted as expired. The words “at least” are omitted as unnecessary because of the source provisions restated in subsection (c) of this section.

In subsection (c)(1), the words “Subject to paragraph (2) of this subsection” are added for clarity. The words “may prescribe regulations amending” are substituted for “may, by rule, amend” for clarity and consistency in the revised title and because “rule” is synonymous with “regulation”. The words “for a model year” are substituted for “for model year 1985, or for any subsequent model year” to eliminate the expired limitation. The reference in 15:2002(h) to 15:2002(d) is omitted because 15:2002(d) is omitted from the revised title as executed. The words “as well as written” are omitted as surplus.

In subsection (c)(2), the words “If an amendment increases the standard . . . or decreases the standard” are substituted for “except that any amendment that has the effect of increasing . . . a standard . . . , or of decreasing . . . a standard” to eliminate unnecessary words. The words “For purposes of considering any modification which is submitted to the Congress under paragraph (4)” are omitted as surplus. The words “are deemed to be” are substituted for “shall be lengthened to” for clarity and consistency.

In subsection (d)(1), before clause (A), the words “Except as provided in paragraph (3) of this subsection” are added because of the restatement. The words “in the model year 2 years before” are substituted for “in the second model year preceding” for clarity. The words “The Secretary may exempt a manufacturer only if the Secretary” are substituted for “Such exemption may only be granted if the Secretary” and “The Secretary may not issue exemptions with respect to a model year unless he” to eliminate unnecessary words. The words

“each such standard shall be set at a level which” are omitted as surplus.

In subsection (d)(3), before clause (A), the words “Notwithstanding paragraph (1) of this subsection” are substituted for “Notwithstanding any provision of law authorizing exemptions from energy conservation requirements for manufacturers of fewer than 10,000 motor vehicles” to eliminate unnecessary words. In clause (B), the word “compliance” is substituted for “conformity” for consistency with chapter 301 of the revised title. The words “prescribed under chapter 301 of this title” are substituted for “Federal” for consistency in the revised title.

Subsection (d)(4) is substituted for 15:2002(c)(1) (2d sentence) to eliminate unnecessary words. The text of 15:2002(c)(2) is omitted as expired.

In subsection (e)(1)(B), the words “police or other” are omitted as unnecessary because the authority to prescribe standards includes the authority to amend those standards.

In subsection (g)(1), the words “from time to time” are omitted as unnecessary. The cross-reference to 15:2002(a)(3) is omitted as executed because 15:2002(a)(3) applied to model years 1981–1984.

In subsection (g)(2), the words “that makes” are substituted for “has the effect of making” to eliminate unnecessary words.

In subsection (i), the words “his responsibilities under” are omitted as surplus.

In subsection (j), the reference to 15:2002(d) and the words “or any modification of” are omitted because 15:2002(d) is omitted from the revised title as executed.

In subsection (j)(1), the words “to prescribe or amend” are substituted for “to establish, reduce, or amend” to eliminate unnecessary words. The words “adverse impact” are substituted for “level” for clarity and consistency. The words “those comments” are substituted for “unaccommodated comments” for clarity.

REFERENCES IN TEXT

Section 108 of the Ten-in-Ten Fuel Economy Act, referred to in subsec. (k)(1), is section 108 of Pub. L. 110–140, title I, Dec. 19, 2007, 121 Stat. 1505, which is not classified to the Code.

AMENDMENTS

2007—Subsec. (a). Pub. L. 110–140, §102(a)(1), in heading, substituted “Prescription of Standards by Regulation” for “Non-Passenger Automobiles”, and, in text, struck out “(except passenger automobiles)” after “for automobiles” and “The Secretary may prescribe separate standards for different classes of automobiles.” at end.

Subsec. (b). Pub. L. 110–140, §102(a)(2), added subsec. (b) and struck out former subsec. (b). Prior to amendment, text of subsec. (b) read as follows: “Except as provided in this section, the average fuel economy standard for passenger automobiles manufactured by a manufacturer in a model year after model year 1984 shall be 27.5 miles a gallon.”

Subsec. (c). Pub. L. 110–140, §102(a)(3), substituted “The Secretary” for “(1) Subject to paragraph (2) of this subsection, the Secretary” and struck out par. (2) which read as follows: “If an amendment increases the standard above 27.5 miles a gallon or decreases the standard below 26.0 miles a gallon, the Secretary of Transportation shall submit the amendment to Congress. The procedures of section 551 of the Energy Policy and Conservation Act (42 U.S.C. 6421) apply to an amendment, except that the 15 calendar days referred to in section 551(c) and (d) of the Act (42 U.S.C. 6421(c), (d)) are deemed to be 60 calendar days, and the 5 calendar days referred to in section 551(f)(4)(A) of the Act (42 U.S.C. 6421(f)(4)(A)) are deemed to be 20 calendar days. If either House of Congress disapproves the amendment under those procedures, the amendment does not take effect.”

Subsec. (h)(3). Pub. L. 110–140, §104(b)(1), added par. (3).

Subsec. (k). Pub. L. 110–140, §102(b), added subsec. (k).

EFFECTIVE DATE OF 2007 AMENDMENT

Amendment by Pub. L. 110–140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

CONTINUED APPLICABILITY OF EXISTING STANDARDS

Pub. L. 110–140, title I, §106, Dec. 19, 2007, 121 Stat. 1504, provided that: “Nothing in this subtitle [subtitle A (§§101–113) of title I of Pub. L. 110–140, see Short Title of 2007 Amendment note set out under section 30101 of this title], or the amendments made by this subtitle, shall be construed to affect the application of section 32902 of title 49, United States Code, to passenger automobiles or non-passenger automobiles manufactured before model year 2011.”

NATIONAL ACADEMY OF SCIENCES STUDIES

Pub. L. 110–140, title I, §107, Dec. 19, 2007, 121 Stat. 1504, provided that:

“(a) IN GENERAL.—As soon as practicable after the date of enactment of this Act [Dec. 19, 2007], the Secretary of Transportation shall execute an agreement with the National Academy of Sciences to develop a report evaluating vehicle fuel economy standards, including—

“(1) an assessment of automotive technologies and costs to reflect developments since the Academy’s 2002 report evaluating the corporate average fuel economy standards was conducted;

“(2) an analysis of existing and potential technologies that may be used practically to improve automobile and medium-duty and heavy-duty truck fuel economy;

“(3) an analysis of how such technologies may be practically integrated into the automotive and medium-duty and heavy-duty truck manufacturing process; and

“(4) an assessment of how such technologies may be used to meet the new fuel economy standards under chapter 329 of title 49, United States Code, as amended by this subtitle [subtitle A (§§101–113) of title I of Pub. L. 110–140, see Short Title of 2007 Amendment note set out under section 30101 of this title].

“(b) REPORT.—The Academy shall submit the report to the Secretary, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Energy and Commerce of the House of Representatives, with its findings and recommendations not later than 5 years after the date on which the Secretary executes the agreement with the Academy.

“(c) QUINQUENNIAL UPDATES.—After submitting the initial report, the Academy shall update the report at 5 year intervals thereafter through 2025.”

THE ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

Memorandum of President of the United States, Jan. 26, 2009, 74 F.R. 4907, provided:

Memorandum for the Secretary of Transportation [and] the Administrator of the National Highway Traffic Safety Administration

In 2007, the Congress passed the Energy Independence and Security Act (EISA). This law mandates that, as part of the Nation’s efforts to achieve energy independence, the Secretary of Transportation prescribe annual fuel economy increases for automobiles, beginning with model year 2011, resulting in a combined fuel economy fleet average of at least 35 miles per gallon by model year 2020. On May 2, 2008, the National Highway Traffic Safety Administration (NHTSA) published a Notice of Proposed Rulemaking entitled *Average Fuel Economy Standards, Passenger Cars and Light Trucks; Model Years 2011–2015*, 73 Fed. Reg. 24352. In the notice and comment period, the NHTSA received numerous comments, some of them contending that certain aspects of the proposed rule, including appendices providing for preemption of State laws, were inconsistent with provisions of EISA

and the Supreme Court's decision in *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007).

Federal law requires that the final rule regarding fuel economy standards be adopted at least 18 months before the beginning of the model year (49 U.S.C. 32902(g)(2)). In order for the model year 2011 standards to meet this requirement, the NHTSA must publish the final rule in the Federal Register by March 30, 2009. To date, the NHTSA has not published a final rule.

Therefore, I request that:

(a) in order to comply with the EISA requirement that fuel economy increases begin with model year 2011, you take all measures consistent with law, and in coordination with the Environmental Protection Agency, to publish in the Federal Register by March 30, 2009, a final rule prescribing increased fuel economy for model year 2011;

(b) before promulgating a final rule concerning model years after model year 2011, you consider the appropriate legal factors under the EISA, the comments filed in response to the Notice of Proposed Rulemaking, the relevant technological and scientific considerations, and to the extent feasible, the forthcoming report by the National Academy of Sciences mandated under section 107 of EISA; and

(c) in adopting the final rules in paragraphs (a) and (b) above, you consider whether any provisions regarding preemption are consistent with the EISA, the Supreme Court's decision in *Massachusetts v. EPA* and other relevant provisions of law and the policies underlying them.

This memorandum is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

The Secretary of Transportation is hereby authorized and directed to publish this memorandum in the Federal Register.

BARACK OBAMA.

IMPROVING ENERGY SECURITY, AMERICAN COMPETITIVENESS AND JOB CREATION, AND ENVIRONMENTAL PROTECTION THROUGH A TRANSFORMATION OF OUR NATION'S FLEET OF CARS AND TRUCKS

Memorandum of President of the United States, May 21, 2010, 75 F.R. 29399, provided:

Memorandum for the Secretary of Transportation[,] the Secretary of Energy[,] the Administrator of the Environmental Protection Agency[, and] the Administrator of the National Highway Traffic Safety Administration

America has the opportunity to lead the world in the development of a new generation of clean cars and trucks through innovative technologies and manufacturing that will spur economic growth and create high-quality domestic jobs, enhance our energy security, and improve our environment. We already have made significant strides toward reducing greenhouse gas pollution and enhancing fuel efficiency from motor vehicles with the joint rulemaking issued by the National Highway Traffic Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) on April 1, 2010, which regulates these attributes of passenger cars and light-duty trucks for model years 2012-2016. In this memorandum, I request that additional coordinated steps be taken to produce a new generation of clean vehicles.

SECTION 1. *Medium- and Heavy-Duty Trucks.*

While the Federal Government and many States have now created a harmonized framework for addressing the fuel economy of and greenhouse gas emissions from cars and light-duty trucks, medium- and heavy-duty trucks and buses continue to be a major source of fossil fuel consumption and greenhouse gas pollution. I therefore request that the Administrators of the EPA and the NHTSA immediately begin work on a joint rulemaking under the Clean Air Act (CAA) and the Energy

Independence and Security Act of 2007 (EISA) to establish fuel efficiency and greenhouse gas emissions standards for commercial medium- and heavy-duty vehicles beginning with model year 2014, with the aim of issuing a final rule by July 30, 2011. As part of this rule development process, I request that the Administrators of the EPA and the NHTSA:

(a) Propose and take comment on strategies, including those designed to increase the use of existing technologies, to achieve substantial annual progress in reducing transportation sector emissions and fossil fuel consumption consistent with my Administration's overall energy and climate security goals. These strategies should consider whether particular segments of the diverse heavy-duty vehicle sector present special opportunities to reduce greenhouse gas emissions and increase fuel economy. For example, preliminary estimates indicate that large tractor trailers, representing half of all greenhouse gas emissions from this sector, can reduce greenhouse gas emissions by as much as 20 percent and increase their fuel efficiency by as much as 25 percent with the use of existing technologies;

(b) Include fuel efficiency and greenhouse gas emissions standards that take into account the market structure of the trucking industry and the unique demands of heavy-duty vehicle applications; seek harmonization with applicable State standards; consider the findings and recommendations published in the National Academy of Science report on medium- and heavy-duty truck regulation; strengthen the industry and enhance job creation in the United States; and

(c) Seek input from all stakeholders, while recognizing the continued leadership role of California and other States.

SEC. 2. *Passenger Cars and Light-Duty Trucks.*

Building on the earlier joint rulemaking, and in order to provide greater certainty and incentives for long-term innovation by automobile and light-duty vehicle manufacturers, I request that the Administrators of the EPA and the NHTSA develop, through notice and comment rulemaking, a coordinated national program under the CAA and the EISA to improve fuel efficiency and to reduce greenhouse gas emissions of passenger cars and light-duty trucks of model years 2017-2025. The national program should seek to produce joint Federal standards that are harmonized with applicable State standards, with the goal of ensuring that automobile manufacturers will be able to build a single, light-duty national fleet. The program should also seek to achieve substantial annual progress in reducing transportation sector greenhouse gas emissions and fossil fuel consumption, consistent with my Administration's overall energy and climate security goals, through the increased domestic production and use of existing, advanced, and emerging technologies, and should strengthen the industry and enhance job creation in the United States. As part of implementing the national program, I request that the Administrators of the EPA and the NHTSA:

(a) Work with the State of California to develop by September 1, 2010, a technical assessment to inform the rulemaking process, reflecting input from an array of stakeholders on relevant factors, including viable technologies, costs, benefits, lead time to develop and deploy new and emerging technologies, incentives and other flexibilities to encourage development and deployment of new and emerging technologies, impacts on jobs and the automotive manufacturing base in the United States, and infrastructure for advanced vehicle technologies; and

(b) Take all measures consistent with law to issue by September 30, 2010, a Notice of Intent to Issue a Proposed Rule that announces plans for setting stringent fuel economy and greenhouse gas emissions standards for light-duty vehicles of model year 2017 and beyond, including plans for initiating joint rulemaking and gathering any additional information needed to support regulatory action. The Notice should describe the key elements of the program that the EPA and the NHTSA intend jointly to propose, under their respective statu-

tory authorities, including potential standards that could be practicably implemented nationally for the 2017–2025 model years and a schedule for setting those standards as expeditiously as possible, consistent with providing sufficient lead time to vehicle manufacturers.

SEC. 3. Cleaner Vehicles and Fuels and Necessary Infrastructure.

The success of our efforts to achieve enhanced energy security and to protect the environment also depends upon the development of infrastructure and promotion of fuels, including biofuels, which will enable the development and widespread deployment of advanced technologies. Therefore, I further request that:

(a) The Administrator of the EPA review for adequacy the current nongreenhouse gas emissions regulations for new motor vehicles, new motor vehicle engines, and motor vehicle fuels, including tailpipe emissions standards for nitrogen oxides and air toxics, and sulfur standards for gasoline. If the Administrator of the EPA finds that new emissions regulations are required, then I request that the Administrator of the EPA promulgate such regulations as part of a comprehensive approach toward regulating motor vehicles; and [sic]

(b) The Secretary of Energy promote the deployment of advanced technology vehicles by providing technical assistance to cities preparing for deployment of electric vehicles, including plug-in hybrids and all-electric vehicles; and

(c) The Department of Energy work with stakeholders on the development of voluntary standards to facilitate the robust deployment of advanced vehicle technologies and coordinate its efforts with the Department of Transportation, the NHTSA, and the EPA.

SEC. 4. General Provisions.

(a) This memorandum shall be implemented consistent with applicable law, including international trade obligations, and subject to the availability of appropriations.

(b) This memorandum is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

(c) Nothing in this memorandum shall be construed to impair or otherwise affect:

(1) authority granted by law to a department, agency, or the head thereof; or

(2) functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

SEC. 5. Publication.

The Secretary of Transportation is hereby authorized and directed to publish this memorandum in the Federal Register.

BARACK OBAMA.

§ 32903. Credits for exceeding average fuel economy standards

(a) **EARNING AND PERIOD FOR APPLYING CREDITS.**—When the average fuel economy of passenger automobiles manufactured by a manufacturer in a particular model year exceeds an applicable average fuel economy standard under subsections (a) through (d) of section 32902 (determined by the Secretary of Transportation without regard to credits under this section), the manufacturer earns credits. The credits may be applied to—

(1) any of the 3 consecutive model years immediately before the model year for which the credits are earned; and

(2) to the extent not used under paragraph (1)¹ any of the 5 consecutive model years im-

mediately after the model year for which the credits are earned.

(b) **PERIOD OF AVAILABILITY AND PLAN FOR FUTURE CREDITS.**—(1) Except as provided in paragraph (2) of this subsection, credits under this section are available to a manufacturer at the end of the model year in which earned.

(2)(A) Before the end of a model year, if a manufacturer has reason to believe that its average fuel economy for passenger automobiles will be less than the applicable standard for that model year, the manufacturer may submit a plan to the Secretary of Transportation demonstrating that the manufacturer will earn sufficient credits under this section within the next 3 model years to allow the manufacturer to meet that standard for the model year involved. Unless the Secretary finds that the manufacturer is unlikely to earn sufficient credits under the plan, the Secretary shall approve the plan. Those credits are available for the model year involved if—

(i) the Secretary approves the plan; and
(ii) the manufacturer earns those credits as provided by the plan.

(B) If the average fuel economy of a manufacturer is less than the applicable standard under subsections (a) through (d) of section 32902 after applying credits under subsection (a)(1) of this section, the Secretary of Transportation shall notify the manufacturer and give the manufacturer a reasonable time (of at least 60 days) to submit a plan.

(c) **DETERMINING NUMBER OF CREDITS.**—The number of credits a manufacturer earns under this section equals the product of—

(1) the number of tenths of a mile a gallon by which the average fuel economy of the passenger automobiles manufactured by the manufacturer in the model year in which the credits are earned exceeds the applicable average fuel economy standard under subsections (a) through (d) of section 32902; times

(2) the number of passenger automobiles manufactured by the manufacturer during that model year.

(d) **APPLYING CREDITS FOR PASSENGER AUTOMOBILES.**—The Secretary of Transportation shall apply credits to a model year on the basis of the number of tenths of a mile a gallon by which the manufacturer involved was below the applicable average fuel economy standard for that model year and the number of passenger automobiles manufactured that model year by the manufacturer. Credits applied to a model year are no longer available for another model year. Before applying credits, the Secretary shall give the manufacturer written notice and reasonable opportunity to comment.

(e) **APPLYING CREDITS FOR NON-PASSENGER AUTOMOBILES.**—Credits for a manufacturer of automobiles that are not passenger automobiles are earned and applied to a model year in which the average fuel economy of that class of automobiles is below the applicable average fuel economy standard under section 32902(a) of this title, to the same extent and in the same way as provided in this section for passenger automobiles.

(f) **CREDIT TRADING AMONG MANUFACTURERS.**—

¹ So in original. Probably should be followed by a comma.

(1) IN GENERAL.—The Secretary of Transportation may establish, by regulation, a fuel economy credit trading program to allow manufacturers whose automobiles exceed the average fuel economy standards prescribed under section 32902 to earn credits to be sold to manufacturers whose automobiles fail to achieve the prescribed standards such that the total oil savings associated with manufacturers that exceed the prescribed standards are preserved when trading credits to manufacturers that fail to achieve the prescribed standards.

(2) LIMITATION.—The trading of credits by a manufacturer to the category of passenger automobiles manufactured domestically is limited to the extent that the fuel economy level of such automobiles shall comply with the requirements of section 32902(b)(4), without regard to any trading of credits from other manufacturers.

(g) CREDIT TRANSFERRING WITHIN A MANUFACTURER'S FLEET.—

(1) IN GENERAL.—The Secretary of Transportation shall establish by regulation a fuel economy credit transferring program to allow any manufacturer whose automobiles exceed any of the average fuel economy standards prescribed under section 32902 to transfer the credits earned under this section and to apply such credits within that manufacturer's fleet to a compliance category of automobiles that fails to achieve the prescribed standards.

(2) YEARS FOR WHICH USED.—Credits transferred under this subsection are available to be used in the same model years that the manufacturer could have applied such credits under subsections (a), (b), (d), and (e), as well as for the model year in which the manufacturer earned such credits.

(3) MAXIMUM INCREASE.—The maximum increase in any compliance category attributable to transferred credits is—

(A) for model years 2011 through 2013, 1.0 mile per gallon;

(B) for model years 2014 through 2017, 1.5 miles per gallon; and

(C) for model year 2018 and subsequent model years, 2.0 miles per gallon.

(4) LIMITATION.—The transfer of credits by a manufacturer to the category of passenger automobiles manufactured domestically is limited to the extent that the fuel economy level of such automobiles shall comply with the requirements under section 32904(b)(4), without regard to any transfer of credits from other categories of automobiles described in paragraph (6)(B).

(5) YEARS AVAILABLE.—A credit may be transferred under this subsection only if it is earned after model year 2010.

(6) DEFINITIONS.—In this subsection:

(A) FLEET.—The term "fleet" means all automobiles manufactured by a manufacturer in a particular model year.

(B) COMPLIANCE CATEGORY OF AUTOMOBILES.—The term "compliance category of automobiles" means any of the following 3 categories of automobiles for which compliance is separately calculated under this chapter:

(i) Passenger automobiles manufactured domestically.

(ii) Passenger automobiles not manufactured domestically.

(iii) Non-passenger automobiles.

(h) REFUND OF COLLECTED PENALTY.—When a civil penalty has been collected under this chapter from a manufacturer that has earned credits under this section, the Secretary of the Treasury shall refund to the manufacturer the amount of the penalty to the extent the penalty is attributable to credits available under this section.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1061; Pub. L. 110–140, title I, §104(a), Dec. 19, 2007, 121 Stat. 1501.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32903(a)	15:2002(l)(1)(B), (4).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §502(l); added Oct. 10, 1980, Pub. L. 96–425, §6(b), 94 Stat. 1826.
32903(b)(1) ..	15:2002(l)(1)(A).	
32903(b)(2) ..	15:2002(l)(1)(C).	
32903(c)	15:2002(l)(1)(D).	
32903(d)	15:2002(l)(1)(E).	
32903(e)	15:2002(l)(2).	
32903(f)	15:2002(l)(3).	

In this section, various forms of the words "apply credits" are substituted for various forms of "credits are available to be taken into account" to be more concise and to make more clear the distinction between when credits are available and to what years they may be applied.

In subsection (a), before clause (1), the text of 15:2002(l)(4) is omitted as surplus because of 49:322(a). The words "any adjustment under subsection (d) of this section" are omitted because 15:2002(d) is omitted from the revised title as executed. The words "calculated under subparagraph (C)" (which apparently should be "calculated under subparagraph (D)") are omitted as surplus. In clauses (1) and (2), the words "with respect to the average fuel economy of that manufacturer" are omitted as surplus. The words "year for which the credits are earned" are substituted for "year in which such manufacturer exceeds such applicable average fuel economy standard" to eliminate unnecessary words.

Subsection (b)(1) is substituted for 15:2002(l)(1)(A) to eliminate unnecessary words.

In subsection (b)(2)(A) is substituted for 15:2002(l)(1)(C)(i)–(iii) to eliminate unnecessary words.

In subsection (e), the words "as provided in this section for passenger automobiles" are substituted for "as provided for under paragraph (1)" for clarity. The text of 15:2002(l)(2) (last sentence) is omitted as expired.

AMENDMENTS

2007—Subsec. (a). Pub. L. 110–140, §104(a)(1), substituted "subsections (a) through (d) of section 32902" for "section 32902(b)–(d) of this title" in introductory provisions.

Subsec. (a)(2). Pub. L. 110–140, §104(a)(2), substituted "paragraph (1)" for "clause (1) of this subsection," and "5 consecutive" for "3 consecutive".

Subsecs. (b)(2)(B), (c)(1). Pub. L. 110–140, §104(a)(1), substituted "subsections (a) through (d) of section 32902" for "section 32902(b)–(d) of this title".

Subsecs. (f) to (h). Pub. L. 110–140, §104(a)(3), (4), added subsecs. (f) and (g) and redesignated former subsec. (f) as (h).

EFFECTIVE DATE OF 2007 AMENDMENT

Amendment by Pub. L. 110–140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

§ 32904. Calculation of average fuel economy

(a) METHOD OF CALCULATION.—(1) The Administrator of the Environmental Protection Agency shall calculate the average fuel economy of a manufacturer subject to—

(A) section 32902(a) of this title in a way prescribed by the Administrator; and

(B) section 32902(b)–(d) of this title by dividing—

(i) the number of passenger automobiles manufactured by the manufacturer in a model year; by

(ii) the sum of the fractions obtained by dividing the number of passenger automobiles of each model manufactured by the manufacturer in that model year by the fuel economy measured for that model.

(2)(A) In this paragraph, “electric vehicle” means a vehicle powered primarily by an electric motor drawing electrical current from a portable source.

(B) If a manufacturer manufactures an electric vehicle, the Administrator shall include in the calculation of average fuel economy under paragraph (1) of this subsection equivalent petroleum based fuel economy values determined by the Secretary of Energy for various classes of electric vehicles. The Secretary shall review those values each year and determine and propose necessary revisions based on the following factors:

(i) the approximate electrical energy efficiency of the vehicle, considering the kind of vehicle and the mission and weight of the vehicle.

(ii) the national average electrical generation and transmission efficiencies.

(iii) the need of the United States to conserve all forms of energy and the relative scarcity and value to the United States of all fuel used to generate electricity.

(iv) the specific patterns of use of electric vehicles compared to petroleum-fueled vehicles.

(b) SEPARATE CALCULATIONS FOR PASSENGER AUTOMOBILES MANUFACTURED DOMESTICALLY AND NOT DOMESTICALLY.—(1)(A) Except as provided in paragraphs (6) and (7) of this subsection, the Administrator shall make separate calculations under subsection (a)(1)(B) of this section for—

(i) passenger automobiles manufactured domestically by a manufacturer (or included in this category under paragraph (5) of this subsection); and

(ii) passenger automobiles not manufactured domestically by that manufacturer (or excluded from this category under paragraph (5) of this subsection).

(B) Passenger automobiles described in subparagraph (A)(i) and (ii) of this paragraph are deemed to be manufactured by separate manufacturers under this chapter, except for the purposes of section 32903.

(2) In this subsection (except as provided in paragraph (3)), a passenger automobile is deemed to be manufactured domestically in a model year if at least 75 percent of the cost to the manufacturer is attributable to value added in the United States or Canada, unless the as-

sembly of the automobile is completed in Canada and the automobile is imported into the United States more than 30 days after the end of the model year.

(3)(A) In this subsection, a passenger automobile is deemed to be manufactured domestically in a model year, as provided in subparagraph (B) of this paragraph, if at least 75 percent of the cost to the manufacturer is attributable to value added in the United States, Canada, or Mexico, unless the assembly of the automobile is completed in Canada or Mexico and the automobile is imported into the United States more than 30 days after the end of the model year.

(B) Subparagraph (A) of this paragraph applies to automobiles manufactured by a manufacturer and sold in the United States, regardless of the place of assembly, as follows:

(i) A manufacturer that began assembling automobiles in Mexico before model year 1992 may elect, during the period from January 1, 1997, through January 1, 2004, to have subparagraph (A) of this paragraph apply to all automobiles manufactured by that manufacturer beginning with the model year that begins after the date of the election.

(ii) For a manufacturer that began assembling automobiles in Mexico after model year 1991, subparagraph (A) of this paragraph applies to all automobiles manufactured by that manufacturer beginning with the model year that begins after January 1, 1994, or the model year beginning after the date the manufacturer begins assembling automobiles in Mexico, whichever is later.

(iii) A manufacturer not described in clause (i) or (ii) of this subparagraph that assembles automobiles in the United States or Canada, but not in Mexico, may elect, during the period from January 1, 1997, through January 1, 2004, to have subparagraph (A) of this paragraph apply to all automobiles manufactured by that manufacturer beginning with the model year that begins after the date of the election. However, if the manufacturer begins assembling automobiles in Mexico before making an election under this subparagraph, this clause does not apply, and the manufacturer is subject to clause (ii) of this subparagraph.

(iv) For a manufacturer that does not assemble automobiles in the United States, Canada, or Mexico, subparagraph (A) of this paragraph applies to all automobiles manufactured by that manufacturer beginning with the model year that begins after January 1, 1994.

(v) For a manufacturer described in clause (i) or (iii) of this subparagraph that does not make an election within the specified period, subparagraph (A) of this paragraph applies to all automobiles manufactured by that manufacturer beginning with the model year that begins after January 1, 2004.

(C) The Secretary of Transportation shall prescribe reasonable procedures for elections under subparagraph (B) of this paragraph.

(4) In this subsection, the fuel economy of a passenger automobile that is not manufactured domestically is deemed to be equal to the average fuel economy of all passenger automobiles manufactured by the same manufacturer that are not manufactured domestically.

of any automobile, the sale of which is subject to any Federal tax imposed with respect to automobile fuel efficiency, a statement indicating the amount of such tax" for clarity.

In subsection (b)(3)(D), the words "Secretary of Energy" are substituted for "Department of Energy" because of 42:7131.

In subsection (c)(1), before clause (A), the words "compile and" are omitted as surplus.

In subsection (c)(3), the words "not later than July 31, 1976" are omitted as executed. The words "make the booklet available to prospective buyers" are substituted for "make available to prospective purchasers information compiled by the EPA Administrator under paragraph (1)" to eliminate unnecessary words.

In subsection (d), the words "which is required to be made", "an express or implied", and "that such fuel economy will be achieved, or that such cost will not be exceeded, under conditions of actual use" are omitted as surplus.

In subsection (f), the words "his duties under" are omitted as surplus.

PUB. L. 103-429

This amends 49:32908(b)(1) to clarify the restatement of 15:2006(a)(1) by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 1068).

REFERENCES IN TEXT

The Federal Trade Commission Act, referred to in subsec. (e)(2), is act Sept. 26, 1914, ch. 311, 38 Stat. 717, as amended, which is classified generally to subchapter I (§41 et seq.) of chapter 2 of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see section 58 of Title 15 and Tables.

The date of the enactment of the Ten-in-Ten Fuel Economy Act, referred to in subsec. (g)(1)(A)(i), (4), is the date of enactment of subtitle A (§§101-113) of title I of Pub. L. 110-140, which was approved Dec. 19, 2007.

Subsection (h) of section 32905 of this title, referred to in subsec. (g)(3), was redesignated subsec. (f) by Pub. L. 110-140, title I, §109(b)(4), Dec. 19, 2007, 121 Stat. 1506, and subsequently was redesignated subsec. (g) by Pub. L. 113-291, div. A, title III, §318(c)(1), Dec. 19, 2014, 128 Stat. 3341.

AMENDMENTS

2007—Subsec. (g). Pub. L. 110-140 added subsec. (g).
1994—Subsec. (b)(1). Pub. L. 103-429 inserted "on the automobile" after "maintain the label" in introductory provisions.

EFFECTIVE DATE OF 2007 AMENDMENT

Amendment by Pub. L. 110-140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

PERIODIC REVIEW OF ACCURACY OF FUEL ECONOMY LABELING PROCEDURES

Pub. L. 110-140, title I, §110, Dec. 19, 2007, 121 Stat. 1506, provided that: "Beginning in December 2009, and not less often than every 5 years thereafter, the Administrator of the Environmental Protection Agency, in consultation with the Secretary of Transportation, shall—

"(1) reevaluate the fuel economy labeling procedures described in the final rule published in the Federal Register on December 27, 2006 (71 Fed. Reg. 77,872; 40 CFR parts 86 and 600) to determine whether changes in the factors used to establish the labeling procedures warrant a revision of that process; and

"(2) submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives that describes the results of the reevaluation process."

EFFECTIVE DATE OF 1994 AMENDMENT

Amendment by Pub. L. 103-429 effective July 5, 1994, see section 9 of Pub. L. 103-429, set out as a note under section 321 of this title.

§ 32909. Judicial review of regulations

(a) FILING AND VENUE.—(1) A person that may be adversely affected by a regulation prescribed in carrying out any of sections 32901-32904 or 32908 of this title may apply for review of the regulation by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit or in the court of appeals of the United States for the circuit in which the person resides or has its principal place of business.

(2) A person adversely affected by a regulation prescribed under section 32912(c)(1) of this title may apply for review of the regulation by filing a petition for review in the court of appeals of the United States for the circuit in which the person resides or has its principal place of business.

(b) TIME FOR FILING AND JUDICIAL PROCEDURES.—The petition must be filed not later than 59 days after the regulation is prescribed, except that a petition for review of a regulation prescribing an amendment of a standard submitted to Congress under section 32902(c)(2) of this title must be filed not later than 59 days after the end of the 60-day period referred to in section 32902(c)(2). The clerk of the court shall send immediately a copy of the petition to the Secretary of Transportation or the Administrator of the Environmental Protection Agency, whoever prescribed the regulation. The Secretary or the Administrator shall file with the court a record of the proceeding in which the regulation was prescribed.

(c) ADDITIONAL PROCEEDINGS.—(1) When reviewing a regulation under subsection (a)(1) of this section, the court, on request of the petitioner, may order the Secretary or the Administrator to receive additional submissions if the court is satisfied the additional submissions are material and there were reasonable grounds for not presenting the submissions in the proceeding before the Secretary or Administrator.

(2) The Secretary or the Administrator may amend or set aside the regulation, or prescribe a new regulation because of the additional submissions presented. The Secretary or Administrator shall file an amended or new regulation and the additional submissions with the court. The court shall review a changed or new regulation.

(d) SUPREME COURT REVIEW AND ADDITIONAL REMEDIES.—A judgment of a court under this section may be reviewed only by the Supreme Court under section 1254 of title 28. A remedy under subsections (a)(1) and (c) of this section is in addition to any other remedies provided by law.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1070; Pub. L. 103-429, §6(38), Oct. 31, 1994, 108 Stat. 4382.)

HISTORICAL AND REVISION NOTES
PUB. L. 103-272

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32909(a)(1) ..	15:2004(a) (1st sentence words before 4th and after 6th commas, last sentence).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §504; added Dec. 22, 1975, Pub. L. 94-163, §301, 89 Stat. 908.
32909(a)(2) ..	15:2004(a) (4th sentence).	
	15:2008(e)(3)(A) (1st sentence less 15th-31st words), (B).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §508(e)(3); added Nov. 9, 1978, Pub. L. 95-619, §402, 92 Stat. 3256.
32909(b)	15:2004(a) (1st sentence words between 4th and 6th commas, 2d, 3d sentences).	
	15:2008(e)(3)(A) (1st sentence 15th-31st words, 2d, last sentences).	
32909(c)	15:2004(b).	
32909(d)	15:2004(c), (d), 15:2008(e)(3)(C).	

In this section, the word “regulation” is substituted for “rule” for consistency in the revised title and because the terms are synonymous.

In subsection (a)(1) and (2), the words “apply for review” are added for clarity.

In subsection (a)(1), the text of 15:2004(a) (last sentence) is omitted because 15:2002(d) is executed and is not a part of the revised title.

In subsection (a)(2), the words “adversely affected” are substituted for “aggrieved”, and the words “regulation prescribed” are substituted for “final rule”, for consistency in the revised title and with other titles of the United States Code. The text of 15:2004(a) (4th sentence) and 2008(e)(3)(B) is omitted because 5:ch. 7 applies unless otherwise stated.

In subsection (b), the words “a regulation prescribing an amendment of a standard submitted to Congress” are substituted for “or in the case of an amendment submitted to each House of Congress” in 15:2004(a), and the words “the Secretary of Transportation or the Administrator of the Environmental Protection Agency, whoever prescribed the regulation” are substituted for “the officer who prescribed the rule”, for clarity. The words “a record of the proceeding in which the regulation was prescribed” are substituted for “the written submissions and other materials in the proceeding upon which such rule was based” in 15:2004(a) and “the written submissions to, and transcript of, the written and oral proceedings on which the rule was based, as provided in section 2112 of title 28, United States Code” in 15:2008(e)(3) for consistency and to eliminate unnecessary words.

In subsection (c)(1), the words “on request of the petitioner” are substituted for “If the petitioner applies to the court in a proceeding under subsection (a) of this section for leave to make additional submissions”, and the words “to receive additional submissions” are substituted for “to provide additional opportunity to make such submissions”, for clarity.

In subsection (c)(2), the words “amend . . . the regulation” and “amended . . . regulation” are substituted for “modify . . . the rule” and “modified . . . rule”, respectively, for consistency in the chapter and because “regulation” is synonymous with “rule”.

In subsection (d), the words “affirming or setting aside, in whole or in part” are omitted as surplus. The words “and not in lieu of” in 15:2004(d) are omitted as surplus.

PUB. L. 103-429

This amends 49:32909(a)(1) to correct an erroneous cross-reference.

AMENDMENTS

1994—Subsec. (a)(1). Pub. L. 103-429 substituted “any of sections 32901-32904” for “section 32901-32904”.

EFFECTIVE DATE OF 1994 AMENDMENT

Amendment by Pub. L. 103-429 effective July 5, 1994, see section 9 of Pub. L. 103-429, set out as a note under section 321 of this title.

§ 32910. Administrative

(a) GENERAL POWERS.—(1) In carrying out this chapter, the Secretary of Transportation or the Administrator of the Environmental Protection Agency may—

(A) inspect and copy records of any person at reasonable times;

(B) order a person to file written reports or answers to specific questions, including reports or answers under oath; and

(C) conduct hearings, administer oaths, take testimony, and subpoena witnesses and records the Secretary or Administrator considers advisable.

(2) A witness summoned under paragraph (1)(C) of this subsection is entitled to the same fee and mileage the witness would have been paid in a court of the United States.

(b) CIVIL ACTIONS TO ENFORCE.—A civil action to enforce a subpoena or order of the Secretary or Administrator under subsection (a) of this section may be brought in the district court of the United States for any judicial district in which the proceeding by the Secretary or Administrator is conducted. The court may punish a failure to obey an order of the court to comply with the subpoena or order of the Secretary or Administrator as a contempt of court.

(c) DISCLOSURE OF INFORMATION.—The Secretary and the Administrator each shall disclose information obtained under this chapter (except information obtained under section 32904(c) of this title) under section 552 of title 5. However, the Secretary or Administrator may withhold information under section 552(b)(4) of title 5 only if the Secretary or Administrator decides that disclosure of the information would cause significant competitive damage. A matter referred to in section 552(b)(4) and relevant to an administrative or judicial proceeding under this chapter may be disclosed in that proceeding. A measurement or calculation under section 32904(c) of this title shall be disclosed under section 552 of title 5 without regard to section 552(b).

(d) REGULATIONS.—The Administrator may prescribe regulations to carry out duties of the Administrator under this chapter.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1070; Pub. L. 103-429, §6(39), Oct. 31, 1994, 108 Stat. 4382.)

HISTORICAL AND REVISION NOTES
PUB. L. 103-272

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32910(a)	15:2005(b)(1), (3).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §505(b), (d); added Dec. 22, 1975, Pub. L. 94-163, §301, 89 Stat. 909.
32910(b)	15:2005(b)(2).	
32910(c)	15:2005(d).	
32910(d)	(no source).	

In subsection (a)(1), before clause (A), the words “or their duly designated agents” are omitted as surplus because of 49:322(b) and section 3 of Reorganization

Public Law 89-271

AN ACT

October 19, 1965
[H. R. 9975]

To authorize the shipment, at Government expense, to, from, and within the United States and between oversea areas of privately owned vehicles of deceased or missing personnel, and for other purposes.

Missing Persons Act, amendment.

71 Stat. 492.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the last sentence of section 12 of the Missing Persons Act, as amended (50 U.S.C. App. 1012), is amended by striking the words "in those cases where the vehicle is located outside the continental limits of the United States or in Alaska".

Approved October 19, 1965.

Public Law 89-272

AN ACT

October 20, 1965
[S. 306]

To amend the Clean Air Act to require standards for controlling the emission of pollutants from certain motor vehicles, to authorize a research and development program with respect to solid-waste disposal, and for other purposes.

Clean Air Act, amendment.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—AMENDMENTS TO CLEAN AIR ACT

77 Stat. 392.
42 USC 1857
note.

SEC. 101. The Clean Air Act is amended (1) by inserting immediately above the heading of section 1: "TITLE I—AIR POLLUTION PREVENTION AND CONTROL"; (2) by changing the words "this Act" wherever they appear in sections 1 through 7 to "this title"; (3) by redesignating sections 1 through 7 and references thereto as sections 101 through 107; (4) by redesignating sections 8 through 14 and references thereto as sections 301 through 307; (5) by inserting immediately above the heading of the so redesignated section 301: "TITLE III—GENERAL"; (6) by striking out subsection (a) of the so redesignated section 306 and striking out the letter (b) at the beginning of subsection (b) in the so redesignated section 306; (7) by striking out "this Act" in the so redesignated section 306 and inserting in lieu thereof "title I"; and (8) by inserting after the so redesignated section 107 and before the heading of such title III the following new title:

"TITLE II—CONTROL OF AIR POLLUTION FROM MOTOR VEHICLES

"SHORT TITLE

Motor Vehicle Air Pollution Control Act.

"SEC. 201. This title may be cited as the 'Motor Vehicle Air Pollution Control Act'.

"ESTABLISHMENT OF STANDARDS

"SEC. 202. (a) The Secretary shall by regulation, giving appropriate consideration to technological feasibility and economic costs, prescribe as soon as practicable standards, applicable to the emission of any kind of substance, from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause or contribute to, or are likely to cause or to contribute to, air pollution which endangers the health or welfare of any persons, and such standards shall apply to such vehicles or engines whether they are designed

as complete systems or incorporate other devices to prevent or control such pollution.

“(b) Any regulations initially prescribed under this section, and amendments thereto, with respect to any class of new motor vehicles or new motor vehicle engines shall become effective on the effective date specified in the order promulgating such regulations which date shall be determined by the Secretary after consideration of the period reasonably necessary for industry compliance.

Effective date.

“PROHIBITED ACTS

“SEC. 203. (a) The following acts and the causing thereof are prohibited—

“(1) in the case of a manufacturer of new motor vehicles or new motor vehicle engines for distribution in commerce, the manufacture for sale, the sale, or the offering for sale, or the introduction or delivery for introduction into commerce, or the importation into the United States for sale or resale, of any new motor vehicle or new motor vehicle engine, manufactured after the effective date of regulations under this title which are applicable to such vehicle or engine unless it is in conformity with regulations prescribed under section 202 (except as provided in subsection (b));

“(2) for any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information, required under section 207; or

“(3) for any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title prior to its sale and delivery to the ultimate purchaser.

“(b) (1) The Secretary may exempt any new motor vehicle or new motor vehicle engine, or class thereof, from subsection (a), upon such terms and conditions as he may find necessary to protect the public health or welfare, for the purpose of research, investigations, studies, demonstrations, or training, or for reasons of national security.

Exemption authority.

“(2) A new motor vehicle or new motor vehicle engine offered for importation by a manufacturer in violation of subsection (a) shall be refused admission into the United States, but the Secretary of the Treasury and the Secretary of Health, Education, and Welfare may, by joint regulation, provide for deferring final determination as to admission and authorizing the delivery of such a motor vehicle or engine offered for import to the owner or consignee thereof upon such terms and conditions (including the furnishing of a bond) as may appear to them appropriate to insure that any such motor vehicle or engine will be brought into conformity with the standards, requirements, and limitations applicable to it under this title. The Secretary of the Treasury shall, if a motor vehicle or engine is finally refused admission under this paragraph, cause disposition thereof in accordance with the customs laws unless it is exported, under regulations prescribed by such Secretary, within ninety days of the date of notice of such refusal or such additional time as may be permitted pursuant to such regulations, except that disposition in accordance with the customs laws may not be made in such manner as may result, directly or indirectly, in the sale, to the ultimate consumer, of a new motor vehicle or new motor vehicle engine that fails to comply with applicable standards of the Secretary of Health, Education, and Welfare under this title.

Importation of vehicles.

“(3) A new motor vehicle or new motor vehicle engine intended solely for export, and so labeled or tagged on the outside of the container and on the vehicle or engine itself, shall not be subject to the provisions of subsection (a).

Exportation of vehicles.

Public Law 94-163
94th Congress

An Act

To increase domestic energy supplies and availability ; to restrain energy demand ;
to prepare for energy emergencies ; and for other purposes.

Dec. 22, 1975
[S. 622]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Energy Policy and Conservation Act".

Energy Policy and Conservation Act.
42 USC 6201 note.

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STATEMENT OF PURPOSES

42 USC 6201.

SEC. 2. The purposes of this Act are—

- (1) to grant specific standby authority to the President, subject to congressional review, to impose rationing, to reduce demand for energy through the implementation of energy conservation plans, and to fulfill obligations of the United States under the international energy program;
- (2) to provide for the creation of a Strategic Petroleum Reserve capable of reducing the impact of severe energy supply interruptions;
- (3) to increase the supply of fossil fuels in the United States, through price incentives and production requirements;
- (4) to conserve energy supplies through energy conservation programs, and, where necessary, the regulation of certain energy uses;
- (5) to provide for improved energy efficiency of motor vehicles, major appliances, and certain other consumer products;
- (6) to reduce the demand for petroleum products and natural gas through programs designed to provide greater availability and use of this Nation's abundant coal resources; and
- (7) to provide a means for verification of energy data to assure the reliability of energy data.

DEFINITIONS

42 USC 6202.

SEC. 3. As used in this Act:

- (1) The term "Administrator" means the Administrator of the Federal Energy Administration.
- (2) The term "person" includes (A) any individual, (B) any corporation, company, association, firm, partnership, society, trust, joint venture, or joint stock company, and (C) the government and any agency of the United States or any State or political subdivision thereof.
- (3) The term "petroleum product" means crude oil, residual fuel oil, or any refined petroleum product (including any natural liquid and any natural gas liquid product).
- (4) The term "State" means a State, the District of Columbia, Puerto Rico, or any territory or possession of the United States.
- (5) The term "United States" when used in the geographical sense means all of the States and the Outer Continental Shelf.
- (6) The term "Outer Continental Shelf" has the same meaning as such term has under section 2 of the Outer Continental Shelf Lands Act (43 U.S.C. 1331).
- (7) The term "international energy program" means the Agreement on an International Energy Program, signed by the United States on November 18, 1974, including (A) the annex entitled "Emergency Reserves", (B) any amendment to such Agreement which includes another nation as a party to such Agreement, and (C) any technical or clerical amendment to such Agreement.
- (8) The term "severe energy supply interruption" means a national energy supply shortage which the President determines—
 - (A) is, or is likely to be, of significant scope and duration, and of an emergency nature;
 - (B) may cause major adverse impact on national safety or the national economy; and
 - (C) results, or is likely to result, from an interruption in the supply of imported petroleum products, or from sabotage or an act of God.

fuel within the meaning of the term 'fuel' if he determines that such inclusion is consistent with the need of the Nation to conserve energy.

"(6) The term 'fuel economy' means the average number of miles traveled by an automobile per gallon of gasoline (or equivalent amount of other fuel) consumed, as determined by the EPA Administrator in accordance with procedures established under section 503(d).

"(7) The term 'average fuel economy standard' means a performance standard which specifies a minimum level of average fuel economy which is applicable to a manufacturer in a model year.

"(8) The term 'manufacturer' means any person engaged in the business of manufacturing automobiles. The Secretary shall prescribe rules for determining, in cases where more than one person is the manufacturer of an automobile, which person is to be treated as the manufacturer of such automobile for purposes of this part.

"(9) The term 'manufacturer' (except for purposes of section 502(c)) means to produce or assemble in the customs territory of the United States, or to import.

"(10) The term 'import' means to import into the customs territory of the United States.

"(11) The term 'model type' means a particular class of automobile as determined, by rule, by the EPA Administrator, after consultation and coordination with the Secretary.

"(12) The term 'model year', with reference to any specific calendar year, means a manufacturer's annual production period (as determined by the EPA Administrator) which includes January 1 of such calendar year. If a manufacturer has no annual production period, the term 'model year' means the calendar year.

"(13) The term 'Secretary' means the Secretary of Transportation.

"(14) The term 'EPA Administrator' means the Administrator of the Environmental Protection Agency.

"AVERAGE FUEL ECONOMY STANDARDS APPLICABLE TO EACH MANUFACTURER

15 USC 2002.

"SEC. 502. (a) (1) Except as otherwise provided in paragraph (4) or in subsection (c) or (d), the average fuel economy for passenger automobiles manufactured by any manufacturer in any model year after model year 1977 shall not be less than the number of miles per gallon established for such model year under the following table:

"Model year:	Average fuel economy standard (in miles per gallon)
1978 -----	18.0.
1979 -----	19.0.
1980 -----	20.0.
1981 -----	Determined by Secretary under paragraph (3) of this subsection.
1982 -----	Determined by Secretary under paragraph (3) of this subsection.
1983 -----	Determined by Secretary under paragraph (3) of this subsection.
1984 -----	Determined by Secretary under paragraph (3) of this subsection.
1985 and thereafter -----	27.5.

"(2) Not later than January 15 of each year, beginning in 1977, the Secretary shall transmit to each House of Congress, and publish in the

Transmittal to Congress, publication in Federal Register.

Environmental Protection Agency

§ 86.1818–12

of 0.888 instead of the 0.8 discount factor otherwise required by this paragraph (p)(2). This results in a total discount of 0.8 ($0.9 \times 0.888 = 0.8$).

(3) Credits are to be rounded to the nearest one-hundredth of a Megagram.

(4) To calculate credits relative to the NO_x standards listed in §86.1816–08 (a)(1)(iv)(A) or (a)(2)(iv)(A) (0.2 or 0.4 grams per mile, respectively) express the standard and FEL to the nearest one-hundredth of a gram per mile prior to calculating the credits. Thus, either 0.20 or 0.40 should be used as the value for “Std”.

(5) Credits generated for 2008 and later model year test groups are not discounted (except as specified in §86.1817–05(c) and paragraph (p)(2) of this section), and do not expire.

(6) For the purpose of using or generating credits during a phase-in of new standards, a manufacturer may elect to split a test group into two subgroups: one which uses credits and one which generates credits. The manufacturer must indicate in the application for certification that the test group is to be split, and may assign the numbers and configurations of vehicles within the respective subfamilies at any time prior to the submission of the end-of-year report described in §86.1817–05 (i)(3). Manufacturers certifying a split test group may label all of the vehicles within that test group with the same FELs: either with a NO_x FEL and an NMHC FEL, or with a single NO_x + NMHC FEL. The FEL(s) on the label will apply for all SEA or other compliance testing.

(7) Vehicles meeting all of the applicable standards of §86.1816–08 prior to model year 2008 may generate NMHC credits for use by 2008 or later test groups. Credits are calculated according to §86.1817–05(c), except that the applicable FEL cap listed in §86.1816–08(a)(1)(ii)(B) or (2)(ii)(B) applies instead of “Std” (the applicable standard).

[66 FR 5192, Jan. 18, 2001, as amended at 79 FR 23725, Apr. 28, 2014]

§ 86.1818–12 Greenhouse gas emission standards for light-duty vehicles, light-duty trucks, and medium-duty passenger vehicles.

(a) *Applicability.* (1) This section contains standards and other regulations applicable to the emission of the air pollutant defined as the aggregate group of six greenhouse gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. This section applies to 2012 and later model year LDV, LDT and MDPV, including multi-fuel vehicles, vehicles fueled with alternative fuels, hybrid electric vehicles, plug-in hybrid electric vehicles, electric vehicles, and fuel cell vehicles. Unless otherwise specified, multi-fuel vehicles must comply with all requirements established for each consumed fuel. The provisions of this section, except paragraph (c), also apply to clean alternative fuel conversions as defined in 40 CFR 85.502, of all model year light-duty vehicles, light-duty trucks, and medium-duty passenger vehicles. Manufacturers that qualify as a small business according to the requirements of §86.1801–12(j) are exempt from the emission standards in this section. Manufacturers that have submitted a declaration for a model year according to the requirements of §86.1801–12(k) for which approval has been granted by the Administrator are conditionally exempt from the emission standards in paragraphs (c) through (e) of this section for the approved model year.

(2) The standards specified in this section apply for testing at both low-altitude conditions and high-altitude conditions. However, manufacturers must submit an engineering evaluation indicating that common calibration approaches are utilized at high altitude instead of performing testing for certification, consistent with §86.1829. Any deviation from low altitude emission control practices must be included in the auxiliary emission control device (AECD) descriptions submitted at certification. Any AECD specific to high altitude requires engineering emission data for EPA evaluation to quantify any emission impact and determine the validity of the AECD.

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(b) *Definitions.* For the purposes of this section, the following definitions shall apply:

(1) *Passenger automobile* means a motor vehicle that is a passenger automobile as that term is defined in 49 CFR 523.4.

(2) *Light truck* means a motor vehicle that is a non-passenger automobile as that term is defined in 49 CFR 523.5.

(3) *Manufacturer* has the meaning given by the Department of Transportation at 49 CFR 531.4.

(c) *Fleet average CO₂ standards for passenger automobiles and light trucks.* (1) For a given individual model year's production of passenger automobiles and light trucks, manufacturers must comply with a full useful life fleet average CO₂ standard calculated according to the provisions of this paragraph (c). Manufacturers must calculate separate full useful life fleet average CO₂ standards for their passenger automobile and light truck fleets, as those terms are defined in this section. Each manufacturer's fleet average CO₂ standards determined in this paragraph (c) shall be expressed in whole grams per mile, in the model year specified as applicable. Manufacturers eligible for and choosing to participate in the Temporary Leadtime Allowance Alternative Standards for qualifying manufacturers specified in paragraph (e) of this section shall not include vehicles subject to the Temporary Leadtime Allowance Alternative Standards in the calculations of their primary passenger automobile or light truck standards determined in this paragraph (c). Manufacturers shall demonstrate compliance with the applicable standards according to the provisions of §86.1865.

(2) *Passenger automobiles—(i) Calculation of CO₂ target values for passenger automobiles.* A CO₂ target value shall be determined for each passenger automobile as follows:

(A) For passenger automobiles with a footprint of less than or equal to 41 square feet, the gram/mile CO₂ target value shall be selected for the appropriate model year from the following table:

Model year	CO ₂ target value (grams/mile)
2012	244.0

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Model year	CO ₂ target value (grams/mile)
2013	237.0
2014	228.0
2015	217.0
2016	206.0
2017	195.0
2018	185.0
2019	175.0
2020	166.0
2021	157.0
2022	150.0
2023	143.0
2024	137.0
2025 and later	131.0

(B) For passenger automobiles with a footprint of greater than 56 square feet, the gram/mile CO₂ target value shall be selected for the appropriate model year from the following table:

Model year	CO ₂ target value (grams/mile)
2012	315.0
2013	307.0
2014	299.0
2015	288.0
2016	277.0
2017	263.0
2018	250.0
2019	238.0
2020	226.0
2021	215.0
2022	205.0
2023	196.0
2024	188.0
2025 and later	179.0

(C) For passenger automobiles with a footprint that is greater than 41 square feet and less than or equal to 56 square feet, the gram/mile CO₂ target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile, except that for any vehicle footprint the maximum CO₂ target value shall be the value specified for the same model year in paragraph (c)(2)(i)(B) of this section:

$$\text{Target CO}_2 = [a \times f] + b$$

Where:

f is the vehicle footprint, as defined in §86.1803; and *a* and *b* are selected from the following table for the appropriate model year:

Model year	a	b
2012	4.72	50.5
2013	4.72	43.3
2014	4.72	34.8
2015	4.72	23.4
2016	4.72	12.7
2017	4.53	8.9
2018	4.35	6.5

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Model year	a	b
2019	4.17	4.2
2020	4.01	1.9
2021	3.84	-0.4
2022	3.69	-1.1
2023	3.54	-1.8
2024	3.4	-2.5
2025 and later	3.26	-3.2

(ii) *Calculation of the fleet average CO₂ standard for passenger automobiles.* In each model year manufacturers must comply with the CO₂ exhaust emission standard for their passenger automobile fleet, calculated for that model year as follows:

(A) A CO₂ target value shall be determined according to paragraph (c)(2)(i) of this section for each unique combination of model type and footprint value.

(B) Each CO₂ target value, determined for each unique combination of model type and footprint value, shall be multiplied by the total production of that model type/footprint combination for the appropriate model year.

(C) The resulting products shall be summed, and that sum shall be divided by the total production of passenger automobiles in that model year. The result shall be rounded to the nearest whole gram per mile. This result shall be the applicable fleet average CO₂ standard for the manufacturer's passenger automobile fleet.

(3) *Light trucks*—(i) *Calculation of CO₂ target values for light trucks.* A CO₂ target value shall be determined for each light truck as follows:

(A) For light trucks with a footprint of less than or equal to 41 square feet, the gram/mile CO₂ target value shall be selected for the appropriate model year from the following table:

Model year	CO ₂ target value (grams/mile)
2012	294.0
2013	284.0
2014	275.0
2015	261.0
2016	247.0
2017	238.0
2018	227.0
2019	220.0
2020	212.0
2021	195.0
2022	186.0
2023	176.0
2024	168.0
2025 and later	159.0

(B) For light trucks with a footprint that is greater than 41 square feet and less than or equal to the maximum footprint value specified in the table below for each model year, the gram/mile CO₂ target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile, except that for any vehicle footprint the maximum CO₂ target value shall be the value specified for the same model year in paragraph (c)(3)(i)(D) of this section:

$$\text{Target CO}_2 = (a \times f) + b$$

Where:

f is the footprint, as defined in §86.1803; and *a* and *b* are selected from the following table for the appropriate model year:

Model year	Maximum footprint	a	b
2012	66.0	4.04	128.6
2013	66.0	4.04	118.7
2014	66.0	4.04	109.4
2015	66.0	4.04	95.1
2016	66.0	4.04	81.1
2017	50.7	4.87	38.3
2018	60.2	4.76	31.6
2019	66.4	4.68	27.7
2020	68.3	4.57	24.6
2021	73.5	4.28	19.8
2022	74.0	4.09	17.8
2023	74.0	3.91	16.0
2024	74.0	3.74	14.2
2025 and later	74.0	3.58	12.5

(C) For light trucks with a footprint that is greater than the minimum footprint value specified in the table below and less than or equal to the maximum footprint value specified in the table below for each model year, the gram/mile CO₂ target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile, except that for any vehicle footprint the maximum CO₂ target value shall be the value specified for the same model year in paragraph (c)(3)(i)(D) of this section:

$$\text{Target CO}_2 = (a \times f) + b$$

Where:

f is the footprint, as defined in §86.1803; and *a* and *b* are selected from the following table for the appropriate model year:

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Model year	Minimum footprint	Maximum footprint	a	b
2017	50.7	66.0	4.04	80.5
2018	60.2	66.0	4.04	75.0

(D) For light trucks with a footprint greater than the minimum value specified in the table below for each model year, the gram/mile CO₂ target value shall be selected for the appropriate model year from the following table:

Model year	Minimum footprint	CO ₂ target value (grams/mile)
2012	66.0	395.0
2013	66.0	385.0
2014	66.0	376.0
2015	66.0	362.0
2016	66.0	348.0
2017	66.0	347.0
2018	66.0	342.0
2019	66.4	339.0
2020	68.3	337.0
2021	73.5	335.0
2022	74.0	321.0
2023	74.0	306.0
2024	74.0	291.0
2025 and later	74.0	277.0

(ii) *Calculation of fleet average CO₂ standards for light trucks.* In each model year manufacturers must comply with the CO₂ exhaust emission standard for their light truck fleet, calculated for that model year as follows:

(A) A CO₂ target value shall be determined according to paragraph (c)(3)(i) of this section for each unique combination of model type and footprint value.

(B) Each CO₂ target value, which represents a unique combination of model type and footprint value, shall be multiplied by the total production of that model type/footprint combination for the appropriate model year.

(C) The resulting products shall be summed, and that sum shall be divided by the total production of light trucks in that model year. The result shall be rounded to the nearest whole gram per mile. This result shall be the applicable fleet average CO₂ standard for the manufacturer's light truck fleet.

(4) *Emergency vehicles.* Emergency vehicles may be excluded from the emission standards described in this section. The manufacturer must notify the Administrator that they are making such an election in the model year reports required under § 600.512 of this

chapter. Such vehicles should be excluded from both the calculation of the fleet average standard for a manufacturer under this paragraph (c) and from the calculation of the fleet average carbon-related exhaust emissions in § 600.510–12.

(d) *In-use CO₂ exhaust emission standards.* The in-use CO₂ exhaust emission standard shall be the combined city/highway carbon-related exhaust emission value calculated for the appropriate vehicle carline/subconfiguration according to the provisions of § 600.113–12(g)(4) of this chapter multiplied by 1.1 and rounded to the nearest whole gram per mile. For in-use vehicle carlines/subconfigurations for which a combined city/highway carbon-related exhaust emission value was not determined under § 600.113–12(g)(4) of this chapter, the in-use CO₂ exhaust emission standard shall be the combined city/highway carbon-related exhaust emission value calculated according to the provisions of § 600.208 of this chapter for the vehicle model type (except that total model year production data shall be used instead of sales projections) multiplied by 1.1 and rounded to the nearest whole gram per mile. For vehicles that are capable of operating on multiple fuels, except plug-in hybrid electric vehicles, a separate in-use standard shall be determined for each fuel that the vehicle is capable of operating on. These standards apply to in-use testing performed by the manufacturer pursuant to regulations at §§ 86.1845 and 86.1846 and to in-use testing performed by EPA.

(e) *Temporary Lead Time Allowance Alternative Standards.* (1) The interim fleet average CO₂ standards in this paragraph (e) are optionally applicable to each qualifying manufacturer, where the terms “sales” or “sold” as used in this paragraph (e) means vehicles produced for U.S. sale, where “U.S.” means the states and territories of the United States.

(i) A qualifying manufacturer is a manufacturer with sales of 2009 model

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year combined passenger automobiles and light trucks of greater than zero and less than 400,000 vehicles that elects to participate in the Temporary Leadtime Allowance Alternative Standards described in this paragraph (e).

(A) If a manufacturer sold less than 400,000 but more than zero 2009 model year combined passenger automobiles and light trucks while under the control of another manufacturer, where those 2009 model year passenger automobiles and light trucks bore the brand of the producing manufacturer, and where the producing manufacturer became independent no later than December 31, 2010, the producing manufacturer is a qualifying manufacturer.

(B) In the case where two or more qualifying manufacturers combine as the result of merger or the purchase of 50 percent or more of one or more companies by another company, and if the combined 2009 model year sales of the merged or combined companies is less than 400,000 but more than zero (combined passenger automobiles and light trucks), the corporate entity formed by the combination of two or more qualifying manufacturers shall continue to be a qualifying manufacturer, except the provisions of paragraph (e)(1)(i)(D) shall apply in the case where one of the merging companies elects to voluntarily opt out of the Temporary Leadtime Allowance Alternative Standards as allowed under paragraph (e)(1)(iv) of this section. The total number of vehicles that the corporate entity is allowed to include under the Temporary Leadtime Allowance Alternative Standards shall be determined by paragraph (e)(2) or (e)(3) of this section, where sales is the total combined 2009 model year sales of all of the merged or combined companies. Vehicles sold by the companies that combined by merger/acquisition to form the corporate entity that were subject to the Temporary Leadtime Allowance Alternative Standards in paragraph (e)(4) of this section prior to the merger/acquisition shall be combined to determine the remaining number of vehicles that the corporate entity may include under the Temporary Leadtime Allowance Alternative Standards in this paragraph (e).

(C) In the case where two or more manufacturers combine as the result of merger or the purchase of 50 percent or more of one or more companies by another company, and if the combined 2009 model year sales of the merged or combined companies is equal to or greater than 400,000 (combined passenger automobiles and light trucks), the new corporate entity formed by the combination of two or more manufacturers is not a qualifying manufacturer. Such a manufacturer shall meet the emission standards in paragraph (c) of this section beginning with the model year that is numerically two years greater than the calendar year in which the merger/acquisition(s) took place.

(D) In the case where two or more manufacturers combine as the result of merger or the purchase of 50 percent or more of one or more companies by another company, where one of the manufacturers chooses to voluntarily opt out of the Temporary Leadtime Allowance Alternative Standards under the provisions of paragraph (e)(1)(iv) of this section, the new corporate entity formed by the combination of two or more manufacturers is not a qualifying manufacturer. Such a manufacturer shall meet the emission standards in paragraph (c) of this section beginning with the model year that is numerically two years greater than the calendar year in which the merger/acquisition(s) took place. If one or more of the merged or combined manufacturers was complying with the Temporary Leadtime Allowance Alternative Standards prior to the merger/com-bination, that manufacturer is no longer eligible for the Temporary Leadtime Allowance Alternative Standards beginning with the model year that is numerically two years greater than the calendar year in which the merger/acquisition(s) took place. The cumulative number of vehicles that such a manufacturer may include in the Temporary Leadtime Allowance Alternative Standards, including those that were included by all merged manufacturers prior to the merger/acquisition, is limited to 100,000.

(ii) For the purposes of making the determination in paragraph (e)(1)(i) of

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this section, “manufacturer” shall mean that term as defined at 49 CFR 531.4 and as that definition was applied to the 2009 model year for the purpose of determining compliance with the 2009 corporate average fuel economy standards at 49 CFR parts 531 and 533.

(iii) A qualifying manufacturer may not use these Temporary Leadtime Allowance Alternative Standards until they have used all available banked credits and/or credits available for transfer accrued under §86.1865-12(k). A qualifying manufacturer with a net positive credit balance calculated under §86.1865-12(k) in any model year after considering all available credits either generated, carried forward from a prior model year, transferred from other averaging sets, or obtained from other manufacturers, may not use these Temporary Leadtime Allowance Alternative Standards in such model year.

(iv) In the event of a merger, acquisition, or combination with another manufacturer, a qualifying manufacturer that has not certified any vehicles to the Temporary Leadtime Allowance Alternative Standards in any model year may voluntarily opt out of the Temporary Leadtime Allowance Alternative Standards. A manufacturer making this election must notify EPA in writing of their intent prior to the end of the model year in which a merger or combination with another manufacturer becomes effective. The notification must indicate that the manufacturer is electing to not use the Temporary Leadtime Allowance Alternative Standards in any model year, and that any manufacturers that are either purchased by or merged with the manufacturer making this election must also meet the emission standards in paragraph (c) of this section beginning with the model year that is numerically two years greater than the calendar year in which the merger/acquisition(s) took place.

(2) Qualifying manufacturers may select any combination of 2012 through 2015 model year passenger automobiles and/or light trucks to include under the Temporary Leadtime Allowance Alternative Standards determined in this paragraph (e) up to a cumulative total of 100,000 vehicles. Vehicles se-

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lected to comply with these standards shall not be included in the calculations of the manufacturer’s fleet average standards under paragraph (c) of this section.

(3)(i) Qualifying manufacturers with sales of 2009 model year combined passenger automobiles and light trucks in the United States of greater than zero and less than 50,000 vehicles may select any combination of 2012 through 2015 model year passenger automobiles and/or light trucks to include under the Temporary Leadtime Allowance Alternative Standards determined in this paragraph (e) up to a cumulative total of 200,000 vehicles, and additionally may select up to 50,000 2016 model year vehicles to include under the Temporary Leadtime Allowance Alternative Standards determined in this paragraph (e). To be eligible for the provisions of this paragraph (e)(3) qualifying manufacturers must provide annual documentation of good-faith efforts made by the manufacturer to purchase credits from other manufacturers. Without such documentation, the manufacturer may use the Temporary Leadtime Allowance Alternative Standards according to the provisions of paragraph (e)(2) of this section, and the provisions of this paragraph (e)(3) shall not apply. Vehicles selected to comply with these standards shall not be included in the calculations of the manufacturer’s fleet average standards under paragraph (c) of this section.

(ii) Manufacturers that qualify in the 2016 model year for the expanded Temporary Leadtime Allowance Alternative Standards described in paragraph (e)(3)(i) of this section, may, subject to certain restrictions, use an alternative compliance schedule that provides additional lead time to meet the standards in paragraph (c) of this section for the 2017 through 2020 model years.

(A) The alternative compliance schedule is as follows. In lieu of the standards in paragraph (c) of this section that would otherwise be applicable to the model year shown in the first column of the table below, a qualifying manufacturer may comply with the standards in paragraph (c) of this section determined for the model year shown in the second column of the

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table. In the 2021 and later model years the manufacturer must meet the standards designated for each model year in paragraph (c) of this section.

Model year	Applicable standards
2017	2016
2018	2016
2019	2018
2020	2019

(B) A manufacturer using the alternative compliance schedule in paragraph (e)(3)(ii) of this section may not sell or otherwise transfer credits generated in years when the alternative phase-in is used to other manufacturers. Other provisions in §86.1865 regarding credit banking, deficit carry-forward, and within-manufacturer transfers across fleets apply.

(4) To calculate the applicable Temporary Allowance Alternative Standards, qualifying manufacturers shall determine the fleet average standard separately for the passenger automobiles and light trucks selected by the manufacturer to be subject to the Temporary Leadtime Allowance Alternative Standards, subject to the limitations expressed in paragraphs (e)(1) through (3) of this section.

(i) The Temporary Leadtime Allowance Alternative Standard applicable to qualified passenger automobiles as defined in §600.002–08 of this chapter shall be the standard calculated using the provisions of paragraph (c)(2)(ii) of this section for the appropriate model year multiplied by 1.25 and rounded to the nearest whole gram per mile. For the purposes of applying paragraph (c)(2)(ii) of this section to determine the standard, the passenger automobile fleet shall be limited to those passenger automobiles subject to the Temporary Leadtime Allowance Alternative Standard.

(ii) The Temporary Leadtime Allowance Alternative Standard applicable to qualified light trucks (*i.e.* non-passenger automobiles as defined in §600.002–08 of this chapter) shall be the standard calculated using the provisions of paragraph (c)(3)(ii) of this section for the appropriate model year multiplied by 1.25 and rounded to the nearest whole gram per mile. For the purposes of applying paragraph (c)(3)(ii) of this section to determine

the standard, the light truck fleet shall be limited to those light trucks subject to the Temporary Leadtime Allowance Alternative Standard.

(5) Manufacturers choosing to optionally apply these standards are subject to the restrictions on credit banking and trading specified in §86.1865–12.

(f) *Nitrous oxide (N₂O) and methane (CH₄) exhaust emission standards for passenger automobiles and light trucks.* Each manufacturer's fleet of combined passenger automobiles and light trucks must comply with N₂O and CH₄ standards using either the provisions of paragraph (f)(1), (2), or (3) of this section. Except with prior EPA approval, a manufacturer may not use the provisions of both paragraphs (f)(1) and (2) of this section in a model year. For example, a manufacturer may not use the provisions of paragraph (f)(1) of this section for their passenger automobile fleet and the provisions of paragraph (f)(2) for their light truck fleet in the same model year. The manufacturer may use the provisions of both paragraphs (f)(1) and (3) of this section in a model year. For example, a manufacturer may meet the N₂O standard in paragraph (f)(1)(i) of this section and an alternative CH₄ standard determined under paragraph (f)(3) of this section. Vehicles certified using the N₂O data submittal waiver provisions of §86.1829(b)(1)(iii)(G) are not required to be tested for N₂O under the in-use testing programs required by §86.1845 and §86.1846.

(1) *Standards applicable to each test group.* (i) Exhaust emissions of nitrous oxide (N₂O) shall not exceed 0.010 grams per mile at full useful life, as measured according to the Federal Test Procedure (FTP) described in subpart B of this part. Manufacturers may optionally determine an alternative N₂O standard under paragraph (f)(3) of this section. (ii) Exhaust emissions of methane (CH₄) shall not exceed 0.030 grams per mile at full useful life, as measured according to the Federal Test Procedure (FTP) described in subpart B of this part. Manufacturers may optionally determine an alternative CH₄ standard under paragraph (f)(3) of this section.

(2) *Include N₂O and CH₄ in fleet averaging program.* Manufacturers may

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elect to not meet the emission standards in paragraph (f)(1) of this section. Manufacturers making this election shall include N₂O and CH₄ emissions in the determination of their fleet average carbon-related exhaust emissions, as calculated in 40 CFR part 600, subpart F. Manufacturers using this option must include both N₂O and CH₄ full useful life values in the fleet average calculations for passenger automobiles and light trucks. Use of this option will account for N₂O and CH₄ emissions within the carbon-related exhaust emission value determined for each model type according to the provisions of 40 CFR part 600. This option requires the determination of full useful life emission values for both the Federal Test Procedure and the Highway Fuel Economy Test. Manufacturers selecting this option are not required to demonstrate compliance with the standards in paragraph (f)(1) of this section.

(3) *Optional use of alternative N₂O and/or CH₄ standards.* Manufacturers may select an alternative standard applicable to a test group, for either N₂O or CH₄, or both. For example, a manufacturer may choose to meet the N₂O standard in paragraph (f)(1)(i) of this section and an alternative CH₄ standard in lieu of the standard in paragraph (f)(1)(ii) of this section. The alternative standard for each pollutant must be greater than the applicable exhaust emission standard specified in paragraph (f)(1) of this section. Alternative N₂O and CH₄ standards apply to emissions measured according to the Federal Test Procedure (FTP) described in Subpart B of this part for the full useful life, and become the applicable certification and in-use emission standard(s) for the test group. Manufacturers using an alternative standard for N₂O and/or CH₄ must calculate emission debits according to the provisions of paragraph (f)(4) of this section for each test group/alternative standard combination. Debits must be included in the calculation of total credits or debits generated in a model year as required under §86.1865-12(k)(5). For flexible fuel vehicles (or other vehicles certified for multiple fuels) you must meet these alternative standards when tested on any applicable test fuel type.

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(4) *CO₂-equivalent debits.* CO₂-equivalent debits for test groups using an alternative N₂O and/or CH₄ standard as determined under paragraph (f)(3) of this section shall be calculated according to the following equation and rounded to the nearest whole megagram:

$$\text{Debits} = [\text{GWP} \times (\text{Production}) \times (\text{AltStd} - \text{Std}) \times \text{VLM}] \div 1,000,000$$

Where:

Debits = CO₂-equivalent debits for N₂O or CH₄, in Megagrams, for a test group using an alternative N₂O or CH₄ standard, rounded to the nearest whole Megagram;

GWP = 25 if calculating CH₄ debits and 298 if calculating N₂O debits;

Production = The number of vehicles of that test group domestically produced plus those imported as defined in §600.511 of this chapter;

AltStd = The alternative standard (N₂O or CH₄) selected by the manufacturer under paragraph (f)(3) of this section;

Std = The exhaust emission standard for N₂O or CH₄ specified in paragraph (f)(1) of this section; and

VLM = 195,264 for passenger automobiles and 225,865 for light trucks.

(g) *Alternative fleet average standards for manufacturers with limited U.S. sales.* Manufacturers meeting the criteria in this paragraph (g) may request that the Administrator establish alternative fleet average CO₂ standards that would apply instead of the standards in paragraph (c) of this section. The provisions of this paragraph (g) are applicable only to the 2017 and later model years. A manufacturer that has sought and received EPA approval for alternative standards for the 2017 model year may, at their option, choose to comply with those standards in the 2015 and 2016 model years in lieu of requesting a conditional exemption under §86.1801(k).

(1) *Eligibility for alternative standards.* Eligibility as determined in this paragraph (g) shall be based on the total sales of combined passenger automobiles and light trucks. The terms "sales" and "sold" as used in this paragraph (g) shall mean vehicles produced for U.S. sale, where "U.S." means the states and territories of the United States. For the purpose of determining eligibility the sales of related companies shall be aggregated according to

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the provisions of § 86.1838-01(b)(3), or, if a manufacturer has been granted operational independence status under § 86.1838(d), eligibility shall be based on vehicle production of that manufacturer. To be eligible for alternative standards established under this paragraph (g), the manufacturer's average sales for the three most recent consecutive model years must remain below 5,000. If a manufacturer's average sales for the three most recent consecutive model years exceeds 4999, the manufacturer will no longer be eligible for exemption and must meet applicable emission standards starting with the model year according to the provisions in this paragraph (g)(1).

(i) If a manufacturer's average sales for three consecutive model years exceeds 4999, and if the increase in sales is the result of corporate acquisitions, mergers, or purchase by another manufacturer, the manufacturer shall comply with the emission standards described in paragraph (c) of this section, as applicable, beginning with the first model year after the last year of the three consecutive model years.

(ii) If a manufacturer's average sales for three consecutive model years exceeds 4999 and is less than 50,000, and if the increase in sales is solely the result of the manufacturer's expansion in vehicle production (not the result of corporate acquisitions, mergers, or purchase by another manufacturer), the manufacturer shall comply with the emission standards described in paragraph (c), of this section, as applicable, beginning with the second model year after the last year of the three consecutive model years.

(2) *Requirements for new entrants into the U.S. market.* New entrants are those manufacturers without a prior record of automobile sales in the United States and without prior certification to (or exemption from, under § 86.1801-12(k)) greenhouse gas emission standards in § 86.1818-12. In addition to the eligibility requirements stated in paragraph (g)(1) of this section, new entrants must meet the following requirements:

(i) In addition to the information required under paragraph (g)(4) of this section, new entrants must provide documentation that shows a clear in-

tent by the company to actually enter the U.S. market in the years for which alternative standards are requested. Demonstrating such intent could include providing documentation that shows the establishment of a U.S. dealer network, documentation of work underway to meet other U.S. requirements (e.g., safety standards), or other information that reasonably establishes intent to the satisfaction of the Administrator.

(ii) Sales of vehicles in the U.S. by new entrants must remain below 5,000 vehicles for the first three model years in the U.S. market, and in subsequent years the average sales for any three consecutive years must remain below 5,000 vehicles. Vehicles sold in violation of these limits within the first five model years will be considered not covered by the certificate of conformity and the manufacturer will be subject to penalties on an individual-vehicle basis for sale of vehicles not covered by a certificate. In addition, violation of these limits will result in loss of eligibility for alternative standards until such point as the manufacturer demonstrates two consecutive model years of sales below 5,000 automobiles. After the first five model years, the eligibility provisions in paragraph (g)(1) of this section apply, where violating the sales thresholds is no longer a violation of the condition on the certificate, but is instead grounds for losing eligibility for alternative standards.

(iii) A manufacturer with sales in the most recent model year of less than 5,000 automobiles, but where prior model year sales were not less than 5,000 automobiles, is eligible to request alternative standards under this paragraph (g). However, such a manufacturer will be considered a new entrant and subject to the provisions regarding new entrants in this paragraph (g), except that the requirement to demonstrate an intent to enter the U.S. market in paragraph (g)(2)(i) of this section shall not apply.

(3) *How to request alternative fleet average standards.* Eligible manufacturers may petition for alternative standards for up to five consecutive model years if sufficient information is available on which to base such standards.

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(i) To request alternative standards starting with the 2017 model year, eligible manufacturers must submit a completed application no later than July 30, 2013.

(ii) To request alternative standards starting with a model year after 2017, eligible manufacturers must submit a completed request no later than 36 months prior to the start of the first model year to which the alternative standards would apply.

(iii) The request must contain all the information required in paragraph (g)(4) of this section, and must be signed by a chief officer of the company. If the Administrator determines that the content of the request is incomplete or insufficient, the manufacturer will be notified and given an additional 30 days to amend the request.

(4) *Data and information submittal requirements.* Eligible manufacturers requesting alternative standards under this paragraph (g) must submit the following information to the Environmental Protection Agency. The Administrator may request additional information as she deems appropriate. The completed request must be sent to the Environmental Protection Agency at the following address: Director, Compliance and Innovative Strategies Division, U.S. Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, Michigan 48105.

(i) *Vehicle model and fleet information.*

(A) The model years to which the requested alternative standards would apply, limited to five consecutive model years.

(B) Vehicle models and projections of production volumes for each model year.

(C) Detailed description of each model, including the vehicle type, vehicle mass, power, footprint, powertrain, and expected pricing.

(D) The expected production cycle for each model, including new model introductions and redesign or refresh cycles.

(ii) *Technology evaluation information.*

(A) The CO₂ reduction technologies employed by the manufacturer on each vehicle model, or projected to be employed, including information regarding the cost and CO₂ -reducing effectiveness. Include technologies that improve air conditioning efficiency and

reduce air conditioning system leakage, and any “off-cycle” technologies that potentially provide benefits outside the operation represented by the Federal Test Procedure and the Highway Fuel Economy Test.

(B) An evaluation of comparable models from other manufacturers, including CO₂ results and air conditioning credits generated by the models. Comparable vehicles should be similar, but not necessarily identical, in the following respects: vehicle type, horsepower, mass, power-to-weight ratio, footprint, retail price, and any other relevant factors. For manufacturers requesting alternative standards starting with the 2017 model year, the analysis of comparable vehicles should include vehicles from the 2012 and 2013 model years, otherwise the analysis should at a minimum include vehicles from the most recent two model years.

(C) A discussion of the CO₂-reducing technologies employed on vehicles offered outside of the U.S. market but not available in the U.S., including a discussion as to why those vehicles and/or technologies are not being used to achieve CO₂ reductions for vehicles in the U.S. market.

(D) An evaluation, at a minimum, of the technologies projected by the Environmental Protection Agency in a final rulemaking as those technologies likely to be used to meet greenhouse gas emission standards and the extent to which those technologies are employed or projected to be employed by the manufacturer. For any technology that is not projected to be fully employed, explain why this is the case.

(iii) *Alternative fleet average CO₂ standards.* (A) The most stringent CO₂ level estimated to be feasible for each model, in each model year, and the technological basis for this estimate.

(B) For each model year, a projection of the lowest feasible sales-weighted fleet average CO₂ value, separately for passenger automobiles and light trucks, and an explanation demonstrating that these projections are reasonable.

(C) A copy of any application, data, and related information submitted to NHTSA in support of a request for alternative Corporate Average Fuel

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Economy standards filed under 49 CFR Part 525.

(iv) *Information supporting eligibility.*

(A) U.S. sales for the three previous model years and projected sales for the model years for which the manufacturer is seeking alternative standards.

(B) Information regarding ownership relationships with other manufacturers, including details regarding the application of the provisions of § 86.1838–01(b)(3) regarding the aggregation of sales of related companies.

(5) *Alternative standards.* Upon receiving a complete application, the Administrator will review the application and determine whether an alternative standard is warranted. If the Administrator judges that an alternative standard is warranted, the Administrator will publish a proposed determination in the FEDERAL REGISTER to establish alternative standards for the manufacturer that the Administrator judges are appropriate. Following a 30 day public comment period, the Administrator will issue a final determination establishing alternative standards for the manufacturer. If the Administrator does not establish alternative standards for an eligible manufacturer prior to 12 months before the first model year to which the alternative standards would apply, the manufacturer may request an extension of the exemption under § 86.1801–12(k) or an extension of previously approved alternative standards, whichever may apply.

(6) *Restrictions on credit trading.* Manufacturers subject to alternative standards approved by the Administrator under this paragraph (g) may not trade credits to another manufacturer. Transfers between car and truck fleets within the manufacturer are allowed, and the carry-forward provisions for credits and deficits apply.

(h) *Mid-term evaluation of standards.* No later than April 1, 2018, the Administrator shall determine whether the standards established in paragraph (c) of this section for the 2022 through 2025 model years are appropriate under section 202(a) of the Clean Air Act, in light of the record then before the Administrator. An opportunity for public comment shall be provided before making such determination. If the Admin-

istrator determines they are not appropriate, the Administrator shall initiate a rulemaking to revise the standards, to be either more or less stringent as appropriate.

(1) In making the determination required by this paragraph (h), the Administrator shall consider the information available on the factors relevant to setting greenhouse gas emission standards under section 202(a) of the Clean Air Act for model years 2022 through 2025, including but not limited to:

(i) The availability and effectiveness of technology, and the appropriate lead time for introduction of technology;

(ii) The cost on the producers or purchasers of new motor vehicles or new motor vehicle engines;

(iii) The feasibility and practicability of the standards;

(iv) The impact of the standards on reduction of emissions, oil conservation, energy security, and fuel savings by consumers;

(v) The impact of the standards on the automobile industry;

(vi) The impacts of the standards on automobile safety;

(vii) The impact of the greenhouse gas emission standards on the Corporate Average Fuel Economy standards and a national harmonized program; and

(viii) The impact of the standards on other relevant factors.

(2) The Administrator shall make the determination required by this paragraph (h) based upon a record that includes the following:

(i) A draft Technical Assessment Report addressing issues relevant to the standard for the 2022 through 2025 model years;

(ii) Public comment on the draft Technical Assessment Report;

(iii) Public comment on whether the standards established for the 2022 through 2025 model years are appropriate under section 202(a) of the Clean Air Act; and

(iv) Such other materials the Administrator deems appropriate.

(3) No later than November 15, 2017, the Administrator shall issue a draft Technical Assessment Report addressing issues relevant to the standards for the 2022 through 2025 model years.

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(4) The Administrator will set forth in detail the bases for the determination required by this paragraph (h), including the Administrator's assessment of each of the factors listed in paragraph (h)(1) of this section.

[75 FR 25686, May 7, 2010, as amended at 76 FR 19874, Apr. 8, 2011; 76 FR 39521, July 6, 2011; 76 FR 57377, Sept. 15, 2011; 77 FR 63156, Oct. 15, 2012; 79 FR 23725, Apr. 28, 2014; 81 FR 73985, Oct. 25, 2016]

§ 86.1819 [Reserved]**§ 86.1819-14 Greenhouse gas emission standards for heavy-duty vehicles.**

This section describes exhaust emission standards for CO₂, CH₄, and N₂O for heavy-duty vehicles. The standards of this section apply for model year 2014 and later vehicles that are chassis-certified with respect to criteria pollutants under this subpart S. Additional heavy-duty vehicles may be optionally subject to the standards of this section as allowed under paragraph (j) of this section. Any heavy-duty vehicles not subject to standards under this section are instead subject to greenhouse gas standards under 40 CFR part 1037, and engines installed in these vehicles are subject to standards under 40 CFR part 1036. If you are not the engine manufacturer, you must notify the engine manufacturer that its engines are subject to 40 CFR part 1036 if you intend to use their engines in vehicles that are not subject to standards under this section. Vehicles produced by small businesses may be excluded from the standards of this section as described in paragraph (k)(5) of this section.

(a) *Fleet-average CO₂ emission standards.* Fleet-average CO₂ emission stand-

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ards apply for the full useful life for each manufacturer as follows:

(1) Calculate a work factor, *WF*, for each vehicle subconfiguration (or group of subconfigurations as allowed under paragraph (a)(4) of this section), rounded to the nearest pound, using the following equation:

$$WF = 0.75 \times (GVWR - \text{Curb Weight} + xwd) + 0.25 \times (GCWR - GVWR)$$

Where:

xwd = 500 pounds if the vehicle has four-wheel drive or all-wheel drive; *xwd* = 0 pounds for all other vehicles.

(2) Using the appropriate work factor, calculate a target value for each vehicle subconfiguration (or group of subconfigurations as allowed under paragraph (a)(4) of this section) you produce using one of the following equations, or the phase-in provisions in paragraph (k)(4) of this section, rounded to the nearest whole g/mile:

(i) For model year 2027 and later vehicles with spark-ignition engines: *CO₂ Target* (g/mile) = 0.0369 × *WF* + 284

(ii) For model year 2027 and later vehicles with compression-ignition engines or with no engines (such as electric vehicles and fuel cell vehicles): *CO₂ Target* (g/mile) = 0.0348 × *WF* + 268

(3) Calculate a production-weighted average of the target values and round it to the nearest whole g/mile. This is your fleet-average standard. All vehicles subject to the standards of this section form a single averaging set. Use the following equation to calculate your fleet-average standard from the target value for each vehicle subconfiguration (*Target_i*) and U.S.-directed production volume of each vehicle subconfiguration for the given model year (*Volume_i*):

$$\text{Fleet-Average Standard} = \frac{\sum [\text{Target}_i \times \text{Volume}_i]}{\sum [\text{Volume}_i]}$$

(4) You may group subconfigurations within a configuration together for purposes of calculating your fleet-average standard as follows:

(i) You may group together subconfigurations that have the same equivalent test weight (ETW), GVWR, and GCWR. Calculate your work factor and target value assuming a curb

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number of credits that the manufacturer generates or purchases. Any remaining deficit is subject to an enforcement action, as described in this paragraph (o)(8). Manufacturers are not permitted to have a credit deficit for two consecutive years.

(ii) If debits are not offset within the specified time period, the number of vehicles not meeting the fleet average cold temperature NMHC standards (and therefore not covered by the certificate) must be calculated by dividing the total amount of debits for the model year by the fleet average cold temperature NMHC standard applicable for the model year in which the debits were first incurred.

(iii) EPA will determine the number of vehicles for which the condition on the certificate was not satisfied by designating vehicles in those test groups with the highest certification cold temperature NMHC emission values first and continuing until reaching a number of vehicles equal to the calculated number of noncomplying vehicles as determined above. If this calculation determines that only a portion of vehicles in a test group contribute to the debit situation, then EPA will designate actual vehicles in that test group as not covered by the certificate, starting with the last vehicle produced and counting backwards.

(iv)(A) If a manufacturer ceases production of LDV/LLDTs and HLDT/MDPVs, the manufacturer continues to be responsible for offsetting any debits outstanding within the required time period. Any failure to offset the debits will be considered a violation of paragraph (o)(8)(i) of this section and may subject the manufacturer to an enforcement action for sale of vehicles not covered by a certificate, pursuant to paragraphs (o)(8)(ii) and (iii) of this section.

(B) If a manufacturer is purchased by, merges with, or otherwise combines with another manufacturer, the controlling entity is responsible for offsetting any debits outstanding within the required time period. Any failure to offset the debits will be considered a violation of paragraph (o)(8)(i) of this section and may subject the manufacturer to an enforcement action for sale of vehicles not covered by a certificate,

pursuant to paragraphs (o)(8)(ii) and (iii) of this section.

(v) For purposes of calculating the statute of limitations, a violation of the requirements of paragraph (o)(8)(i) of this section, a failure to satisfy the conditions upon which a certificate(s) was issued and hence a sale of vehicles not covered by the certificate, all occur upon the expiration of the deadline for offsetting debits specified in paragraph (o)(8)(i) of this section.

(9) The following provisions apply to NMHC credit trading:

(i) EPA may reject NMHC credit trades if the involved manufacturers fail to submit the credit trade notification in the annual report. A manufacturer may not sell credits that are not available for sale pursuant to the provisions in paragraphs (o)(7)(i) of this section.

(ii) In the event of a negative credit balance resulting from a transaction that a manufacturer could not cover by the reporting deadline for the model year in which the trade occurred, both the buyer and seller are liable, except in cases involving fraud. EPA may void ab initio the certificates of conformity of all engine families participating in such a trade.

(iii) A manufacturer may only trade credits that it has generated pursuant to paragraph (o)(4) of this section or acquired from another party.

(p) *Reporting and recordkeeping.* Keep records and submit information for demonstrating compliance with the fleet average cold temperature NMHC standard as described in § 86.1862-04.

[72 FR 8567, Feb. 26, 2007, as amended at 76 FR 19874, Apr. 8, 2011; 79 FR 23736, Apr. 28, 2014]

§ 86.1865-12 How to comply with the fleet average CO₂ standards.

(a) *Applicability.* (1) Unless otherwise exempted under the provisions of paragraph (d) of this section, CO₂ fleet average exhaust emission standards of this subpart apply to:

(i) 2012 and later model year passenger automobiles and light trucks.

(ii) Heavy-duty vehicles subject to standards under § 86.1819.

(iii) Vehicles imported by ICIs as defined in 40 CFR 85.1502.

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(2) The terms “passenger automobile” and “light truck” as used in this section have the meanings given in § 86.1818–12.

(b) *Useful life requirements.* Full useful life requirements for CO₂ standards are defined in §§ 86.1818 and 86.1819. There is not an intermediate useful life standard for CO₂ emissions.

(c) *Altitude.* Greenhouse gas emission standards apply for testing at both low-altitude conditions and at high-altitude conditions, as described in §§ 86.1818 and 86.1819.

(d) *Small volume manufacturer certification procedures.* (1) *Passenger automobiles and light trucks.* Certification procedures for small volume manufacturers are provided in § 86.1838. Small businesses meeting certain criteria may be exempted from the greenhouse gas emission standards in § 86.1818 according to the provisions of § 86.1801–12(j) or (k).

(2) *Heavy-duty vehicles.* HDV manufacturers that qualify as small businesses are not subject to the Phase 1 greenhouse gas standards of this subpart as specified in § 86.1819–14(k)(5).

(e) *CO₂ fleet average exhaust emission standards.* The fleet average standards referred to in this section are the corporate fleet average CO₂ standards for passenger automobiles and light trucks set forth in § 86.1818–12(c) and (e), and for HDV in § 86.1819. Each manufacturer must comply with the applicable CO₂ fleet average standard on a production-weighted average basis, for each separate averaging set, at the end of each model year, using the procedure described in paragraph (j) of this section. The fleet average CO₂ standards applicable in a given model year are calculated separately for passenger automobiles and light trucks for each manufacturer and each model year according to the provisions in § 86.1818. Calculate the HDV fleet average CO₂ standard in a given model year as described in § 86.1819–14(a).

(f) *In-use CO₂ standards.* In-use CO₂ exhaust emission standards are provided in § 86.1818–12(d) for passenger automobiles and light trucks and in § 86.1819–14(b) for HDV.

(g) *Durability procedures and method of determining deterioration factors (DFs).* Deterioration factors for CO₂ exhaust

emission standards are provided in § 86.1823–08(m) for passenger automobiles and light trucks and in § 86.1819–14(d)(5) for HDV.

(h) *Vehicle test procedures.* (1) The test procedures for demonstrating compliance with CO₂ exhaust emission standards are described at § 86.101 and 40 CFR part 600, subpart B.

(2) Testing to determine compliance with CO₂ exhaust emission standards must be on a loaded vehicle weight (LVW) basis for passenger automobiles and light trucks (including MDPV), and on an adjusted loaded vehicle weight (ALVW) basis for non-MDPV heavy-duty vehicles.

(3) Testing for the purpose of providing certification data is required only at low-altitude conditions. If hardware and software emission control strategies used during low-altitude condition testing are not used similarly across all altitudes for in-use operation, the manufacturer must include a statement in the application for certification, in accordance with § 86.1844–01(d)(11), stating what the different strategies are and why they are used.

(i) *Calculating fleet average carbon-related exhaust emissions for passenger automobiles and light trucks.* (1) Manufacturers must compute separate production-weighted fleet average carbon-related exhaust emissions at the end of the model year for passenger automobiles and light trucks, using actual production, where production means vehicles produced and delivered for sale, and certifying model types to standards as defined in § 86.1818–12. The model type carbon-related exhaust emission results determined according to 40 CFR part 600, subpart F (in units of grams per mile rounded to the nearest whole number) become the certification standard for each model type.

(2) Manufacturers must separately calculate production-weighted fleet average carbon-related exhaust emissions levels for the following averaging sets according to the provisions of 40 CFR part 600, subpart F:

(i) Passenger automobiles subject to the fleet average CO₂ standards specified in § 86.1818–12(c)(2);

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(ii) Light trucks subject to the fleet average CO₂ standards specified in § 86.1818-12(c)(3);

(iii) Passenger automobiles subject to the Temporary Leadtime Allowance Alternative Standards specified in § 86.1818-12(e), if applicable; and

(iv) Light trucks subject to the Temporary Leadtime Allowance Alternative Standards specified in § 86.1818-12(e), if applicable.

(j) *Certification compliance and enforcement requirements for CO₂ exhaust emission standards.*

(1) Compliance and enforcement requirements are provided in this section and § 86.1848-10(c)(9).

(2) The certificate issued for each test group requires all model types within that test group to meet the in-use emission standards to which each model type is certified. The in-use standards for passenger automobiles and light duty trucks (including MDPV) are described in § 86.1818-12(d). The in-use standards for non-MDPV heavy-duty vehicles are described in § 86.1819-14(b).

(3) Each manufacturer must comply with the applicable CO₂ fleet average standard on a production-weighted average basis, at the end of each model year. Use the procedure described in paragraph (i) of this section for passenger automobiles and light trucks (including MDPV). Use the procedure described in § 86.1819-14(d)(9)(iv) for non-MDPV heavy-duty vehicles.

(4) Each manufacturer must comply on an annual basis with the fleet average standards as follows:

(i) Manufacturers must report in their annual reports to the Agency that they met the relevant corporate average standard by showing that the applicable production-weighted average CO₂ emission levels are at or below the applicable fleet average standards; or

(ii) If the production-weighted average is above the applicable fleet average standard, manufacturers must obtain and apply sufficient CO₂ credits as authorized under paragraph (k)(8) of this section. A manufacturer must show that they have offset any exceedance of the corporate average standard via the use of credits. Manufacturers must also include their credit balances

or deficits in their annual report to the Agency.

(iii) If a manufacturer fails to meet the corporate average CO₂ standard for four consecutive years, the vehicles causing the corporate average exceedance will be considered not covered by the certificate of conformity (*see* paragraph (k)(8) of this section). A manufacturer will be subject to penalties on an individual-vehicle basis for sale of vehicles not covered by a certificate.

(iv) EPA will review each manufacturer's production to designate the vehicles that caused the exceedance of the corporate average standard. EPA will designate as nonconforming those vehicles in test groups with the highest certification emission values first, continuing until reaching a number of vehicles equal to the calculated number of noncomplying vehicles as determined in paragraph (k)(8) of this section. In a group where only a portion of vehicles would be deemed nonconforming, EPA will determine the actual nonconforming vehicles by counting backwards from the last vehicle produced in that test group. Manufacturers will be liable for penalties for each vehicle sold that is not covered by a certificate.

(k) *Requirements for the CO₂ averaging, banking and trading (ABT) program.* (1) A manufacturer whose CO₂ fleet average emissions exceed the applicable standard must complete the calculation in paragraph (k)(4) of this section to determine the size of its CO₂ deficit. A manufacturer whose CO₂ fleet average emissions are less than the applicable standard may complete the calculation in paragraph (k)(4) of this section to generate CO₂ credits. In either case, the number of credits or debits must be rounded to the nearest whole number.

(2) There are no property rights associated with CO₂ credits generated under this subpart. Credits are a limited authorization to emit the designated amount of emissions. Nothing in this part or any other provision of law should be construed to limit EPA's authority to terminate or limit this authorization through a rulemaking.

(3) Each manufacturer must comply with the reporting and recordkeeping requirements of paragraph (l) of this section for CO₂ credits, including early

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credits. The averaging, banking and trading program is enforceable through the certificate of conformity that allows the manufacturer to introduce any regulated vehicles into U.S. commerce.

(4) Credits are earned on the last day of the model year. Manufacturers must calculate, for a given model year and separately for passenger automobiles, light trucks, and heavy-duty vehicles, the number of credits or debits it has generated according to the following equation rounded to the nearest megagram:

$$CO_2 \text{ Credits or Debits (Mg)} = [(CO_2 \text{ Standard} - \text{Manufacturer's Production-Weighted Fleet Average } CO_2 \text{ Emissions}) \times (\text{Total Number of Vehicles Produced}) \times (\text{Mileage})] \div 1,000,000$$

Where:

CO₂ Standard = the applicable standard for the model year as determined in § 86.1818 or § 86.1819;

Manufacturer's Production-Weighted Fleet Average CO₂ Emissions = average calculated according to paragraph (i) of this section;

Total Number of Vehicles Produced = the number of vehicles domestically produced plus those imported as defined in § 600.511–08 of this chapter; and

Mileage = useful life value (in miles) for HDV, and vehicle lifetime miles of 195,264 for passenger automobiles and 225,865 for light trucks.

(5) Determine total HDV debits and credits for a model year as described in § 86.1819–14(d)(6). Determine total passenger car and light truck debits and credits for a model year as described in this paragraph (k)(5). Total credits or debits generated in a model year, maintained and reported separately for passenger automobiles and light trucks, shall be the sum of the credits or debits calculated in paragraph (k)(4) of this section and any of the following credits, if applicable, minus any CO₂-equivalent debits for N₂O and/or CH₄ calculated according to the provisions of § 86.1818–12(f)(4):

(i) Air conditioning leakage credits earned according to the provisions of § 86.1867–12(b).

(ii) Air conditioning efficiency credits earned according to the provisions of § 86.1868–12(c).

(iii) Off-cycle technology credits earned according to the provisions of § 86.1869–12(d).

(iv) Full size pickup truck credits earned according to the provisions of § 86.1870–12(c).

(v) CO₂-equivalent debits for N₂O and/or CH₄ accumulated according to the provisions of § 86.1818–12(f)(4).

(6) Unused CO₂ credits generally retain their full value through five model years after the model year in which they were generated. Credits remaining at the end of the fifth model year after the model year in which they were generated may not be used to demonstrate compliance for later model years. The following particular provisions apply for passenger cars and light trucks:

(i) Unused CO₂ credits from the 2009 model year shall retain their full value through the 2014 model year. Credits from the 2009 model year that remain at the end of the 2014 model year may not be used to demonstrate compliance for later model years.

(ii) Unused CO₂ credits from the 2010 through 2015 model years shall retain their full value through the 2021 model year. Credits remaining from these model years at the end of the 2021 model year may not be used to demonstrate compliance for later model years.

(7) Credits may be used as follows:

(i) Credits generated and calculated according to the method in paragraphs (k)(4) and (5) of this section may not be used to offset deficits other than those deficits accrued within the respective averaging set, except that credits may be transferred between the passenger automobile and light truck fleets of a given manufacturer. Credits may be banked and used in a future model year in which a manufacturer's average CO₂ level exceeds the applicable standard. Credits may also be traded to another manufacturer according to the provisions in paragraph (k)(8) of this section. Before trading or carrying over credits to the next model year, a manufacturer must apply available credits to offset any deficit, where the deadline to offset that credit deficit has not yet passed. This paragraph (k)(7)(i) applies for MDPV, but not for other HDV.

(ii) The use of credits shall not change Selective Enforcement Auditing or in-use testing failures from a failure to a non-failure. The enforcement of the averaging standard occurs

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through the vehicle's certificate of conformity as described in paragraph (k)(8) of this section. A manufacturer's certificate of conformity is conditioned upon compliance with the averaging provisions. The certificate will be void ab initio if a manufacturer fails to meet the corporate average standard and does not obtain appropriate credits to cover its shortfalls in that model year or subsequent model years (see deficit carry-forward provisions in paragraph (k)(8) of this section).

(iii) The following provisions apply for passenger automobiles and light trucks under the Temporary Leadtime Allowance Alternative Standards:

(A) Credits generated by vehicles subject to the fleet average CO₂ standards specified in § 86.1818-12(c) may only be used to offset a deficit generated by vehicles subject to the Temporary Leadtime Allowance Alternative Standards specified in § 86.1818-12(e).

(B) Credits generated by a passenger automobile or light truck averaging set subject to the Temporary Leadtime Allowance Alternative Standards specified in § 86.1818-12(e)(4)(i) or (ii) may be used to offset a deficit generated by an averaging set subject to the Temporary Leadtime Allowance Alternative Standards through the 2015 model year, except that manufacturers qualifying under the provisions of § 86.1818-12(e)(3) may use such credits to offset a deficit generated by an averaging set subject to the Temporary Leadtime Allowance Alternative Standards through the 2016 model year.

(C) Credits generated by an averaging set subject to the Temporary Leadtime Allowance Alternative Standards specified in § 86.1818-12(e)(4)(i) or (ii) of this section may not be used to offset a deficit generated by an averaging set subject to the fleet average CO₂ standards specified in § 86.1818-12(c)(2) or (3) or otherwise transferred to an averaging set subject to the fleet average CO₂ standards specified in § 86.1818-12(c)(2) or (3).

(D) Credits generated by vehicles subject to the Temporary Leadtime Allowance Alternative Standards specified in § 86.1818-12(e)(4)(i) or (ii) may be banked for use in a future model year (to offset a deficit generated by an averaging set subject to the Temporary Leadtime Al-

lowance Alternative Standards). All such credits may not be used to demonstrate compliance for model year 2016 and later vehicles, except that manufacturers qualifying under the provisions of § 86.1818-12(e)(3) may use such credits to offset a deficit generated by an averaging set subject to the Temporary Leadtime Allowance Alternative Standards through the 2016 model year.

(E) A manufacturer with any vehicles subject to the Temporary Leadtime Allowance Alternative Standards specified in § 86.1818-12(e)(4)(i) or (ii) of this section in a model year in which that manufacturer also generates credits with vehicles subject to the fleet average CO₂ standards specified in § 86.1818-12(c) may not trade or bank credits earned against the fleet average standards in § 86.1818-12(c) for use in a future model year.

(iv) Credits generated in the 2017 through 2020 model years under the provisions of § 86.1818-12(e)(3)(ii) may not be traded or otherwise provided to another manufacturer.

(v) Credits generated under any alternative fleet average standards approved under § 86.1818-12(g) may not be traded or otherwise provided to another manufacturer.

(8) The following provisions apply if a manufacturer calculates that it has negative credits (also called "debits" or a "credit deficit") for a given model year:

(i) The manufacturer may carry the credit deficit forward into the next three model years. Such a carry-forward may only occur after the manufacturer exhausts any supply of banked credits. The deficit must be covered with an appropriate number of credits that the manufacturer generates or purchases by the end of the third model year. Any remaining deficit is subject to a voiding of the certificate ab initio, as described in this paragraph (k)(8). Manufacturers are not permitted to have a credit deficit for four consecutive years.

(ii) If the credit deficit is not offset within the specified time period, the number of vehicles not meeting the fleet average CO₂ standards (and therefore not covered by the certificate) must be calculated.

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(A) Determine the negative credits for the noncompliant vehicle category by multiplying the total megagram deficit by 1,000,000 and then dividing by the mileage specified in paragraph (k)(4) of this section.

(B) Divide the result by the fleet average standard applicable to the model year in which the debits were first incurred and round to the nearest whole number to determine the number of vehicles not meeting the fleet average CO₂ standards.

(iii) EPA will determine the vehicles not covered by a certificate because the condition on the certificate was not satisfied by designating vehicles in those test groups with the highest carbon-related exhaust emission values first and continuing until reaching a number of vehicles equal to the calculated number of non-complying vehicles as determined in this paragraph (k)(8). The same approach applies for HDV, except that EPA will make these designations by ranking test groups based on CO₂ emission values. If these calculations determines that only a portion of vehicles in a test group contribute to the debit situation, then EPA will designate actual vehicles in that test group as not covered by the certificate, starting with the last vehicle produced and counting backwards.

(iv)(A) If a manufacturer ceases production of passenger automobiles, light trucks, or heavy-duty vehicles, the manufacturer continues to be responsible for offsetting any debits outstanding within the required time period. Any failure to offset the debits will be considered a violation of paragraph (k)(8)(i) of this section and may subject the manufacturer to an enforcement action for sale of vehicles not covered by a certificate, pursuant to paragraphs (k)(8)(ii) and (iii) of this section.

(B) If a manufacturer is purchased by, merges with, or otherwise combines with another manufacturer, the controlling entity is responsible for offsetting any debits outstanding within the required time period. Any failure to offset the debits will be considered a violation of paragraph (k)(8)(i) of this section and may subject the manufacturer to an enforcement action for sale of vehicles not covered by a certificate,

pursuant to paragraphs (k)(8)(ii) and (iii) of this section.

(v) For purposes of calculating the statute of limitations, a violation of the requirements of paragraph (k)(8)(i) of this section, a failure to satisfy the conditions upon which a certificate(s) was issued and hence a sale of vehicles not covered by the certificate, all occur upon the expiration of the deadline for offsetting debits specified in paragraph (k)(8)(i) of this section.

(9) The following provisions apply to CO₂ credit trading:

(i) EPA may reject CO₂ credit trades if the involved manufacturers fail to submit the credit trade notification in the annual report.

(ii) A manufacturer may not sell credits that are no longer valid for demonstrating compliance based on the model years of the subject vehicles, as specified in paragraph (k)(6) of this section.

(iii) In the event of a negative credit balance resulting from a transaction, both the buyer and seller are liable for the credit shortfall. EPA may void ab initio the certificates of conformity of all test groups that generate or use credits in such a trade.

(iv)(A) If a manufacturer trades a credit that it has not generated pursuant to this paragraph (k) or acquired from another party, the manufacturer will be considered to have generated a debit in the model year that the manufacturer traded the credit. The manufacturer must offset such debits by the deadline for the annual report for that same model year.

(B) Failure to offset the debits within the required time period will be considered a failure to satisfy the conditions upon which the certificate(s) was issued and will be addressed pursuant to paragraph (k)(8) of this section.

(v) A manufacturer may only trade credits that it has generated pursuant to paragraphs (k)(4) and (5) of this section or acquired from another party.

(1) *Maintenance of records and submittal of information relevant to compliance with fleet average CO₂ standards—*
(1) *Maintenance of records.* (1) Manufacturers producing any light-duty vehicles, light-duty trucks, medium-duty passenger vehicles, or other heavy-duty vehicles subject to the provisions in

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this subpart must establish, maintain, and retain all the following information in adequately organized records for each model year:

- (A) Model year.
- (B) Applicable fleet average CO₂ standards for each averaging set as defined in paragraph (i) of this section.
- (C) The calculated fleet average CO₂ value for each averaging set as defined in paragraph (i) of this section.
- (D) All values used in calculating the fleet average CO₂ values.
 - (i) Manufacturers must establish, maintain, and retain all the following information in adequately organized records for each vehicle produced that is subject to the provisions in this subpart:
 - (A) Model year.
 - (B) Applicable fleet average CO₂ standard.
 - (C) EPA test group.
 - (D) Assembly plant.
 - (E) Vehicle identification number.
 - (F) Carbon-related exhaust emission standard (automobile and light truck only), N₂O emission standard, and CH₄ emission standard to which the vehicle is certified.
 - (G) In-use carbon-related exhaust emission standard for passenger automobiles and light truck, and in-use CO₂ standard for HDV.
 - (H) Information on the point of first sale, including the purchaser, city, and state.
 - (ii) Manufacturers must retain all required records for a period of eight years from the due date for the annual report. Records may be stored in any format and on any media, as long as manufacturers can promptly send EPA organized written records in English if requested by the Administrator. Manufacturers must keep records readily available as EPA may review them at any time.
 - (iv) The Administrator may require the manufacturer to retain additional records or submit information not specifically required by this section.
 - (v) Pursuant to a request made by the Administrator, the manufacturer must submit to the Administrator the information that the manufacturer is required to retain.
 - (vi) EPA may void ab initio a certificate of conformity for vehicles cer-

tified to emission standards as set forth or otherwise referenced in this subpart for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request, or to submit the reports required in this section in the specified time period.

(2) *Reporting.* (i) Each manufacturer must submit an annual report. The annual report must contain for each applicable CO₂ standard, the calculated fleet average CO₂ value, all values required to calculate the CO₂ emissions value, the number of credits generated or debits incurred, all the values required to calculate the credits or debits, and the resulting balance of credits or debits. For each applicable alternative N₂O and/or CH₄ standard selected under the provisions of § 86.1818-12(f)(3) for passenger automobiles and light trucks (or § 86.1819-14(c) for HDV), the report must contain the CO₂-equivalent debits for N₂O and/or CH₄ calculated according to § 86.1818-12(f)(4) (or § 86.1819-14(c) for HDV) for each test group and all values required to calculate the number of debits incurred.

(ii) For each applicable fleet average CO₂ standard, the annual report must also include documentation on all credit transactions the manufacturer has engaged in since those included in the last report. Information for each transaction must include all of the following:

- (A) Name of credit provider.
- (B) Name of credit recipient.
- (C) Date the trade occurred.
- (D) Quantity of credits traded in megagrams.
- (E) Model year in which the credits were earned.
- (iii) Manufacturers calculating air conditioning leakage and/or efficiency credits under paragraph § 86.1871-12(b) shall include the following information for each model year and separately for passenger automobiles and light trucks and for each air conditioning system used to generate credits:
 - (A) A description of the air conditioning system.
 - (B) The leakage credit value and all the information required to determine this value.

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(C) The total credits earned for each averaging set, model year, and region, as applicable.

(iv) Manufacturers calculating advanced technology vehicle credits under paragraph §86.1871-12(c) shall include the following information for each model year and separately for passenger automobiles and light trucks:

(A) The number of each model type of eligible vehicle sold.

(B) The cumulative model year production of eligible vehicles starting with the 2009 model year.

(C) The carbon-related exhaust emission value by model type and model year.

(v) Manufacturers calculating off-cycle technology credits under paragraph §86.1871-12(d) shall include, for each model year and separately for passenger automobiles and light trucks, all test results and data required for calculating such credits.

(vi) Unless a manufacturer reports the data required by this section in the annual production report required under §86.1844-01(e) or the annual report required under §600.512-12 of this chapter, a manufacturer must submit an annual report for each model year after production ends for all affected vehicles produced by the manufacturer subject to the provisions of this subpart and no later than May 1 of the calendar year following the given model year. Annual reports must be submitted to: Director, Compliance Division, U.S. Environmental Protection Agency, 2000 Traverwood Dr., Ann Arbor, Michigan 48105.

(vii) Failure by a manufacturer to submit the annual report in the specified time period for all vehicles subject to the provisions in this section is a violation of section 203(a)(1) of the Clean Air Act (42 U.S.C. 7522 (a)(1)) for each applicable vehicle produced by that manufacturer.

(viii) If EPA or the manufacturer determines that a reporting error occurred on an annual report previously submitted to EPA, the manufacturer's credit or debit calculations will be recalculated. EPA may void erroneous credits, unless traded, and will adjust erroneous debits. In the case of traded erroneous credits, EPA must adjust the selling manufacturer's credit balance

to reflect the sale of such credits and any resulting credit deficit.

(3) *Notice of opportunity for hearing.* Any voiding of the certificate under paragraph (1)(1)(vi) of this section will be made only after EPA has offered the affected manufacturer an opportunity for a hearing conducted in accordance with 40 CFR part 1068, subpart G, and, if a manufacturer requests such a hearing, will be made only after an initial decision by the Presiding Officer.

[81 FR 73992, Oct. 25, 2016]

§ 86.1866-12 CO₂ credits for advanced technology vehicles.

This section describes how to apply CO₂ credits for advanced technology passenger automobiles and light trucks (including MDPV). This section does not apply for heavy-duty vehicles that are not MDPV.

(a) Electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles, as those terms are defined in §86.1803-01, that are certified and produced for U.S. sale, where "U.S." means the states and territories of the United States, in the 2012 through 2025 model years may use a value of zero (0) grams/mile of CO₂ to represent the proportion of electric operation of a vehicle that is derived from electricity that is generated from sources that are not on-board the vehicle, as specified by this paragraph (a).

(1) Model years 2012 through 2016: The use of zero (0) grams/mile CO₂ is limited to the first 200,000 combined electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced for U.S. sale, where "U.S." means the states and territories of the United States, in the 2012 through 2016 model years, except that a manufacturer that produces 25,000 or more such vehicles for U.S. sale in the 2012 model year shall be subject to a limitation on the use of zero (0) grams/mile CO₂ to the first 300,000 combined electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced and delivered for sale by a manufacturer in the 2012 through 2016 model years.

(2) Model years 2017 through 2021: For electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced for U.S. sale, where "U.S." means the states and territories of the

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participate in a conformity pilot program and have developed alternative requirements that have been approved by EPA as an implementation plan revision in accordance with § 51.390 of this chapter. For the duration of the pilot program, areas selected to participate in the pilot program must comply with the conformity requirements of the pilot area's implementation plan revision for § 51.390 of this chapter and all other requirements in 40 CFR parts 51 and 93 that are not covered by the pilot area's implementation plan revision for § 51.390 of this chapter. The alternative conformity requirements in conjunction with any applicable state and/or federal conformity requirements must be proposed to fulfill all of the requirements of and achieve results equivalent to or better than section 176(c) of the Clean Air Act. After the three-year duration of the pilot program has expired, areas will again be subject to all of the requirements of this subpart and 40 CFR part 51, subpart T, and/or to the requirements of any implementation plan revision that was previously approved by EPA in accordance with § 51.390 of this chapter.

[64 FR 13483, Mar. 18, 1999]

Subpart B—Determining Conformity of General Federal Actions to State or Federal Implementation Plans

SOURCE: 58 FR 63253, Nov. 30, 1993, unless otherwise noted.

§ 93.150 Prohibition.

(a) No department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.

(b) A Federal agency must make a determination that a Federal action conforms to the applicable implementation plan in accordance with the requirements of this subpart before the action is taken.

(c) [Reserved]

(d) Notwithstanding any provision of this subpart, a determination that an

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action is in conformance with the applicable implementation plan does not exempt the action from any other requirements of the applicable implementation plan, the National Environmental Policy Act (NEPA), or the Clean Air Act (Act).

(e) If an action would result in emissions originating in more than one nonattainment or maintenance area, the conformity must be evaluated for each area separately.

[58 FR 63253, Nov. 30, 1993; 58 FR 67442, Dec. 21, 1993; 75 FR 17272, Apr. 5, 2010]

§ 93.151 State implementation plan (SIP) revision.

The provisions and requirements of this subpart to demonstrate conformity required under section 176(c) of the Clean Air Act (CAA) apply to all Federal actions in designated nonattainment and maintenance areas where EPA has not approved the General Conformity SIP revision allowed under 40 CFR 51.851. When EPA approves a State's or Tribe's conformity provisions (or a portion thereof) in a revision to an applicable implementation plan, a conformity evaluation is governed by the approved (or approved portion of the) State or Tribe's criteria and procedures. The Federal conformity regulations contained in this subpart apply only for the portions, if any, of the part 93 requirements not contained in the State or Tribe conformity provisions approved by EPA. In addition, any previously applicable implementation plan conformity requirements remain enforceable until the EPA approves the revision to the applicable SIP to specifically include the revised requirements or remove requirements.

[75 FR 17272, Apr. 5, 2010]

§ 93.152 Definitions.

Terms used but not defined in this part shall have the meaning given them by the Act and EPA's regulations (40 CFR chapter I), in that order of priority.

Affected Federal land manager means the Federal agency or the Federal official charged with direct responsibility for management of an area designated as Class I under the Act (42 U.S.C. 7472)

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that is located within 100 km of the proposed Federal action.

Applicability analysis is the process of determining if your Federal action must be supported by a conformity determination.

Applicable implementation plan or applicable SIP means the portion (or portions) of the SIP or most recent revision thereof, which has been approved under section 110(k) of the Act, a Federal implementation plan promulgated under section 110(c) of the Act, or a plan promulgated or approved pursuant to section 301 (d) of the Act (Tribal implementation plan or TIP) and which implements the relevant requirements of the Act.

Areawide air quality modeling analysis means an assessment on a scale that includes the entire nonattainment or maintenance area using an air quality dispersion model or photochemical grid model to determine the effects of emissions on air quality, for example, an assessment using EPA's community multi-scale air quality (CMAQ) modeling system.

Cause or contribute to a new violation means a Federal action that:

(1) Causes a new violation of a national ambient air quality standard (NAAQS) at a location in a nonattainment or maintenance area which would otherwise not be in violation of the standard during the future period in question if the Federal action were not taken; or

(2) Contributes, in conjunction with other reasonably foreseeable actions, to a new violation of a NAAQS at a location in a nonattainment or maintenance area in a manner that would increase the frequency or severity of the new violation.

Caused by, as used in the terms "direct emissions" and "indirect emissions," means emissions that would not otherwise occur in the absence of the Federal action.

Confidential business information (CBI) means information that has been determined by a Federal agency, in accordance with its applicable regulations, to be a trade secret, or commercial or financial information obtained from a person and privileged or confidential and is exempt from required disclosure

under the Freedom of Information Act (5 U.S.C. 552(b)(4)).

Conformity determination is the evaluation (made after an applicability analysis is completed) that a Federal action conforms to the applicable implementation plan and meets the requirements of this subpart.

Conformity evaluation is the entire process from the applicability analysis through the conformity determination that is used to demonstrate that the Federal action conforms to the requirements of this subpart.

Continuing program responsibility means a Federal agency has responsibility for emissions caused by:

(1) Actions it takes itself; or

(2) Actions of non-Federal entities that the Federal agency, in exercising its normal programs and authorities, approves, funds, licenses or permits, provided the agency can impose conditions on any portion of the action that could affect the emissions.

Continuous program to implement means that the Federal agency has started the action identified in the plan and does not stop the actions for more than an 18-month period, unless it can demonstrate that such a stoppage was included in the original plan.

Criteria pollutant or standard means any pollutant for which there is established a NAAQS at 40 CFR part 50.

Direct emissions means those emissions of a criteria pollutant or its precursors that are caused or initiated by the Federal action and originate in a nonattainment or maintenance area and occur at the same time and place as the action and are reasonably foreseeable.

Emergency means a situation where extremely quick action on the part of the Federal agencies involved is needed and where the timing of such Federal activities makes it impractical to meet the requirements of this subpart, such as natural disasters like hurricanes or earthquakes, civil disturbances such as terrorist acts and military mobilizations.

Emission inventory means a listing of information on the location, type of source, type and quantity of pollutant emitted as well as other parameters of the emissions.

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Emissions budgets are those portions of the applicable SIP's projected emission inventories that describe the levels of emissions (mobile, stationary, area, etc.) that provide for meeting reasonable further progress milestones, attainment, and/or maintenance for any criteria pollutant or its precursors.

Emissions offsets, for purposes of § 93.158, are emissions reductions which are quantifiable, consistent with the applicable SIP attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable at both the State and Federal levels, and permanent within the timeframe specified by the program.

EPA means the U.S. Environmental Protection Agency.

Federal action means any activity engaged in by a department, agency, or instrumentality of the Federal government, or any activity that a department, agency or instrumentality of the Federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 *et seq.*). Where the Federal action is a permit, license, or other approval for some aspect of a non-Federal undertaking, the relevant activity is the part, portion, or phase of the non-Federal undertaking that requires the Federal permit, license, or approval.

Federal agency means, for purposes of this subpart, a Federal department, agency, or instrumentality of the Federal government.

Increase the frequency or severity of any existing violation of any standard in any area means to cause a nonattainment area to exceed a standard more often or to cause a violation at a greater concentration than previously existed and/or would otherwise exist during the future period in question, if the project were not implemented.

Indirect emissions means those emissions of a criteria pollutant or its precursors:

(1) That are caused or initiated by the Federal action and originate in the

same nonattainment or maintenance area but occur at a different time or place as the action;

(2) That are reasonably foreseeable;

(3) That the agency can practically control; and

(4) For which the agency has continuing program responsibility.

For the purposes of this definition, even if a Federal licensing, rulemaking or other approving action is a required initial step for a subsequent activity that causes emissions, such initial steps do not mean that a Federal agency can practically control any resulting emissions.

Local air quality modeling analysis means an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadways on a Federal facility, which uses an air quality dispersion model (*e.g.*, Industrial Source Complex Model or Emission and Dispersion Model System) to determine the effects of emissions on air quality.

Maintenance area means an area that was designated as nonattainment and has been re-designated in 40 CFR part 81 to attainment, meeting the provisions of section 107(d)(3)(E) of the Act and has a maintenance plan approved under section 175A of the Act.

Maintenance plan means a revision to the applicable SIP, meeting the requirements of section 175A of the Act.

Metropolitan Planning Organization (MPO) means the policy board of an organization created as a result of the designation process in 23 U.S.C. 134(d).

Milestone has the meaning given in sections 182(g)(1) and 189(c)(1) of the Act.

Mitigation measure means any method of reducing emissions of the pollutant or its precursor taken at the location of the Federal action and used to reduce the impact of the emissions of that pollutant caused by the action.

National ambient air quality standards (NAAQS) are those standards established pursuant to section 109 of the Act and include standards for carbon monoxide (CO₂), lead (Pb), nitrogen dioxide (NO₂), ozone, particulate matter (PM-10 and PM2.5), and sulfur dioxide (SO₂).

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Nonattainment area means an area designated as nonattainment under section 107 of the Act and described in 40 CFR part 81.

Precursors of a criteria pollutant are:

(1) For ozone, nitrogen oxides (NO_x), unless an area is exempted from NO_x requirements under section 182(f) of the Act, and volatile organic compounds (VOC).

(2) For PM-10, those pollutants described in the PM-10 nonattainment area applicable SIP as significant contributors to the PM-10 levels.

(3) For PM_{2.5}:

(i) Sulfur dioxide (SO₂) in all PM_{2.5} nonattainment and maintenance areas,

(ii) Nitrogen oxides in all PM_{2.5} nonattainment and maintenance areas unless both the State and EPA determine that it is not a significant precursor, and

(iii) Volatile organic compounds (VOC) and ammonia (NH₃) only in PM_{2.5} nonattainment or maintenance areas where either the State or EPA determines that they are significant precursors.

Reasonably foreseeable emissions are projected future direct and indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known and the emissions are quantifiable as described and documented by the Federal agency based on its own information and after reviewing any information presented to the Federal agency.

Regional water and/or wastewater projects include construction, operation, and maintenance of water or wastewater conveyances, water or wastewater treatment facilities, and water storage reservoirs which affect a large portion of a nonattainment or maintenance area.

Restricted information is information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes, but is not limited to: Classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.

Take or start the Federal action means the date that the Federal agency signs

or approves the permit, license, grant or contract or otherwise physically begins the Federal action that requires a conformity evaluation under this subpart.

Total of direct and indirect emissions means the sum of direct and indirect emissions increases and decreases caused by the Federal action; i.e., the “net” emissions considering all direct and indirect emissions. The portion of emissions which are exempt or presumed to conform under §93.153 (c), (d), (e), or (f) are not included in the “total of direct and indirect emissions.” The “total of direct and indirect emissions” includes emissions of criteria pollutants and emissions of precursors of criteria pollutants.

Tribal implementation plan (TIP) means a plan to implement the national ambient air quality standards adopted and submitted by a federally recognized Indian tribal government determined to be eligible under 40 CFR 49.9 and the plan has been approved by EPA.

[58 FR 63253, Nov. 30, 1993, as amended at 71 FR 40427, July 17, 2006; 75 FR 17273, Apr. 3, 2010]

§93.153 Applicability.

(a) Conformity determinations for Federal actions related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 *et seq.*) must meet the procedures and criteria of 40 CFR part 51, subpart T, in lieu of the procedures set forth in this subpart.

(b) For Federal actions not covered by paragraph (a) of this section, a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs (b)(1) or (2) of this section.

(1) For purposes of paragraph (b) of this section the following rates apply in nonattainment areas (NAA’s):

	Tons/year
Ozone (VOC’s or NO _x):	
Serious NAA’s	50

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action, or if significant new circumstances or information arise which bear on the proposal or its impacts.

§ 1501.8 Time limits.

Although the Council has decided that prescribed universal time limits for the entire NEPA process are too inflexible, Federal agencies are encouraged to set time limits appropriate to individual actions (consistent with the time intervals required by §1506.10). When multiple agencies are involved the reference to agency below means lead agency.

(a) The agency shall set time limits if an applicant for the proposed action requests them: *Provided*, That the limits are consistent with the purposes of NEPA and other essential considerations of national policy.

(b) The agency may:

(1) Consider the following factors in determining time limits:

(i) Potential for environmental harm.

(ii) Size of the proposed action.

(iii) State of the art of analytic techniques.

(iv) Degree of public need for the proposed action, including the consequences of delay.

(v) Number of persons and agencies affected.

(vi) Degree to which relevant information is known and if not known the time required for obtaining it.

(vii) Degree to which the action is controversial.

(viii) Other time limits imposed on the agency by law, regulations, or executive order.

(2) Set overall time limits or limits for each constituent part of the NEPA process, which may include:

(i) Decision on whether to prepare an environmental impact statement (if not already decided).

(ii) Determination of the scope of the environmental impact statement.

(iii) Preparation of the draft environmental impact statement.

(iv) Review of any comments on the draft environmental impact statement from the public and agencies.

(v) Preparation of the final environmental impact statement.

(vi) Review of any comments on the final environmental impact statement.

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(vii) Decision on the action based in part on the environmental impact statement.

(3) Designate a person (such as the project manager or a person in the agency's office with NEPA responsibilities) to expedite the NEPA process.

(c) State or local agencies or members of the public may request a Federal Agency to set time limits.

PART 1502—ENVIRONMENTAL IMPACT STATEMENT

Sec.

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AUTHORITY: NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

SOURCE: 43 FR 55994, Nov. 29, 1978, unless otherwise noted.

§ 1502.1 Purpose.

The primary purpose of an environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in the

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Act are infused into the ongoing programs and actions of the Federal Government. It shall provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. Agencies shall focus on significant environmental issues and alternatives and shall reduce paperwork and the accumulation of extraneous background data. Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses. An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.

§ 1502.2 Implementation.

To achieve the purposes set forth in §1502.1 agencies shall prepare environmental impact statements in the following manner:

(a) Environmental impact statements shall be analytic rather than encyclopedic.

(b) Impacts shall be discussed in proportion to their significance. There shall be only brief discussion of other than significant issues. As in a finding of no significant impact, there should be only enough discussion to show why more study is not warranted.

(c) Environmental impact statements shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and with these regulations. Length should vary first with potential environmental problems and then with project size.

(d) Environmental impact statements shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of sections 101 and 102(1) of the Act and other environmental laws and policies.

(e) The range of alternatives discussed in environmental impact statements shall encompass those to be considered by the ultimate agency decisionmaker.

(f) Agencies shall not commit resources prejudicing selection of alter-

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natives before making a final decision (§1506.1).

(g) Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.

§ 1502.3 Statutory requirements for statements.

As required by sec. 102(2)(C) of NEPA environmental impact statements (§1508.11) are to be included in every recommendation or report.

On proposals (§1508.23).

For legislation and (§1508.17).

Other major Federal actions (§1508.18).

Significantly (§1508.27).

Affecting (§§1508.3, 1508.8).

The quality of the human environment (§1508.14).

§ 1502.4 Major Federal actions requiring the preparation of environmental impact statements.

(a) Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined. Agencies shall use the criteria for scope (§1508.25) to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.

(b) Environmental impact statements may be prepared, and are sometimes required, for broad Federal actions such as the adoption of new agency programs or regulations (§1508.18). Agencies shall prepare statements on broad actions so that they are relevant to policy and are timed to coincide with meaningful points in agency planning and decisionmaking.

(c) When preparing statements on broad actions (including proposals by more than one agency), agencies may find it useful to evaluate the proposal(s) in one of the following ways:

(1) Geographically, including actions occurring in the same general location, such as body of water, region, or metropolitan area.

(2) Generically, including actions which have relevant similarities, such

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§ 1.94 The National Highway Traffic Safety Administration.

Is responsible for:

(a) *In highway safety*, setting uniform guidelines for a coordinated national highway safety formula grant program carried out by the States and local communities; conducting research and development activities, including demonstration projects and the collection and analysis of highway and motor vehicle safety data and related information; administering highway safety grant programs to encourage State efforts in such areas as occupant protection, impaired and distracted driving, traffic safety data information system improvements, motorcyclist safety, child safety restraints, and graduated driver's licensing; determining State compliance with highway traffic safety law requirements; administering a nationwide high visibility enforcement program; administering the National Driver Register; and leading and coordinating efforts to establish, expand, and improve State, local, tribal, and regional emergency medical services and 9-1-1 systems.

(b) *In motor vehicle safety*, establishing and enforcing safety standards and regulations for the manufacture and importation of motor vehicles and motor vehicle equipment; conducting research, development, and testing concerning motor vehicle safety, including vehicle-to-vehicle and vehicle-to-infrastructure technologies and other new or advanced vehicle technologies; and investigating safety-related defects and non-compliance in motor vehicles and motor vehicle equipment and administering related recalls.

(c) *In automobile fuel economy*, establishing automobile fuel economy standards for passenger and non-passenger automobiles and fuel efficiency standards for medium and heavy vehicles.

(d) *In consumer protection and information*, establishing requirements and carrying out programs for passenger motor vehicle information, such as the New Car Assessment Program; bumper standards for passenger motor vehicles; odometer requirements; and passenger motor vehicle theft prevention standards.

§ 1.95 Delegations to the National Highway Traffic Safety Administrator.

The National Highway Traffic Safety Administrator is delegated authority to:

(a) Exercise the authority vested in the Secretary under chapters 301, 303, 321, 323, 325, 327, 329, and 331, of Title 49, U.S.C., except for 49 U.S.C. 32916(b).

(b) Exercise the authority vested in the Secretary by 49 U.S.C. 20134(a) with respect to laws administered by the National Highway Traffic Safety Administration pertaining to highway, traffic and motor vehicle safety.

(c) Carry out, in coordination with the Federal Motor Carrier Safety Administrator, the authority vested in the Secretary by subchapter III of chapter 311 of title 49, U.S.C., to promulgate safety standards for commercial motor vehicles and equipment subsequent to initial manufacture when the standards are based upon and similar to a Federal Motor Vehicle Safety Standard promulgated, either simultaneously or previously, under chapter 301 of title 49, U.S.C.

(d) Carry out the Highway Safety Act of 1966, as amended (Pub. L. 89-564, 80 Stat. 731), for highway safety programs, research, and development except those relating to highway design, construction and maintenance, traffic control devices, identification and surveillance of crash locations, and highway-related aspects of pedestrian safety.

(e) Exercise the authority vested in the Secretary under chapter 4 of title 23, U.S.C., except for 23 U.S.C. 409.

(f) Carry out the functions and exercise the authority vested in the Secretary for the following provisions of title 23, U.S.C. (with respect to matters within the primary responsibility of the National Highway Traffic Safety Administration): 153, 154, 158, 161, 163, 164, and 313 (Buy America).

(g) Carry out the consultation functions vested in the Secretary by Executive Order 11912, as amended ("Delegation of Authorities Relating to Energy Policy and Conservation") relating to automobiles.

(h) Exercise the authority vested in the Secretary by section 210(2) of the

§ 520.4

§ 520.4 Applicability.

(a) *Scope.* This part applies to all elements of NHTSA, including the Regional Offices.

(b) *Actions covered.* Except as provided in paragraph (e) of this section, this part applies to the following agency actions and such actions and proposals as may be sponsored jointly with another agency:

(1) New and continuing programs and projects; budget proposals; legislative proposals by the agency; requests for appropriations; reports on legislation initiated elsewhere where the agency has primary responsibility for the subject matter involved; and any renewals or reapprovals of the foregoing;

(2) Research, development, and demonstration projects; formal approvals of work plans; and associated contracts;

(3) Rulemaking and regulatory actions, including Notices of Proposed Rulemaking (NPRM); requests for procurement (RFP); requests for grants (Annual Work Programs); and contracts;

(4) All grants, loans or other financial assistance for use in State and Community projects;

(5) Annual State Highway Safety Work Programs;

(6) Construction; leases; purchases; operation of Federal facilities; and

(7) Any other activity, project, or action likely to have a significant effect on the environment.

(c) *Continuing actions.* This part applies to any action enumerated in paragraph (b) of this section, even though such actions arise from a project or program initiated prior to enactment of the National Environmental Policy Act on January 1, 1970.

(d) *Environmental assessments.* Within the scope of activities listed in § 520.4(b), any person outside the agency submitting a program or project proposal may be requested to prepare an environmental assessment of such proposed action to be included in his submission to the agency.

(e) *Exceptions.* (1) Assistance in the form of general revenue sharing funds, distributed under the State and Local Fiscal Assistance Act of 1972, 31 U.S.C. 1221, with no control by the NHTSA over the subsequent use of such funds;

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(2) Personnel actions;

(3) Administrative procurements (e.g., general supplies) and contracts for personal services;

(4) Legislative proposals originating in another agency and relating to matters not within NHTSA's primary areas of responsibility;

(5) Project amendments (e.g., increases in costs) which have no environmental significance; and

(6) Minor agency actions that are determined by the official responsible for the actions to be of such limited scope that they clearly will not have a significant effect on the quality of the human environment.

(f) *Consolidation of statements.* Proposed actions (and alternatives thereto) having substantially similar environmental impacts may be covered by a single environmental review and environmental impact statement or negative declaration.

§ 520.5 Guidelines for identifying major actions significantly affecting the environment.

(a) *General guidelines.* The phrase, "major Federal actions significantly affecting the quality of the human environment," as used in this part, shall be construed with a view to the overall, cumulative impact of the actions, other Federal projects or actions in the area, and any further contemplated or anticipated actions. Therefore, an environmental impact statement should be prepared in any of the following situations:

(1) Proposed actions which are localized in their impact but which have a potential for significantly affecting the environment;

(2) Any proposed action which is likely to be controversial on environmental grounds;

(3) Any proposed action which has unclear but potentially significant environmental consequences.

(b) *Specific guidelines.* While a precise definition of environmental significance that is valid in all contexts is not possible, any of the following actions should ordinarily be considered as significantly affecting the quality of the human environment:

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(1) Any matter falling under section 4(f) of the Department of Transportation Act (49 U.S.C. 1653(f)) and section 138 of Federal-aid highway legislation (23 U.S.C. 138), requiring the use of any publicly owned land from a park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from an historic site of national, State, or local significance;

(2) Any matter falling under section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470(f)), requiring consideration of the effect of the proposed action on any building included in the National Register of Historic Preservation and reasonable opportunity for the Advisory Council on Historic Preservation to comment on such action;

(3) Any action that is likely to affect the preservation and enhancement of sites of historical, architectural, or archaeological significance;

(4) Any action that is likely to be highly controversial regarding relocation housing;

(5) Any action that (i) divides or disrupts an established community, disrupts orderly, planned development, or is inconsistent with plans or goals that have been adopted by the community in which the project is located; or (ii) causes significantly increased congestion;

(6) Any action that (i) involves inconsistency with any Federal, State, or local law or administrative determination relating to the environment; (ii) has a significantly detrimental impact on air or water quality or on ambient noise levels for adjoining areas; (iii) involves a possibility of contamination of a public water supply system; or (iv) affects ground water, flooding, erosion, or sedimentation;

(7) Any action that may directly or indirectly result in a significant increase in noise levels, either within a motor vehicle's closed environment or upon nearby areas;

(8) Any action that may directly or indirectly result in a significant increase in the energy or fuel necessary to operate a motor vehicle, including but not limited to the following: (i) Ac-

tions which may directly or indirectly result in a significant increase in the weight of a motor vehicle; and (ii) actions which may directly or indirectly result in a significant adverse effect upon the aerodynamic drag of a motor vehicle;

(9) Any action that may directly or indirectly result in a significant increase in the amount of harmful emissions resulting from the operation of a motor vehicle;

(10) Any action that may directly or indirectly result in a significant increase in either the use of or the exposure to toxic or hazardous materials in the manufacture, operation, or disposal of motor vehicles or motor vehicle equipment;

(11) Any action that may directly or indirectly result in a significant increase in the problem of solid waste, as in the disposal of motor vehicles or motor vehicle equipment;

(12) Any action that may directly or indirectly result in a significant depletion of scarce natural resources associated with the manufacture or operation of motor vehicles or motor vehicle equipment; and

(13) Any other action that causes significant environment impact by directly or indirectly affecting human beings through adverse impacts on the environment.

(c) *Research activities.* (1) In accordance with DOT Order 5610.1B, the Assistant Secretary for Systems Development and Technology (TST) will prepare, with the concurrence of the NHTSA, proposed procedures for assessing the environmental consequences of research activities. Until final procedures are promulgated, the following factors are to be considered for periodic evaluation to determine when an environmental statement is required for such programs:

(i) The magnitude of Federal investment in the program;

(ii) The likelihood of widespread application of the technology;

(iii) The degree of environmental impact which would occur if the technology were widely applied; and

(iv) The extent to which continued investment in the new technology is likely to restrict future alternatives.

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(2) The statement or environmental review culminating in a negative declaration must be written late enough in the development process to contain meaningful information, but early enough so that this information can practically serve as an input in the decision-making process. Where it is anticipated that an environmental impact statement may ultimately be required but its preparation is still premature, the office shall prepare a publicly available record briefly setting forth the reasons for its determination that a statement is not yet necessary. This record shall be updated at least quarterly, or as may be necessary when significant new information becomes available concerning the potential environmental impact of the program. In any case, a statement or environmental review culminating in a negative declaration must be prepared before research activities have reached a state of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives. Statements on technology research and development programs shall include an analysis not only of alternative forms of the same technology that might reduce any adverse environmental impacts but also of alternative technologies that would serve the same function as the technology under consideration. Efforts shall be made to involve other Federal agencies and interested groups with relevant expertise in the preparation of such statements because the impacts and alternatives to be considered are likely to be less well defined than in other types of statements.

Subpart B—Procedures**§ 520.21 Preparation of environmental reviews, negative declarations, and notices of intent.**

(a) *General responsibilities*—(1) *Associate Administrators and Chief Counsel.* Each Associate Administrator and the Chief Counsel is responsible for determining, in accordance with Subpart A, whether the projects and activities under his jurisdiction require an environmental review, and for preparing all such reviews, negative declarations, and notices of intent.

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(2) *Regional Administrators.* Each Regional Administrator, in consultation with the Governor's Representative, is responsible for determining, in accordance with Subpart A, whether proposed State activities in his Region, as stated in Annual Work Programs, require an environmental review, and for the preparing all such reviews, negative declarations, and notices of intent.

(3) *Associate Administrator for Planning and Evaluation.* The Associate Administrator for Planning and Evaluation may request in accordance with the requirements of this order, that the appropriate Associate Administrator or Regional Administrator prepare an Environmental review or Environmental Impact Statement for any proposed or continuing NHTSA action, or comment on any environmental statement prepared by other agencies.

(b) *Coordination.* Coordination with appropriate local, State and Federal agencies should be accomplished during the early stages by the responsible official to assist in identifying areas of significance and concern. Existing procedures, including those established under the Office of Management and Budget (OMB) Revised Circular A-95, should be used to the greatest extent practicable to accomplish this early coordination.

(c) *Applicants.* (1) Each applicant for a grant, loan, or other financial assistance for use in State and community projects may be requested to submit, with the original application, an environmental assessment of the proposed project.

(2) Under OMB Revised Circular A-95, "Evaluation, Review, and Coordination of Federal Assistance Programs and Projects," and DOT 4600.4B, "Evaluation, Review and Coordination of DOT Assistance Programs and Projects," dated February 27, 1974, a grant applicant must notify the clearinghouse of its intention to apply for Federal program assistance. The notification must solicit comments on the project and its impacts from appropriate State and local agencies. Since it is the NHTSA's policy to assure that (i) interested parties and Federal, State, and local agencies receive early notification of the decision to prepare an environmental

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day time period is measured from the date of publication in the FEDERAL REGISTER of the list of weekly filings of environmental impact statements with the CEQ, but the 30-day period is computed from the date of receipt by the CEQ.

§ 520.34 Comments on environmental statements prepared by other agencies.

(a) All requests for NHTSA's views on a DEIS or a proposed action undergoing environmental review by another agency will be transmitted to the Associate Administrator for Planning and Evaluation for action or referral to TES where appropriate. Offices within NHTSA may be requested by the Associate Administrator for Planning and Evaluation to supply any pertinent information and comments for a coordinated agency response.

(b) NHTSA's comments and the comments of any offices responding to a request by the Associate Administrator for Planning and Evaluation should be organized in a manner consistent with the structure of an environmental review set out in § 520.21(e). NHTSA programs that are environmentally related to the proposed action under review should be identified so interrelationships may receive due consideration.

(c) Copies of NHTSA's comments on environmental statements prepared by other agencies shall be distributed as follows:

(1) The original and 1 copy to the requesting agency;

(2) 1 copy to TES-70; and

(3) 5 copies to CEQ.

(d) Requests by the public for copies should be referred to the agency originating the statement.

ATTACHMENT 1 TO PART 520—FORM AND CONTENT OF STATEMENT

1. Form. a. Each statement will be headed as follows:

DEPARTMENT OF TRANSPORTATION NATIONAL
HIGHWAY TRAFFIC SAFETY ADMINISTRATION

(Draft) Environmental Impact Statement Pursuant to section 102(2)(C), Pub. L. 91-190; 83 Stat. 853; 42 U.S.C. 4332(2)(C).

b. The heading specified above shall be modified to indicate that the statement also covers sections 4(f) of the DOT Act or 106 of

the National Historic Preservation Act, when appropriate.

c. Each statement will, as a minimum, contain sections corresponding to paragraph 3 herein, supplemented as necessary to cover other matters provided in this Attachment.

d. The format for the summary to accompany draft and final environmental statements is as follows:

SUMMARY

(Check one) () Draft () Final; Department of Transportation, National Highway Traffic Safety Administration. Name, address, and telephone number of individual who can be contacted for additional information about the proposed action or the statement. (Note: DOT Order 2100.2 prescribes procedures for reporting public contacts in rule-making.)

(1) Name of Action. (Check one) () Administrative Action. () Legislative Action.

(2) Brief description of action indicating what States (and counties) are particularly affected.

(3) Summary of environmental impact and adverse environmental effects.

(4) List alternatives considered.

(5)(a) (For draft statements) List all Federal, State, and local agencies from which comments have been requested.

(b) (For final statements) List all Federal, State, and local agencies and other sources from which written comments have been received.

(6) Dates the draft statement and the final statement if issued were made available to the Council on Environmental Quality and the public.

2. Guidance as to content of statement. The following paragraphs of this Attachment are intended to be considered, where relevant, as guidance regarding the content of environmental statements. This guidance is expected to be supplemented by research reports, guidance on methodology, and other material from the literature as may be pertinent to evaluation of relevant environmental factors.

3. General content. The following points are to be covered:

a. A description of the proposed Federal action (e.g., "The proposed Federal action is approval of a grant application to construct * * *"), a statement of its purpose, and a description of the environment affected, including information, summary technical data, and maps and diagrams where relevant, adequate to permit an assessment of potential environmental impact by commenting offices and the public.

(1) Highly technical and specialized analyses and data should generally be avoided in the body of the draft impact statement. Such materials should be appropriately summarized in the body of the environmental statement and attached as appendices or

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footnoted with adequate bibliographic references.

(2) The statement should succinctly describe the environment of the area affected as it exists prior to a proposed action, including other related Federal activities in the area, their interrelationships, and cumulative environmental impact. The amount of detail provided in such descriptions should be commensurate with the extent and expected impact of the action, and with the amount of information required at the particular level of decision making (planning, feasibility, design, etc.). In order to insure accurate descriptions and environmental considerations, site visits should be made where appropriate.

(3) The statement should identify, as appropriate, population and growth characteristics of the affected area and any population and growth assumptions used to justify the project or program or to determine secondary population and growth impacts resulting from the proposed action and its alternatives (see paragraph 3c(2)). In discussing these population aspects, the statement should give consideration to using the rates of growth in the region of the project contained in the projection compiled for the Water Resources Council by the Bureau of Economic Analysis of the Department of Commerce and the Economic Research Service of the Department of Agriculture (the OBERS projection).

(4) The sources of data used to identify, quantify, or evaluate any or all environmental consequences must be expressly noted.

b. The relationship of the proposed action and how it may conform to or conflict with adopted or proposed land use plans, policies, controls, and goals and objectives as have been promulgated by affected communities. Where a conflict or inconsistency exists, the statement should describe the extent of reconciliation and the reasons for proceeding notwithstanding the absence of full reconciliation.

c. The probable impact of the proposed action on the environment. (1) This requires assessment of the positive and negative effects of the proposed action as it affects both national and international human environment. The attention given to different environmental factors will vary according to the nature, scale, and location of proposed actions. Among factors to be considered should be the potential effect of the action on such aspects of the environment as those listed in Attachment 2, and in section 520.5(b), *supra*. Primary attention should be given in the statement to discussing those factors most evidently impacted by the proposed action.

(2) Secondary and other foreseeable effects, as well as primary consequences for the environment, should be included in the analyses. Secondary effects, such as the impact on fuel

consumption, emissions, or noise levels of automobiles or in the use of toxic or scarce materials, may be more substantial than the primary effects of the original action.

d. Alternatives to the proposed action, including, where relevant, those not within the existing authority of the responsible preparing office. Section 102(2)(D) of NEPA requires the responsible agency to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” A rigorous exploration and an objective evaluation of the environmental impacts of all reasonable alternative actions, particularly those that might enhance environmental quality or avoid some or all of the adverse environmental effects, are essential. Sufficient analysis of such alternatives and their environmental benefits, costs, and risks should accompany the proposed action through the review process in order not to foreclose prematurely options which might enhance environmental quality or have less detrimental effects. Examples of such alternatives include: The alternatives of not taking any action or of postponing action pending further study; alternatives requiring actions of a significantly different nature which would provide similar benefits with different environmental impacts, e.g., low capital intensive improvements, mass transit alternatives to highway construction; alternatives related to different locations or designs or details of the proposed action which would present different environmental impacts. In each case, the analysis should be sufficiently detailed to reveal comparative evaluation of the environmental benefits, costs, and risks of the proposed action and each reasonable alternative. Where an existing impact statement already contains such an analysis its treatment of alternatives may be incorporated, provided such treatment is current and relevant to the precise purpose of the proposed action.

e. Any probable adverse environmental effects which cannot be avoided (such as water or air pollution, noise, undesirable land use patterns, or impacts on public parks and recreation areas, wildlife and waterfowl refuges, or on historic sites, damage to life systems, traffic congestion, threats to health, or other consequences adverse to the environmental goals set out in section 101(b) of NEPA). This should be a brief section summarizing in one place those effects discussed in paragraph 3c that are adverse and unavoidable under the proposed action. Included for purposes of contrast should be a clear statement of how all adverse effects will be mitigated. Where mitigating steps are included in the statement, the responsible official shall see that they are carried out.

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f. The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. This section should contain a brief discussion of the extent to which the proposed action involves tradeoffs between short-term environmental gains at the expense of long-term losses, or vice versa, and a discussion of the extent to which the proposed action forecloses future options.

g. Any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented. This requires identification of unavoidable impacts and the extent to which the action irreversibly curtails the range of potential uses of the environment. "Resources" means not only the labor and materials devoted to an action but also the natural and cultural resources lost or destroyed.

h. An indication of what other interests and considerations of Federal policy are thought to offset the adverse environmental effects of the proposed action identified pursuant to subparagraphs (c) and (e) of this paragraph. The statement should also indicate the extent to which these stated countervailing benefits could be realized by following reasonable alternatives to the proposed action (as identified in subparagraph (d) of this paragraph) that would avoid some or all of the adverse environmental effects. In this connection if a cost-benefit analysis of the proposed action has been prepared, it, or a summary, should be attached to the environmental impact statement, and should clearly indicate the extent to which environmental costs have not been reflected in such analysis.

i. A discussion of problems and objections raised by other Federal agencies, State and local entities, and citizens in the review process, and the disposition of the issues involved and the reasons therefor. (This section shall be added to the final environmental statement at the end of the review process.)

(1) The draft and final statements should document issues raised through consultations with Federal, State, and local agencies with jurisdiction or special expertise and with citizens, of actions taken in response to comments, public hearings, and other citizens involvement proceedings.

(2) Any unresolved environmental issues and efforts to resolve them, through further consultations or otherwise, should be identified in the final statement. For instance, where an agency comments that the statement has inadequate analysis or that the agency has reservations concerning the impacts, or believes that the impacts are too adverse for approval, either the issue should be resolved or the final statement should reflect efforts to resolve the issue and set forth any action that will result.

(3) The statement should reflect that every effort was made to discover and discuss all major points of view on the environmental effects of the proposed action and alternatives in the draft statement. However, where opposing professional views and responsible opinion have been overlooked in the draft statement and are raised through the commenting process, the environmental effects of the action should be reviewed in light of those views. A meaningful reference should be made in the final statement to the existence of any responsible opposing view not adequately discussed in the draft statement indicating responses to the issues raised.

(4) All substantive comments received on the draft (or summaries of responses from the public which have been exceptionally voluminous) should be attached to the final statement, whether or not each such comment is thought to merit individual discussion in the text of the statement.

j. Draft statement should indicate at appropriate points in the text any underlying studies, reports, and other information obtained and considered in preparing the statement, including any cost-benefit analyses prepared. In the case of documents not likely to be easily accessible (such as internal studies or reports), the statement should indicate how such information may be obtained. If such information is attached to the statement, care should be taken to insure that the statement remains an essentially self-contained instrument, capable of being understood by the reader without the need for undue cross reference.

4. Publicly owned parklands, recreational areas, wildlife and waterfowl refuges and historic sites. The following points are to be covered:

a. Description of "any publicly owned land from a public park, recreational area or wildlife and waterfowl refuge" or "any land from an historic site" affected or taken by the project. This includes its size, available activities, use, patronage, unique or irreplaceable qualities, relationship to other similarly used lands in the vicinity of the project, maps, plans, slides, photographs, and drawings showing a sufficient scale and detail the project. This also includes its impact on park, recreation, wildlife, or historic areas, and changes in vehicular or pedestrian access.

b. Statement of the "national, State or local significance" of the entire park, recreational area, refuge, or historic site "as determined by the Federal, State or local officials having jurisdiction thereof."

(1) In the absence of such a statement lands will be presumed to be significant. Any statement of "insignificance" by the official having jurisdiction is subject to review by the Department as to whether such statement is capricious.

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(2) Where Federal lands are administered for multiple uses, the Federal official having jurisdiction over the lands shall determine whether the subject lands are in fact being used for park, recreation, wildlife, waterfowl, or historic purposes.

c. Similar data, as appropriate, for alternative designs and locations, including detailed cost estimates (with figures showing percentage differences in total project costs) and technical feasibility, and appropriate analysis of the alternatives, including any unique problems present and evidence that the cost or community disruptions resulting from alternative routes reach extraordinary magnitudes. This portion of the statement should demonstrate compliance with the Supreme Court's statement in the Overton Park case, as follows:

[The] very existence of the statute indicates that protection of parkland was to be given paramount importance. The few green havens that are public parks were not to be lost unless there were truly unusual factors present in a particular case or the cost or community disruption resulting from alternative routes reached extraordinary magnitudes. If the statutes are to have any meaning, the Secretary cannot approve the destruction of parkland unless he finds that alternative routes present unique problems. 401 U.S. 402, 412 (1971).

d. If there is no feasible and prudent alternative, description of all planning undertaken to minimize harm to the protected area and statement of actions taken or to be taken to implement this planning, including measures to maintain or enhance the natural beauty of the lands traversed.

(1) Measures to minimize harm may include replacement of land and facilities, providing land or facilities, provision for functional replacement of the facility (see 49 CFR 25.267).

(2) Design measures to minimize harm; e.g., tunneling, cut and cover, cut and fill, treatment of embankments, planting, screening, maintenance of pedestrian or bicycle paths and noise mitigation measures all reflecting utilization of appropriate interdisciplinary design personnel.

e. Evidence of concurrence or description of efforts to obtain concurrence of Federal, State or local officials having jurisdiction over the section 4(f) property regarding the action proposed and the measures planned to minimize harm.

f. If Federally-owned properties are involved in highway projects, the final statement shall include the action taken or an indication of the expected action after filing a map of the proposed use of the land or other appropriate documentation with the Secretary of the Department supervising the land (23 U.S.C. 317).

g. If land acquired with Federal grant money (Department of Housing and Urban

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Development open space or Bureau of Outdoor Recreation land and water conservation funds) is involved, the final statement shall include appropriate communications with the grantor agency.

h. TGC will determine application of section 4(f) to public interests in lands, such as easements, reversions, etc.

i. A specific finding by the Administrator that there is no feasible and prudent alternative and that the proposal includes all possible planning to minimize harm to the "4(f) area" involved.

5. Properties and sites of historic and cultural significance. The statement should document actions taken to preserve and enhance districts, sites, buildings, structures, and objects of historical, architectural, archeological, or cultural significance affected by the action.

a. Draft environmental statements should include identification, through consulting the National Register and applying the National Register Criteria (36 CFR part 800), of properties that are included in or eligible for inclusion in the National Register of Historic Places that may be affected by the project. The National Register is published in its entirety each February in the FEDERAL REGISTER. Monthly additions and listings of eligible properties are published in the FEDERAL REGISTER the first Tuesday of each month. The Secretary of the Interior will advise, upon request, whether properties are eligible for the National Register.

b. If application of the Advisory Council on Historic Preservation's (ACHP) Criteria of Effect (36 CFR part 800) indicates that the project will have an effect upon a property included in or eligible for inclusion in the National Register of Historic Places, the draft environmental statement should document the effect. Evaluation of the effect should be made in consultation with the State Historic Preservation Officer (SHPO) and in accordance with the ACHP's criteria of Adverse Effect (36 CFR part 800).

c. Determinations of no adverse effect should be documented in the draft statement with evidence of the application of the ACHP's Criteria of Adverse Effect, the views of the appropriate State Historic Preservation Officer, and submission of the determination to the ACHP for review.

d. If the project will have an adverse effect upon a property included in or eligible for inclusion in the National Register of Historic Places, the final environmental statement should include either an executed Memorandum of Agreement or comments from the Council after consideration of the project at a meeting of the ACHP and an account of actions to be taken in response to the comments of the ACHP. Procedures for obtaining a Memorandum of Agreement and the comments of the Council are found in 36 CFR part 800.

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e. To determine whether the project will have an effect on properties of State or local historical, architectural, archaeological, or cultural significance not included in or eligible for inclusion in the National Register, the responsible official should consult with the State Historic Preservation Officer, with the local official having jurisdiction of the property, and where appropriate, with historical societies, museums, or academic institutions having expertise with regard to the property. Use of land from historic properties of Federal, State and local significance as determined by the official having jurisdiction thereof involves section 4(f) of the DOT Act and documentation should include information necessary to consider a 4(f) determination (see paragraph 4).

6. Impacts of the proposed action on the human environment involving community disruption and relocation. a. The statement should include a description of probable impact sufficient to enable an understanding of the extent of the environmental and social impact of the project alternatives and to consider whether relocation problems can be properly handled. This would include the following information obtainable by visual inspection of the proposed affected area and from secondary sources and community sources when available.

(1) An estimate of the households to be displaced including the family characteristics (e.g., minorities, and income levels, tenure, the elderly, large families).

(2) Impact on the human environment of an action which divides or disrupts an established community, including where pertinent, the effect of displacement on types of families and individuals affected, effect of streets cut off, separation of residences from community facilities, separation of residential areas.

(3) Impact on the neighborhood and housing to which relocation is likely to take place (e.g., lack of sufficient housing for large families, doublings up).

(4) An estimate of the businesses to be displaced, and the general effect of business relocation on the economy of the community.

(5) A discussion of relocation housing in the area and the ability to provide adequate relocation housing for the types of families to be displaced. If the resources are insufficient to meet the estimated displacement needs, a description of the actions proposed to remedy this situation including, if necessary, use of housing of last resort.

(6) Results of consultation with local officials and community groups regarding the impacts to the community affected. Relocation agencies and staff and other social agencies can help to describe probable social impacts of this proposed action.

(7) Where necessary, special relocation advisory services to be provided the elderly, handicapped and illiterate regarding inter-

pretations of benefits, assistance in selecting replacement housing and consultation with respect to acquiring, leasing, and occupying replacement housing.

b. This data should provide the preliminary basis for assurance of the availability of relocation housing as required by DOT 5620.1, Replacement Housing Policy, dated June 24, 1970, and 49 CFR 25.53.

7. Considerations relating to pedestrians and bicyclists. Where appropriate, the statement should discuss impacts on and consideration to be given in the development of the project to pedestrian and bicycle access, movement and safety within the affected area, particularly in medium and high density commercial and residential areas.

8. Other social impacts. The general social groups specially benefitted or harmed by the proposed action should be identified in the statement including the following:

a. Particular effects of a proposal on the elderly, handicapped, non-drivers, transit dependent, or minorities should be described to the extent reasonably predictable.

b. How the proposal will facilitate or inhibit their access to jobs, educational facilities, religious institutions, health and welfare services, recreational facilities, social and cultural facilities, pedestrian movement facilities, and public transit services.

9. Standards as to noise, air, and water pollution. The statement shall reflect sufficient analysis of the effects of the proposed action on attainment and maintenance of any environmental standards established by law or administrative determination (e.g., noise, ambient air quality, water quality) including the following documentation:

a. With respect to water quality, there should be consultation with the agency responsible for the State water pollution control program as to conformity with standards and regulations regarding storm sewer discharge sedimentation control, and other non-point source discharges.

b. The comments or determinations of the offices charged with administration of the State's implementation plan for air quality as to the consistency of the project with State plans for the implementation of ambient air quality standards.

c. Conformity to adopted noise standards, compatible, if appropriate, with different land uses.

10. Energy supply and natural resources development. Where applicable, the statement should reflect consideration of whether the project or program will have any effect on either the production or consumption of energy and other natural resources, and discuss such effects if they are significant.

11. Flood hazard evaluation. When an alternative under consideration encroaches on a flood plain, the statement should include evidence that studies have been made and evidence of consultations with agencies with

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expertise have been carried out. Necessary measures to handle flood hazard problems should be described. In compliance with Executive Order 11296, and Flood Hazard Guidelines for Federal Executive Agencies, promulgated by the Water Resources Council, or how such requirements can be met during project development.

12. Considerations relating to wetlands or coastal zones. Where wetlands or coastal zones are involved, the statement should include:

a. Information on location, types, and extent of wetlands areas which might be affected by the proposed action.

b. An assessment of the impacts resulting from both construction and operation of the project on the wetlands and associated wildlife, and measures to minimize adverse impacts.

c. A statement by the local representative of the Department of the Interior, and any other responsible officials with special expertise, setting forth his views on the impacts of the project on the wetlands, the worth of the particular wetlands areas involved to the community and to the Nation, and recommendations as to whether the proposed action should proceed, and, if applicable, along what alternative route.

d. Where applicable, a discussion of how the proposed project relates to the State coastal zone management program for the particular State in which the project is to take place.

13. Construction impacts. In general, adverse impacts during construction will be of less importance than long-term impacts of a proposal. Nonetheless, statements should appropriately address such matters as the following identifying any special problem areas:

a. Noise impacts from construction and any specifications setting maximum noise levels.

b. Disposal of spoil and effect on borrow areas and disposal sites (include specifications where special problems are involved).

c. Measures to minimize effects on traffic and pedestrians.

14. Land use and urban growth. The statement should include, to the extent relevant and predictable:

a. The effect of the project on land use, development patterns, and urban growth.

b. Where significant land use and development impacts are anticipated, identify public facilities needed to serve the new development and any problems or issues which would arise in connection with these facilities, and the comments of agencies that would provide these facilities.

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ATTACHMENT 2 TO PART 520—AREAS OF ENVIRONMENTAL IMPACT AND FEDERAL AGENCIES AND FEDERAL-STATE AGENCIES WITH JURISDICTION BY LAW OR SPECIAL EXPERTISE TO COMMENT THEREON

EDITORIAL NOTE: Filed as part of the original document. For text see 39 FR 32546, Sept. 30, 1975.

ATTACHMENT 3 TO PART 520—OFFICES WITHIN FEDERAL AGENCIES AND FEDERAL-STATE AGENCIES FOR INFORMATION REGARDING THE AGENCIES' IMPACT STATEMENTS FOR WHICH COMMENTS ARE REQUESTED

EDITORIAL NOTE: Filed as part of the original document. For text see 39 FR 35248, Sept. 30, 1975.

ATTACHMENT 4 TO PART 520—STATE AND LOCAL AGENCY REVIEW OF IMPACT STATEMENTS

1. OBM Revised Circular No. A-95 through its system of clearinghouses provides a means for securing the views of State and local environmental agencies, which can assist in the preparation of impact statements. Under A-95, review of the proposed project in the case of federally assisted projects (Part I of A-95) generally takes place prior to the preparation of the impact statement. Therefore, comments on the environmental effects of the proposed project that are secured during this stage of the A-95 process represent inputs to the environmental impact statement.

2. In the case of direct Federal development (Part II of A-95), Federal agencies are required to consult with clearinghouses at the earliest practicable time in the planning of the project or activity. Where such consultation occurs prior to completion of the draft impact statement, comments relating to the environmental effects of the proposed action would also represent inputs to the environmental impact statement.

3. In either case, whatever comments are made on environmental effects of proposed Federal or federally assisted projects by clearinghouses, or by State and local environmental agencies through clearinghouses, in the course of the A-95 review should be attached to the draft impact statement when it is circulated for review. Copies of the statement should be sent to the agencies making such comments. Whether those agencies then elect to comment again on the basis of the draft impact statement is a matter to be left to the discretion of the commenting agency depending on its resources, the significance of the project and the extent

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caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See §402.17).

Environmental baseline refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline.

* * * * *

Programmatic consultation is a consultation addressing an agency's multiple actions on a program, region, or other basis. Programmatic consultations allow the Services to consult on the effects of programmatic actions such as:

- (1) Multiple similar, frequently occurring, or routine actions expected to be implemented in particular geographic areas; and
- (2) A proposed program, plan, policy, or regulation providing a framework for future proposed actions.

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§ 402.03 Applicability.

Section 7 and the requirements of this part apply to all actions in which there is discretionary Federal involvement or control.

[74 FR 20423, May 4, 2009]

§ 402.04 Counterpart regulations.

The consultation procedures set forth in this part may be superseded for a particular Federal agency by joint counterpart regulations among that agency, the Fish and Wildlife Service, and the National Marine Fisheries Service. Such counterpart regulations shall be published in the FEDERAL REGISTER in proposed form and shall be

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subject to public comment for at least 60 days before final rules are published.

§ 402.05 Emergencies.

(a) Where emergency circumstances mandate the need to consult in an expedited manner, consultation may be conducted informally through alternative procedures that the Director determines to be consistent with the requirements of sections 7(a)-(d) of the Act. This provision applies to situations involving acts of God, disasters, casualties, national defense or security emergencies, etc.

(b) Formal consultation shall be initiated as soon as practicable after the emergency is under control. The Federal agency shall submit information on the nature of the emergency action(s), the justification for the expedited consultation, and the impacts to endangered or threatened species and their habitats. The Service will evaluate such information and issue a biological opinion including the information and recommendations given during the emergency consultation.

§ 402.06 Coordination with other environmental reviews.

(a) Consultation, conference, and biological assessment procedures under section 7 may be consolidated with interagency cooperation procedures required by other statutes, such as the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*, implemented at 40 CFR parts 1500-1508) or the Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661 *et seq.*). Satisfying the requirements of these other statutes, however, does not in itself relieve a Federal agency of its obligations to comply with the procedures set forth in this part or the substantive requirements of section 7. The Service will attempt to provide a coordinated review and analysis of all environmental requirements.

(b) Where the consultation or conference has been consolidated with the interagency cooperation procedures required by other statutes such as NEPA or FWCA, the results should be included in the documents required by those statutes.

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the biological assessment requirement for the proposed action by incorporating by reference the earlier biological assessment, plus any supporting data from other documents that are pertinent to the consultation, into a written certification that:

(1) The proposed action involves similar impacts to the same species in the same geographic area;

(2) No new species have been listed or proposed or no new critical habitat designated or proposed for the action area; and

(3) The biological assessment has been supplemented with any relevant changes in information.

(h) *Permit requirements.* If conducting a biological assessment will involve the taking of a listed species, a permit under section 10 of the Act (16 U.S.C. 1539) and part 17 of this title (with respect to species under the jurisdiction of the FWS) or parts 220, 222, and 227 of this title (with respect to species under the jurisdiction of the NMFS) is required.

(i) *Completion time.* The Federal agency or the designated non-Federal representative shall complete the biological assessment within 180 days after its initiation (receipt of or concurrence with the species list) unless a different period of time is agreed to by the Director and the Federal agency. If a permit or license applicant is involved, the 180-day period may not be extended unless the agency provides the applicant, before the close of the 180-day period, with a written statement setting forth the estimated length of the proposed extension and the reasons why such an extension is necessary.

(j) *Submission of biological assessment.* The Federal agency shall submit the completed biological assessment to the Director for review. The Director will respond in writing within 30 days as to whether or not he concurs with the findings of the biological assessment. At the option of the Federal agency, formal consultation may be initiated under § 402.14(c) concurrently with the submission of the assessment.

(k) *Use of the biological assessment.* (1) The Federal agency shall use the biological assessment in determining whether formal consultation or a conference is required under § 402.14 or

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§ 402.10, respectively. If the biological assessment indicates that there are no listed species or critical habitat present that are likely to be adversely affected by the action and the Director concurs as specified in paragraph (j) of this section, then formal consultation is not required. If the biological assessment indicates that the action is not likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat, and the Director concurs, then a conference is not required.

(2) The Director may use the results of the biological assessment in (i) determining whether to request the Federal agency to initiate formal consultation or a conference, (ii) formulating a biological opinion, or (iii) formulating a preliminary biological opinion.

§ 402.13 Informal consultation.

(a) Informal consultation is an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency or the designated non-Federal representative, designed to assist the Federal agency in determining whether formal consultation or a conference is required. If during informal consultation it is determined by the Federal agency, with the written concurrence of the Service, that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary.

(b) During informal consultation, the Service may suggest modifications to the action that the Federal agency and any applicant could implement to avoid the likelihood of adverse effects to listed species or critical habitat.

[74 FR 20423, May 4, 2009]

EFFECTIVE DATE NOTE: At 84 FR 45016, Aug. 27, 2019, § 402.13 was amended by revising paragraph (a) and adding paragraph (c), effective Sept. 26, 2019. At 84 FR 50333, Sept. 25, 2019, this rule was delayed until Oct. 28, 2019. For the convenience of the user, the added and revised text is set forth as follows:

§ 402.13 Informal consultation.

(a) Informal consultation is an optional process that includes all discussions, correspondence, etc., between the Service and

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the Federal agency or the designated non-Federal representative, designed to assist the Federal agency in determining whether formal consultation or a conference is required.

* * * * *

(c) If during informal consultation it is determined by the Federal agency, with the written concurrence of the Service, that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary.

(1) A written request for concurrence with a Federal agency's not likely to adversely affect determination shall include information similar to the types of information described for formal consultation at §402.14(c)(1) sufficient for the Service to determine if it concurs.

(2) Upon receipt of a written request consistent with paragraph (c)(1) of this section, the Service shall provide written concurrence or non-concurrence with the Federal agency's determination within 60 days. The 60-day timeframe may be extended upon mutual consent of the Service, the Federal agency, and the applicant (if involved), but shall not exceed 120 days total from the date of receipt of the Federal agency's written request consistent with paragraph (c)(1) of this section.

§ 402.14 Formal consultation.

(a) *Requirement for formal consultation.* Each Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required, except as noted in paragraph (b) of this section. The Director may request a Federal agency to enter into consultation if he identifies any action of that agency that may affect listed species or critical habitat and for which there has been no consultation. When such a request is made, the Director shall forward to the Federal agency a written explanation of the basis for the request.

(b) *Exceptions.* (1) A Federal agency need not initiate formal consultation if, as a result of the preparation of a biological assessment under §402.12 or as a result of informal consultation with the Service under §402.13, the Federal agency determines, with the written concurrence of the Director, that the proposed action is not likely to ad-

versely affect any listed species or critical habitat.

(2) A Federal agency need not initiate formal consultation if a preliminary biological opinion, issued after early consultation under §402.11, is confirmed as the final biological opinion.

(c) *Initiation of formal consultation.* A written request to initiate formal consultation shall be submitted to the Director and shall include:

(1) A description of the action to be considered;

(2) A description of the specific area that may be affected by the action;

(3) A description of any listed species or critical habitat that may be affected by the action;

(4) A description of the manner in which the action may affect any listed species or critical habitat and an analysis of any cumulative effects;

(5) Relevant reports, including any environmental impact statement, environmental assessment, or biological assessment prepared; and

(6) Any other relevant available information on the action, the affected listed species, or critical habitat.

Formal consultation shall not be initiated by the Federal agency until any required biological assessment has been completed and submitted to the Director in accordance with §402.12. Any request for formal consultation may encompass, subject to the approval of the Director, a number of similar individual actions within a given geographical area or a segment of a comprehensive plan. This does not relieve the Federal agency of the requirements for considering the effects of the action as a whole.

(d) *Responsibility to provide best scientific and commercial data available.* The Federal agency requesting formal consultation shall provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat. This information may include the results of studies or surveys conducted by the Federal agency or the designated non-Federal representative. The Federal agency shall

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provide any applicant with the opportunity to submit information for consideration during the consultation.

(e) *Duration and extension of formal consultation.* Formal consultation concludes within 90 days after its initiation unless extended as provided below. If an applicant is not involved, the Service and the Federal agency may mutually agree to extend the consultation for a specific time period. If an applicant is involved, the Service and the Federal agency may mutually agree to extend the consultation provided that the Service submits to the applicant, before the close of the 90 days, a written statement setting forth:

(1) The reasons why a longer period is required,

(2) The information that is required to complete the consultation, and

(3) The estimated date on which the consultation will be completed. A consultation involving an applicant cannot be extended for more than 60 days without the consent of the applicant. Within 45 days after concluding formal consultation, the Service shall deliver a biological opinion to the Federal agency and any applicant.

(f) *Additional data.* When the Service determines that additional data would provide a better information base from which to formulate a biological opinion, the Director may request an extension of formal consultation and request that the Federal agency obtain additional data to determine how or to what extent the action may affect listed species or critical habitat. If formal consultation is extended by mutual agreement according to §402.14(e), the Federal agency shall obtain, to the extent practicable, that data which can be developed within the scope of the extension. The responsibility for conducting and funding any studies belongs to the Federal agency and the applicant, not the Service. The Service's request for additional data is not to be construed as the Service's opinion that the Federal agency has failed to satisfy the information standard of section 7(a)(2) of the Act. If no extension of formal consultation is agreed to, the Director will issue a biological opinion using the best scientific and commercial data available.

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(g) *Service responsibilities.* Service responsibilities during formal consultation are as follows:

(1) Review all relevant information provided by the Federal agency or otherwise available. Such review may include an on-site inspection of the action area with representatives of the Federal agency and the applicant.

(2) Evaluate the current status of the listed species or critical habitat.

(3) Evaluate the effects of the action and cumulative effects on the listed species or critical habitat.

(4) Formulate its biological opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

(5) Discuss with the Federal agency and any applicant the Service's review and evaluation conducted under paragraphs (g)(1) through (3) of this section, the basis for any finding in the biological opinion, and the availability of reasonable and prudent alternatives (if a jeopardy opinion is to be issued) that the agency and the applicant can take to avoid violation of section 7(a)(2). The Service will utilize the expertise of the Federal agency and any applicant in identifying these alternatives. If requested, the Service shall make available to the Federal agency the draft biological opinion for the purpose of analyzing the reasonable and prudent alternatives. The 45-day period in which the biological opinion must be delivered will not be suspended unless the Federal agency secures the written consent of the applicant to an extension to a specific date. The applicant may request a copy of the draft opinion from the Federal agency. All comments on the draft biological opinion must be submitted to the Service through the Federal agency, although the applicant may send a copy of its comments directly to the Service. The Service will not issue its biological opinion prior to the 45-day or extended deadline while the draft is under review by the Federal agency. However, if the Federal agency submits comments to the Service regarding the draft biological opinion within 10 days of the deadline for issuing the opinion, the Service

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is entitled to an automatic 10-day extension on the deadline.

(6) Formulate discretionary conservation recommendations, if any, which will assist the Federal agency in reducing or eliminating the impacts that its proposed action may have on listed species or critical habitat.

(7) Formulate a statement concerning incidental take, if such take is reasonably certain to occur.

(8) In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation.

(h) *Biological opinions.* The biological opinion shall include:

(1) A summary of the information on which the opinion is based;

(2) A detailed discussion of the effects of the action on listed species or critical habitat; and

(3) The Service's opinion on whether the action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "jeopardy biological opinion"); or, the action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "no jeopardy" biological opinion). A "jeopardy" biological opinion shall include reasonable and prudent alternatives, if any. If the Service is unable to develop such alternatives, it will indicate that to the best of its knowledge there are no reasonable and prudent alternatives.

(i) *Incidental take.* (1) In those cases where the Service concludes that an action (or the implementation of any reasonable and prudent alternatives) and the resultant incidental take of listed species will not violate section 7(a)(2), and, in the case of marine mammals, where the taking is authorized pursuant to section 101(a)(5) of the Marine Mammal Protection Act of 1972, the Service will provide with the biological opinion a statement concerning incidental take that:

(i) Specifies the impact, *i.e.*, the amount or extent, of such incidental taking on the species (A surrogate (*e.g.*, similarly affected species or habitat or ecological conditions) may be used to express the amount or extent of anticipated take provided that the biological opinion or incidental take statement: Describes the causal link between the surrogate and take of the listed species, explains why it is not practical to express the amount or extent of anticipated take or to monitor take-related impacts in terms of individuals of the listed species, and sets a clear standard for determining when the level of anticipated take has been exceeded.);

(ii) Specifies those reasonable and prudent measures that the Director considers necessary or appropriate to minimize such impact;

(iii) In the case of marine mammals, specifies those measures that are necessary to comply with section 101(a)(5) of the Marine Mammal Protection Act of 1972 and applicable regulations with regard to such taking;

(iv) Sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or any applicant to implement the measures specified under paragraphs (i)(1)(ii) and (i)(1)(iii) of this section; and

(v) Specifies the procedures to be used to handle or dispose of any individuals of a species actually taken.

(2) Reasonable and prudent measures, along with the terms and conditions that implement them, cannot alter the basic design, location, scope, duration, or timing of the action and may involve only minor changes.

(3) In order to monitor the impacts of incidental take, the Federal agency or any applicant must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. The reporting requirements will be established in accordance with 50 CFR 13.45 and 18.27 for FWS and 50 CFR 216.105 and 222.301(h) for NMFS.

(4) If during the course of the action the amount or extent of incidental taking, as specified under paragraph (i)(1)(i) of this Section, is exceeded, the

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Federal agency must reinstate consultation immediately.

(5) Any taking which is subject to a statement as specified in paragraph (i)(1) of this section and which is in compliance with the terms and conditions of that statement is not a prohibited taking under the Act, and no other authorization or permit under the Act is required.

(6) For a framework programmatic action, an incidental take statement is not required at the programmatic level; any incidental take resulting from any action subsequently authorized, funded, or carried out under the program will be addressed in subsequent section 7 consultation, as appropriate. For a mixed programmatic action, an incidental take statement is required at the programmatic level only for those program actions that are reasonably certain to cause take and are not subject to further section 7 consultation.

(j) *Conservation recommendations.* The Service may provide with the biological opinion a statement containing discretionary conservation recommendations. Conservation recommendations are advisory and are not intended to carry any binding legal force.

(k) *Incremental steps.* When the action is authorized by a statute that allows the agency to take incremental steps toward the completion of the action, the Service shall, if requested by the Federal agency, issue a biological opinion on the incremental step being considered, including its views on the entire action. Upon the issuance of such a biological opinion, the Federal agency may proceed with or authorize the incremental steps of the action if:

(1) The biological opinion does not conclude that the incremental step would violate section 7(a)(2);

(2) The Federal agency continues consultation with respect to the entire action and obtains biological opinions, as required, for each incremental step;

(3) The Federal agency fulfills its continuing obligation to obtain sufficient data upon which to base the final biological opinion on the entire action;

(4) The incremental step does not violate section 7(d) of the Act concerning irreversible or irretrievable commitment of resources; and

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(5) There is a reasonable likelihood that the entire action will not violate section 7(a)(2) of the Act.

(1) *Termination of consultation.* (1) Formal consultation is terminated with the issuance of the biological opinion.

(2) If during any stage of consultation a Federal agency determines that its proposed action is not likely to occur, the consultation may be terminated by written notice to the Service.

(3) If during any stage of consultation a Federal agency determines, with the concurrence of the Director, that its proposed action is not likely to adversely affect any listed species or critical habitat, the consultation is terminated.

[51 FR 19957, June 3, 1986, as amended at 54 FR 40350, Sept. 29, 1989; 73 FR 76287, Dec. 16, 2008; 74 FR 20423, May 4, 2009; 80 FR 26844, May 11, 2015]

EFFECTIVE DATE NOTE: At 84 FR 45016, Aug. 27, 2019, § 402.14 was amended by:

- a. Revising paragraph (c);
- b. Removing the undesignated paragraph following paragraph (c);
- c. Revising paragraphs (g)(2), (4), and (8) and (h);
- d. Redesignating paragraph (l) as paragraph (m); and
- e. Adding a new paragraph (l), effective Sept. 26, 2019.

At 84 FR 50333, Sept. 25, 2019, this rule was delayed until Oct. 28, 2019.

For the convenience of the user, the added and revised text is set forth as follows:

§ 402.14 Formal consultation.

* * * * *

(c) *Initiation of formal consultation.* (1) A written request to initiate formal consultation shall be submitted to the Director and shall include:

(i) A description of the proposed action, including any measures intended to avoid, minimize, or offset effects of the action. Consistent with the nature and scope of the proposed action, the description shall provide sufficient detail to assess the effects of the action on listed species and critical habitat, including:

- (A) The purpose of the action;
- (B) The duration and timing of the action;
- (C) The location of the action;
- (D) The specific components of the action and how they will be carried out;
- (E) Maps, drawings, blueprints, or similar schematics of the action; and
- (F) Any other available information related to the nature and scope of the proposed

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action relevant to its effects on listed species or designated critical habitat.

(ii) A map or description of all areas to be affected directly or indirectly by the Federal action, and not merely the immediate area involved in the action (i.e., the action area as defined at § 402.02).

(iii) Information obtained by or in the possession of the Federal agency and any applicant on the listed species and designated critical habitat in the action area (as required by paragraph (c)(1)(ii) of this section), including available information such as the presence, abundance, density, or periodic occurrence of listed species and the condition and location of the species' habitat, including any critical habitat.

(iv) A description of the effects of the action and an analysis of any cumulative effects.

(v) A summary of any relevant information provided by the applicant, if available.

(vi) Any other relevant available information on the effects of the proposed action on listed species or designated critical habitat, including any relevant reports such as environmental impact statements and environmental assessments.

(2) A Federal agency may submit existing documents prepared for the proposed action such as NEPA analyses or other reports in substitution for the initiation package outlined in this paragraph (c). However, any such substitution shall be accompanied by a written summary specifying the location of the information that satisfies the elements above in the submitted document(s).

(3) Formal consultation shall not be initiated by the Federal agency until any required biological assessment has been completed and submitted to the Director in accordance with § 402.12.

(4) Any request for formal consultation may encompass, subject to the approval of the Director, a number of similar individual actions within a given geographical area, a programmatic consultation, or a segment of a comprehensive plan. The provision in this paragraph (c)(4) does not relieve the Federal agency of the requirements for considering the effects of the action or actions as a whole.

* * * * *

(g) * * *

(2) Evaluate the current status and environmental baseline of the listed species or critical habitat.

* * * * *

(4) Add the effects of the action and cumulative effects to the environmental baseline and in light of the status of the species and critical habitat, formulate the Service's opinion as to whether the action is likely to

jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

* * * * *

(8) In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions as proposed or taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation. Measures included in the proposed action or a reasonable and prudent alternative that are intended to avoid, minimize, or offset the effects of an action are considered like other portions of the action and do not require any additional demonstration of binding plans.

(h) Biological opinions. (1) The biological opinion shall include:

(i) A summary of the information on which the opinion is based;

(ii) A detailed discussion of the environmental baseline of the listed species and critical habitat;

(iii) A detailed discussion of the effects of the action on listed species or critical habitat; and

(iv) The Service's opinion on whether the action is:

(A) Likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "jeopardy" biological opinion); or

(B) Not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "no jeopardy" biological opinion).

(2) A "jeopardy" biological opinion shall include reasonable and prudent alternatives, if any. If the Service is unable to develop such alternatives, the Service will indicate that to the best of its knowledge there are no reasonable and prudent alternatives.

(3) The Service may adopt all or part of:

(i) A Federal agency's initiation package; or

(ii) The Service's analysis required to issue a permit under section 10(a) of the Act in its biological opinion.

(4) A Federal agency and the Service may agree to follow an optional collaborative process that would further the ability of the Service to adopt the information and analysis provided by the Federal agency during consultation in the development of the Service's biological opinion to improve efficiency in the consultation process and reduce duplicative efforts. The Federal agency and the Service shall consider the nature, size, and scope of the action or its anticipated effects on listed species or critical habitat, and other relevant factors to determine whether

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an action or a class of actions is appropriate for this process. The Federal agency and the Service may develop coordination procedures that would facilitate adoption of the initiation package with any necessary supplementary analyses and incidental take statement to be added by the Service, if appropriate, as the Service's biological opinion in fulfillment of section 7(b) of the Act.

* * * * *

(1) *Expedited consultations.* Expedited consultation is an optional formal consultation process that a Federal agency and the Service may enter into upon mutual agreement. To determine whether an action or a class of actions is appropriate for this type of consultation, the Federal agency and the Service shall consider the nature, size, and scope of the action or its anticipated effects on listed species or critical habitat and other relevant factors. Conservation actions whose primary purpose is to have beneficial effects on listed species will likely be considered appropriate for expedited consultation.

(1) *Expedited timelines.* Upon agreement to use this expedited consultation process, the Federal agency and the Service shall establish the expedited timelines for the completion of this consultation process.

(2) *Federal agency responsibilities.* To request initiation of expedited consultation, the Federal agency shall provide all the information required to initiate consultation under paragraph (c) of this section. To maximize efficiency and ensure that it develops the appropriate level of information, the Federal agency is encouraged to develop its initiation package in coordination with the Service.

(3) *Service responsibilities.* In addition to the Service's responsibilities under the provisions of this section, the Service will:

(i) Provide relevant species information to the Federal agency and guidance to assist the Federal agency in completing its effects analysis in the initiation package; and

(ii) Conclude the consultation and issue a biological opinion within the agreed-upon timeframes.

* * * * *

§ 402.15 Responsibilities of Federal agency following issuance of a biological opinion.

(a) Following the issuance of a biological opinion, the Federal agency shall determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service's biological opinion.

(b) If a jeopardy biological opinion is issued, the Federal agency shall notify

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the Service of its final decision on the action.

(c) If the Federal agency determines that it cannot comply with the requirements of section 7(a)(2) after consultation with the Service, it may apply for an exemption. Procedures for exemption applications by Federal agencies and others are found in 50 CFR part 451.

§ 402.16 Reinitiation of formal consultation.

Reinitiation of formal consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and:

(a) If the amount or extent of taking specified in the incidental take statement is exceeded;

(b) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;

(c) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or

(d) If a new species is listed or critical habitat designated that may be affected by the identified action.

EFFECTIVE DATE NOTE: At 84 FR 45017, Aug. 27, 2019, § 402.16 was amended by:

- a. Revising the section heading;
- b. Redesignating paragraphs (a) through (d) as paragraphs (a)(1) through (4);
- c. Designating the introductory text as paragraph (a);
- d. Revising the newly designated paragraphs (a) introductory text and (a)(3); and
- e. Adding a new paragraph (b), effective Sept. 26, 2019.

At 84 FR 50333, Sept. 25, 2019, this rule was delayed until Oct. 28, 2019.

For the convenience of the user, the added and revised text is set forth as follows:

§ 402.16 Reinitiation of consultation.

(a) Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and:

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among alternatives). The summary will normally not exceed 15 pages.

§ 1502.13 Purpose and need.

The statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.

§ 1502.14 Alternatives including the proposed action.

This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (§1502.15) and the Environmental Consequences (§1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. In this section agencies shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.

(d) Include the alternative of no action.

(e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

§ 1502.15 Affected environment.

The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data

and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.

§ 1502.16 Environmental consequences.

This section forms the scientific and analytic basis for the comparisons under §1502.14. It shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) as is necessary to support the comparisons. The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. This section should not duplicate discussions in §1502.14. It shall include discussions of:

(a) Direct effects and their significance (§1508.8).

(b) Indirect effects and their significance (§1508.8).

(c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See §1506.2(d).)

(d) The environmental effects of alternatives including the proposed action. The comparisons under §1502.14 will be based on this discussion.

(e) Energy requirements and conservation potential of various alternatives and mitigation measures.

(f) Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.

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and the time of actual preparation, the notice of intent required by §1501.7 may be published at a reasonable time in advance of preparation of the draft statement.

PART 1508—TERMINOLOGY AND INDEX

- Sec.
- 1508.1 Terminology.
- 1508.2 Act.
- 1508.3 Affecting.
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- 1508.16 Lead agency.
- 1508.17 Legislation.
- 1508.18 Major Federal action.
- 1508.19 Matter.
- 1508.20 Mitigation.
- 1508.21 NEPA process.
- 1508.22 Notice of Intent.
- 1508.23 Proposal.
- 1508.24 Referring agency.
- 1508.25 Scope.
- 1508.26 Special expertise.
- 1508.27 Significantly.
- 1508.28 Tiering.

AUTHORITY: NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

SOURCE: 43 FR 56003, Nov. 29, 1978, unless otherwise noted.

§ 1508.1 Terminology.

The terminology of this part shall be uniform throughout the Federal Government.

§ 1508.2 Act.

Act means the National Environmental Policy Act, as amended (42 U.S.C. 4321, *et seq.*) which is also referred to as "NEPA."

§ 1508.3 Affecting.

Affecting means will or may have an effect on.

§ 1508.4 Categorical exclusion.

Categorical exclusion means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (§1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. An agency may decide in its procedures or otherwise, to prepare environmental assessments for the reasons stated in §1508.9 even though it is not required to do so. Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect.

§ 1508.5 Cooperating agency.

Cooperating agency means any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. The selection and responsibilities of a cooperating agency are described in §1501.6. A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency.

§ 1508.6 Council.

Council means the Council on Environmental Quality established by title II of the Act.

§ 1508.7 Cumulative impact.

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

§ 1961.1. Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2009 through 2016 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

(a) *Greenhouse Gas Emission Requirements.* The greenhouse gas emission levels from new 2009 through 2016 model year passenger cars, light-duty trucks, and medium-duty passenger vehicles shall not exceed the following requirements. Light-duty trucks from 3751 lbs. LVW – 8500 lbs. GVW that are certified to the Option 1 LEV II NO_x Standard in section 1961(a)(1) are exempt from these greenhouse gas emission requirements, however, passenger cars, light-duty trucks 0-3750 lbs. LVW, and medium-duty passenger vehicles are not eligible for this exemption.

(1) *Fleet Average Greenhouse Gas Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles.*

(A)(i) The fleet average greenhouse gas exhaust mass emission values from passenger cars, light-duty trucks, and medium-duty passenger vehicles that are produced and delivered for sale in California each model year by a large volume manufacturer shall not exceed:

FLEET AVERAGE GREENHOUSE GAS EXHAUST MASS EMISSION REQUIREMENTS FOR PASSENGER CAR, LIGHT-DUTY TRUCK, AND MEDIUM-DUTY PASSENGER VEHICLE WEIGHT CLASSES¹ (4,000 mile Durability Vehicle Basis)		
<i>Model Year</i>	<i>Fleet Average Greenhouse Gas Emissions (grams per mile CO₂-equivalent)</i>	
	<i>All PCs; LDTs 0-3750 lbs. LVW</i>	<i>LDTs 3751 lbs. LVW - 8500 lbs. GVW; MDPVs</i>
2009	323	439
2010	301	420
2011	267	390
2012	233	361
2013	227	355
2014	222	350
2015	213	341
2016	205	332

¹ Each manufacturer shall demonstrate compliance with these values in accordance with section 1961.1(a)(1)(B).

1. For each model year, a manufacturer must demonstrate compliance with the fleet average requirements in this section 1961.1(a)(1)(A) based on one of two options applicable throughout the model year, either:

Option 1: the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles that are certified to the California exhaust emission standards in this section 1961.1, and are produced and delivered for sale in California; or

Option 2: the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles that are certified to the California exhaust emission standards in this section 1961.1, and are produced and delivered for sale in California, the District of Columbia, and all states that have adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).

a. For the 2009 and 2010 model years, a manufacturer that selects compliance Option 2 must notify the Executive Officer of that selection, in writing, within 30 days of the effective date of the amendments to this section (a)(1)(A)1 or must comply with Option 1.

b. For the 2011 through 2016 model years, a manufacturer that selects compliance Option 2 must notify the Executive Officer of that selection, in writing, prior to the start of the applicable model year or must comply with Option 1.

c. When a manufacturer is demonstrating compliance using Option 2 for a given model year, the term "in California" as used in subsections 1961.1(a)(1)(B)3. and 1961.1 (b) means California, the District of Columbia, and all states that have adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).

d. A manufacturer that selects compliance Option 2 must provide to the Executive Officer separate values for the number of vehicles produced and delivered for sale in the District of Columbia and for each individual state within the average.

(A)(ii) For the 2012 through 2016 model years, a manufacturer may elect to demonstrate compliance with this section 1961.1 by demonstrating compliance with the 2012 through 2016 MY National greenhouse gas program as follows:

1. A manufacturer that selects compliance with this option 1961.1(a)(1)(A)(ii) must notify the Executive Officer of that selection, in writing, prior to the start of the applicable model year or must comply with 1961.1(a)(1)(A)(i).

2. The manufacturer must submit to ARB a copy of the Model Year CAFE report that it submitted to EPA as required under 40 CFR §86.1865-12 (May 7, 2010), for demonstrating compliance with the 2012 through 2016 MY National greenhouse gas program and the EPA determination of compliance. These must be submitted within 30 days of receipt of the EPA determination of compliance, for each model year that a manufacturer selects compliance with this option 1961.1(a)(1)(A)(ii);

3. The manufacturer must provide to the Executive Officer separate values for the number of vehicles produced and delivered for sale in California, the District of Columbia, and each individual state that has adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507); and

4. If a manufacturer has outstanding greenhouse gas debits at the end of the 2011 model year, as calculated in accordance with 1961.1(b), the manufacturer must submit to the Executive Officer a plan for offsetting all outstanding greenhouse gas debits by using greenhouse gas credits earned under the 2012 through 2016 MY National greenhouse gas program before applying those credits to offset any 2012 through 2016 MY National greenhouse gas program debits. Upon approval of the plan by the Executive Officer, the manufacturer may demonstrate compliance with this section 1961.1 by demonstrating compliance with the 2012 through 2016 MY National greenhouse gas program. Any California debits not offset by the end of the 2016 model year National greenhouse gas program reporting period are subject to penalties as provided in this Section 1961.1.

(B) *Calculation of Fleet Average Greenhouse Gas Value.*

1. *Basic Calculation.*

a. Option A: Each manufacturer shall calculate both a “city” grams per mile average CO₂-equivalent value for each GHG vehicle test group and a “highway” grams per mile average CO₂-equivalent value for each GHG vehicle test group, including vehicles certified in accordance with section 1960.5 and vehicles certified in accordance with section 1961(a)(14), using the following formula. Option B: For a manufacturer that elects to demonstrate compliance with the greenhouse gas requirements using CAFE data, “GHG vehicle test group” shall mean “subconfiguration” in this subsection 1961.1(a)(1)(B)1.a. Greenhouse Gas emissions used for the “city” CO₂-equivalent value calculation shall be measured using the “FTP” test cycle (40 CFR, Part 86, Subpart B). Greenhouse Gas emissions used for the “highway” CO₂-equivalent value calculation shall be based on emissions measured using the Highway Test Procedures.

$$\text{CO}_2\text{-Equivalent Value} = \text{CO}_2 + 296 \times \text{N}_2\text{O} + 23 \times \text{CH}_4 - \text{A/C Direct Emissions Allowance} - \text{A/C Indirect Emissions Allowance}$$

A manufacturer may use N₂O = 0.006 grams per mile in lieu of measuring N₂O exhaust emissions. A manufacturer that elects to use CAFE data to demonstrate compliance with the greenhouse gas requirements may substitute the term 1.9 CO₂-equivalent grams per mile for the terms “296 x N₂O + 23 x CH₄” in this equation.

b. *A/C Direct Emissions Allowance.* A manufacturer may use the following A/C Direct Emission Allowances, upon approval of the Executive Officer, if that manufacturer demonstrates that the following requirements are met. Such demonstration shall include specifications of the components used and an engineering evaluation that verifies the estimated lifetime emissions from the components and the system. A manufacturer shall also provide

confirmation that the number of fittings and joints has been minimized and components have been optimized to minimize leakage. No A/C Direct Emissions Allowance is permitted if the following requirements are not met.

- i. A “low-leak air conditioning system” shall be defined as one that meets all of the following criteria:
 - A. All pipe and hose connections are equipped with multiple o-rings, seal washers, or metal gaskets only (e.g., no single o-rings);
 - B. All hoses in contact with the refrigerant must be ultra-low permeability barrier or veneer hose on both the high-pressure and the low-pressure sides of the system (e.g., no rubber hoses); and
 - C. Only multiple-lip compressor shaft seals shall be used (with either compressor body o-rings or gaskets).

- ii. For an air conditioning system that uses HFC-134a as the refrigerant:
 - A. An A/C Direct Emissions Allowance of 3.0 CO₂-equivalent grams per mile shall apply if the system meets the criteria for a “low-leak air conditioning system.”
 - B. An A/C Direct Emissions Allowance of 3.0 CO₂-equivalent grams per mile shall apply if the manufacturer demonstrates alternative technology that achieves equal or lower direct emissions than a “low-leak air conditioning system.”
 - C. An A/C Direct Emissions Allowance greater than 3.0 CO₂-equivalent grams per mile may apply for an air conditioning system that reduces refrigerant leakage further than would be obtained from a “low-leak air conditioning system.” A maximum A/C Direct Emissions Allowance of 6.0 CO₂-equivalent grams per mile may be earned for an air conditioning system that has 100 percent containment of refrigerant during “normal operation.” To obtain an A/C Direct Emissions Allowance greater than 3.0 CO₂-equivalent grams per mile, the manufacturer must provide an engineering evaluation that supports the allowance requested.

- iii. For an air conditioning system that uses HFC-152a, CO₂ refrigerant, or any refrigerant with a GWP of 150 or less:
An A/C Direct Emissions Allowance shall be calculated using the following formula:

$$\text{A/C Direct Emissions Allowance} = A - (B \times C)$$

where: A = 9 CO₂-equivalent grams per mile (the lifetime vehicle emissions expected from an air conditioning system that uses refrigerant HFC-134a);

$$B = 9 \text{ CO}_2 - \text{equivalent g/mi} \times \frac{\text{GWP}}{1300}$$

where: B is the lifetime vehicle emissions expected from an air conditioning system that uses a refrigerant with a GWP of 150 or less, and

“GWP” means the GWP of this refrigerant; and

C = 1, except for an air conditioning system that meets the criteria of a “low-leak air conditioning system.”

For an air conditioning system that meets or exceeds the criteria of a “low-leak air conditioning system,” the following formula shall apply:

$$C = 1 - (0.12 \times \text{credit})$$

where: “credit” equals 3.0 CO₂-equivalent grams per mile for a “low-leak air conditioning system” that meets the criteria of section 1961.1(a)(1)(B)1.b.i., or

“credit” equals a value greater than 3.0 CO₂-equivalent grams per mile for an air conditioning system that reduces refrigerant leakage further than would be obtained from a “low-leak air conditioning system.” A maximum credit of 6.0 CO₂-equivalent grams per mile may be earned for an air conditioning system that has 100 percent containment of refrigerant during normal operation. To obtain a credit greater than 3.0 CO₂-equivalent grams per mile, the manufacturer must provide an engineering evaluation that supports the credit requested.

iv. A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse gas requirements shall calculate the A/C Direct Emissions Allowance for each Vehicle Configuration by calculating the A/C Direct Emissions Allowance for each air conditioning system used in that Vehicle Configuration and calculating a sales-weighted average for that Vehicle Configuration.

c. *A/C Indirect Emissions Allowance.* A manufacturer may use the following A/C Indirect Emissions Allowances, upon approval of the Executive Officer, if the manufacturer demonstrates using data or an engineering evaluation that the air conditioning system meets the following requirements. A manufacturer may use the following A/C Indirect Emissions Allowances for other technologies, upon approval of the Executive Officer, if that manufacturer demonstrates that the air conditioning system achieves equal or greater CO₂-equivalent grams per mile emissions reductions.

i. An “A/C system with reduced indirect emissions” shall be defined as one that meets all of the following criteria:

- A. Has managed outside and recirculated air balance to achieve comfort, demisting, and safety requirements, based on such factors as temperature, humidity, pressure, and level of fresh air in the passenger compartment to minimize compressor usage;
- B. Is optimized for energy efficiency by utilizing state-of-the-art high efficiency evaporators, condensers, and other components; and
- C. Has an externally controlled compressor (such as an externally controlled variable displacement or variable speed compressor or an externally controlled fully cycling fixed displacement compressor) that adjusts evaporative temperature to minimize the necessity of reheating cold air to satisfy occupant comfort.

ii. For an A/C system that meets all of the criteria for an "A/C system with reduced indirect emissions," the allowance shall be calculated using the following emission factors, up to a maximum allowance of 9.0 CO₂-equivalent grams per mile if the system has one evaporator and up to a maximum allowance of 11.0 CO₂-equivalent grams per mile if the system has two evaporators:

- A. 5.0 CO₂-equivalent grams per mile per 100 cc of maximum compressor displacement for a system that does not use CO₂ as the refrigerant
- B. 27.5 CO₂-equivalent grams per mile per 100 cc of maximum compressor displacement for a system that uses CO₂ as the refrigerant

iii. For an air conditioning system equipped with a refrigerant having a GWP of 150 or less, the allowance shall be calculated using the following emission factors, up to a maximum allowance of 0.5 CO₂-equivalent grams per mile:

- A. 0.2 CO₂-equivalent grams per mile per 100cc of maximum compressor displacement for a system that does not use CO₂ as the refrigerant and
- B. 1.1 CO₂-equivalent grams per mile per 100cc of maximum compressor displacement for a system that uses CO₂ as the refrigerant.

iv. A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse gas requirements shall calculate the A/C Indirect Emissions Allowance for each Vehicle Configuration by calculating the A/C Indirect Emissions Allowance for each air conditioning system used in that Vehicle Configuration and calculating a sales-weighted average for that Vehicle Configuration.

d. *Upstream Greenhouse Gas Emission Adjustment Factors for Alternative Fuel Vehicles.* A grams per mile average CO₂-equivalent value for each GHG vehicle test group certifying on a fuel other than conventional gasoline, including vehicles certified in accordance

with section 1960.5 and vehicles certified in accordance with section 1961(a)(14), shall be calculated as follows:

$$(\text{CO}_2 + \text{A/C Indirect Emissions}) \times (\text{Fuel Adjustment Factor}) + 296 \times \text{N}_2\text{O} + 23 \times \text{CH}_4 + \text{A/C Direct Emissions}$$

where:

$$\text{A/C Indirect Emissions} = A - B$$

where: “A” represents the indirect emissions associated with an A/C system that does not incorporate any of the A/C improvements described in section 1961.1(a)(1)(B)1.c. A is determined by the following emission factors, with a maximum value of 17.0 CO₂-equivalent grams per mile for a system that has one evaporator and a maximum value of 21.0 CO₂-equivalent grams per mile for a system that has two evaporators.

A = 9.6 CO₂-equivalent grams per mile per 100cc of maximum compressor displacement for an A/C system that does not use CO₂ as the refrigerant or

A = 52.8 CO₂-equivalent grams per mile per 100cc of maximum compressor displacement for an A/C system that uses CO₂ as the refrigerant.

B = A/C Indirect Emissions Allowance as calculated per section 1961.1(a)(1)(B)1.c.

A/C Direct Emissions = 9 CO₂-equivalent grams per mile – A/C Direct Emissions Allowance as calculated per section 1961.1(a)(1)(B)1.b.

The Fuel Adjustment Factors are:

Fuel	Fuel Adjustment Factor
Natural Gas	1.03
LPG	0.89
E85	0.74

e. *Calculation of CO₂-Equivalent Emissions for Hydrogen Internal Combustion Engine Vehicles and for Electric and Hydrogen ZEVs.* The grams per mile average CO₂-equivalent value for each GHG vehicle test group certifying to ZEV standards, including vehicles certified in accordance with section 1960.5 and vehicles certified in accordance with section 1961(a)(14), shall be:

$$\text{A/C Direct Emissions} + \text{Upstream Emissions Factor}$$

where: $A/C \text{ Direct Emissions} = 9 \text{ CO}_2\text{-equivalent grams per mile} - A/C \text{ Direct Emissions Allowance as calculated per section } 1961.1(a)(1)(B)1.b.$

The Upstream Emissions Factors are:

Vehicle Type	Upstream Emissions Factor ¹ (CO ₂ -equivalent g/mi)
Electric ZEV	130
Hydrogen Internal Combustion Engine Vehicle	290
Hydrogen ZEV	210

¹The Executive Officer may approve use of a lower upstream emissions factor if a manufacturer demonstrates the appropriateness of the lower value by providing information that includes, but is not limited to, the percentage of hydrogen fuel or the percentage of electricity produced for sale in California using a “renewable energy resource.”

2. *Calculation of Greenhouse Gas Values for Bi-Fuel Vehicles, Fuel-Flexible Vehicles, Dual-Fuel Vehicles, and Grid-connected Hybrid Electric Vehicles.* For bi-fuel, fuel-flexible, dual-fuel, and grid-connected hybrid electric vehicles, a manufacturer shall calculate a grams per mile average CO₂-equivalent value for each GHG vehicle test group, in accordance with section 1961.1(a)(1)(B)1., based on exhaust mass emission tests when the vehicle is operating on gasoline.

a. *Optional Alternative Compliance Mechanisms.* Beginning with the 2010 model year, a manufacturer that demonstrates that a bi-fuel, fuel-flexible, dual-fuel, or grid-connected hybrid electric GHG vehicle test group will be operated in use in California on the alternative fuel shall be eligible to certify those vehicles using this optional alternative compliance procedure, upon approval of the Executive Officer.

i. To demonstrate that bi-fuel, fuel-flexible, dual-fuel, or grid-connected hybrid electric vehicles within a GHG vehicle test group will be operated in use in California on the alternative fuel, the manufacturer shall provide data that shows the previous model year sales of such vehicles to fleets that provide the alternative fuel on-site or, for grid-connected hybrid electric vehicles, to end users with the capability to recharge the vehicle on-site. This data shall include both the total number of vehicles sales that were made to such fleets or end users with the capability to recharge the vehicle on-site and as the percentage of total GHG vehicle test group sales. The manufacturer shall also provide data demonstrating the percentage of total vehicle miles traveled by the bi-fuel, fuel-flexible, dual-fuel, or grid-connected hybrid electric vehicles sold to each fleet or to end users with the capability to recharge the vehicle on-site in the previous model year using the alternative fuel and using gasoline.

ii. For each GHG vehicle test group that receives approval by the Executive Officer under section 1961.1(a)(1)(B)2.a.i., a grams per mile CO₂-equivalent value shall be calculated as follows:

$$\text{CO}_2\text{-equivalent value} = [A \times E \times B \times C] + [(1 - (A \times E \times B)) \times D]$$

where: A = the percentage of previous model year vehicles within a GHG vehicle test group that were operated in use in California on the alternative fuel during the previous calendar year;

B = the percentage of miles traveled by “A” during the previous calendar year ;

C = the CO₂-equivalent value for the GHG vehicle test group, as calculated in section 1961.1(a)(1)(B)1, when tested using the alternative fuel;

D = the CO₂-equivalent value for the GHG vehicle test group, as calculated in section 1961.1(a)(1)(B)1, when tested using gasoline; and

E = 0.9 for grid-connected hybrid electric vehicles or

E = 1 for bi-fuel, fuel-flexible, and dual-fuel vehicles.

The Executive Officer may approve use of a higher value for “E” for a grid-connected hybrid electric vehicle GHG vehicle test group if a manufacturer demonstrates that the vehicles can reasonably be expected to maintain more than 90 percent of their original battery capacity over a 200,000 mile vehicle lifetime. The manufacturer may demonstrate the appropriateness of a higher value either by providing data from real world vehicle operation; or by showing that these vehicles are equipped with batteries that do not lose energy storage capacity until after 100,000 miles; or by offering 10 year/150,000 mile warranties on the batteries.

iii. For the first model year in which a grid-connected hybrid electric vehicle model is certified for sale in California, the manufacturer may estimate the sales and percentage of total vehicle miles traveled information requested in section 1961.1(a)(1)(B)2.a.i. in lieu of providing actual data, and provide final sales data and data demonstrating the percentage of total vehicle miles traveled using electricity by no later than March 1 of the calendar year following the close of the model year.

3. *Calculation of Fleet Average Greenhouse Gas Values.*

a. Each manufacturer’s PC and LDT1 fleet average Greenhouse Gas value for the total number of PCs and LDT1s produced and delivered for sale in California, including vehicles certified in accordance with section 1960.5 and vehicles certified in accordance with section 1961(a)(14), shall be calculated as follows:

$$[0.55 \times (\Sigma \text{ City Test Group Greenhouse Gas Values}) + 0.45 \times (\Sigma \text{ Highway Test Group Greenhouse Gas Values})] \div \text{Total Number of PCs and LDT1s Produced, Including ZEVs and HEVs}$$

where: City Test Group Greenhouse Gas Value = [(Total Number of Vehicles in a Test Group - Σ Number of Vehicles in Optional GHG Test Vehicle Configurations) x “worst-case” calculated CO₂-equivalent value + Σ (Number of vehicles in Optional GHG Test Vehicle Configurations x applicable calculated CO₂-equivalent value)] measured using the FTP test cycle; and

Highway Test Group Greenhouse Gas Value = [(Total Number of Vehicles in a Test Group - Σ Number of Vehicles in Optional GHG Test Vehicle Configurations) x “worst-case” calculated CO₂-equivalent value + Σ (Number of vehicles in Optional GHG Test Vehicle Configurations x applicable calculated CO₂-equivalent value)] measured using the Highway Test Procedures.

b. Each manufacturer’s LDT2 and MDPV fleet average Greenhouse Gas value for the total number of LDT2s and MDPVs produced and delivered for sale in California, including vehicles certified in accordance with section 1960.5 and vehicles certified in accordance with section 1961(a)(14), shall be calculated as follows:

$$[0.55 \times (\Sigma \text{ City Test Group Greenhouse Gas Values}) + 0.45 \times (\Sigma \text{ Highway Test Group Greenhouse Gas Values})] \div \text{Total Number of LDT2s and MDPVs Produced, Including ZEVs and HEVs}$$

where: City Test Group Greenhouse Gas Value = [(Total Number of Vehicles in a Test Group - Σ Number of Vehicles in Optional GHG Test Vehicle Configurations) x “worst-case” calculated CO₂-equivalent value + Σ (Number of vehicles in Optional GHG Test Vehicle Configurations x applicable calculated CO₂-equivalent value)] measured using the FTP test cycle; and

Highway Test Group Greenhouse Gas Value = [(Total Number of Vehicles in a Test Group - Σ Number of Vehicles in Optional GHG Test Vehicle Configurations) x “worst-case” calculated CO₂-equivalent value + Σ (Number of vehicles in Optional GHG Test Vehicle Configurations x applicable calculated CO₂-equivalent value)] measured using the Highway Test Procedures.

(C) *Requirements for Intermediate Volume Manufacturers.*

1. Before the 2016 model year, compliance with this section 1961.1 shall be waived for intermediate volume manufacturers.

2. For each intermediate volume manufacturer, the manufacturer's baseline fleet average greenhouse gas value for PCs and LDT1s and baseline fleet average greenhouse gas value for LDT2s and MDPVs shall be calculated, in accordance with section 1961.1(a)(1)(B) using its 2002 model year fleet.

3. In the 2016 model year, an intermediate volume manufacturer shall either:

- not exceed a fleet average greenhouse gas emissions value of 233 g/mi for PCs and LDT1s and 361 g/mi for LDT2s and MDPVs, or
- not exceed a fleet average greenhouse gas value of 0.75 times the baseline fleet average greenhouse gas value for PCs and LDT1s and 0.82 times the baseline fleet average greenhouse gas value for LDT2s and MDPVs, as calculated in section 1961.1(a)(1)(C)2.

4. If a manufacturer's average annual California sales exceed 60,000 units of new PCs, LDTs, MDVs and heavy-duty engines based on the average number of vehicles sold for the three previous consecutive model years, the manufacturer shall no longer be treated as an intermediate volume manufacturer and shall comply with the fleet average requirements applicable to large volume manufacturers as specified in section 1961.1(a)(1) beginning with the fourth model year after the last of the three consecutive model years.

5. If a manufacturer's average annual California sales fall below 60,001 units of new PCs, LDTs, MDVs and heavy-duty engines based on the average number of vehicles sold for the three previous consecutive model years, the manufacturer shall be treated as an intermediate volume manufacturer and shall be subject to the requirements for intermediate volume manufacturers beginning with the next model year.

(D) *Requirements for Small Volume Manufacturers and Independent Low Volume Manufacturers.*

1. Before the 2016 model year, compliance with this section 1961.1 shall be waived for small volume manufacturers and independent low volume manufacturers.

2. At the beginning of the 2013 model year, each small volume manufacturer and independent low volume manufacturer shall identify all 2012 model year vehicle models, certified by a large volume manufacturer that are comparable to that small volume manufacturer or independent low volume manufacturer's 2016 model year vehicle models, based on horsepower and horsepower to weight ratio. The small volume manufacturer and independent low volume manufacturer shall demonstrate to the Executive Officer the appropriateness of each comparable vehicle model selected. Upon approval of the Executive Officer, s/he shall provide to the small volume manufacturer and to the independent low volume manufacturer the CO₂-equivalent value for each 2012 model year vehicle model that is approved. The small volume manufacturer and independent low volume manufacturer shall calculate an average greenhouse gas emissions value for each its greenhouse gas vehicle test groups based on the CO₂-equivalent values provided by the Executive Officer.

3. In the 2016 model year, a small volume manufacturer and an independent low volume manufacturer shall either:

- a. not exceed the fleet average greenhouse gas emissions value calculated for each GHG vehicle test group for which a comparable vehicle is sold by a large volume manufacturer, in accordance with section 1961.1(a)(1)(D)2; or
- b. not exceed a fleet average greenhouse gas emissions value of 233 g/mi for PCs and LDT1s and 361 g/mi for LDT2s and MDPVs; or
- c. upon approval of the Executive Officer, if a small volume manufacturer demonstrates a vehicle model uses an engine, transmission, and emission control system that is identical to a configuration certified for sale in California by a large volume manufacturer, those small volume manufacturer vehicle models are exempt from meeting the requirements in paragraphs 3.a. and b. of this section.

4. If a manufacturer's average annual California sales exceed 4,500 units of new PCs, LDTs, MDVs and heavy-duty engines based on the average number of vehicles sold for the three previous consecutive model years, the manufacturer shall no longer be treated as a small volume manufacturer and shall comply with the fleet average requirements applicable to larger volume manufacturers as specified in section 1961.1(a)(1) beginning with the fourth model year after the last of the three consecutive model years.

5. If a manufacturer's average annual California sales exceed 10,000 units of new PCs, LDTs, MDVs and heavy-duty engines based on the average number of vehicles sold for the three previous consecutive model years, the manufacturer shall no longer be treated as an independent low volume manufacturer and shall comply with the fleet average requirements applicable to larger volume manufacturers as specified in section 1961.1(a)(1) beginning with the fourth model year after the last of the three consecutive model years.

6. If a manufacturer's average annual California sales fall below 4,501 units of new PCs, LDTs, MDVs and heavy-duty engines based on the average number of vehicles sold for the three previous consecutive model years, the manufacturer shall be treated as a small volume manufacturer and shall be subject to the requirements for small volume manufacturers beginning with the next model year.

(b) *Calculation of Greenhouse Gas Credits/Debits.*

(1) *Calculation of Greenhouse Gas Credits for Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles.*

(A) In the 2000 through 2008 model years, a manufacturer that achieves fleet average Greenhouse Gas values lower than the fleet average Greenhouse Gas requirement applicable to the 2012 model year shall receive credits for each model year in units of g/mi determined as:

[(Fleet Average Greenhouse Gas Requirement for the 2012 model year)
- (Manufacturer's Fleet Average Greenhouse Gas Value)]
x (Total No. of Vehicles Produced and Delivered for Sale
in California, Including ZEVs and HEVs).

(B) In 2009 through 2016 model years, a manufacturer that achieves fleet average Greenhouse Gas values lower than the fleet average Greenhouse Gas requirement for the corresponding model year shall receive credits in units of g/mi Greenhouse Gas determined as:

[(Fleet Average Greenhouse Gas Requirement) - (Manufacturer's Fleet Average Greenhouse Gas Value)] x (Total No. of Vehicles Produced and Delivered for Sale in California, Including ZEVs and HEVs).

(2) A manufacturer with 2009 through 2016 model year fleet average Greenhouse Gas values greater than the fleet average requirement for the corresponding model year shall receive debits in units of g/mi Greenhouse Gas equal to the amount of negative credits determined by the aforementioned equation. For the 2009 through 2016 model years, the total g/mi Greenhouse Gas credits or debits earned for PCs and LDT1s and for LDT2s and MDPVs shall be summed together. The resulting amount shall constitute the g/mi Greenhouse Gas credits or debits accrued by the manufacturer for the model year.

(3) *Procedure for Offsetting Greenhouse Gas Debits.*

(A) A manufacturer shall equalize Greenhouse Gas emission debits by earning g/mi Greenhouse Gas emission credits in an amount equal to the g/mi Greenhouse Gas debits, or by submitting a commensurate amount of g/mi Greenhouse Gas credits to the Executive Officer that were earned previously or acquired from another manufacturer. A manufacturer shall equalize Greenhouse Gas debits for PCs, LDTs, and MDPVs within five model years after they are earned. If emission debits are not equalized within the specified time period, the manufacturer shall be subject to the Health and Safety Code section 43211 civil penalty applicable to a manufacturer which sells a new motor vehicle that does not meet the applicable emission standards adopted by the state board. The cause of action shall be deemed to accrue when the emission debits are not equalized by the end of the specified time period. For a manufacturer demonstrating compliance under Option 2 in subsection 1961.1(a)(1)(A)1., the emission debits that are subject to a civil penalty under Health and Safety Code section 43211 shall be calculated separately for California, the District of Columbia, and each individual state that is included in the fleet average greenhouse gas requirements in subsection 1961.1(a)(1)(A)1. These emission debits shall be calculated for each individual state using the formula in subsections 1961.1(b)(1)(B) and 1961.1(b)(2), except that the "Total No. of Vehicles Produced and Delivered for Sale in California, including ZEVs and HEVs" shall be calculated separately for the District of Columbia and each individual state.

For the purposes of Health and Safety Code section 43211, the number of passenger cars and LDT1s not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi Greenhouse Gas emission debits for the model year calculated for California by

the g/mi Greenhouse Gas fleet average requirement for PCs and LDTs 0-3750 lbs. LVW applicable for the model year in which the debits were first incurred. For the purposes of Health and Safety Code section 43211, the number of LDT2s and MDPVs not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi Greenhouse Gas emission debits for the model year calculated for California by the g/mi Greenhouse Gas fleet average requirement for LDTs 3751 lbs. LVW – 8500 lbs. GVW and MDPVs applicable for the model year in which the debits were first incurred.

(B) Greenhouse Gas emission credits earned in the 2000 through 2008 model years shall be treated as if they were earned in the 2011 model year and shall retain full value through the 2012 model year. Greenhouse Gas emission credits earned in the 2009 through 2016 model years shall retain full value through the fifth model year after they are earned. The value of any credits earned in the 2000 through 2008 model years that are not used to equalize debits accrued in the 2009 through 2012 model years shall be discounted by 50% at the beginning of the 2013 model year, shall be discounted to 25% of its original value if not used by the beginning of the 2014 model year, and will have no value if not used by the beginning of the 2015 model year. Any credits earned in the 2009 through 2016 model years that are not used by the end of the fifth model year after they are accrued shall be discounted by 50% at the beginning of the sixth model year after being earned, shall be discounted to 25% of its original value if not used by the beginning of the seventh model year after being earned, and will have no value if not used by the beginning of the eighth model year after being earned.

(c) *Test Procedures.* The certification requirements and test procedures for determining compliance with the emission standards in this section are set forth in the “California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” incorporated by reference in section 1961(d). In the case of hybrid electric vehicles and on-board fuel-fired heaters, the certification requirements and test procedures for determining compliance with the emission standards in this section are set forth in the “California Exhaust Emission Standards and Test Procedures for 2009 through 2017 Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes,” incorporated by reference in section 1962.1.

(d) *Abbreviations.* The following abbreviations are used in this section 1961.1:

“cc” mean cubic centimeters.

"CH₄" means methane.

"CO₂" means carbon dioxide.

“E85” means a blend of 85 percent ethanol and 15 percent gasoline.

“FTP” means Federal Test Procedure.

"GHG" means greenhouse gas.

“g/mi” means grams per mile.

“GVW” means gross vehicle weight.

“GVWR” means gross vehicle weight rating.

“GWP” means the global warming potential.
“HEV” means hybrid-electric vehicle.
“LDT” means light-duty truck.
“LDT1” means a light-duty truck with a loaded vehicle weight of 0-3750 pounds.
“LDT2” means a “LEV II” light-duty truck with a loaded vehicle weight of 3751 pounds to a gross vehicle weight of 8500 pounds.
“LEV” means low-emission vehicle.
“LPG” means liquefied petroleum gas.
“LVW” means loaded vehicle weight.
“MDPV” means medium-duty passenger vehicle.
“MDV” means medium-duty vehicle.
“mg/mi” means milligrams per mile.
“N₂O” means nitrous oxide.
“PC” means passenger car.
“SULEV” means super-ultra-low-emission vehicle.
“ULEV” means ultra-low-emission vehicle.
“ZEV” means zero-emission vehicle.

(e) *Definitions Specific to this Section.* The following definitions apply to this section 1961.1:

(1) “A/C Direct Emissions” means any refrigerant released from a motor vehicle's air conditioning system.

(2) “A/C Indirect Emissions” means any increase in motor vehicle exhaust CO₂ emissions that can be attributed to the operation of the air conditioning system.

(3) “GHG Vehicle Test Group” means vehicles that have an identical test group, vehicle make and model, transmission class and driveline, aspiration method (e.g., naturally aspirated, turbocharged), camshaft configuration, valvetrain configuration, and inertia weight class.

(4) “Greenhouse Gas” means the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.

(5) “Grid-Connected Hybrid Electric Vehicle” means a hybrid electric vehicle that has the capacity for the battery to be recharged from an off-board source of electricity and has some all-electric range.

(6) “GWP” means the 100-year global warming potential specified in IPCC (Intergovernmental Panel on Climate Change) 2000: Emissions Scenarios. N. Nakicenovic et. al. editors, Special Report of Working Group III of the IPCC, Cambridge University Press, Cambridge UK, ISBN 0-521-80493-0.

(7) “2012 through 2016 MY National greenhouse gas program” means the national program that applies to new 2012 through 2016 model year passenger cars, light-duty trucks, and

medium-duty passenger vehicles as adopted by the U.S. Environmental Protection Agency at 75 Fed.Reg. 25324 (May 7, 2010), as incorporated in and amended by the "California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

(8) "Normal Operation" of an air conditioning system means typical everyday use of the A/C system to cool a vehicle. "Normal Operation" does not include car accidents, dismantling of an air conditioning system, or any other non-typical events.

(9) "Optional GHG Test Vehicle Configuration" means any GHG vehicle configuration that is selected for testing by the manufacturer as allowed by section G.2.3 of the "California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," other than the worst-case configuration.

(10) "Renewable Energy Resource" means a facility that meets all of the criteria set forth in Public Resources Code section 25741(a), except that the facility is not required to be located in California or near the border of California.

(11) "Variable Displacement Compressor" means a compressor in which the mass flow rate of refrigerant is adjusted independently of compressor speed by the control system in response to cooling load demand.

(12) "Variable Speed Compressor" means a compressor in which the mass flow rate of refrigerant can be adjusted by control of the compressor input shaft speed, independent of vehicle engine speed. For example, a variable speed compressor can have electric drive, hydraulic drive, or mechanical drive through a variable speed transmission.

(13) "Worst-Case" means the vehicle configuration within each test group that is expected to have the highest CO₂-equivalent value, as calculated in section 1961.1(a)(1)(B)1.

(f) *Severability*. Each provision of this section is severable, and in the event that any provision of this section is held to be invalid, the remainder of this article remains in full force and effect.

(g) *Effective Date of this Section*. The requirements of this section 1961.1 shall become effective on January 1, 2006.

NOTE: Authority cited: Sections 39500, 39600, 39601, 43013, 43018, 43018.5, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43018.5, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43204, 43205 and 43211, Health and Safety Code.

ORAL ARGUMENT NOT YET SCHEDULED

No. 20-1145

Consolidated with Nos. 20-1167, 20-1168, 20-1169, 20-1173,
20-1174, 20-1176, 20-1177, and 20-1230

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

COMPETITIVE ENTERPRISE INSTITUTE, et al.,
Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, et al.,
Respondents.

**STATE AND LOCAL GOVERNMENT PETITIONERS' ADDENDUM OF
STATUTES, REGULATIONS, AND STANDING DECLARATIONS
VOLUME B: STANDING DECLARATIONS**

XAVIER BECERRA
Attorney General of
California
ROBERT W. BYRNE
EDWARD H. OCHOA
Senior Assistant
Attorneys General
GARY E. TAVETIAN
DAVID A. ZONANA
Supervising Deputy
Attorneys General

JESSICA BARCLAY-STROBEL
JULIA K. FORGIE
MEREDITH HANKINS
MICAELA M. HARMS
JENNIFER KALNINS TEMPLE
CAROLYN NELSON ROWAN
ROBERT D. SWANSON
JONATHAN A. WIENER
DAVID ZAFT
M. ELAINE MECKENSTOCK
Deputy Attorneys General
1515 Clay Street, 20th Floor
Oakland, CA 94612-0550
Telephone: (510) 879-0299
Elaine.Meckenstock@doj.ca.gov

*Attorneys for Petitioner State of California, by and through its Governor Gavin Newsom, Attorney
General Xavier Becerra, and the California Air Resources Board*

Additional parties and counsel listed on signature pages of brief filed herewith

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**UNITED STATES COURT OF APPEALS
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SAFETY ADMINISTRATION, *et al.*,

Respondents.

No. 20-1145
(and consolidated cases)

DECLARATION OF JAY CHAMBERLIN

I, Jay Chamberlin, state and declare as follows:

1. I submit this declaration in support of the State of California's standing to challenge the final actions of the United States Environmental Protection Agency ("EPA") and the National Highway Traffic Safety Administration ("NHTSA"), the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks," 85 Fed. Reg. 24,174 (Apr. 30, 2020) ("Actions"). I make this declaration of my own personal knowledge, unless otherwise indicated.

2. I am the Chief of the Natural Resources Division of the California Department of Parks and Recreation ("Department"), a position I have held since 2010. I have worked in the conservation field for more than 20 years. I received a

Masters of Science in Natural Resources and Environment from the University of Michigan in 1998. Prior to my current position, I served as Environmental Program Manager at the California Department of Water Resources from 2008 to 2010, and Deputy Assistant Secretary at the California Natural Resources Agency from 2005 to 2008. I have also worked as a consultant to the Ecosystem Restoration Program for the California Bay-Delta Authority, and as Policy Manager for the Pacific Forest Trust, where my work focused on climate projects and policies.

3. I regularly give presentations on climate change and its impacts to the California State Park System, and on plans, management practices, and policies for addressing those impacts. I have given such presentations to professionals, students and other audiences, including, for example, the California State Assembly's Select Committee on Sea Level Rise and the California Economy. I have also given a series of climate change presentations and updates (in January 2018, September 2018, and May 2019) to the California State Parks and Recreation Commission, the body with authority for guiding policy and planning for the State Park System.

4. The Department manages the California State Park System, which consists of 280 park units and approximately 1.6 million acres of land. Parks are located in every bioregion of California, and the State Park System protects some of the most important natural resources in California, including old growth forests, grasslands, woodlands, lakes and reservoirs, habitat for native and rare wildlife, and roughly one-quarter of the California coastline. The State Park System also protects

the largest assemblage of cultural resources in California, including historic buildings and archaeological sites. The State Park System receives in excess of 80,000,000 visitors per year, and it is the primary destination for shoreline recreation in California.

5. I am familiar with scientific studies and models related to global climate change and with evidence of the influence that climate change is having on resources in the State Park System. My knowledge is based on my ongoing review of the current scientific literature, attendance and participation at professional conferences, trainings, and workshops, and my work for the Department.

6. For years, Department staff have been engaged in active management, documentation, and monitoring of resource conditions throughout the State Park System. Many of the specific threats to biological diversity and native species that have emerged in recent years are attributable to, or compounded by, the influence of climate change. Climate-influenced impacts on State Park System resources include accelerated coastal erosion, the spread of pests and pathogens (such as bark beetles), changes in phenology (the timing of seasonal natural phenomena such as blossoms on trees or flowers), alterations to wildlife health and behavior, and increases in the frequency and severity of wildfires. These changes in natural systems due to climate change damage the land, native plants, and wildlife that are the primary natural resources of the State Park System. In the course of my work, I have reviewed information and reports by the Department and other agency staff concerning these phenomena.

7. Scientific models of global climate change—which link the buildup of greenhouse gases to increased global temperatures—predict that by the year 2100 the average annual maximum daily temperature in California will increase by 5.6 to 8.8 degrees Fahrenheit. Scientific studies and models further predict that—as a result of increased temperatures, and consequent thermal expansion and glacial ice melt, caused by greenhouse gas emissions—by 2100, mean sea levels along the coast will rise between 1 and 7 feet, greatly exacerbating the effects of wave run up (the upper level reached by a wave on a beach) and storm surges. Due to uncertainty in the models, actual mean sea level rise could well exceed the predicted levels by considerable margins. Also, sea level rise will vary by location, and certain areas could experience sea levels that exceed the predicted mean levels.

8. Based upon my professional experience and knowledge of California's State Park System, if the predicted changes in temperature, precipitation, and sea level occur, they would have significant adverse and costly impacts on the State Park System, including those I summarize below. Additional emissions of greenhouse gases will continue to drive climate change and worsen these impacts in the future.

9. Rising sea levels will drastically reduce the amount of beach available for shorebirds, including threatened and endangered species. In fact, many of California's beaches, including many in the State Park System, such as Crystal Cove in Orange County, are narrow bands of sand backed by steep cliffs. If the sea level rises as models predict, many beaches will not simply move inland, but will completely

disappear. Also, any additional rise in sea level will affect the salinity, temperature, and hydrology in California's many estuaries and lagoons, thereby harming the aquatic life—including rare, threatened and endangered fish—that rely on estuaries for breeding or rearing. In addition, sea level rise threatens infrastructure in the more than 100 coastal units of the State Park System, including numerous campgrounds, trails and roads, and other facilities, including water and waste systems that exist along the ocean's edge. The reduced or destroyed beaches, coastal estuaries, lagoons, and wetlands and the destruction of other fish and wildlife habitats are material impacts to State trust resources. Moreover, damaged infrastructure will also negatively impact the ability of visitors to access the coast, another material impact to the purpose of State Beaches to provide for recreational access to the coast. Finally, sea level rise will negatively impact the balance of payments of the State—as revenues from visitors may decline even as costs to maintain, restore, and protect park resources and facilities increase.

10. In addition, the California State Park System includes many important cultural resources, including archeological and historic sites, such as Native American sites, 18th century missions, historic lighthouses and piers, and buildings, including historic campgrounds and other sites constructed by the Civilian Conservation Corps. These resources are irreplaceable, and the protection or documentation of cultural resources that would be inundated by sea level rise would be very expensive. For instance, even a small rise in sea level will erode or inundate many of the State Park

System's ancient shell middens. These cultural resources, which contain remnants from California's earliest human residents, date back thousands of years and would be permanently lost for their descendants and for visitors and researchers as well.

11. Global climate change models in combination with other predictive studies also suggest that wildfires will increase in frequency and severity. The State's recent experiences concerning wildfires are generally consistent with these predictions. In 2017, California had the highest average summer temperatures in recorded history. Over the last 40 years, California's fire season has increased 78 days—and in some places in the State the fire season is nearly year-round. Seventeen of the 20 largest wildfires in the State's recorded history have occurred since 2000, with 9 of those occurring since 2015.

12. Increases in the frequency and severity of wildfires will have a significant impact on the State Park System. The Department and its allied agencies, including the California Department of Forestry and Fire Protection, currently expend significant resources both to protect park infrastructure and natural and cultural resources from wildfires, and to prevent these fires. Growing wildfire activity also increases the risk that irreplaceable resources will be lost, including historic structures. Over the last 15 years, several state parks have been impacted by wildfires, and the increasing frequency of wildfires has become a more important problem for the State Park System. In 2020, the wildfires that collectively burned more acres of California than at any time since fire records have been kept burned more than 115,000 acres of

the State Park System across 22 State Park units. In Big Basin Redwoods State Park – California’s first state park – the entire park headquarters, including buildings that were designated national historic landmarks, were completely destroyed during the CZU complex fires in August of 2020. The old growth redwood forest is expected to recover but old growth trees and associated wildlife that are by definition irreplaceable resources were also lost. Previously, the October 2017 Wine Country fires in Napa and Sonoma Counties burned through several state parks, including Trione-Annadel State Park, Sugarloaf Ridge State Park, and Robert Louis Stevenson State Historic Park, and threatened Jack London State Historic Park, while the 2018 Woolsey Fire burned through several state parks including Malibu Creek State Park, Leo Carrillo State Park, and parts of Point Mugu State Park.


13. Observed changes, along with global climate change models, also suggest that coastal fog declines observed in recent decades could accelerate due to greenhouse gas-driven warming and changed ocean circulation. Diminished fog would have a severe and damaging impact on natural forest types that are dependent upon fog, including the endangered Torrey pine, the Monterey pine, and the Coast redwood. In addition to their ecological importance, these forest types draw many visitors to the State Park System, and a decline in these forests would constitute a critical impact on the natural resources of the State Park System and would result in fewer visitors and a loss of revenue to the Department.

14. The Department also manages several parks in winter snow areas, as well as the Sno-Park Program for California, which provides the public roadside access to winter sports recreation. Global climate change models and other studies predict reductions in winter-spring snowpack, which would result in loss of recreational opportunities and increased flooding downstream, along with operational challenges and associated costs at reservoir parks. It may also reduce revenues associated with the Sno-Park Program.

15. According to EPA and NHTSA, their weakening of the federal greenhouse gas emission and fuel economy standards in the Actions will cause the emission of an additional 867–923 million metric tons of greenhouse gases. 85 Fed. Reg. at 24,180–81. While significant and unavoidable impacts from climate change are already impacting the resources of the State Park System as summarized above, the most extreme impacts of climate change on the State Park System likely depend on current and future greenhouse gas emissions and measures taken to reduce those emissions. Increased emissions of greenhouse gases from motor vehicles due to the federal Agencies' Actions will exacerbate the impacts to the State Park System of the type I have described in this declaration. Conversely, vacating the federal Actions would restore the prior, more stringent standards, thereby reducing future vehicular greenhouse gas emissions, and mitigate those harms.

I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed on January 8, 2021 in SACRAMENTO, California.



JAY CHAMBERLIN

**UNITED STATES COURT OF APPEALS
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SAFETY ADMINISTRATION, *et al.*,

Respondents.

No. 20-1145
(and consolidated cases)

DECLARATION OF ELIZABETH SCHEEHLE

I, Elizabeth Scheehle, state and declare as follows:

Experience

1. I am currently the Chief of the Research Division of the California Air Resources Board (CARB). I have a Bachelor of Science degree in Earth and Atmospheric Sciences from the Georgia Institute of Technology, a Master of Public Policy from the Kennedy School of Government at Harvard University, and a Master of Public Health from the Bloomberg School of Public Health at Johns Hopkins University.

2. I have worked more than 20 years in climate change and air quality programs, starting at the U.S. Environmental Protection Agency (EPA) where I led national and international efforts on non-carbon-dioxide greenhouse gases (GHGs). I

served as an expert for the United Nations Framework Convention on Climate Change and the Intergovernmental Panel on Climate Change (IPCC). In that role, I earned recognition for my contribution to the IPCC's Nobel Prize. I continued my career at U.S. EPA, developing its Carbon Capture and Sequestration expertise, including comprehensive risk assessment considerations.

3. I joined CARB's Research Division in 2007 and led three climate change-related efforts: carbon capture and sequestration, an ozone-depleting substance offset protocol, and an early action climate measure. I was a section manager of the Research Division's GHG Technology and Field-Testing Section before next joining the Cap-and-Trade Program in CARB's Industrial Strategies Division. In 2014, I became a Branch Chief in the Industrial Strategies Division, overseeing programs related to oil and gas operations, alternative fuel regulations, and carbon capture and sequestration.

4. In 2018, I became Chief of the Research Division. In that capacity, I oversee CARB's research program, which investigates the causes of human health and welfare impacts from air pollutant emissions and the potential for reducing those impacts through emission reduction strategies. I also lead the development and implementation of multidisciplinary research plans and studies to provide a robust scientific foundation for our air quality and climate policy decisions. In addition, the Division implements programs on indoor air quality and high global warming-potential gas mitigation. I have broad experience with climate science and research.

5. I make this declaration based upon my knowledge and expertise in the matters within and upon my review of relevant rulemakings, reports, and other documents discussed below. I submit this declaration in support of the State and Local Government Petitioners' Brief filed in this challenge to the final actions of EPA and the National Highway Traffic Safety Administration (NHTSA), the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021-2026 Passenger Cars and Light Trucks," 85 Fed. Reg. 24,174 (April 30, 2020) ("Rollbacks").

Climate Change

6. Climate change is driven by the accumulation of greenhouse gases in the atmosphere. Greenhouse gases retain heat that would otherwise escape back to space; increasing concentrations of greenhouse gases in the atmosphere thus cause a continuing increase of the planet's average temperature over time, which in turn disrupts established geophysical systems (such as ocean circulation) and ecosystems across the globe. Since the Industrial Revolution began around the year 1750, the predominant source of climate-altering greenhouse gas emissions has been human activities. Human activities cause the emission of greenhouse gases in various ways, including through deforestation and the combustion of fossil fuels for energy.

7. Of all the long-lived greenhouse gases, the ones that have the largest climate impact are carbon dioxide (CO₂), methane, and nitrous oxide; of those three, CO₂, the most abundant human-emitted greenhouse gas, has by far the largest climate-warming impact. Before the Industrial Revolution, the global average

concentration of CO₂ was about 280 parts per million. Data from the National Oceanic and Atmospheric Association (NOAA) shows average global CO₂ concentrations, measured at Mauna Loa Observatory in May 2020, at 417.07 parts per million, the highest since measurements began in Hawaii in 1958.¹

8. Because of this dramatic uptick in CO₂ concentrations, the average global temperature has already risen almost one degree Celsius (1.8 degrees Fahrenheit) since pre-industrial times.² According to independent analyses by the National Aeronautics and Space Administration (NASA) and NOAA, Earth's average global surface temperatures in 2019 were the second warmest (following 2016) since measurements began in 1880, and the past six years have been the warmest of the last 140 years.³ Global surface temperatures show 2020 is on track to be one of the three

¹ NOAA Global Monitoring Laboratory, TRENDS IN ATMOSPHERIC CARBON DIOXIDE, <https://www.esrl.noaa.gov/gmd/ccgg/trends/>.

² IPCC, *Summary for Policymakers*, in *Global Warming of 1.5°C* (2018), https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf (The Intergovernmental Panel on Climate Change uses the reference period 1850–1900 to approximate pre-industrial temperature, as this is the earliest period with near-global observations.).

³ James Hanson, et al., *Global Temperature in 2019* (Jan. 15, 2020), http://www.columbia.edu/~jeh1/mailings/2020/20200115_Temperature2019.pdf; World Meteorological Organization, 2020 on track to be one of three warmest years on record (Dec. 2, 2020), <https://public.wmo.int/en/media/press-release/2020-track-be-one-of-three-warmest-years-record>.

warmest years on record, with 2011-2020 being the warmest decade on record.⁴ And September 2020 was the hottest September on record for the planet.⁵

9. The ocean has absorbed about 29 percent of global CO₂ emissions since the end of the pre-industrial era. Adding additional CO₂ to the ocean is changing the ocean's chemistry, making it more acidic and slowing its ability to take up more CO₂. If the ocean starts to take up less CO₂, more is left in the atmosphere where it can contribute to additional warming. Furthermore, warming global and regional temperatures are contributing to rising sea levels, both from thermal expansion of the ocean itself (seawater volume expanding as it gets warmer) and melting sea ice and glaciers around the world.

10. The timing of actions to reduce greenhouse gas emissions and the magnitude of such reductions are critical to climate mitigation efforts. Carbon dioxide remains in the atmosphere longer than the other major greenhouse gases emitted as a result of human activities: once emitted, approximately 40 percent will remain in the atmosphere for approximately 100 years, 20 percent will reside for 1000 years, and the final 10 percent will take 10,000 years to turn over. As explained in the

⁴ World Meteorological Organization, *supra* note 3; NOAA National Centers for Environmental Information, Global Climate Report – October 2020, 2020 Year-to-Date Temperatures Versus Previous Years (Dec. 11, 2020), <https://www.ncdc.noaa.gov/sotc/global/202010/supplemental/page-1>.

⁵ NOAA, Earth just had its hottest September on record (Oct. 14, 2020), <https://www.noaa.gov/news/earth-just-had-its-hottest-september-on-record>.

Fourth National Climate Assessment, “[w]aiting to begin reducing emissions is likely to increase the damages from climate-related extreme events (such as heat waves, droughts, wildfires, flash floods, and stronger storm surges due to higher sea levels and more powerful hurricanes).”⁶

11. The timing of emission reductions also affects the likelihood of reaching (or avoiding) climate tipping points. Tipping points are thresholds of abrupt and irreversible change (such as creating an irreversible shift to a hotter world with higher sea levels, changes in ocean circulation, or near-permanent drought in some regions). The two most recent IPCC Special Reports (published in 2018 and 2019)^{7,8} suggest that some tipping points could be reached even by an increase in the mean global temperature between 1 and 2 degrees Celsius. For instance, a recent commentary in the journal *Nature* summarized expert conclusions that nine major climate tipping points (including the slowing down of ocean circulation in the North Atlantic, massive deforestation in the Amazon, and accelerating ice loss from the West Antarctic ice sheet) are “dangerously close” to being triggered.⁹ Any one of these tipping points, if exceeded, could push Earth’s climate into catastrophic runaway

⁶ U.S. Global Change Research Program, *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*, at 1488 (2018).

⁷ IPCC, *Global Warming of 1.5°C* (2018), <https://www.ipcc.ch/sr15/>.

⁸ IPCC, *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate* (2019), <https://www.ipcc.ch/2019/09/25/srocc-press-release/>.

⁹ Timothy M. Lenton, et al., *Comment: Climate Tipping Points - Too Risky to Bet Against*, *NATURE* (Apr. 9, 2020) <https://www.nature.com/articles/d41586-019-03595-0>.

global warming, and could even produce a domino effect whereby one tipping point triggers others. Thus, as the planet continues to warm, it may be approaching a critical climate threshold beyond which changes may occur at significantly more rapid (decadal-scale) and catastrophic levels than previously anticipated.

12. Because of the compounding effect of greenhouse gas emissions (particularly CO₂) and the cascade effect of tipping points, reductions of current and near-term future emissions are especially necessary to avoid some of the most harmful effects of climate change, and those reductions cannot be made up by future reductions.

California's Climate Laws

13. As part of its efforts to reduce harmful air pollution, CARB has regulated emissions from light-duty vehicles since 1959. In 2004, California enacted the Nation's first law requiring limits on vehicular greenhouse gas emissions, Cal. Health & Safety Code § 43018.5, and CARB subsequently adopted regulations establishing such limits, 13 Cal. Code Regs. §§ 1961.1, 1961.3. In 2006, California enacted Assembly Bill (AB) 32, the Global Warming Solutions Act, requiring the State to reduce its greenhouse gas emissions to 1990 levels by 2020 and directing CARB to adopt regulations to achieve that goal. In 2016, the State Legislature set more ambitious goals in Senate Bill (SB) 32, which directs CARB to ensure that State greenhouse gas emissions are reduced 40 percent below 1990 levels by 2030.

The Impacts of EPA's and NHTSA's Rollbacks

16. According to EPA and NHTSA, their replacement of prior federal greenhouse gas emission and fuel economy standards with the weaker standards adopted in the Rollbacks will cause the emission of an additional 867–923 million metric tons of greenhouse gases. 85 Fed. Reg. at 24,180–81. This increase in greenhouse gas emissions amplifies the risk of further and more extreme climate impacts to California, as discussed below.

Climate Change Impacts on California

18. California is one of the most geographically and ecologically diverse regions in the world, with landscapes ranging from chaparral and grasslands to sandy beaches and rugged coastal areas to redwood rainforests and dense interior forests to snow-covered alpine mountains to dry desert valleys. Each of these regions experiences a unique combination of impacts from climate change. From record temperatures to increasingly intense wildfires¹⁰ to rising sea levels and increasingly acidic seas¹¹ to less reliable snowpack,¹² climate change poses an immediate and escalating threat to California’s environment, public health, and economic vitality.

¹⁰ A.P. Williams, et al., *Observed Impacts of Anthropogenic Climate Change on Wildfire in California*, 7 EARTH’S FUTURE 892–910 (2019), <https://doi.org/10.1029/2019EF001210>.

¹¹ E.B. Osborne, et al., *Decadal Variability in Twentieth-century Ocean Acidification in the California Current Ecosystem*, 13 NAT. GEOSCI. 43–49 (2020), <https://doi.org/10.1038/s41561-019-0499-z>.

¹² P.W. Mote, et al., *Dramatic Declines in Snowpack in the Western US*, 1 NATURE PARTNER JS. CLIM. ATMOS. SCI. (2018), <https://doi.org/10.1038/s41612-018-0012-1>.

19. California is already experiencing the effects of climate change, and it is expected that these effects will worsen in the coming decades. California has been warming since the early 20th century.¹³ New data released in fall of 2020 by NOAA's National Centers for Environmental Information¹⁴ shows that September 2020 officially ranks as California's hottest September since record-keeping began in 1880. Tracking with rising temperatures, California's 2020 fire season has been record-breaking, not only in the total amount of acres burned (at just over 4 million) but also in wildfire size: 6 of the 20 largest wildfires in California history occurred in 2020. Warmer air temperatures also alter precipitation and runoff patterns, affecting the availability of freshwater supplies. Temperature changes can also increase the risk of severe weather events, such as heat waves and intense storms. A wide range of impacts on ecosystems and on human health and well-being are associated with increased temperatures.¹⁵

20. California's infrastructure is at increasing risk from climate change. California owns and operates a wide range of physical assets and infrastructure, including the state highway system, university campuses, parks, and historic structures.

¹³ <https://oehha.ca.gov/climate-change/report/2018-report-indicators-climate-change-california>

¹⁴ NOAA, Earth just had its hottest September on record (Oct. 14, 2020), <https://www.noaa.gov/news/earth-just-had-its-hottest-september-on-record>.

¹⁵ Office of Environmental Health Hazard Assessment, *Indicators of Climate Change*, oehha.ca.gov/climate-change/document/indicators-climate-change-california.

These assets are worth billions of dollars, and the State uses this infrastructure to provide critical services to its residents. Climate change impacts, including sea-level rise, more severe heat days, more frequent drought, and increased risk of wildfires, heighten the risk of the State's infrastructure being damaged or lost, disruption to State provision of key services, and impairment of natural habitats within the State.¹⁶

21. The latest science shows that the rate of ice loss from Greenland and Antarctica is increasing and soon will become the primary contributor to global sea-level rise, overtaking ocean expansion from warming waters and the melting of mountain glaciers and ice caps.¹⁷ In particular, melting ice from Antarctica is causing higher sea-level rise in California than the global average. California has the nation's largest ocean economy, valued at over \$44 billion per year, with the vast majority of it connected to coastal recreation and tourism as well as ports and shipping. Many of the facilities and infrastructure that support California's ocean economy—not to mention the public beaches themselves—lie within a few feet of the present high tide line. Rising sea levels from global warming thus are the main cause of the biggest impacts to California's coastal land, infrastructure, and development, through more

¹⁶ Legislative Analyst's Office, *Assessing Vulnerability of State Assets to Climate Change* (Jan. 9, 2020), <https://lao.ca.gov/Publications/Report/4133>.

¹⁷ Thomas Slater, Anna E. Hogg & Ruth Mottram. Ice-sheet losses track high-end sea-level rise projections. *Nature Climate Change*, 2020 DOI: [10.1038/s41558-020-0893-y](https://doi.org/10.1038/s41558-020-0893-y).

frequent flooding and inundation as well as increased cliff, bluff, dune, and beach erosion.¹⁸ A significant share of the affected coastal lands are State owned.

22. In addition, a warming climate in the western United States is causing changes to the wildfire regime, with wildfires increasing in frequency, duration, and severity in the western United States.^{19,20,21} A 2016 study published in Proceedings of the National Academy of Sciences concluded that anthropogenic climate change has doubled the cumulative wildfire area burned in the West during 1984–2015.²² California’s annual wildfire extent has increased fivefold since the 1970s, aided by extremely large and destructive wildfires in 2017 and 2018,²³ and a further record-

¹⁸ G. Griggs, et al. (California Ocean Protection Council Science Advisory Team Working Group), *Rising Seas in California: An Update on Sea-Level Rise Science*. California Ocean Science Trust (Apr. 2017).

¹⁹ Anthony LeRoy Westerling, *Wildfire Simulations for the Fourth California Climate Assessment: Projecting Changes in Extreme Wildfire Events with a Warming Climate in California’s Fourth Climate Change Assessment*, Cal. Energy Commiss’n, Pub. No. CCCA4-CEC-2018-014 (2018),

http://www.climateassessment.ca.gov/techreports/docs/20180827-Projections_CCCA4-CEC-2018-014.pdf.

²⁰ J.K. Balch, et al., *Human-started Wildfires Expand the Fire Niche Across the United States*, 114(11) Proc. of the Nat’l Acad. of Sci. 2946–51 (2017), <https://doi.org/10.1073/pnas.1617394114>.

²¹ Kasha Patel, *6 Trends to Know about Fire Season in the Western U.S.*, NASA, Earth Matters (Nov. 29, 2018), <https://earthobservatory.nasa.gov/blogs/earthmatters/category/natural-hazards/>.

²² B.J. Harvey, *Human-caused Climate Change is Now a Key Driver of Forest Fire Activity in the Western United States*, 113 Proc. of the Nat’l Acad. Sci. USA 11649–50 (2016).

²³ Williams, A. P., Abatzoglou, J. T., Gershunov, A., Guzman-Morales, J., Bishop, D. A., Balch, J. K., & Lettenmaier, D. P. (2019). Observed impacts of anthropogenic

setting 2020 wildfire season. More than four million acres burned across the state in 2020—far surpassing the previous annual record of just under 2 million acres set in 2018.²⁴ This trend was mainly due to an eightfold increase in summertime forest-fire area and was very likely driven by drying of fuels promoted by human-induced warming.²⁵ Continued climate change will further amplify the number of days with extreme fire weather by the end of the century (absent any additional actions taken in accordance with the U.N. Paris commitments).²⁶

23. California’s Fourth Climate Change Assessment²⁷ states that “[c]limate change will make forests more susceptible to extreme wildfires” and suggests that climate change will lead to wildfires in the next few decades that will be unprecedented in size and severity.²⁸ If greenhouse gas emissions continue to rise,

climate change on wildfire in California. *Earth's Future*, 7, 892–910.

<https://doi.org/10.1029/2019EF001210>

²⁴ CAL FIRE, California Wildfires and Acres for all Jurisdictions,

<https://www.fire.ca.gov/media/11397/fires-acres-all-agencies-thru-2018.pdf>.

²⁵ A.P. Williams, et al., *Observed Impacts of Anthropogenic Climate Change on Wildfire in California*, 7 *EARTH'S FUTURE* 892–910 (2019), <https://doi.org/10.1029/2019EF001210>.

²⁶ Michael Goss, et al., *Climate Change is Increasing the Risk of Extreme Autumn Wildfire Conditions Across California*, *ENVTL RES. LETTERS* (2020), DOI: [10.1088/1748-9326/ab83a7](https://doi.org/10.1088/1748-9326/ab83a7).

²⁷ CA.GOV, California’s Fourth Climate Change Assessment, <http://www.climateassessment.ca.gov/>.

²⁸ State of California, *California’s Fourth Climate Change Assessment: Statewide Summary Report* at 9 (2018), https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf.

one study found that by 2100 the frequency of extreme wildfires burning 25,000 acres or more would increase by nearly 50 percent and average area burned statewide would increase by 77 percent.²⁹

24. Climate change also exacerbates other air pollution problems throughout California. Increasing temperatures generally cause increases in ozone concentrations in California's polluted regions.³⁰ Increasing frequency and intensity of wildfires is already having a measurable effect on air quality.³¹ In 2020, California cities dominated the top 10 cities with the worst air quality in the United States and, in some cases, the entire world because of several major wildfires in Northern California. Wildfires release large amounts of particulate matter and toxic gases. Particulate matter exposure is also a heightened problem during droughts, which climate change is also anticipated to exacerbate in California as changes in weather patterns block

²⁹ *Id.*

³⁰ *E.g.*, American Lung Association, *State of the Air 2018* at 4, <https://www.lung.org/assets/documents/healthy-air/state-of-the-air/sota-2018-full.pdf>.

³¹ Proc. of the Nat'l Acad. Sci. USA (Jul. 16, 2018), pii: 201804353, doi: 10.1073/pnas.1804353115, <https://www.ncbi.nlm.nih.gov/pubmed/30012611>; *see also* X. Liu, et al., *Airborne Measurements of Western U.S. Wildfire Emissions: Comparison with Prescribed Burning and Air Quality Implications*, 122 J. GEOPHYS. RES. ATMOS. 6108-29 (2017), doi:10.1002/2016JD 026315 (showing that wildfires emit fine particulate matter at over three times the level previously estimated).

rainfall from reaching the State.^{32,33} Indeed, with temperatures continuing to rise, California currently is projected to enter another multi-year drought.³⁴ Worse air quality from climate-driven or magnified events leads to increased risk for respiratory infections like bronchitis and pneumonia, which will result in greater health costs to the State.^{35,36,37}

25. Increasing greenhouse gas emissions due to the federal agencies’

Rollbacks will worsen these climate impacts throughout California.

³² A.P. Williams, et al., *Contribution of Anthropogenic Warming to California Drought During 2012-2014*, 42 GEOPHYS. RES. LETT. 6819–28 (2015), <http://doi.org/10.1002/2015GL064924>.

³³ I. Cvijanovic, B.D. Santer, C. Bonfils, C. et al., *Future Loss of Arctic Sea-ice Cover Could Drive a Substantial Decrease in California’s Rainfall*, 8 NAT. COMMUN. 1947 (2017), <https://doi.org/10.1038/s41467-017-01907-4>.

³⁴ CapRadio, “Is California Heading For A Multi-Year Drought? The Odds Aren’t In Our Favor, The Experts Say.” (Nov. 30, 2020), <https://www.capradio.org/articles/2020/11/30/is-california-heading-for-a-multi-year-drought-the-odds-arent-in-our-favor-experts-say/>; California WaterBlog, “Is California Heading for a Multi-Year Drought?” (Dec. 6, 2020), <https://californiawaterblog.com/2020/12/06/is-california-heading-for-a-multi-year-drought/>.

³⁵ John A. Romley, Andrew Hackbarth & Dana P. Goldman, *Cost and Health Consequences of Air Pollution in California*, Santa Monica, CA, RAND Corp. (2010), https://www.rand.org/pubs/research_briefs/RB9501.html.

³⁶ M. Wang, C.P. Aaron, J. Madrigiano, et al., *Association Between Long-term Exposure to Ambient Air Pollution and Change in Quantitatively Assessed Emphysema and Lung Function*, 322(6) J. AM. MED. ASSOC. 546-56 (2019), doi:10.1001/jama.2019.10255.

³⁷ A. Inzerro, *Air Pollution Linked to Lung Infections, Especially in Young Children*, AM. J. MANAGED CARE (May 6, 2018), <https://www.ajmc.com/newsroom/air-pollution-linked-to-lung-infections-especially-in-young-children>.

I certify under penalty of perjury under the laws of the State of California and the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed on January 11, 2021, at Sacramento, County of Sacramento, California.


ELIZABETH SCHEEHLE

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

COMPETITIVE ENTERPRISE
INSTITUTE, *et al.*,

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION, *et al.*,

Respondents.

No. 20-1145
(and consolidated cases)

DECLARATION OF SYLVIA VANDERSPEK

I, Sylvia Vanderspek, declare as follows:

Relevant expertise

1. I make this declaration based upon my knowledge and expertise in the matters within, my review of the relevant rulemakings, reports, and other documents discussed below, and (where indicated) information provided by my colleagues at the California Air Resources Board (CARB). I submit this declaration in support of the State and Local Government Petitioners' Brief filed in this challenge to the final actions of the United States Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA), the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021-2026 Passenger Cars and

Light Trucks,” 85 Fed. Reg. 24,174 (April 30, 2020) (SAFE Part Two Rollbacks or Rollbacks).

2. I am the Chief of the Air Quality Planning Branch in the Air Quality Planning & Science Division at CARB. I have held this position since May 2013.

3. I am the lead manager responsible for the Clean Air Act state implementation planning and control strategy development throughout the State for meeting air quality standards. The State Implementation Plan is required by the Clean Air Act for areas that do not meet air quality standards and describes how those air quality standards will be met by their attainment deadline. As part of the control strategy development, I oversaw the development of the 2016 Mobile Source Strategy¹ integrating the benefits of the criteria emission reductions contained in the 2016 Strategy for the State Implementation Plan with climate and toxic emission reductions.

4. In fulfilling my responsibilities as the lead manager for Clean Air Act state implementation planning throughout the State, I routinely review relevant plans and reports, and in doing so rely on my knowledge of: atmospheric modeling of air pollution, atmospheric reactions that contribute to air pollution, air pollution trends and projections, other causes of air pollution, and the health effects of air pollution. My knowledge of atmospheric modeling, including the atmospheric reactions that

¹ Mobile Source Strategy (May 2016),
<https://ww3.arb.ca.gov/planning/sip/2016sip/2016mobsrsrc.pdf>.

contribute to air pollution, is critical to my management of State Implementation Plan planning in order to identify the most effective strategies for providing healthy air for the residents of California. I also utilize my knowledge of air pollution trends and emissions, along with future emission projections, when overseeing the selection of future strategies and their impact on air quality. And as part of the State Implementation Plan planning process, I must analyze the health effects of criteria pollutants and other air pollutants.

5. Prior to this, I was the manager of the Particulate Matter Analysis Section in the Planning and Technical Support Division at CARB from February 2006 until May 2013. In this role, I supervised the development of particulate matter State Implementation Plans statewide and ozone State Implementation Plans for the San Joaquin Valley air basin. In addition, I oversaw development of the technical support analyses required to address particulate matter pollution and meet air quality standards in California.

6. Prior to that, I was a staff member of the Transportation Strategies Section in the Planning and Technical Support Division from April 2001 until February 2006 working on particulate matter and ozone implementation plans.

7. I have a Bachelor of Science in Agricultural Engineering from California Polytechnic State University, San Luis Obispo.

Clean Air Act planning obligations

8. The federal Clean Air Act (Act) requires states to develop and enforce implementation plans for “nonattainment” areas, i.e., areas of the State that have air pollution surpassing levels the federal government has deemed requisite to protect public health and the environment. EPA has developed national ambient air quality standards (NAAQS) for six “criteria” pollutants.

9. The standards for two of these pollutants—ozone and fine particulate matter (PM_{2.5})—are particularly relevant in California. California suffers some of the worst air pollution in the nation. The South Coast and San Joaquin Valley air basins are the only two regions in the country with the worst—Extreme—classification for nonattainment of the federal ozone standards of 75 parts per billion (ppb). These areas also suffer some of the worst levels of fine particulate matter pollution.

10. For all of the State’s nonattainment areas, California must implement all reasonably available pollution control measures as expeditiously as practicable. California’s ozone and fine particulate matter nonattainment areas rely on immediate emission reductions to provide critical health benefits and to demonstrate attainment of the standards in those areas with near-term attainment dates. California also has an interest in reducing harmful pollution across the State—including in areas that have attained the federal NAAQS—both because California must at least maintain attained air quality and because reducing this harmful pollution protects human health and the environment.

11. For the South Coast and San Joaquin Valley air basins, there are impending deadlines to attain different NAAQS in 2022 for 1-hour ozone, 2023 for 80 ppb ozone, 2024 for 24-hour PM_{2.5}, and 2025 for annual PM_{2.5}, as well as later years. Attaining these NAAQS, especially for ozone, requires sustained, comprehensive action to reduce emissions from all categories of sources. For instance, to achieve the ozone standards by 2031, CARB must reduce smog-forming NO_x emissions from on-road light-and heavy-duty vehicles by 85% from 2015 levels.²

12. Other areas of California also do not meet the NAAQS. For example, the Sacramento ozone nonattainment area is required to attain the 75 ppb 8-hour ozone standard by 2024.

13. If an area attains an air quality standard and is redesignated as attainment, it must develop a maintenance plan with measures and controls ensuring its air quality levels continue to remain below the standard.

14. If an area does not attain an air quality standard by the applicable deadline under the Clean Air Act, the consequences are substantial. In addition to the public health and environmental consequences, failure to meet a standard in the time required imposes additional obligations on the State to develop and submit a new plan

² See, e.g., CARB, Revised Proposed 2016 State Strategy for the State Implementation Plan at 7, 11 (Mar. 7, 2017), <https://ww3.arb.ca.gov/planning/sip/2016sip/rev2016statesip.pdf>.

that could lead to increased costs and restrictions on the myriad activities that cause air pollution.

15. California also has its own Clean Air Act, under which CARB has established state ambient air quality standards. These standards are generally more stringent than their federal counterparts, and CARB and the local air districts are mandated to meet and maintain those standards as well.³

The SAFE Part Two Rollbacks increase criteria pollutant and greenhouse gas emissions, thus jeopardizing several of California's attainment plans for both federal and State ambient air quality standards and necessitating additional emission reductions.

16. The federal agencies' Part Two Rollbacks will result in higher criteria pollutant and greenhouse gas emissions and increase concentrations of ground-level ozone and particulate matter.

17. As a result of the Rollbacks, EPA has replaced the robust greenhouse gas emission standards it promulgated in 2012 for model year 2021-2025 light-duty vehicles with substantially weaker standards. Whereas EPA's pre-existing standards increased in strength more than 4% on average each year, EPA's new standards increase in strength by only 1.5% on average each year. As a result, EPA projects that the new standards will increase gasoline consumption by 78 billion gallons, increase criteria pollutant emissions, and cause up to 1,000 premature deaths and other health problems due to worsened air quality. 85 Fed. Reg. at 24,181, 25,060, and 25,084.

³ *E.g.*, Cal. Health & Safety Code §§ 39606, 40910–40930.

According to analysis done by my colleagues at CARB, these projections—and their resulting health impacts—are likely underestimated because of several errors in the analysis.

18. The increase in criteria pollutants resulting from EPA’s adoption of weaker greenhouse gas standards will primarily occur “upstream,” i.e., from sources responsible for the refinement, production, storage, and transport of gasoline. California has more oil refineries than all other states except for Texas and Louisiana, and several are located in the South Coast and San Joaquin Valley air basins. The increased emission of criteria pollutants resulting from the SAFE Part Two Rollbacks will make it more difficult for California to meet and maintain the NAAQS for ozone and particulate matter.

19. In addition, EPA found that its new standards will increase greenhouse gas emissions by 867 million metric tons, which will increase the harmful effects of climate change. 85 Fed. Reg. at 24,181. Several of these climate impacts are making it more difficult for California to attain and maintain State and federal ambient air standards for ozone and particulate matter. For example, the concentrations of both pollutants depend strongly on temperature. Studies indicate that increasing temperatures generally cause increases in ozone concentrations in California’s polluted regions due to accelerated chemical reaction rates. The 2018 American Lung Association’s State of the Air report found that California’s ozone levels rose

significantly in 2016 due to some of the warmest temperatures on record.⁴ Additional emission controls will need to be implemented to make up for the “climate penalty” that causes higher air pollutant concentrations.^{5,6,7}

20. The increased frequency of wildfires and droughts due to climate change will also impede progress toward attainment and maintenance. Decades of air pollution gains within the western United States are being erased by the increasing number and severity of wildfires.⁸ Smoke from wildfires contains fine particulate matter, which is the most damaging size of particulate matter for human health. For instance, from August through October 2020, massive wildfires up and down the state blanketed large portions of California with smoke for weeks, turning the skies orange and producing some of the worst air quality in the world. These fires caused significant increases in fine particulate matter throughout the State, and contributed to an increase in the number of high ozone “bad air” days in the South Coast Air Basin

⁴ American Lung Association, *State of the Air 2018* at 4, <https://www.lung.org/assets/documents/healthy-air/state-of-the-air/sota-2018-full.pdf>.

⁵ D.J. Jacob & D.A. Winner, *Effect of Climate Change on Air Quality*, *ATMOS. ENVIRON.* 43, 51–63 (2009).

⁶ S. Wu, et al., *Effects of 2000–2050 Global Change on Ozone Air Quality in the United States*, *J. GEOPHYS. RES.-ATMOS.*, 113 (2008).

⁷ A.M. Fiore, et al., *Air Quality and Climate Connections*, *J. AIR WASTE MANAGE. ASSOC.* 65 (6), 645–685 (2015).

⁸ *Proc. Nat’l Acad. Sci.* (Jul. 16, 2018), <https://www.ncbi.nlm.nih.gov/pubmed/30012611>.

to levels not seen in over two decades.⁹ Similarly, climate change is increasing the frequency of droughts, which will increase wind erosion and ambient dust concentration.¹⁰ As soils become increasingly dry during a drought, dust from the ground is more likely to become airborne. Particulate matter suspended in the air from these events or from wildfire smoke can increase the risk for respiratory infections like bronchitis and pneumonia, which will result in greater health costs to the State.^{11,12}

21. The increased criteria emissions from the Rollbacks, whether directly or indirectly via further climate change, will need to be mitigated by developing additional control measures. But California's implementation plans already include all reasonably available control measures and other measures necessary to attain the federal standards by the Clean Air Act's deadlines. In fact, EPA's 2019 withdrawal of California's waiver stripped away two such measures, namely California's state standards for vehicular greenhouse gas emissions and its ZEV mandate. *See* 84 Fed.

⁹ The Fresno Bee, "California's air quality is the worst in the nation. How to protect yourself" (Sept. 8, 2020), <https://www.fresnobee.com/news/california/fires/article245574900.html>; Los Angeles Times, "L.A. began 2020 with a clean-air streak, but ended with its worse smog in decades" (Dec. 6, 2020), <https://www.latimes.com/california/story/2020-12-06/2020-la-air-quality-southern-california-pollution-analysis>.

¹⁰ M.C. Duniway, et al., *Wind Erosion and Dust from US Drylands: A Review of Causes, Consequences, and Solutions in a Changing World*, ECOSPHERE 10(3) (2019).

¹¹ C. Stanke, et al., *Health Effects of Drought: A Systematic Review of the Evidence*, PLOS CURRENTS, 5 (2013).

¹² *See, e.g.*, C.G. Jones, et al., *Out-of-Hospital Cardiac Arrests and Wildfire-Related Particulate Matter During 2015-2017 California Wildfires*, J. AM. HEART ASSOC. 9(8) (2020).

Reg. 51,310.¹³ Section 182(e)(5) of the federal Clean Air Act allows Extreme ozone nonattainment areas to anticipate development of new control techniques or improvement of existing control technologies and rely on those to demonstrate attainment in the implementation plan. CARB has worked with the South Coast air district to include these new or improved technologies expectations into the existing implementation plan.¹⁴ In light of the increase in criteria emissions, developing additional control measures, will be onerous in all nonattainment areas, but will be particularly hard in the South Coast and San Joaquin Valley air basins.

I certify under penalty of perjury under the laws of the State of California and the United States of America that the foregoing is true and correct.

Executed on December 31, 2020, at Sacramento, County of Sacramento, California.

Sylvia Vanderspek

SYLVIA VANDERSPEK

¹³ Challenges to this action are currently pending before this Court (see *Union of Concerned Scientists et al. v. NHTSA et al.*, Case No. 19-1230 (and consolidated cases)).

¹⁴ See 84 Fed. Reg. 28,132, 28,135-36 (June 17, 2019) for U.S. EPA's proposed approval of California's comprehensive plan for the South Coast air basin to meet multiple ozone NAAQS that relies on new technologies under Section 182(e)(5) of the Clean Air Act, and additional commitments from the District to reduce emissions.

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

COMPETITIVE ENTERPRISE
INSTITUTE, et al.,

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION, et al.,

Respondents.

No. 20-1145
(and consolidated cases)

DECLARATION OF ELIZABETH T. BABCOCK

I, Elizabeth T. Babcock, declare:

1. I am a Manager in the Office of Climate Action, Sustainability and Resiliency for the City and County of Denver (“Denver”). I have served in this role since January 2019 when the climate action section was created in Denver’s Department of Public Health and Environment (“the Department”). Prior to that, I served as a Manager and Administrator with the Department. I have worked at Denver for over nine years and during that time, I have overseen community outreach and engagement and developed and

implemented policies and programs that address air quality, water quality, and climate change issues. I have over 10 years of experience in environmental policy.

2. In my current role, I lead a team of 10 professionals to drive action to meet Denver's climate goals. I am responsible for developing and implementing a number of climate mitigation and adaptation plans, policies, and programs. These include: Denver's 80x50 Climate Action Plan, Denver's Climate Adaptation Plan, electric vehicle market acceleration, the Certifiably Green Denver program, Denver's Sustainable Neighborhoods program, and various waste diversion pilot programs. Of note, Denver's 80x50 Climate Action Plan was released in 2018 and the Plan defines how Denver will meet its long-term climate goal to reduce carbon emissions 45% below 2005 levels by the year 2030 and 80% below 2005 levels by the year 2050. The Climate Action Plan calls for deep decarbonization in buildings, transportation and electricity generation.

3. Denver has a long history of innovative initiatives related to climate change and is a national leader in this space. Denver conducted its first greenhouse gas inventory in 2005, released its first

Climate Action Plan in 2007, has reported to the Carbon Disclosure Project since 2012, and released its first Climate Adaptation Plan in 2014. Denver was also one of the first cities to sign on to the Mayor's Climate Protection Agreement of the U.S. Conference of Mayors, the ambitious Mayors' National Climate Action Agenda, and the Global Covenant of Mayors.

4. I have personal knowledge and experience regarding climate related threats to the Denver region (or "Front Range"), including potential impacts to our region from the Environmental Protection Agency's ("EPA") amendment of its greenhouse gas emission standards and the promulgation of the Safer Affordable Fuel-Efficient ("SAFE") Vehicles Rule ("Rule") by EPA and the National Highway Traffic Safety Administration ("NHTSA").

Climate Change Impacts to Denver

5. From hotter summers to extreme weather events, Denver is already experiencing the impacts of climate change. According to Denver's 2014 Climate Adaptation Plan¹, the most significant hazards

¹https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/EQ/Climate1/Climate_Adaptation_Final%20with%20letter.pdf

our region faces due to climate change include: (1) increased temperatures and urban heat island effect; (2) increased frequency of extreme weather events; and (3) reduced snowpack and earlier snowmelt. From a study on extreme heat conducted by the Rocky Mountain Climate Organization, if worldwide emissions continue to rise at the historical rate, by midcentury Denver will have, in extreme years, 25 days per year of temperatures at or above 100°F, and, by the end of the century, Denver's most extreme year could see 72 days of temperatures at or above 100°F.²

6. According to Climate Central, Denver currently ranks third in the nation for the worst heat island effect, with up to a 23°F difference between the city and nearby rural areas.³ Denver also ranks among the top 10 U.S. metropolitan areas for number of asthma attacks and is the eighth most ozone-polluted city in the United States.⁴ The resulting adverse effects on the respiratory

² <http://www.rockymountainclimate.org/extremes/denver.htm>

³ <https://www.climatecentral.org/wgts/UHI/index.html>

⁴ http://www.catf.us/wp-content/uploads/2018/10/CATF_Pub_GaspingForBreath.pdf

system are particularly dangerous for children, the elderly, and those with respiratory disease.

7. The Denver Metro North Front Range experiences significant challenges with ozone and has been classified as a Serious non-attainment area by the EPA. Transportation emissions account for approximately half of pollutants responsible for the formation of ozone in this area. Because of this, a majority of the state's population is exposed to high levels of ozone, endangering public health. Poor air quality harms everyone who breathes, but the effects are especially harmful for children, the elderly, those with respiratory disease, people with low income, and people of color.

8. Climate change is driving poor air quality in Denver. Higher temperatures combined with more stagnant air days results in longer and more intense ozone seasons in the Front Range.⁵

9. The current COVID-19 crisis tightens our focus on the critical importance of air quality to respiratory health. The Centers for Disease Control and Prevention ("CDC") has cited chronic

⁵ <https://www.climatecentral.org/news/climate-change-is-threatening-air-quality-across-the-country-2019>

obstructive pulmonary disease as a risk factor for poor COVID-19 outcomes.⁶ While the literature is still developing regarding COVID-19 morbidity and mortality related to air pollution, air pollution is closely linked to negative outcomes from similar respiratory diseases.⁷

10. Higher temperatures may also have a significant impact on water supplies. Denver provides residents with water primarily taken from stream flows sourced by annual snowmelt from the nearby Rocky Mountains. Rising temperatures tend to cause earlier snowmelt in the mountains, which can lead to diminished water supplies in the summer months when demand is highest. To prepare for the impacts of diminished water supplies, Denver Water—the entity that supplies treated water to the Denver region—in 2015 and 2016 spent \$3 million to drill eight bore holes to investigate a process known as Aquifer Storage and Recovery (“ASR”). This technique involves storing treated water in aquifers during wet years and

⁶ CDC, *People Who are Higher Risk for Severe Illness*, <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html#copd>

⁷ Cui, Y., Zhang, Z., Froines, J. et al., *Air pollution and case fatality of SARS in the People's Republic of China: an ecologic study*, *Environ Health* 2, 15 (2003), <https://doi.org/10.1186/1476-069X-2-15>

pumping it back up for use in times of drought. One of the major benefits of ASR is that stored water is not lost to evaporation. Evaporative losses are increasing throughout Colorado because of climate warming.

11. Climate change has already made Colorado more susceptible to extreme weather events such as heat waves, hail storms, drought, flooding, and wildfires. The increase in the frequency and severity of these events puts significant strain on local governments who must provide emergency response services and ongoing human services for vulnerable populations. It also has a significant impact on infrastructure, the economy, and human health. Denver has experienced significant impacts from recent extreme weather events, such as the 2018 hail storms which caused significant financial and infrastructure impacts. Colorado led the country that year in insurance claims from hail damage. Direct property losses to Denver caused by hail events amounted to \$3,655,958 in 2017, \$918,816 in 2018, and \$84,319 in 2019.

12. As another example of recent extreme weather events, a historic rain event in September 2013 and subsequent flooding

swelled rivers and creeks across the region, killed 10 people and caused nearly \$4 billion in damage across 24 counties in Colorado, including Denver. Denver suffered direct property losses amounting to \$3,088,496 from the floods. The floods displaced 18,000 people and destroyed more than 1,800 homes and 200 businesses.⁸ The Governor declared the flood a state disaster, and the President declared the flood a national disaster.

Denver's Response to Climate Change Threats

13. Denver has dedicated significant staff and budget resources to pursue efforts related both to climate change mitigation and adaptation actions. The newly created Office of Climate Action, Sustainability and Resiliency, which formally began operations on July 1, 2020, is tasked with setting greenhouse gas emission reduction goals in line with the climate science and recommendations of the Intergovernmental Panel on Climate Change and preparing Denver to respond to the impacts of a changing climate.

⁸ See <https://www.denverpost.com/2017/09/14/colorado-floods-2013-photos/>

14. Denver is pursuing high-impact policies and programs to reduce emissions from buildings, electricity generation, transportation, and waste. In the transportation sector, Denver is taking aggressive action to increase market adoption of electric vehicles and to provide people with multi-modal transportation choices. In 2018 and 2019, Denver, in partnership with other local governments, supported the successful effort of the state of Colorado to adopt California's Advanced Clean Car Standards as well as the Zero Emission Vehicle Standards for model years 2022 and beyond.⁹ A 2019 report by the Denver Department of Public Health and Environment concluded that an electric vehicle in Denver in 2018 produced 71 percent less nitrogen oxides, 99 percent less volatile organic compounds, and 34 percent less greenhouse gases than a new gasoline powered vehicle. The report further determined that by 2025, an electric vehicle in Denver would produce 83 percent less nitrogen oxides, 99 percent less volatile organic compounds, and 59

⁹<https://drive.google.com/file/d/1JoxTqZx6xBToVP7H5DUEbuTo5V5Zb83E/view>

percent less greenhouse gases than a gasoline powered vehicle.¹⁰ In addition, Denver's Mobility Action Plan commits to aggressive actions to provide people with more transportation options, including biking, walking, and transit.

15. Renewable energy is a top strategy to reduce emissions and Denver participates in programs such as Community Solar Gardens and rooftop solar. In addition, Denver is active in state regulatory processes to advance renewable generation statewide. In 2020, Denver was ranked tenth nationally among large cities for installed solar photovoltaic (PV) panels per capita.¹¹

16. Denver has also pursued many strategies to prepare for a changing climate. The 2014 Climate Adaptation Plan lays out many strategies across all city agencies that will be necessary to prepare for climate disruptions and adapt to changing conditions.¹² These include: (1) requiring xeric planting or low water use landscape

¹⁰<https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/EQ/EV/EVFinalReport.pdf>

¹¹ See <https://environmentamerica.org/feature/ame/shining-cities-2020>

¹²https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/EQ/Climate1/Climate_Adaptation_Final%20with%20letter.pdf

plantings in the urban design standards to respond to the growing unreliability of the annual snowpack; (2) developing incentives or regulations to improve resiliency of buildings in areas facing increased risk of flood; (3) requiring construction of “safe rooms” as described in the 2015 ICC building code to protect citizens during extreme weather events; and (4) designating public cooling shelters for extreme heat events.

The Rule Will Negatively Impact Denver

17. The greenhouse gas emission standards for passenger vehicles have been EPA’s most beneficial regulation for addressing climate change. The Rule weakens the greenhouse gas emission standards EPA previously established for model years 2021–2025, and according to EPA the new, weaker standards will increase the emission of greenhouse gases by 867 million metric tons.¹³ This increase in greenhouse gases will exacerbate the harmful impacts of climate change on vulnerable cities and regions, including Denver. Among other impacts, the resulting increase in hot days will increase

¹³ 85 Fed. Reg. 24,174, 241,81 (Apr. 30, 2020).

the number and severity of localized ozone events, endangering public health and increasing cost burdens on families and local government. Outdoor workers exposed to ozone events and extreme heat may experience health effects from exposure and the City will need to plan for managing those impacts on staff. During extreme heat events, public health staff may need to be activated to support efforts to mitigate increased morbidity and mortality, putting additional strain on already overburdened local public health agencies.

18. The third National Climate Assessment shows that cities will continue to bear the brunt of environmental, public health, and safety impacts associated with climate change. Denver, given its particular vulnerability to climate change, has a significant interest in the outcome of the legal issues related to the Rule. Because of the

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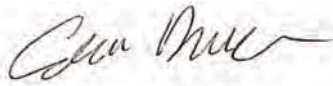
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unique and urgent threats to Denver and our region posed by climate change, Denver strongly opposes the Rule.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 6, 2021



Elizabeth T. Babcock
Manager, Office of Climate Action, Sustainability and Resiliency
City and County of Denver

DECLARATION OF GEORGE S. ABURN, JR.

I, George S. Aburn, Jr., declare as follows:

1. I am employed as the Director of the Air and Radiation Administration (“ARA”) within the Maryland Department of the Environment (“MDE” or “the Department”). I have held this position since February of 2006. In this capacity, among other responsibilities, I oversee management of the State’s climate change, air quality compliance, air monitoring, air planning programs, and other efforts by Maryland to reduce and/or respond to the impacts of air pollution, including greenhouse gas (“GHG”) emissions.

I submit this declaration in support of the State Petitioners’ standing to challenge final actions of the United States Environmental Protection Agency (“EPA”), United States Department of Transportation (“USDOT”), National Highway Transportation Safety Administration (“NHTSA”), set forth in the Federal Register notice published at 85 Fed. Reg. 24,174 (April 30,2020) and titled “Safer Affordable Fuel-Efficient (“SAFE”) Vehicles Rules for Model Years 2021-2026 Passenger Cars and Light Trucks”; and review of EPA’s action titled “Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025

Light-Duty Vehicles,” set forth in the Federal Register notice published at 83 Fed. Reg. 16,077 (Apr. 13, 2018). See 5 U.S.C. § 704 (“A preliminary, procedural, or intermediate agency action or ruling not directly reviewable is subject to review on the review of the final agency action.”).

The Rule projects an increase in GHG emissions of either 867 million metric tons (EPA's CO₂ standards) or 923 million metric tons (NHTSA's CAFE standards). See 85 Fed. Reg. at 24180-81. Maryland will be harmed by the climate and health effects that will result in an increase in GHG emissions by nearly 1 billion metric tons. Climate change will erode state-owned coastal property; cause increased flood damage to critical infrastructure owned, funded, and/or maintained by Maryland; and harm the ecological resources of the State. Increased levels of GHG emissions will injure the health of Maryland residents, cause the State to incur increased medical costs, and hamper the State's ability to comply with federal air pollution standards.

PERSONAL BACKGROUND AND QUALIFICATIONS

2. Prior to my appointment as Director, I served as the Department's Manager of Air Quality Planning and Monitoring Program for 14 years. In that position, I was responsible for the development of

State plans to achieve compliance with National Ambient Air Quality Standards (“NAAQS”), new regulatory initiatives and adoption of air quality control regulations, as well as education and outreach efforts. I have worked in air quality control programs for MDE, and its predecessor agency, in various capacities for over 30 years. I received a Bachelor’s Degree in Environmental Engineering from Brown University in 1978.

3. In my professional capacity, I have served as Chairman of various working committees for the Ozone Transport Commission (“OTC”). I am on the Board of Directors for the Mid-Atlantic Regional Air Management Association (“MARAMA”), and I am a two-term past President of the National Association of Clean Air Agencies (“NACAA”). I currently serve as the Co-Chair of NACAA’s Criteria Pollutant Committee.

4. In a career that has spanned more than 30 years, addressing climate change has been one of the biggest challenges I have encountered working on air pollution policy and control. I have managed Maryland’s efforts to identify every feasible control program that could provide some meaningful benefit. I have organized, funded, and been part of approximately 10 years of research related to climate change and efforts

to reduce GHG emissions. I have worked with other states to try and adopt regional control programs to reduce GHG emissions, such as the Regional Greenhouse Gas Initiative (“RGGI”). I can state with certainty that unless the impacts of climate change are effectively reduced, Maryland faces severe consequences.

CLIMATE CHANGE HARMS THREATENING MARYLAND

5. Maryland has been, and continues to be, impacted by climate change. With more than 3,000 miles of coastline, Maryland’s coast is particularly vulnerable to rising sea levels and the more extreme weather events associated with climate change including shoreline erosion, coastal flooding, storm surges, inundation, and saltwater intrusion into groundwater supplies. In 2007, the Maryland Commission on Climate Change (“MCCC”) was established and charged with evaluating and recommending state goals to reduce Maryland’s GHG emissions to 1990 levels by 2020 and to reduce those emissions to 80 percent of their 2006 levels by 2050. The MCCC was also tasked with developing a plan of action that addressed the causes and impacts of climate change which includes firm benchmarks and timetables for policy implementation. As

a result of the work of more than 100 stakeholders and subject matter experts, the MCCC produced a climate action plan.

6. That plan was the impetus of Maryland's Greenhouse Gas Emissions Reduction Act of 2009 (“GGRA”). This groundbreaking law requires statewide, science-based reductions in the GHGs that are changing our climate and threatening our health. In order to achieve those reductions, GGRA also requires the creation of Maryland’s Greenhouse Gas Reduction Plan. Maryland’s Greenhouse Gas Reduction Plan initially laid out state actions to achieve the required 25% reduction in GHGs from 2006 levels by 2020. The GGRA specifically requires the development of a baseline inventory for 2006. This inventory was developed based on six categories of heat retaining gases: carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons and perfluorocarbon. These gases have various global warming potentials, with gases like Methane (CH₄), having a higher global warming potential than CO₂.

7. The GGRA directed the state to reduce climate pollution by 25 percent by 2020 and led to the creation of Maryland’s wide-ranging Greenhouse Gas Reduction Plan, which includes more than 150

programs. Through the plan, Maryland remains committed to implementing smart environmental and economic strategies, such as increasing clean energy use, helping customers save energy and money through Maryland's EmPower program, and participating in RGGI, a regional program that reduces carbon pollution from fossil fuel fired power plants.

8. More recently, on April 4, 2016, Governor Larry Hogan signed the landmark Greenhouse Gas Emissions Reduction Act of 2016 ("GGRA 2016") into law. The GGRA 2016 further extended the goal to a 40 percent reduction in GHGs from 2006 levels by 2030, requiring long-term cuts in pollution.

9. In the Northeast, the rate of sea level rise already observed is greater than the global average, having increased about one foot since 1990, likely due to both increased ice loss as well as changes in regional currents and land subsidence. The climate in Maryland and the rest of the Northeastern U.S. is currently trending warmer and wetter, a trajectory that is expected to continue. Maryland has experienced an increase in annual average temperature of 1.5°F since the beginning of the 20th century, and a winter warming trend reflected in the average of

less than one day per year of nights below 0°F since the mid 1990's, as compared to an average of two nights per year between 1950 and 1994. Annual precipitation, though more variable, increased by approximately 0.39 inches per decade in the Northeast during this same time, with Maryland's annual mean precipitation having been above average for the past two decades.

10. Heat waves are likely to increase in frequency, intensity and duration corresponding directly to increases in emissions; and Maryland is expected to have a notable increase in days with extreme heat (over 90 degrees Fahrenheit) by 2050, as compared to the late 1900's. The trend in average precipitation is expected to remain seasonal, increasing in the winter and spring, with less change expected in the fall and summer. Combined with the higher summer temperatures, greater evaporation and earlier snowmelt will create a risk of drought during the growing season (significant for both ecosystems and human systems). Additional impacts in Maryland could include increased frequency and severity of other existing problems such as storms, flooding, and forest fires, as well as erosion, saltwater intrusion and inundation of low-lying areas along the State's shoreline and coast.

11. In terms of health impacts, the average number of days for which Maryland is likely to exceed temperatures of 90 degrees or higher is expected to rise considerably, markedly exacerbating heat-related illnesses and mortality, particularly among the elderly. Pollution, excessively warm temperatures, and other environmental factors such as extreme precipitation have also been shown to increase the risk of a number of infectious diseases.

12. Agriculture in Maryland will be affected. In 2016, the market value of all agricultural products was over \$2.3 billion. Maryland's total production in 2017 included over \$1 billion in broiler chickens, \$699 million in field crops, and \$169 million in milk. Poultry farms, the highest grossing agricultural industry in the State, are expected to see increased summer cooling costs, decreased growth rates, increased mortality, and increased risk of Salmonella with increasing temperatures, challenging already slim margins. Increased frequency of summer heat stress has the potential to negatively affect both field crops and milk production yields, and may amplify water demand, increasing the risk of over pumping groundwater for irrigation. This latter tendency, combined with sea-level

rise, places unconfined aquifers exposed to the freshwater-saltwater interface on the Eastern shore at risk from saltwater intrusion.

13. Changes in temperature and precipitation are also likely to alter the types of crops that can be grown in a given region, similar to the effects on natural plant populations. The seasonality of trends in temperature and precipitation is also particularly relevant to the agricultural sector. Combined with the higher summer temperatures, this will likely increase the intensity of any droughts during the growing season. Perennial crops such as fruit trees and vines are also at risk as their life cycles rely on particular seasonal cues. In 2017, Maryland's apple and peach orchards produced over \$11.5 million utilized for fresh eating and in processing. Additionally, the State has 858 acres of vineyards, 70 percent of which are owned by wineries that sold \$47 million worth of product in 2015.

14. Businesses involved in the State's tourism sector are also likely to feel the impact of climate change. In 2016, Maryland visitors spent \$17.3 billion dollars, more than 60 percent of which was in the industries of transportation, food and beverage, and lodging. Tourism in the State supported 146,012 direct full-time equivalent jobs in that year,

bringing in wages of approximately \$6 billion; while visitor spending generated over \$2.3 billion in state and local taxes. Without action, the natural beauty of the State could suffer the effects of climate change, depriving Maryland residents and visitors of a wealth of experiences.

15. Finally, the Chesapeake Bay is the largest estuary in the United States, fed by a watershed that stretches from mountains to sea across 64,000 square miles (166,000 square kilometers), spanning six states - Maryland, Delaware, Virginia, West Virginia, Pennsylvania, and New York - and the District of Columbia. However, human development and pollution have degraded the natural resilience of the ecosystems of the Bay and its watershed, leaving them more vulnerable to extreme events. Climate change will likely exacerbate this problem, creating a greater threat to these ecosystems. The Chesapeake Bay fisheries are expected to be impacted by a combination of environmental stressors, including basic water quality issues that include changes in temperature, salinity, and dissolved oxygen, as well as habitat loss due to sea level rise and projected impacts on submerged grasses. Many commercially important fisheries species are projected to move northward as waters warm and suitable habitats shift and, as previously noted, this shift could

also bring new pests or increase the damages done by diseases such as bacteria that thrive in warmer waters. Maryland's seafood industry contributes nearly \$600 million to the state economy each year. In 2016, the commercial landings value of Maryland's seafood industry was \$90,361,277. Within the State, the blue crab remained the most lucrative species by far, accounting for over \$54 million in revenue in 2015, with the oyster coming in second at \$15 million. In addition to concerns regarding ocean acidification, oysters may be at an increased risk of suffocation by sediment loads, exposure to low-oxygen dead zones, and damages from the diseases such as Dermo and MSX, all of which have contributed to the historic decline of the oyster population and may be exacerbated directly or indirectly by the changing climate.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 20th day of October, 2020



George S. Aburn, Jr.
Director, Air and Radiation Administration
Maryland Department of the Environment

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

STATE OF CALIFORNIA, *et al.*,

Petitioners,

v.

ANDREW R. WHEELER, *et al.*,

Respondents.

No. 20-1167

(consolidated with No. 20-1145)

DECLARATION OF LISA BERRY ENGLER

I, Lisa Berry Engler, declare of my personal knowledge as follows:

1. I am currently employed by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) as Director of the Office of Coastal Zone Management (CZM). CZM is the lead policy and planning agency on coastal and ocean issues in Massachusetts. I have held this position for 21 months. I have been employed by CZM since 2011, having held positions with increasing responsibility. I previously held the positions of Assistant Director, Boston Harbor Regional Coordinator, Acting Director for the Massachusetts Bays National Estuary Program (MassBays), and MetroBoston Regional Coordinator for MassBays. Prior to joining CZM, I held positions with the Massachusetts

Department of Transportation and the Massachusetts Department of Conservation and Recreation.

2. I have extensive professional knowledge and experience regarding the impacts of climate change on coastal resources and communities in Massachusetts, as well as Massachusetts' efforts to plan and prepare for such impacts. My job duties include providing oversight and administration for CZM and directing policy development, planning efforts, and technical approaches for CZM program areas. I supervise a team of 34 multidisciplinary professionals working in a range of program areas, including climate change adaptation and coastal resilience administered as CZM's StormSmart Coasts Program. Many of the staff I oversee have significant professional experience in coastal and environmental management, planning, science, policy, and other related fields. I routinely engage and partner with scientific and technical subject matter experts in federal agencies and academia. As part of my management responsibilities, I oversee CZM's work to provide information, strategies, tools, and financial resources to support communities and people working and living on the Massachusetts coast to address the challenges of erosion, flooding, storms, sea level rise, and other climate-change impacts. For instance, I oversee the development of sea level rise decision-support tools and services including inundation maps and guidance documents. I also direct CZM's work to provide policy and planning support and technical assistance to

other state agencies, local communities, and private entities regarding adapting and increasing resilience to current and future impacts of climate change on our coast. For example, I oversee CZM's StormSmart Coasts Program that offers competitive grants, hands-on technical and planning assistance, and decision-support tools to Massachusetts cities and towns and non-profit organizations for the purposes of planning for and adapting to sea level rise and other climate-change-related coastal hazards.

3. In my role with CZM, I chair and participate in various legislative and executive branch groups, including the Massachusetts Ocean Advisory Commission and Science Advisory Council and associated work groups. I also represent the Commonwealth of Massachusetts (Commonwealth) on several multi-state organizations, including the Coastal States Organization, Northeast Regional Ocean Council, and the Gulf of Maine Council on the Marine Environment.

4. I have a bachelor's degree in Biology from Colby College and a master's degree in Environmental Management from Duke University.

5. I am aware of and familiar with the science related to global and local climate change. My knowledge comes from my review of scientific peer-reviewed literature and consensus assessment reports, attendance at professional conferences and workshops, and professional exposure to other research and material. As a result of my professional experience and my knowledge of the peer-reviewed

literature and reports, as well as my knowledge of the Massachusetts coastal resources and policies and planning related thereto, I can attest to the following.

6. The purposes of this declaration are to: (i) briefly describe the serious harms that climate change, caused in part by motor vehicle emissions, is causing and will continue to cause to Massachusetts' coastal resources, infrastructure, and communities; and (ii) briefly summarize extensive state and local initiatives, programs, and plans to respond to and prepare for such impacts. I am submitting this declaration in support of the brief filed in this action by State and Municipal Petitioners to challenge the final action of the United States Environmental Protection Agency and the National Highway Traffic Safety Administration (collectively "Agencies") entitled *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*, 85 Fed. Reg. 24,174 (Apr. 30, 2020). In that rule, the Agencies would establish new fuel-economy standards for passenger cars and light trucks in Model Years 2021-2026, as well as the standards for controlling greenhouse gas emissions from those same model-year motor vehicles.

Climate Change Threatens Massachusetts' Coastal Resources and Communities

7. The accelerated rate of global sea level rise and the severity and timing of coastal impacts due to this rise in sea level are largely dependent on current and future global greenhouse gas emissions, including carbon dioxide

emissions, and reduction measures. Continued emissions of greenhouse gases, including from motor vehicles, will result in increases in global temperature, yielding additional contributions to global sea level rise (*i.e.*, increased contributions from thermal expansion of warmer waters and melting of land-based ice sheets).¹

8. Human-caused climate change has led to a rise in global mean sea levels of 7 to 8 inches since 1900, and a rate of rise greater than that in any preceding century in the last 2,800 years.² Global average sea levels will continue to rise by 1 to 4 feet by 2100, and emerging science regarding Antarctic ice sheet instability indicates sea level rise of as much as 8 feet by 2100 cannot be ruled out.³ Due to the relationship of the East Coast to the Gulf Stream and melting Antarctic ice sheets, sea level rise will be higher than the global average on the East Coast of the United States.⁴

9. A March 2018 report entitled *Massachusetts Climate Change Projections* (2018 Projections Report), informed by a team of scientists from the

¹ See generally U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME I (D.J. Wuebbles et al. eds., 2017), <https://science2017.globalchange.gov/>.

² *Id.* at 10.

³ *Id.*

⁴ *Id.*

U.S. Department of the Interior's Northeast Climate Adaptation Science Center at the University of Massachusetts Amherst, presents the best available, peer-reviewed science on climate change downscaled, or localized, for Massachusetts through the end of this century.⁵ The 2018 Projections Report identifies substantial increases in air temperature, precipitation, and sea levels across Massachusetts as a result of human-caused greenhouse gas emissions.

10. A key component of the 2018 Projections Report is sea level rise projections for the state's coastline. The analysis for Massachusetts consisted of a probabilistic assessment of future relative sea level rise at tide gauge stations with long-term records at Boston Harbor, MA, Nantucket, MA, Woods Hole, MA, and Newport, RI.⁶ The sea level projections are based on a methodology that provides complete probability distributions for different greenhouse gas emissions scenarios.⁷ Working with the principal investigators (Robert DeConto and Robert Kopp) and a team of external peer reviewers, CZM reviewed and synthesized the

⁵ MASSACHUSETTS CLIMATE CHANGE PROJECTIONS (2018), https://nescaum-dataservices-assets.s3.amazonaws.com/resources/production/MA%20Statewide%20and%20MajorBasins%20Climate%20Projections_Guidebook%20Supplement_March2018.pdf.

⁶ *See id.* at 11 (citing Robert M. DeConto & Robert E. Kopp, *Massachusetts Sea Level Assessment and Projections*, Technical Memorandum (2017)).

⁷ *See id.* (citing Robert E. Kopp et al., *Probabilistic 21st and 22nd century sea level projections at a global network of tide gauge sites*, 2 EARTH'S FUTURE 383–406 (2014)).

downscaled projections, which are made available by the Commonwealth, to set forth a standard set of sea level rise projections to be used by municipalities, state government, industry, the private sector, and others to assess vulnerability and identify and prioritize actions to reduce risk. Given a high emissions pathway (Representative Concentration Pathway 8.5), Massachusetts is projected to experience approximately 4.0 to 7.6 feet of sea level rise over the twenty-first century (99.5% probability), with as much as 10.2 feet possible when accounting for higher ice sheet contributions (99.9% probability).

11. Massachusetts has 2,819 miles of tidal coastline, and a coastal zone (land areas from the shoreline to 100 feet inland of major roads or railways from New Hampshire to Rhode Island) that encompasses 886 square miles. Approximately 4.9 million people or 75% of the Commonwealth's population (as of the 2010 U.S. census) reside in coastal counties. In 2014, the total output of the Massachusetts coastal economy was \$249.2 billion, representing over 54% of the state's annual gross domestic product, and coastal counties accounted for 53% of the state's employment and wages.⁸ Approximately 170,000 year-round residents are currently (as of the 2010 U.S. census) located within coastal flood hazard areas,

⁸ NAT'L OCEAN ECONOMICS PROGRAM, STATE OF THE U.S. OCEAN AND COASTAL ECONOMIES: COASTAL STATES SUMMARIES – 2016 UPDATE 29 (2016), http://midatlanticocean.org/wp-content/uploads/2016/03/CoastalStatesSummaryReports_2016.pdf.

as defined by the Federal Emergency Management Agency (FEMA), and are susceptible to 1% annual chance coastal storm flooding under current sea level conditions.⁹ Accelerated sea level rise will lead to more regular flooding of developed and natural coastal areas due to an increase in the extent of tidal inundation, and will also exacerbate erosion along beaches, dunes, and coastal banks.

12. In addition, there is very high confidence that climate change and sea level rise will increase the frequency and extent of flooding associated with coastal storms, such as hurricanes and nor'easters.¹⁰ Moderate to major coastal storm events will cause inundation of larger areas, and will occur more frequently, damaging or destroying coastal engineering structures such as seawalls; critical infrastructure such as pump stations, wastewater treatment plants, and transportation systems; and businesses and private property.

13. More frequent severe storm surges will create serious risks for public safety and health, especially where roads, sewer mains, and pump stations are impacted. Frequent tidal flooding from sea level rise may also lead to increases in

⁹ See Mark Crowell et al., *Estimating the United States Population at Risk from Coastal Flood-Related Hazards*, in COASTAL HAZARDS, 151, 167 (Charles W. Finkl ed., 2013), <https://tinyurl.com/yaolf6bk>.

¹⁰ See U.S GLOBAL CHANGE RESEARCH PROGRAM, *supra*, at 27.

respiratory diseases due to mold from dampness in homes.¹¹ Saltwater intrusion—or the increased penetration of salt water into sources of fresh water—from sea level rise will impact water resources (such as drinking water) by contaminating freshwater sources with salt water and also through the corrosion of water supply infrastructure.

14. The Massachusetts coast includes a diverse array of marine and estuarine ecosystems including, among others, sandy beaches, rocky shores, barrier beaches, islands, and salt marshes. These ecosystems offer immense commercial, recreational, cultural, and aesthetic values to the residents of and visitors to the Commonwealth, while also serving important ecological functions. For instance, natural coastal resources, especially beaches and salt marshes, provide valuable coastal resilience services to the Commonwealth by buffering inland coastal communities and the built environment from waves and storm surges. Salt water will also impact natural coastal resources, as saltwater intrusion into salt marshes and freshwater wetlands will alter the composition of plant species and affect wildlife that depend on these ecosystems.

¹¹ See generally CENTERS FOR DISEASE CONTROL & PREVENTION, U.S. DEP'T OF HEALTH & HUMAN SERVS., COASTAL FLOODING, CLIMATE CHANGE, AND YOUR HEALTH: WHAT YOU CAN DO TO PREPARE (2017), www.cdc.gov/climateandhealth/pubs/CoastalFloodingClimateChangeandYourHealth-508.pdf.

Massachusetts is Experiencing Economic Impacts from Climate Change and is Expending Significant Resources to Adapt and Prepare for Impacts of Climate Change on Our Coastal Areas

15. The Commonwealth is already experiencing impacts of climate change. The relative sea level trend at the Boston tide station is (+) 2.86 millimeters per year based on monthly mean sea level data from 1921 to 2019, which is equivalent to a change of 0.94 feet over 100 years.¹²

16. These impacts are directly harming the welfare of Massachusetts residents and causing significant economic losses. Coastal storms currently result in flooding with extensive damages to public infrastructure, private homes and businesses, and a significant demand for emergency response and recovery services. For example, a nor'easter on March 2–3, 2018, which reached the third-highest water level recorded at the Boston Harbor tide gauge, resulted in major flooding, damages, and expenditures for response and recovery. On April 30, 2018, Massachusetts Governor Charles Baker requested a federal disaster declaration, which the Trump Administration approved on June 25, 2018. The disaster declaration authorized FEMA Public Assistance funding for eligible applicants

¹² See Nat'l Oceanic & Atmospheric Admin., *Relative Sea Level Trend 8443970 Boston, Massachusetts*, TIDES & CURRENTS, https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8443970.

(FEMA DR-5372-MA), and as of October 2020, FEMA has obligated over \$27 million for public storm-related costs related to the event.

17. Rising sea levels increase the frequency, depth, and duration of coastal flooding events; and the associated magnitude of damage costs, including costs associated with the increased demand on first responders, will escalate accordingly.

18. Sea level rise and other impacts of a changing climate pose major risks to communities in Massachusetts' coastal zone. Looking out to the end of the century, a 2018 study analyzed the number of coastal homes and commercial properties throughout the United States that will be at risk from frequent tidal flooding (meaning at least 26 higher tides per year) as a result of projected sea level conditions without any storm events.¹³ In Massachusetts, over 89,000 existing homes and 8,000 commercial properties may be disrupted by chronic tidal flooding or inundation by 2100 under a high-emissions scenario. The 2018 market value of residential buildings at risk of higher tides in 2100 was estimated at \$63 billion,

¹³ See UNION OF CONCERNED SCIENTISTS, UNDERWATER: RISING SEAS, CHRONIC FLOODS, AND THE IMPLICATIONS FOR US COASTAL REAL ESTATE (2018), www.ucsusa.org/resources/underwater.

and these homeowners currently contribute over \$400 million to the local property tax base.¹⁴

19. Development along the Massachusetts coast is afforded protection from coastal buffers such as beaches and dunes, and from engineered coastal infrastructure such as revetments and seawalls. These coastal engineered structures will experience greater impacts from flooding and wave energy from the anticipated increase in frequency and intensity of coastal storm events associated with accelerated sea level rise and climate change. With these greater impacts will come more frequent need for maintenance and replacement of coastal engineered structures as well as beaches in the form of sediment nourishment at significant costs. For example, the Town of Winthrop needed additional protection from storm surge and flooding impacts for a suburban neighborhood with existing engineered shoreline structures (*i.e.*, seawalls, groins, and breakwaters) and an eroding beach. At a cost of approximately \$25 million in state funding, 460,000 cubic yards of sand, gravel, and cobble were placed along 4,200 linear feet of shoreline in 2013–2014. The community gained approximately 150 feet of beach width at high tide and increased protection against wave energy and coastal storms. Other communities across Massachusetts (*e.g.*, New Bedford, Rockport, Duxbury, and

¹⁴ See Massachusetts-specific data available at: www.ucsusa.org/sites/default/files/attach/2018/06/underwater-data-by-state.xlsx.

Scituate) have worked to design beach nourishment projects and address erosion and failing coastal engineered structures that will be exacerbated by accelerated sea level rise and increased flooding from coastal storms. As described below, the Commonwealth provides substantial funding for these projects to protect coastal communities and their residents and businesses.

20. Coastal engineered structures, such as seawalls and revetments, have been constructed along over a quarter of the Commonwealth's ocean-facing shoreline to protect public and private infrastructure and assets from flooding and erosion. The Commonwealth and its municipalities own approximately 92 miles of such structures along the coastline. As a result of wave forces on the coastal structures and lowered beach elevations, the Commonwealth and local governments routinely invest millions of dollars to repair and reinforce these structures so they can adequately protect coastal communities. For example, in 2018 a seawall reconstruction project was completed in the Town of Marshfield to address coastal flooding and public safety issues. The Commonwealth provided a \$1.85 million grant and loan award to the town, which was matched with roughly \$620,000 in local funds. The approximately 600-foot section of seawall sustained damages during a coastal storm in January 2015, and the state-funded project increased the height of the seawall by two to three feet to better protect a public road, utilities, and homes. The Town of Marshfield has 32 coastal engineered

structures along 12 miles of exposed shoreline, totaling over 20,000 feet (3.9 miles), that have been identified as needing repairs and retrofits to address the current and future threats of sea level rise and coastal storms. With higher flood levels and greater storm surges, significantly more investments will be required to achieve the current flood-design protections afforded by these engineered structures across the coast.

21. The Commonwealth owns a substantial portion of the state's coastal property and infrastructure. The Commonwealth owns, operates, and maintains approximately 177 coastal state parks, beaches, reservations, and wildlife refuges located within the Massachusetts coastal zone. The Commonwealth also owns, operates, and maintains numerous properties, facilities, and infrastructure in the coastal zone, including roads, parkways, piers, and dams. Rising sea levels along the Massachusetts coast will result in either the permanent or temporary loss of the Commonwealth's coastal property through inundation, storm surge, flooding, and erosion events. These projected losses of coastal property will likely destroy or damage many of the state-owned facilities and infrastructure described above. The Commonwealth likely will be required to expend significant resources to protect, repair, rebuild, or possibly relocate the affected properties, facilities, and infrastructure. According to the Commonwealth's 2018 *State Hazard Mitigation*

and Climate Adaptation Plan,¹⁵ the replacement cost of state-owned facilities exposed to FEMA's 1% annual chance flood event in coastal counties exceeds \$500 million.

22. The Massachusetts coastal zone is home to several major ports including the Port of Boston and New Bedford/Fairhaven Harbor. Recent economic studies indicate the income generated from the Massachusetts maritime economy supports 2.6% of the state's direct employment and 1.3% of gross domestic product.¹⁶ In 2018, New Bedford/Fairhaven Harbor alone generated \$3.7 billion in direct business revenue from seafood processing and fleet operation businesses.¹⁷ By nature of their purpose, the state's ports and harbors are generally low-lying, coastal-dependent areas of high density-built environment and are susceptible to service interruption and associated revenue loss when flooded or otherwise impacted by coastal events. Additionally, coastal dependent businesses,

¹⁵ Available at: www.mass.gov/service-details/massachusetts-integrated-state-hazard-mitigation-and-climate-adaptation-plan.

¹⁶ See DAVID R. BORGES ET AL., UMASS DARTMOUTH PUBLIC POLICY CTR., NAVIGATING THE GLOBAL ECONOMY: A COMPREHENSIVE ANALYSIS OF THE MASSACHUSETTS MARITIME ECONOMY 11 (2018), www.mass.gov/files/documents/2018/01/24/Maritime_Economy.pdf.

¹⁷ MARTIN ASSOCIATES & FOTH-CLE ENG'G GROUP, ECONOMIC IMPACT STUDY OF THE NEW BEDFORD/FAIRHAVEN HARBOR 5 (2019), https://www.fairhaven-ma.gov/system/files/uploads/economic_impact_study_nbfh_harbor_2019-martin-report_0.pdf.

maritime schools, and public facilities and departments will face disruptions in service in post-storm conditions.

23. The Commonwealth is committed to protecting public safety, human health, the environment, and public resources through programs and policies that address sea level rise and other climate-change-related coastal hazards. EEA and CZM provide information, strategies, and tools to help other state agencies and communities plan for and address the challenges of erosion, flooding, storms, sea level rise, and other climate change impacts.

24. Of more than \$41 million requested over the past seven years, CZM has awarded approximately \$21 million in state-funded grants to local communities and non-profit organizations to support sea level rise adaptation planning and implementation through the Coastal Resilience Grant Program. Local governments and non-profit organizations have matched these state funds with roughly \$11.5 million in local funds and in-kind services. Since 2017, EEA has awarded over \$44 million of \$116 million requested in municipal grants for climate vulnerability planning and implementation statewide through the Municipal Vulnerability Preparedness (MVP) Program. Since the start of the MVP Program, local governments have matched MVP grants with almost \$18 million in local funds and staff time. Between both CZM and EEA climate grant programs, the total amount of funding requested for State Fiscal Year (SFY) 2020 was over

\$19 million, and the request for SFY 2021 increased to over \$33 million—demonstrating a significant and growing need for support at the local level.

25. Municipalities, private entities, and other partners have begun to support planning and fund implementation of adaptation measures to address the impacts of sea level rise and other climate change impacts in Massachusetts. Adaptation planning efforts include vulnerability assessments to determine areas and infrastructure susceptible to coastal impacts, prioritization of vulnerable assets and areas, and development of adaptation alternatives to mitigate climate risks in the near and long term. One example is the City of Boston’s “Climate Ready Boston” initiative, which is developing district-level adaptation plans to address near-term coastal flooding and establish a framework for the funding and implementation of long-term, broader scale solutions. For the East Boston and Charlestown neighborhoods, the City of Boston identified near-term (2030–2050) and long-term (2050–2070) actions for addressing future flood risks created by sea level rise. The City of Boston’s report estimates the costs for these actions range from \$202 million to \$342 million for East Boston and Charlestown alone.¹⁸ More recently, the city completed a coastal resilience plan for the South Boston

¹⁸ See COASTAL RESILIENCE SOLUTIONS FOR EAST BOSTON AND CHARLESTOWN: FINAL REPORT (2017), https://www.boston.gov/sites/default/files/embed/c/climatereadyeastbostoncharlestown_finalreport_web.pdf.

neighborhood and a similar plan for the Downtown area in 2020. Another example of planning for the impacts of coastal climate change is the *Great Marsh Coastal Adaptation Plan* led by the National Wildlife Federation in partnership with the Ipswich River Watershed Association.¹⁹ The plan assesses climate impacts and vulnerability for the Great Marsh region and each of its six communities (Salisbury, Newburyport, Newbury, Rowley, Ipswich, and Essex), examining the risk and exposure of critical infrastructure and natural resources, and identifies areas of special concern. The plan states that in Newburyport, estimated one-time damages to buildings and structures (not contents) from a 1% annual exceedance probability storm (also known as the 100-year storm) under 1.09 feet of sea level rise would be \$18.3 million, and under 3.45 feet of sea level rise the damages would increase to \$32.4 million.²⁰

26. In conclusion, any increase in the rate of sea level rise and the frequency, magnitude, and severity of coastal flooding, erosion, and storms related to greenhouse gas emissions, including from motor vehicles, will adversely impact the Commonwealth and its residents and will require the Commonwealth to expend additional resources and incur additional costs.

¹⁹ See TAJ SCHOTTLAND ET AL., GREAT MARSH COASTAL ADAPTATION PLAN (2017), www.nwf.org/-/media/Documents/PDFs/NWF-Reports/NWF-Report_Great-Marsh-Coastal-Adaptation-Plan_2017.ashx.

²⁰ *Id.* at 49, tbl.3.3-3.

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Belmont, Massachusetts on January 12, 2021.



Lisa Berry Engler

Director

Massachusetts Office of Coastal Zone Management

No. 20-1145

Consolidated with Cases No. 20-1167, -1168,
-1169, -1173, -1174, -1176, -1177 & -1230

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

COMPETITIVE ENTERPRISE INSTITUTE et al.,

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION et al.,

Respondents,

DECLARATION OF CATHERINE R. MCCABE

I, Catherine R. McCabe, declare as follows:

1. I am the Commissioner of the New Jersey Department of Environmental Protection (“NJDEP”). In this capacity, I am responsible for overseeing the development, implementation, and enforcement of NJDEP’s programs to protect public health and New Jersey’s natural and historic resources from pollution and its impacts. I am also responsible for fulfilling New Jersey Governor Murphy’s environmental goals, including reducing greenhouse gas emissions and

air pollution in the State, responding to the impacts of air pollution including greenhouse gas emissions, and increasing the State's resilience and adaptation to the effects of climate change already experienced in the State.

2. I submit this declaration in support of the State and Municipal Petitioners' standing to challenge the final actions of the United States Environmental Protection Agency ("EPA") and Administrator Andrew R. Wheeler, in his official capacity, United States Department of Transportation Secretary Elaine L. Chao, in her official capacity, the National Highway Traffic Safety Administration ("NHTSA") and Acting Administrator James C. Owens, in his official capacity, set forth in the Federal Register notice published at 85 Fed. Reg. 24,174 (Apr. 30, 2020) and titled "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks" (the "Rule").

PERSONAL BACKGROUND AND QUALIFICATIONS

3. I received a Bachelor of Arts degree in environmental science from Barnard College and studied environmental science at the

graduate level in Columbia University's Graduate School of Arts and Sciences. I earned a law degree from Columbia Law School.

4. I have been the NJDEP Commissioner since early 2018, when the Murphy Administration took office. Before joining NJDEP, I served at EPA from 2005 to 2017 in various capacities, including as the Principal Deputy Assistant Administrator for the Office of Enforcement and Compliance Assurance, as a judge on EPA's Environmental Appeals Board, and as Deputy Regional Administrator of EPA's Region 2 office in New York City. Prior to that, I worked for the United States Department of Justice in the Environment and Natural Resources Division as a trial attorney and manager. Prior to federal service, I served as an Assistant Attorney General in the New York Attorney General's Environmental Protection Bureau.

5. As NJDEP Commissioner, I oversee the units within NJDEP, including the Office of Climate and Flood Resilience, the Office of Air Quality, Energy and Sustainability, the Office of Watershed and Land Use Management, and the Division of Science and Research, which are among the principal programs working to address, mitigate, and respond to the impacts of climate change in New Jersey. The Office

of Climate and Flood Resilience directs and informs NJDEP's efforts to make the State more resilient and adapt to climate change impacts. The Office of Climate and Flood Resilience also provides planning and technical support to communities to adapt to the effects of climate change. Watershed and Land Use Management protects and enhances the State's environment by developing and implementing regulations for land use and managing coastal and other sensitive natural resources. The Air Quality, Energy and Sustainability program controls and reduces air pollutants, including climate change pollutants, maintains emissions inventories, evaluates existing federal and State programs intended to reduce greenhouse gas emissions, and develops and implements programs to help achieve the State's greenhouse gas emission reduction goals. The work of the Division of Science and Research ensures that NJDEP's decisions are based on current and sound science.

CLIMATE CHANGE HARMS THREATENING NEW JERSEY

6. New Jersey has more than 1,800 miles of coastline from the New York State border to the head of tide along the Delaware River. The coastal zone covers 3,218 square miles and comprises 239

communities. Fifteen of the 21 counties in the State touch some part of the coastline.

7. Approximately 53 percent of New Jersey's total population resides in the coastal zone, with thousands more visiting cities, towns, beaches, parks, and other popular places every day. The coastal zone features thousands of attractive destinations; indeed, New Jersey's tourism industry is a multi-billion-dollar economic engine, and other sectors also rely on waterfront access. The communities in this region are diverse and encompass characteristics of all New Jersey communities, including large urbanized cities, shore towns, and hamlets surrounded by undeveloped land.

8. New Jersey's coastal zone faces significant threats and challenges in the face of a changing climate and rising seas. The New Jersey coast is particularly vulnerable to inundation because of its sandy beaches, flat coastal plain and gradually sloping shoreline, low-lying barrier islands, and gradual subsidence.¹

¹ Union of Concerned Scientists, *Confronting Climate Change in the U.S. Northeast* (2007), at 4, available at https://www.state.nj.us/dep/cleanair/hearings/pdf/09_confronting.pdf (last accessed March 31, 2020).

9. Since 1911, the sea-level rose 17.6 inches along New Jersey's coast, compared to a global mean sea-level rise of 7.6 inches.² Between 1979 and 2019, sea-level along the coast rose 8.2 inches, compared to global mean sea-level rise of 4.3 inches.³

10. Areas within the coastal zone are already vulnerable to inundation from tides, coastal storms, and rain events. Future coastal storm impacts will be exacerbated because of greater overall storm flood levels due to future sea-level rise.⁴ The State's 239 coastal communities are particularly vulnerable to the effects of sea-level rise, storm surges, flooding, erosion, polluted runoff, and saltwater intrusion.⁵ The effects

² Kopp, R.E., C. Andrews, A. Broccoli, A. Garner, D. Kreeger, R. Leichenko, N. Lin, C. Little, J.A. Miller, J.K. Miller, K.G. Miller, R. Moss, P. Orton, A. Parris, D. Robinson, W. Sweet, J. Walker, C.P. Weaver, K.White, M. Campo, M. Kaplan, J. Herb, and L. Auermuller. *New Jersey's Rising Seas and Changing Coastal Storms: Report of the 2019 Science and Technical Advisory Panel*, at 2. Rutgers, The State University of New Jersey. Prepared for the New Jersey Department of Environmental Protection. Trenton, New Jersey. Available at <https://www.nj.gov/dep/climatechange/pdf/nj-rising-seas-changing-coastal-storms-stap-report.pdf> (last accessed April 1, 2020).

³ *Id.*

⁴ *Id.* at 24.

⁵ Stacey Small-Lorenz, Bill Shadel, and Patty Glick, *Building Ecological Solutions to Coastal Community Hazards: A Guide for New Jersey Coastal Communities*, at 12, available at <https://www.nj.gov/dep/oclp/docs/bescch-final.pdf> (last accessed March 31, 2020).

of sea-level rise are magnified during storm events, which increase the severity of coastal flooding and erosion. For example, the storm surge of Superstorm Sandy reached 9-10 feet above normal in some coastal areas. The estimated damage the State experienced from severe winds and coastal flooding reached \$29.4 billion in repair, response, and restoration costs.⁶ Sandy cost the State an estimated \$11.7 billion in lost gross domestic product, including \$950 million in tourism losses.⁷

11. Sea-level rise of only 12 inches could cause shorelines to recede by as much as 120 feet.⁸ If the sea rises four feet, barrier islands on the Atlantic Coast from Bay Head to Cape May could be broken up by new inlets or lost to erosion.⁹ A four-foot sea-level rise would inundate up to 3 percent of the State's land area.¹⁰

12. Additionally, high-tide flooding, also called sunny day flooding because these floods occur without an associated storm, is

⁶ *Id.* at 6.

⁷ *Id.* at 5.

⁸ *Id.* at 16.

⁹ EPA, *What Climate Change Means for New Jersey*, EPA 430-F-16-032 (August 2016) at 1, available at <https://www.epa.gov/sites/production/files/2016-09/documents/climate-changenj.pdf> (last accessed March 31, 2020).

¹⁰ Small-Lorenz, *supra* note 5, at 12.

likely to increase in certain coastal areas.¹¹ According to one report, sea-level rise since 1980 has increased the number of homes at risk of frequent flooding by approximately 110%.¹² Twenty-three thousand more buildings, including homes, worth \$13 billion total are at risk of frequent flooding today than if sea levels had remained at 1980s levels. New Jersey has been ranked as one of the most threatened states when considering the value of coastal real estate at risk from sea-level rise and chronic flooding in the next decades.¹³ One estimate places the expected average annual loss to the State from current hurricane-related wind and flood damage at around \$670 million to \$1.3 billion higher compared to 1980s activity and sea levels.¹⁴

13. New Jersey has also seen an increase in annual precipitation. Between 2005 and 2015, precipitation was about 8%

¹¹ Kopp, *supra* note 2, at 25-26.

¹² Rhodium Group, *New Jersey's Rising Coastal Risk* (October 2019), at 5, available at https://rhg.com/wp-content/uploads/2019/10/Rhodium_NJCoastalRisk_Oct2019final.pdf (last accessed April 1, 2020).

¹³ Union of Concerned Scientists, *Underwater: Rising Seas, Chronic Floods, and the Implications for US Coastal Real Estate* (June 2018), at 5-7, 10-11, available at <https://www.ucsusa.org/sites/default/files/attach/2018/06/underwater-analysis-full-report.pdf> (last accessed March 31, 2020).

¹⁴ Rhodium Group, *supra* note 12, at 10.

above average and the number of extreme precipitation events, i.e., days with more than two inches, also exceeded the average. New Jersey experienced the highest number of extreme precipitation events between 2010 and 2014 compared to any other 5-year period.¹⁵

14. Although precipitation is likely to increase during winter and spring, drought is likely during summer and fall due to rising temperatures, increased evaporation, and drier soil.¹⁶ Heat and drought will decrease surface water supplies and groundwater recharge and lower reservoir water levels. Already at risk of flooding and failure due to aging infrastructure, water supply and wastewater treatment systems will also be increasingly threatened. During Superstorm Sandy, for example, the Passaic Valley Sewerage Commission's main treatment facility in Newark was inundated with over 200 million gallons of water due to tidal surge and dumped about 240 million gallons of raw or partially treated sewage a day into Newark Bay and

¹⁵ NOAA National Centers for Environmental Information, *State Climate Summaries: New Jersey*, available at <https://statesummaries.ncics.org/nj> (last accessed March 31, 2020).

¹⁶ EPA, *supra* note 9, at 1.

Upper New York Bay. Increased warming and runoff from heavy rains can also degrade water quality and perpetuate harmful algal blooms.¹⁷

15. Sea-level rise, storm surge, and extreme weather events also threaten critical infrastructure in the State. During Superstorm Sandy, the four electric distribution companies in the State reported 2.9 million outages, approximately 73% of the State's electric customers.¹⁸ During Hurricane Irene in 2011, approximately 1.9 million of 3.9 million electricity customers were affected by outages due to flood water inundation.¹⁹

16. The State's coastal ecosystems are particularly vulnerable to climate change. Tidal wetlands buffer coastal communities from flooding and provide ecological value and carbon sequestration. Coastal habitats and the species that rely on tidal wetlands will become

¹⁷ NJ Dep't of Environmental Protection, *2020 New Jersey Scientific Report on Climate Change* (June 30, 2020), Chapter 5.10, available at <https://www.nj.gov/dep/climatechange/docs/nj-scientific-report-2020.pdf> (last accessed January 5, 2021)..

¹⁸ NJ Climate Adaptation Alliance, *A Summary of Climate Change Impacts and Preparedness Opportunities for Telecommunications and Energy Utilities in New Jersey* (March 2014), at 6, available at <https://njadapt.rutgers.edu/docman-lister/resource-pdfs/97-njcaa-utilities/file> (last accessed March 31, 2020).

¹⁹ *Id.*

increasingly threatened by sea-level rise, increased storm intensity, and hotter temperatures. The State's coastal wetlands are an important stopover point for about 1.5 million migratory birds and are home to the world's largest population of horseshoe crabs.²⁰ Delaware Bay is a major stopover area for at least six species of migratory shorebirds that feed on its beaches and tidal flats, including most of the Western Hemisphere's red knot population.²¹

17. Droughts, excess winter precipitation, and spread of pests and diseases as temperatures rise will also reduce agriculture yields. New Jersey has a diverse, billion-dollar agricultural industry, including fruits, vegetables, field crops, equine, poultry, eggs, dairy, specialty crops, and fish and seafood. The State's agricultural sector is threatened by pests and weeds which will continue to expand northward with rising winter temperatures. Crops like blueberries and cranberries, which require long periods of winter chill, will also be

²⁰ NJ Climate Adaptation Alliance, *A Summary of Climate Change Impacts and Preparedness Opportunities Affecting Natural Resources in New Jersey* (March 2014), at 1, available at <https://njadapt.rutgers.edu/docman-lister/working-briefs/106-njcaa-natural-resources/file> (last accessed April 1, 2020).

²¹ EPA, *supra* note 9, at 1.

directly threatened. Milk production could decline 5 to 20 percent in certain months, since dairy cows produce less milk when temperatures exceed 75°. ²²

18. Ocean acidification caused by high carbon dioxide concentrations may harm commercial fishing in the State by impairing the ability of young scallops and surf clams to build shells. These shellfish account for about two-thirds of the State's commercial fishing revenue. Crabs and hard-shell clams, which account for about 15 percent of fishing revenues, could also be harmed by higher acidity in estuaries and the loss of wetlands and eelgrass. Warming temperatures will also impact marine fisheries as fish species seek waters within their normal temperature ranges. ²³

19. Hot days are themselves dangerous, particularly for vulnerable populations such as children, the elderly, the sick, and lower income families. Higher temperature days can cause heat stroke,

²² NJ Dep't of Environmental Protection, *2020 New Jersey Scientific Report on Climate Change* (June 30, 2020), at 83, available at <https://www.nj.gov/dep/climatechange/docs/nj-scientific-report-2020.pdf> (last accessed January 5, 2021)..

²³ EPA, *supra* note 9, at 1.

dehydration, and impact cardiovascular and nervous systems. Warmer temperatures can also increase the formation of ground-level ozone, increasing respiratory problems, and the length and severity of the pollen season. The risk of diseases caused by insects, such as ticks that transmit Lyme disease and the Asian tiger mosquito, which can carry the West Nile virus, will also increase.²⁴

20. Reducing greenhouse gas emissions is critical to mitigating climate change impacts on the State. Continued emissions of greenhouse gases, including emissions from passenger cars and light trucks, will result in increased impacts. Any increase in impacts and their severity related to greenhouse gas emissions will impact New Jersey, its residents, and its natural resources and will require New Jersey to incur additional costs and harms.

**THE RULE WILL INCREASE GREENHOUSE GAS EMISSIONS
THAT CAUSE CLIMATE CHANGE HARMS**

21. By Respondents' own analysis, the Rule will have substantial adverse environmental and climate impacts. EPA projects its new emission standards will inflate fuel consumption by 78 billion

²⁴ *Id.*

gallons, while NHTSA's parallel analysis of its fuel economy standards projects that fuel consumption will rise by 84 billion gallons when compared to the final and augural standards it advanced in 2012. 85 Fed. Reg. at 24,180-81. According to Respondents, the Rule will increase greenhouse gas emissions between 867 and 923 million additional metric tons, nearly the amount emitted by the nation's cars and light trucks each year.²⁵ *Id.*

22. The New Jersey Global Warming Response Act, N.J.S.A. 26:2C-37 to -44, establishes a 2050 greenhouse gas emissions limit, which equals 80% less than the 2006 level of Statewide greenhouse gas emissions. N.J.S.A. 26:2C-39. The statute requires the State to meet the 2050 limit by January 1, 2050. N.J.S.A. 26:2C-40. Pursuant to the New Jersey Global Warming Response Act, the State has initiated

²⁵ EPA, Fast Facts: U.S. Transportation Sector Greenhouse Gas Emissions 1990–2017 (June 2019), 2 (available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100WUHR.pdf>) (cars and light trucks generated 1.098 billion metric tons of greenhouse gases in 2017). The greenhouse gas emission and fuel consumption figures in the Rule assume that the standards for the last model year for which standards were established extend through model year 2029. The agencies then modeled the impacts for the estimated lifetime of all vehicles sold through model year 2029.

several initiatives to reduce greenhouse gas emissions from the transportation sector.²⁶

23. Additionally, New Jersey is a participating state in the Regional Greenhouse Gas Initiative, a cooperative effort among 11 states to cap and reduce carbon dioxide emissions from the power sector. New Jersey will invest auction proceeds from this initiative to programs and projects designed to help meet the State's climate, clean energy, and equity goals.²⁷ In 2020, New Jersey realized over \$94 million dollars in proceeds through its participation in RGGI. Because the Rule will impair New Jersey's efforts to achieve its greenhouse gas emission reduction requirements and goals, and undermines the State's efforts to reduce greenhouse gas emissions from the transportation sector, New Jersey will need to develop and implement additional

²⁶ See N.J. Dep't of Environmental Protection, *N.J. Global Warming Response Act 80x50 Report: Evaluating Our Progress and Identifying Pathways to Reduce Emissions 80% by 2050*, Chapter 1, available at <https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf>; N.J. Bd. Of Pub. Util., *N.J. Energy Master Plan: Pathway to 2050* (2019), Section 6, Strategy 1, available at http://d31hzhk6di2h5.cloudfront.net/20200127/84/84/03/b2/2293766d081ff4a3cd8e60aa/NJBPU_EMP.pdf

²⁷ N.J. Bd. Of Pub. Util., RGGI Strategic Funding Plan: Years 2020 Through 2022, <https://nj.gov/rggi/docs/rggi-strategic-funding-plan.pdf>

greenhouse gas emission reduction efforts, imposing additional undue costs on the state.

I declare under penalty of perjury that the forgoing is true and correct.

Executed in Trenton, New Jersey on January 8, 2021

A handwritten signature in blue ink that reads "Catherine R. McCabe". The signature is written in a cursive style and is positioned above a horizontal line.

Catherine R. McCabe, Commissioner

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

COMPETITIVE ENTERPRISE
INSTITUTE, *et al.*,

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION, *et al.*,

Respondents.

No. 20-1145
(and consolidated cases)

DECLARATION OF CHRISTOPHER M. LALONE

Pursuant to 28 U.S.C § 1746, I, Christopher M. LaLone, P.E., declare as follows:

1. I am the Acting Director of the Division of Air Resources (DAR) at the New York State Department of Environmental Conservation (NYSDEC), where I have worked since 1993. I provide this declaration in support of the State Petitioners' brief filed in this lawsuit challenging the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks," which was jointly adopted by the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA), 85 Fed. Reg. 24,174 (September 27, 2019) (the "SAFE Part 2" or "Final Actions"). The State of New York filed this case because of our strong interest in the

environmental protections provided by original federal motor vehicle emissions standards that the SAFE Part 2 rules weaken.

2. As an administrator of New York's air pollution control programs, it is clear that New York will suffer harm due to EPA's and NHTSA's weakening of federal automobile emissions and fuel economy standards. These actions, together with EPA and NHTSA's actions to block California's and other states' ability to adopt more stringent emissions standards under Clean Air Act Sections 209(b) and 177, *see* 84 Fed. Reg. 24,174 (September 27, 2019),¹ will result in New York suffering the effects of increased greenhouse gas (GHG) pollution emitted both in and outside its borders. These increased emissions will substantially impair New York's ability to reach its statutorily mandated emissions goals. Failure to reduce GHG emissions both inside and outside New York will worsen the effects of climate change, which, as a result of increased temperatures, will damage New Yorkers' public health as well as the state's environment and economy.

PERSONAL BACKGROUND AND QUALIFICATIONS

3. I have Bachelor of Science in Chemical Engineering degree from Clarkson University. I am a licensed Professional Engineer in New York.

¹ New York and other states filed a separate action challenging the SAFE Part 1 rulemaking, which is currently pending in this Court. U.S. Court of Appeals for the District of Columbia Circuit Case No. 19-1230.

4. I have been the Acting Director of the Division of Air Resources for approximately two months. In addition to my current position, I have held the positions of Assistant Director of Air Resources; Regional Environmental Quality Engineer in the Region 9 Buffalo office; Chief of the Permitting and Compliance Section in the Bureau of Stationary Sources; Chief of the Enforcement Section of the Bureau of Stationary Sources; and other engineering positions within NYSDEC and in the private sector.

5. My responsibilities include overseeing DAR's central office in Albany, which carries out the development and implementation of mobile source regulations and technology development, monitoring and research functions, and stationary source permitting. In addition, I work with NYSDEC's nine regional offices, which are responsible for air permitting and enforcement throughout the state.

6. Another of my responsibilities is overseeing NYSDEC's air quality planning efforts, including regulation and mitigation of GHG emissions.

7. I also oversee the development of Clean Air Act-mandated State Implementation Plans (SIP). SIPs detail how NYSDEC will assure that, among other things, the air quality in New York will come into or maintain compliance with the National Ambient Air Quality Standards (NAAQS) for the "criteria pollutants," including ozone, particulate matter (PM_{2.5}) and sulfur dioxide (SO₂),

set by EPA under Sections 108 and 109 of the Clean Air Act. States are primarily responsible for ensuring attainment and maintenance of a NAAQS once EPA has established one.

POINT I

THE MORE STRINGENT FEDERAL GHG EMISSIONS STANDARDS ARE CRITICAL TO NEW YORK

A. The Rolled-Back Federal Standards Are Crucial to New York's Efforts to Reduce the State's GHG Emissions.

8. Absent EPA and NHTSA's SAFE Part 1 and Part 2 final actions, New York, other state, and federal laws would impose much more stringent standards on automobiles in and outside of the State. Section 177 of the Clean Air Act allows a state to adopt California's motor vehicle emission standards so long as the state's standards are identical to California's, and the state adopts the standards at least two years prior to the applicable vehicle model year. In 1990, New York was the first state in the nation to adopt California's standards, codified at 6 NYCRR Part 218, which took effect beginning with the 1993 vehicle model year. With the exception of model year 1995, New York has continued to implement California's updates to its new motor vehicle program because this program provides substantial reductions in both criteria and GHG pollutants. And in 2005, New York adopted California's first (in that state and the nation) GHG emissions standards for cars and trucks. Since then, New York has continued to adopt

California's GHG emissions standards, including the most recent ones for model years (MY) 2017-2025.

9. In 2012, with the support of the auto industry, EPA promulgated GHG emissions standards for MY2017-2025, in a joint proceeding with NHTSA, which adopted final and augural fuel economy standards for those same model years. 77 Fed. Reg. 62,623 (Oct. 15, 2012). The emissions standards, expressed as reductions of CO₂ in grams/mile (g/mi), are expected to be achieved through a combination of measures, including increases in engine and vehicle efficiency, changes to air conditioning, and off-cycle credits. EPA found that the standards would “reduce GHG emissions by the equivalent of over two billion metric tons,” and would have net benefits of \$326 to \$451 billion, over the vehicles' lifetimes. 77 Fed. Reg. at 62,631. The standards' stringency increases annually for each vehicle model year going out to MY2025. 77 Fed. Reg. at 62,771. In an historic agreement, California agreed that automakers who complied with the federal standards would be “deemed to comply” with California's similarly strict, although not identical, standards. New York and other states (the Section 177 states) continued to opt in to California's standards rather than exclusively rely on the slightly less stringent federal standards.

10. SAFE Part I—which New York and other states are also challenging—purported to revoke California's ability to adopt and enforce its own

GHG standards and other states' ability to adopt those standards. These actions, if they stand, would deprive California, New York, and the other Section 177 states of the ability to enforce more stringent standards than those imposed by EPA, including EPA's weakened GHG standards for model years 2021-2025 established in the SAFE Part 2.

11. If the Final Actions are not invalidated, New York will be left with the much less stringent standards challenged in this litigation. EPA and NHTSA found that the weakened federal standards in the SAFE Part 2 will increase GHG emissions by between 867 and 923 million metric tons when compared with the prior standards established in 2012. 85 Fed. Reg. at 24,180–81. The State's ability to achieve the GHG emissions reductions detailed in Point I.B below will be substantially impaired and the public health, environmental and economic harms from GHG emissions set forth below in Point 2 below will only worsen. Indeed, as EPA itself acknowledges, one effect of imposing only these laxer standards nationwide is 444-1000 more premature deaths from increased air pollution. *See* 85 Fed. Reg. 24174, 25119 (Apr. 30, 2020).

B. New York Needs the Rolled-Back Federal Standards to Meet Statutorily-Mandated GHG Emissions Reduction Goals

12. New York's efforts to reduce GHG emissions have recently been mandated by statute. The Climate Leadership and Community Protection Act

(CLCPA), which went into effect on January 1, 2020, requires New York to reduce GHG emissions 85% below 1990 levels by 2050 and offset the remaining 15%. Environmental Conservation Law (ECL) § 75-0107.

13. The statewide GHG emission reduction requirements established by statute in the CLCPA are applicable to all sources of GHG emissions, including emissions from light-duty vehicles subject to the Final Actions. The CLCPA also requires NYSDEC to promulgate regulations to ensure compliance with the Statewide GHG emission limits. ECL § 75-0109. Importantly, as defined by the CLCPA, “statewide GHG emissions” includes emissions of GHGs from all sources within the State, as well as GHGs produced outside of the State associated with the extraction and transmission of fossil fuels imported into the State. ECL § 75-0101(13).

14. The rolled-back federal standards are critical to New York’s efforts to meet the emissions reductions demanded by the CLCPA. Transportation is the largest sector of GHG emissions in New York, and this sector is growing as a result of increasing vehicle use; it is infeasible for New York to seek to reduce vehicle use in the short term while maintaining economic growth. New York cannot reasonably expect to meet its goals without reductions in GHG emissions from the transportation sector.

15. For instance, California had previously mandated that a certain percentage of vehicles each manufacturer sells must be “zero-emission vehicles” (ZEVs). Cal. Code Regs. Title 13 § 1960-1960.2. Under Section 177, New York has adopted these percentages. 6 NYCRR § 218-4.1 (requiring manufacturers’ sales fleets to “contain at least the same percentage of ZEVs subject to the same requirements set forth in California Code of Regulations”). In the absence of the ZEV program—which cannot be implemented if SAFE Part I is upheld—and without the more stringent GHG emissions standards mandated fleetwide—stripped under the Final Actions—New York would no longer be able to rely on this source of emissions reductions. Thus, if the Final Actions are left to stand, New York’s ability to meet its climate goals will be substantially impaired, including the statutory requirements of CLCPA.

POINT II

NEW YORK AND ITS CITIZENS WILL SUFFER SHORT- AND LONG-TERM HARM FROM THE FINAL ACTIONS

16. The Final Actions, by increasing nationwide GHG emissions, will have short- and long-term adverse effects on: (1) the health and safety of New Yorkers; (2) New York’s environment and proprietary interests; and (3) the economic interests of New York State and New Yorkers. Increased GHG emissions will have long-term effects on the physical conditions of New York

State. These changes—including alterations to New York State’s weather, rise in sea levels, and damage to the Great Lakes—will have negative effects on New York State in its proprietary interest, including on its budget and State land.

A. Climate Change is Already Harming New Yorkers’ Health

17. Demand for health services and the need for public health surveillance and monitoring will increase as the climate continues to change. Heat-related illness and death are projected to increase. Increased coastal and riverine flooding resulting from intense precipitation increases the risk that such flooding could release contaminants or even toxic substances from wastewater treatment facilities, industrial facilities, and superfund sites with multiple attendant adverse health effects. Such flooding could lead to increased stress and mental health impacts, increased respiratory diseases such as asthma, and increased outbreaks of gastrointestinal diseases—as well impaired ability to deliver public health and medical services. Vector-borne diseases, such as those spread by mosquitoes and ticks (e.g., West Nile virus and Lyme disease), may expand or change their distribution patterns, either of which may adversely affect additional populations.

Water- and food-borne diseases are likely to increase without mitigation and adaptation intervention.²

18. The New York City metropolitan area has a significant ozone problem. Climate change is likely to worsen the harms New York is already suffering from ozone. As NHTSA recognized during the original rulemaking for the 2017-2025 corporate average fuel economy standards, “increased temperatures from climate change are projected to increase ground-level ozone concentrations, triggering asthma attacks among children.”³

19. Breathing ozone can trigger a variety of health problems. These problems include chest pain, coughing, throat irritation, airway inflammation, reduced lung function and damaged lung tissue. Ozone can worsen bronchitis, emphysema and asthma, leading to increased medical costs. Exposure to ozone has also been linked to early deaths. People most at risk from breathing air containing ozone include people with asthma, children, older adults and people who are active outdoors, especially outdoor workers.

² N.Y. State Energy Research and Dev. Auth., Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation (2011) (Cynthia Rosenzweig, et al., eds.) at 403-04, 421-22 (hereinafter the “ClimAID Report”), <https://www.nyserda.ny.gov/-/media/Files/Publications/Research/Environmental/EMEP/climaid/ClimAID-Report.pdf>

³ 77 Fed. Reg. at 63,148.

20. Ozone also interferes with the ability of plants and forests to produce and store nutrients, which makes them more susceptible to disease, insects, harsh weather and other pollutants. This harms crop production in New York and throughout the United States, resulting in significant losses and injury to native vegetation and ecosystems. Furthermore, ozone damages the leaves of trees and other plants, and can also damage certain man-made materials, such as textile fibers, dyes, rubber products and paints.

B. Climate Change is Already Harming New York’s Environment

21. Anthropogenic emissions of the predominant GHG, CO₂, are contributing to the observed warming of the planet.⁴ The Earth’s lower atmosphere, oceans, and land surfaces are warming; sea level is rising; and snow cover, mountain glaciers, and Greenland and Antarctic ice sheets are shrinking. The Earth’s climate is changing, with adverse consequences already well documented across the globe, in our nation and in the State. Extreme heat events are increasing, and intense storms are occurring with greater frequency. Many of the observed climate changes are beyond what can be explained by natural

⁴ Intergovernmental Panel on Climate Change Working Group I Fifth Assessment Report, *Climate Change 2013: The Physical Science Basis*, 2013, *available at* <https://www.ipcc.ch/report/ar5/wg1/>

variability of the climate.⁵ These changes are harming, and will continue to harm, New York State's environment, including shorelines, drinking water sources, agriculture, forests, and wildlife diversity.

1. Climate Change Has Changed and Continues to Change New York's Weather

22. Temperatures in New York State have risen on average 0.25°F per decade over the past century, with the greatest warming coming in the most recent decades. This warming includes an increase in the number of extreme hot days (days at or above 90°F) and a decrease in the number of cold days (days at or below 32°F).⁶ The 2011 New York State ClimAID assessment⁷ and the 2014 update to ClimAID⁸ present the numerous direct impacts that have already been observed in New York State. These impacts are described in more detail below.

23. New York State is likely to see widespread shifts in species composition in the State's forests and other natural landscapes within the next

⁵ Ibid.

⁶ ClimAID Report at 367, II-10.

⁷ ClimAID Report.

⁸ N.Y. State Energy Research and Dev. Auth., *Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information* (2014) (Cynthia Rosenzweig, et al., eds.) (hereinafter the "ClimAID Update"), <https://www.nyserda.ny.gov/-/media/Files/Publications/Research/Environmental/ClimAID/2014-ClimAid-Report.pdf>

several decades due to climate change. Losses of spruce-fir forests, alpine tundra and boreal plant communities are expected. Climate change favors the expansion of some invasive species into New York, such as the aggressive weed, kudzu, and the insect pest, hemlock woolly adelgid. Increased CO₂ in the atmosphere due to climate change is likely to preferentially increase the growth rate of fast-growing species, which are often weeds and other invasive species. Lakes, streams, inland wetlands and associated aquatic species will be highly vulnerable to changes in the timing, supply, and intensity of rainfall and snowmelt, groundwater recharge and duration of ice cover. Increasing water temperatures will negatively affect brook trout and other native cold-water fish.⁹

24. New York State's forests and the economy that depends on them will be hurt by climate change. Climate change will affect the forest mix in New York, which could change from the current mixed forest to a temperate deciduous forest. The habitat for existing tree species will decrease as suitable climate conditions shift northward.¹⁰ As forest species change, the resulting decrease in the vibrant display of New York State fall foliage could have a negative impact on regional tourism. New York State's Adirondack Park is the largest forested area east of the

⁹ ClimAID Report 172, 196.

¹⁰ ClimAID Report 177.

Mississippi and consists of six million acres, including 2.6 million acres of state-owned forest preserve.¹¹ The Adirondack Park, one the most significant hardwood ecosystems in the world, is likely to be threatened by these changes.¹² These changes will also further impact plant and wildlife species in the Adirondack Park and throughout the state, as the forest composition changes.

2. Sea-Level Rise and Increased Flooding Are Already Harming New York State

25. Warming ocean waters contribute to sea level rise, with adverse impacts for New York State. Warmer ocean water, which results in thermal expansion of ocean waters, melting of land ice, and local changes in the height of land relative to the height of the continental land mass, are the major contributors of sea level rise. Warming ocean water has the potential to strengthen the most powerful storms, and combined with sea level rise, will lead to more frequent and extensive coastal flooding. Sea level in the coastal waters of New York State and up the Hudson River has been steadily rising over the 20th century. Tide-gauge observations in New York indicate that rates of relative sea level rise were

¹¹ N.Y. State Adirondack Park Agency, “More about the Adirondack Park,” https://www.apa.ny.gov/About_Park/more_park.html

¹² ClimAID Report 178-79, III-47.

significantly greater than the global mean, ranging from 0.9 to 1.5 inches per decade.¹³

26. Sea-level rise increases the extent and magnitude of coastal flooding. For example, the twelve inches of sea level rise the New York City area has experienced in the past century exacerbated the flooding caused by Hurricane Sandy by about twenty-five square miles, damaging the homes of an additional 80,000 people in the New York City area alone.¹⁴ That flooding devastated several areas of New York City, including the Brooklyn-Queens Waterfront, the East and South Shores of Staten Island, Southern Queens, Southern Manhattan, and Southern Brooklyn. Some areas lost power and other critical services for extended periods. Overall, Hurricane Sandy caused 53 deaths and the estimated costs of response and recovery in New York State exceeded \$30 billion.¹⁵

¹³ ClimAID Report at 19, 127, 135.

¹⁴ New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms. Ann. N.Y. Acad. Sci. ISSN 0077-8923, *available at* <http://onlinelibrary.wiley.com/doi/10.1111/nyas.12593/full>

¹⁵ N.Y. Senate Bipartisan Task Force on Sandy Recovery, *Preliminary Response & Recovery Report* at 1, 26 (Feb. 2013), <https://www.nysenate.gov/sites/default/files/articles/attachments/Senate%20Bipartisan%20Task%20Force%20on%20Hurricane%20Sandy%20Report%20FINAL%202-5.pdf>

27. New York State's tidal shoreline, including barrier islands, coastal wetlands, and bays, is expected to be particularly adversely affected by increased sea levels. New York State has 1,850 miles of tidal coastline,¹⁶ and the State owns dozens of state parks within New York State's coastal boundary. Tidal shoreline property in the State held by private landowners is similarly at risk.

28. Climate change will also increase the frequency and magnitude of flood damage and storms. Rising air temperatures associated with climate change intensify the water cycle by driving increased evaporation and precipitation. The resulting altered patterns of precipitation include more rain falling in heavy events, often with longer dry periods in between. Heavy downpours have increased in New York State over the past 50 years. By the end of the 21st century, coastal flood levels currently associated with a 100-year flood could occur approximately four times as often under even conservative sea level rise scenarios. This trend will increase localized flash flooding in urban areas and hilly regions.¹⁷

29. New York State incurs significant costs from damage from flooding. Grants to the State from the Federal Emergency Management Agency (FEMA)

¹⁶ U.S. Bureau of the Census, *Statistical Abstract of the United States 1987* at 187 (107th Ed.).

¹⁷ ClimAID Report at 35, 103.

Public Assistance Program made in the aftermath of flood disasters almost always require the State to fund a portion of the project. For example, in the aftermath of Hurricane Sandy, FEMA obligated over \$14 billion to New York State and local governments.¹⁸ Even in the case of Hurricane Sandy, which was deemed damaging enough that New York State and local governments had to pay only 10% of eligible costs for most projects,¹⁹ these grants entailed significant expenditures.

30. Flooding due to climate change exacerbates harm to public health and the environment in New York State. Flooding increases water pollution by carrying runoff from land areas containing road oils, salts, farm and lawn chemicals, pesticides, metals, and other pollutants into New York's water bodies. Flooding has also inundated and/or overloaded New York wastewater treatment plants, causing raw sewage to enter waterways. Polluted floodwaters can inundate communities and other vulnerable development within floodplains, impairing potable public and private water supplies, and rendering cleanup more hazardous. Contaminated floodwaters can also impede other water uses including swimming,

¹⁸ Fed. Emergency. Mgmt. Agency, *New York Hurricane Sandy (DR-4085-NY)* (last updated Mar. 20, 2020), <https://www.fema.gov/ar/disaster/4085>

¹⁹ Fed. Emergency. Mgmt. Agency, *New York; Amendment No. 9 to Notice of a Major Disaster*, 78 Fed. Reg. 32,413 (May 30, 2013).

beach-going, and fishing.²⁰ The U.S. Secretary of Health and Human Services issued Public Health Emergency Declarations in New York²¹ following Hurricane Sandy and Tropical Storm Lee, in large part because of post-flood conditions.

31. Climate change requires an increased commitment of State emergency response resources to protect lives and property in flood prone areas. For example, swift-water or air-rescue teams rescued over one thousand state residents during the flooding caused by Hurricane Irene and Tropical Storm Lee. New York State committed extensive emergency resources in response to the storms, including: deploying 1,700 State Police and 3,200 National Guard members, opening 200 shelters to house 18,000 citizens, and staffing 74 Disaster Recovery Centers to assist citizens during the recovery period.²² The storms closed 400 road segments and bridges and required repairs at 945 locations on the State highway system.

²⁰ ClimAID Report at 422, 444-53.

²¹ U.S. Dep't of Health & Human Serv., "Public Health Emergency Declarations," <https://www.phe.gov/emergency/news/healthactions/phe/Pages/default.aspx>

²² N.Y. State Office of the Governor, *New York State Responds – Hurricane Irene and Tropical Storm Lee: One Year Later*. August 2012. Available at: <https://www.governor.ny.gov/sites/governor.ny.gov/files/archive/assets/documents/Irene-Lee-One-Year-Report.pdf>

32. As NHTSA earlier recognized, “The Northeast includes densely populated coastal areas that are extremely vulnerable to projected increases in the extent and frequency of storm surge, coastal flooding, erosion, property damage, and loss of wetlands.”²³ Indeed, “[e]xtensive erosion has already been documented across the mid-Atlantic region, New England, and New York.”²⁴ Over 15.5 million people live within coastal counties in New York, the second highest population within the United States (only California has a larger coastal population).²⁵ According to NOAA’s Office of Coastal Management, New York has the most insured coastal properties in the country that are vulnerable to hurricanes (\$2.92 trillion in value).²⁶

33. New York State and entities it funds maintain or own critical transportation infrastructure in lower Manhattan, including the Hugh L. Carey

²³ CAFE Standards Passenger Cars and Light Trucks Model Years 2017-2025, FEIS, Dkt. No. NHTSA-2011-0056, at § 5.5.2.1.3, available at https://www.nhtsa.gov/staticfiles/rulemaking/pdf/cape/FINAL_EIS.pdf.

²⁴ *Id.*

²⁵ Nat’l Oceanic and Atmospheric Admin., *National Coastal Population Report: Population Trends from 1970 to 2010* (Mar. 2013), available at: <https://aamboceanservice.blob.core.windows.net/oceanservice-prod/facts/coastal-population-report.pdf>.

²⁶ Nat’l Oceanic and Atmospheric Admin, Office for Coastal Mgmt., “Fast Facts: Hurricane Costs,” <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>

Tunnel (formerly the Brooklyn-Battery Tunnel),²⁷ the South Ferry Terminal,²⁸ and the West Side Highway.²⁹

34. New York’s Metropolitan Transit Authority (the “MTA”) has, especially in the wake of Hurricane Sandy, taken extensive measures to prepare its infrastructure for climate change impacts such as increases in sea-level rise, coastal storm surges, extreme winds, average air temperature and heat waves, and heavy precipitation.³⁰ In 2016, the MTA identified 46 resiliency projects across its transit system, requiring a total expenditure of just over \$750 million, which included both state and federal funding.³¹ These projects included:

- a. Resiliency measures (e.g., hardening of pump systems, watertight doors, and portal-sealing) designed to improve underground and

²⁷ See MTA, *2017 Adopted Budget: February Financial Plan, 2017-2020*, available at <http://web.mta.info/mta/budget/pdf/MTA%202017%20Adopted%20Budget%20February%20Financial%20Plan%202017-2020.pdf>

²⁸ *Id.* at 106.

²⁹ N.Y. State Dep’t of Transport., Real Estate Division, Notice of Appropriation, “Route 9A Reconstruction Project,” available at http://a836-acris.nyc.gov/DS/DocumentSearch/DocumentImageView?doc_id=FT_1840006500484.

³⁰ MTA, *MTA Climate Adaptation Task Force Resiliency Report* at 8, available at <https://new.mta.info/document/10456>

³¹ *Id.* at 12

underwater subway tunnels from flooding from future Category 2 storms, with an additional three-foot safety factor;

- b. Redesign of bus depots with interior and exterior flood protections;
- c. Elevation of electric substations on the MTA Metro-North Railroad's Hudson Line four feet above projected flood levels; and
- d. The installation of flood barriers on each side of the Hugh L. Carey Tunnel.³²

35. As of 2019, the MTA reported progress or completion of many of these climate resiliency projects, including elevation and replacement of substations across the system, installation of flood and debris protection walls, replacement of critical power and signaling components, flood gates at the Hugh L. Carey Tunnel, and seawall and shoreline repair at the Rockaway bridges.³³

36. As climate change continues to worsen, it is expected that the State will be required to develop and pay for additional resiliency projects. For this reason, regulations and policies, such as the Final Actions, that substantially increase future GHG emissions directly harm the State.

³² *Id.* at 16-27.

³³ MTA, *MTA Climate Adaptation Task Force 2019 Resiliency Report: Update on agency-wide climate resiliency projects*, available at <https://new.mta.info/document/10461>.

C. Climate Change is Harming New York's Economy

37. Climate change is also expected to result in less frequent summer rainfall, increased evaporation, and additional, and possibly longer, summer dry periods, potentially impacting the ability of water supply systems to meet demands. Reduced summer flows on large rivers and lowered groundwater tables could lead to conflicts among competing water users.³⁴

38. Climate change is expected to hurt agriculture in New York State. Increased summer heat stress will negatively affect cool-season crops, requiring farmers to take adaptive measures such as shifting to more heat-tolerant crop varieties and eventually resulting in a different crop mix for New York's farmers. The loss of long cold winters could limit the productivity of apples and potatoes, as these crops require longer cold dormant periods. New York's maple syrup industry also requires specific temperature conditions in order for the sugar maples to produce sap. It is projected that sugar maple trees will be displaced to the north as the climate changes and temperatures increase. Increased weed and pest pressure associated with longer growing seasons and warmer winters will be an increasingly important challenge. Water management will be a more serious challenge for New York farmers in the future due to increased frequency of heavy

³⁴ ClimAID Report at 103.

rainfall events, and more frequent and intense summer water deficits by mid-to late-century.³⁵

39. Dairy farmers will also be impacted by warmer air temperatures associated with climate change. Milk production is maximized under cool conditions ranging from 41°F to 68°F.³⁶ New York is the third largest producer of milk in the United States, behind California and Wisconsin, with 14.8 billion pounds of milk produced in 2016.³⁷ During the unusually hot summer in 2005, declines in milk production of five to 15 pounds of milk per cow per day (an eight to 20 percent decrease) in many New York dairy herds were reported.³⁸ In 2019, New York reported approximately \$2.5 billion dollars of cash receipts from its dairy industry.³⁹ A loss of milk production efficiency from heat effects could

³⁵ ClimAID Report at 236; III-69; 187-88; II-58; 222-23; 241-243.

³⁶ Alvaro Garcia, *Dealing with Heat Stress in Dairy Cows* (South Dakota Cooperative Extension Service, Sep. 2002) at 1.

³⁷ U.S. Dep't of Agric., *Milk Production, Disposition and Income: 2016 Summary* at 10, available https://www.nass.usda.gov/Publications/Todays_Reports/reports/mlkpdi17.pdf

³⁸ Peter Frumhoff, *Confronting Climate Change in the U.S. Northeast: Science, Impacts, and Solutions*, Northeast Climate Impacts Assessment, July 2007 at 69.

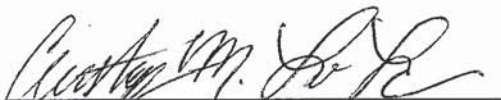
³⁹ U.S. Dep't of Agric., *Milk Production, Disposition and Income: 2019 Summary* at 9, <https://downloads.usda.library.cornell.edu/usda-esmis/files/4b29b5974/5h73qf66r/hd76sk303/mlkpdi20.pdf>

result in the loss of hundreds of millions of dollars annually for New York's dairy industry, and a consequential negative impact to the State's tax revenues.

40. In sum, the effects of climate change on New York will be deadly, widespread, and extremely expensive.

I declare under penalty of perjury that I believe the foregoing to be true and correct.

Executed on January 12, 2021.


Christopher M. LaLone, P.E.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

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COMPETITIVE ENTERPRISE INSTITUTE et
al.,

Petitioners,

No. 20-1145
(and consolidated cases)

v.

NATIONAL HIGHWAY TRAFFIC SAFETY
ADMINISTRATION, et al.,

Respondents.

X

DECLARATION OF ADAM PARRIS

I, Adam Parris, declare as follows:

1. I am the Deputy Director of Climate Science and Risk
Communication at the New York City Mayor’s Office of Resiliency (MOR). At
MOR, my responsibilities include ensuring the City of New York (City) is using
credible, actionable science in all aspects of City-wide decision-making related to
climate change resiliency, including the New York City Panel on Climate Change
process.

2. I submit this declaration in support of the State-City Petitioners’
standing to challenge final actions of the United States Environmental Protection

Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) set forth in the Federal Register notice published at 85 Fed. Reg. 24,174 (Apr. 30, 2020) and titled “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021– 2026 Passenger Cars and Light Trucks” (the “Federal Standards Rollback Rule” or “Rule”).

3. Unless otherwise noted, the statements made in this declaration are based upon my review of the relevant rulemakings, reports, and other documents discussed below and based on my knowledge and expertise in the matters within.

4. As further explained below, the City of New York will be directly harmed by the Rule as it will make it significantly more likely the City will face increasingly severe climate change impacts in the near term and future, placing a significant burden and toll on human life, property, and physical and financial municipal resources.

PERSONAL BACKGROUND AND QUALIFICATIONS

5. I have over fifteen years of experience, in various capacities, working with scientists; local, state, and federal governments; and communities to advance climate resilience and adaptation using scientific research and evidence-based strategies and tools.

6. I received a Master of Science in Geology from the University of Vermont and a Bachelor's degree in English Literature and Environmental Geology from Bucknell University. From 2010 to 2015, I served as the Climate Assessment and Services Division Chief and Regional Integrated Sciences and Assessments Program Manager at the National Oceanic & Atmospheric Administration (NOAA). While at NOAA, I oversaw climate research programs, conducted research on sea level rise for a number of states and municipalities, and spearheaded science and engagement efforts for tools to assist the Hurricane Sandy Rebuilding Task Force. Following my time at NOAA, I served as the Executive Director of the Science and Resilience Institute at Jamaica Bay located in the New York City area. In that capacity, I worked on promoting climate preparedness in local communities, including development of programs, partnerships, and strategic initiatives using science to improve resilience to climate change.

7. In my current position at MOR, I oversee the processes and procedures pertaining to the New York City Panel on Climate Change (NPCC) as prescribed by local law. The NPCC is an advisory board of researchers with expertise in various aspects of climate change appointed by New York City's Mayor. The purpose of the NPCC is to identify the best available science on climate change and its potential impacts on the City's communities, vulnerable populations, public health, natural systems, critical infrastructure, buildings, and

economy and to advise MOR and the City on the furtherance of actionable solutions. I also lead the integration of science in the development of various resiliency strategies to facilitate New York City's adaptation to projected climate change impacts.

NEW YORK CITY IS ALREADY EXPERIENCING CLIMATE CHANGE IMPACTS

8. I am aware of and familiar with the science related to global climate change. I am also familiar with the projected impacts of climate change on New York City, including harms to municipal resources and property, threats to public health and safety, and significant financial impacts on the City due to recovery and adaptation costs. Due in part to my involvement with the NPCC, I have studied the research and conclusions resulting from that Panel's research. I am further tasked in my current role with utilizing the information developed by NPCC to affirmatively address the projected risks from climate change City-wide, and therefore have a thorough understanding of the costs associated with New York City's adaptation efforts.

9. Changing climate hazards in the New York metropolitan region are increasing the risks for the people, economy, and infrastructure of New York City in numerous and dramatic ways. These risks were initially documented in the

NPCC's January 2015 report, *Building the Knowledge Base for Climate*.¹ The projections in the 2015 NPCC Report were validated and updated in the NPCC's 2019 assessment.²

10. Annual temperatures are hotter, heavy downpours are getting more intense, and the sea is rising. These trends are projected to continue and become even worse in the coming decades due to higher concentrations of GHG in the atmosphere.³

11. Sea level rise in New York City has averaged 1.1 inches per decade since 1900, nearly twice the observed global rate, with a total increase of more than a foot; approximately 60 percent of that rise is driven by climate-related factors.⁴ This increase in sea level may have expanded Hurricane Sandy's flood area by approximately 25 square miles, flooding the homes of more than 80,000

¹ New York City Panel on Climate Change, *Building the Knowledge Base for Climate Resiliency: New York City Panel on Climate Change 2015 Report*, Annals of the New York Academy of Science, Vol. 1336 (Jan. 2015), at 9, available at <http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc> (hereinafter "*NPCC 2015 Report*").

² New York City Panel on Climate Change, *Advancing Tools and Methods for Flexible Adaptation Pathways and Science Policy Integration*, Annals of the New York Academy of Science, Vol. 1439 (Mar. 2019), available at <https://www.nyas.org/annals/special-issue-advancing-tools-and-methods-for-flexible-adaptation-pathways-and-science-policy-integration-new-york-city-panel-on-climate-change-2019-report-vol-1439/> (hereinafter "*NPCC 2019 Report*").

³ *NPCC 2019 Report*, Executive Summary.

⁴ *NPCC 2015 Report*, Chapter 2.

additional people in New York and New Jersey alone,⁵ and shutting down all six East River subway tunnels between Manhattan and Brooklyn.⁶

12. Beyond major disruptions during events like Hurricane Sandy, several neighborhoods in New York City are experiencing flooding on sunny days as many as 63 times per year, absent any storms.⁷ These events can be linked to human-induced climate change because the additional amount of sea level rise caused by climate change increases the height of spring tides during a full moon or other regular processes affecting the tides.⁸

13. Climate change also poses risks to New Yorkers' health and safety. Extreme weather events can result in injury and loss of life due to exposure, interrupted utility service, or lack of access to emergency services. In 2012, Hurricane Sandy killed 44 people and caused \$19 billion in damages in New York City alone.⁹ In addition, warming temperatures exacerbate or introduce a wide

⁵ *Id.*

⁶ A Stronger More Resilient New York, *Sandy and Its Impacts*, 17 (June 2013), at http://www.nyc.gov/html/sirr/downloads/pdf/final_report/Ch_1_SandyImpacts_FINAL_singles.pdf.

⁷ *NPCC 2015 Report*, Chapter 4.

⁸ Strauss, B.H., R.E. Kopp, W.V. Sweet & K. Bittermann. 2016. *Unnatural coastal floods: sea level rise and the human fingerprint on US floods since 1950*. Climate Central Research Report. Climate Central, Inc., available at <https://sealevel.climatecentral.org/uploads/research/Unnatural-Coastal-Floods-2016.pdf>.

⁹ *OneNYC 2050, Building a Strong and Fair City: A Livable Climate* (Volume 7) at 6, available at <http://onenyc.cityofnewyork.us/reports-resources/> (hereinafter "*OneNYC 2050 Building a Strong and Fair City Report*").

range of health problems, including a likely increase in deaths due to extreme heat.¹⁰ The health consequences of climate change disproportionately affect New York City's most vulnerable populations – the elderly, children, and low-income communities who already experience elevated instances of cardiovascular and respiratory diseases.¹¹

NEW YORK CITY IS PROJECTED TO EXPERIENCE SIGNIFICANT CLIMATE CHANGE IMPACTS IN THE FUTURE

14. In addition to the effects New York City is already experiencing due to a changing climate, the NPCC has projected significant and worsening long-term climate change impacts for the region without a proactive response. Climate impacts on New York City are “likely to inundate coastal wetlands, threaten vital infrastructure and water supplies, raise summertime energy demand, and affect public health, all at the same time.”¹² By the 2050s, New York City will likely experience sea levels that are up to 2.5 feet higher than today.¹³ The practical result of rising sea levels at this magnitude is land that was once protected from coastal

¹⁰ *Id.*

¹¹ See DOHMH, *Air Pollution and the Health of New Yorkers: The Impact of Fine Particles and Ozone* at 4, at <https://www1.nyc.gov/assets/doh/downloads/pdf/eode/eode-air-quality-impact.pdf>; see also Globalchange.gov, *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment* Ch. 9, Populations of Concern (April 2016), at <https://health2016.globalchange.gov/populations-concern>.

¹² NPCC 2019 Report, Chapter 9.

¹³ *Id.*, Executive Summary Table ES.2.

flooding and used by New York City residents for numerous productive activities, along New York City's 520 miles of coastline, becomes increasingly vulnerable to more frequent and severe coastal flood events.¹⁴

15. These flooding events are also more likely due to the increased probability of severe weather events due to long-term climate impacts. More extreme weather will also leave the City and its essential infrastructure susceptible to more frequent violent storms and severe flooding; at other times, the new extremes could subject the City to prolonged periods of drought.¹⁵ Moreover, New York City is projected to experience more rainfall due to climate change, and increases in heavy downpours could exacerbate not just coastal flooding but urban flooding in non-coastal areas.¹⁶

16. New York City is also likely to experience an increase in average temperatures by up to 5.7 degrees Fahrenheit and an estimated average

¹⁴ *Id.*, Chapter 5.

¹⁵ For a comprehensive discussion of the likely effects of climate change on New York City's watershed and water delivery systems, *see* The New York City Department of Environmental Protection Climate Change Program, *Assessment and Action Plan* (May 2008), at http://www.nyc.gov/html/dep/pdf/climate/climate_complete.pdf. Details of climate change impacts on the City's wastewater treatment system are presented in DEP's *NYC Wastewater Resiliency Plan: Climate Risk Assessment and Adaptation Study* (Oct. 2013), at

http://www.nyc.gov/html/dep/html/about_dep/wastewater_resiliency_plan.shtml.

¹⁶ *NPCC 2019 Report*, Chapter 2.

annual precipitation increase of up to 11 percent.¹⁷ Heat waves, defined as three or more consecutive days of temperatures at or above 90 degrees Fahrenheit, strain the City's power grid, cause deaths from heat stroke, and exacerbate chronic health conditions, particularly for vulnerable populations like the elderly and children. Current projections show that by the 2050s New York City could experience up to 56 days per year above 90 degrees Fahrenheit, up to a total two to three-fold increase in the number of days with temperatures rising above 90 degrees.¹⁸

17. New York City has already incurred substantial costs due to recovery and mitigation in the face of climate change impacts and expects to further incur substantial costs in the development of new resiliency projects and climate proofing existing infrastructure such that the City can withstand future impacts and effectively protect vulnerable New Yorkers and critical City infrastructure and resources. The City is currently implementing a resiliency plan in excess of \$20 billion consisting of approximately \$6.5 billion of City funds and \$16.4 billion in federal funds. This plan includes projects throughout the City, including but not limited to \$3.2 billion dollars of repairs and resiliency measures at New York City Housing Authority campuses, \$1.9 billion dollars of repairs at Health + Hospital facilities, coastal resiliency measures such as the East Side

¹⁷ *OneNYC 2050 Building a Strong and Fair City Report* (Volume 7) at 6.

¹⁸ *NPCC 2019 Report*, Chapter 2; *NPCC 2015 Report* at 22, 31.

Coastal Resiliency (\$1.45 billion), the Army Corps Staten Island project (\$615 million), and the Rockaway Boardwalk and other Rockaway Resiliency projects (\$626 million), to name just a few.

18. Aggressive action to reduce GHG emissions is required to reduce the likelihood of the NPCC’s “high end” projections with respect to the described climate impacts on New York City and potentially mitigate future adaptation costs in excess of those described above. Simply put, the projected “high end” impacts would be calamitous for New York City, causing destruction to essential infrastructure, affecting the basic habitability of significant swaths of the City, and increasing rates of death and severe illness for New Yorkers.

19. In 2014 New York City committed to a goal of reduction of GHG emissions by 80 percent below 2005 levels by the year 2050, representing the same goal set by the United Nations Framework Convention on Climate Change to prevent dangerous anthropogenic interference with the climate system.¹⁹ The City pushed this commitment further in 2019, pledging to achieve carbon neutrality by 2050,²⁰ by, among other things, incentivizing zero-emission vehicles,

¹⁹ The New York City Council memorialized this commitment in legislation. *See* Local Law 66 of 2014 (Nov. 13, 2014) (amending section 24-803 of the New York City Administrative Code to require that citywide emissions be reduced by eighty percent of 2005 levels by calendar year 2050).

²⁰ *OneNYC 2050 Building a Strong and Fair City Report* (Volume 7) at 5.

increasing the City fleet's efficiency, and expanding infrastructure necessary for electric vehicles.²¹

20. However, New York City's actions to reduce GHG alone will not prevent the impacts of global climate change on New York City or its residents. Action to reduce GHG emissions to stave off the realization of these "high end" impacts is not only required locally, but nationally and globally. Emissions of GHGs, including from the transportation sector, contribute to increased severity of impacts due to climate change experienced in New York City, and in turn, the costs and harms borne by New York City and its residents.

**THE RULE FAILS TO PROVIDE GREENHOUSE GAS
EMISSION REDUCTIONS NEEDED AND HINDERS
EFFORTS TO PROTECT NEW YORK CITY FROM
CLIMATE CHANGE HARMS**

21. New York City's GHG emission reduction goals were developed assuming rigorous federal regulation of GHG emissions. In 2016, New York City published its *Roadmap to 80x50*, which modeled projected emissions through 2050 from the transportation sector under a business as usual scenario.²² Under this business as usual scenario, GHG emissions were expected to decline.

²¹ *OneNYC 2050 Building a Strong and Fair City Report* (Volume 8) at 27.

²² New York City's Roadmap to 80 x50 at 81, available at https://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New%20York%20City's%20Roadmap%20to%2080%20x%2050_Final.pdf.

These reductions were largely the result of federal standards that are the subject of the Federal Standards Rollback Rule.²³

22. However, the Rule starkly alters the GHG emissions decline New York City can expect from the transportation sector. According to EPA and NHTSA's analysis, the Federal Standards Rollback Rule will result in 867 to 923 additional million metric tons of the GHG carbon dioxide nationally as compared to current estimates of what the standards set forth in 2012 would require.²⁴

23. The Rule fails to implement the necessary reductions in GHG emissions to realize the decreases New York City estimated under the business as usual scenario and stave off dangerous warming and the worst of climate change impacts. Thus, in order to achieve the target New York City laid out in the 2016 *Roadmap to 80x50*, it will need to develop and implement its own additional efforts to reduce greenhouse gas emission, a significant undertaking which would require grappling with technical and legal limitations, and incur substantial associated costs.

24. As previously noted, the City is already working to achieve carbon neutrality by 2050 and, as a result, there is limited opportunity to further reduce emissions beyond that goal to offset the anticipated increase in future

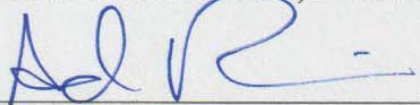
²³ *Id.*

²⁴ 85 Fed. Reg. 24,174, 24,176 (April 30, 2020).

emissions nationwide under the Federal Standards Rollback Rule. Further, as described above, the likelihood of the “high end” scenarios for severe climate change impacts increases where emissions are not significantly reduced in the near and medium term. New York City can therefore expect to shoulder larger economic, financial, social, and structural harms resulting from climate change due to the Rule.

I declare under penalty of perjury that the foregoing is true and correct.

Executed in New York, NY on January 6, 2021



ADAM PARRIS

Deputy Director of Climate Science and Risk Communication, New York City
Mayor's Office of Resiliency

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

STATE OF CALIFORNIA, by and through
GOVERNOR GAVIN NEWSOM,
ATTORNEY GENERAL XAVIER
BECERRA, et al.,

Petitioners,

Case No. 20-1167

v.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY, *et al.*,

Respondents.

DECLARATION OF MARK HAMMOND

I, Mark Hammond, pursuant to 28 U.S.C. § 1746, declare as follows:

Overview

1. I am the Director of the Bureau of Air Quality of the Pennsylvania Department of Environmental Protection (“PADEP”).

2. I submit this declaration in support of the brief filed in this action by the above-captioned States and Cities challenging the National Highway Traffic Safety Administration’s (“NHTSA”) and U.S. Environmental Protection Agency’s (“EPA”) joint final action titled “The Safer Affordable Fuel-Efficient (“SAFE”) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks.” See, 85 Fed. Reg. 24,174; April 30, 2020. (“SAFE Vehicles Part 2 Rule”).

3. Unless otherwise noted, the statements made in this declaration are based on my review of various publicly available records, reports, statements, and data compilations prepared by public agencies of the federal government and/or the Commonwealth of Pennsylvania (“Commonwealth”). I have also reviewed the federal regulation at issue in this litigation.

4. Based upon my review and analysis, the Commonwealth and its residents will be harmed by EPA’s and NHTSA’s final action in this matter.

5. The model year vehicles at issue in the SAFE Vehicles Part 2 Rule were previously required to increase fuel efficiency each year while simultaneously reducing emissions from the vehicles.

6. By the EPA’s and NHTSA’s own admissions, the changes in this rule will increase emissions of greenhouse gases (“GHGs”), the primary cause of global warming, by at least 867 million metric tons relative to the standards being rolled back.

7. These increased emissions will have adverse consequences to the public health of Commonwealth residents such as asthma, lung damage and causing increased premature deaths as well as other harms from climate effects. The changes in climate will damage state owned properties; cause increased flood damage in the Delaware, Ohio and Susquehanna River basins to critical infrastructure owned, funded, and/or administered by the Commonwealth; and harm ecological resources

of the Commonwealth. With the increased GHG emissions, the Commonwealth will incur increased medical costs and hamper the Commonwealth's air quality planning efforts to comply with federal air pollution standards. Moreover, the increased GHG emissions from the SAFE Vehicles Part 2 Rule will undermine the Commonwealth's mitigation and adaptation efforts to address climate change.

Biography

8. I received my Bachelor of Science degree in 1991 from Virginia Polytechnical Institute and State University with a major in Mechanical Engineering and obtained my Juris Doctorate from the University of Pittsburgh School of Law in 1994.

9. I became the Director of the BAQ on August 3, 2020. My current responsibilities include safeguarding the health of Pennsylvanians by achieving the goals of the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and the Pennsylvania Air Pollution Control Act, 35 P.S. §§ 4001-4015. I manage the BAQ's goals, objectives, and policies and oversee all its programs which include air quality monitoring, air resource management and planning, compliance and enforcement, permitting, and source testing and monitoring.

10. From 2010 to August 2020, I served on the Commonwealth's Climate Change Advisory Committee ("CCAC") created under the Pennsylvania Climate Change Act, 71 P.S. §§ 1361.1 *et seq.* I served as the Chairman of CCAC from September 2018 to August 2020 and as Vice Chair of CCAC from 2012 to 2016.

My role involved providing advice to PADEP regarding the implementation of the Pennsylvania Climate Change Act, including the development and submission of a Climate Change Action Plan to the Governor.

11. Starting in June 2011, I served as an attorney for Land Air Water Legal Solutions, LLC in Pennsylvania and became President of this firm in October 2011. During this time, I counseled clients on regulatory compliance strategies, implementation and reporting matters pertaining to the Clean Air Act and Air Pollution Control Act. This work included permitting, emission inventories, ambient air modeling and monitoring and risk assessments. I held this role with Land Air Water Legal Solutions, LLC until my departure on December 31, 2019.

12. In my previous position as an Associate with Drinker Biddle & Reath, LLP from 2002-2011, I counseled clients on Clean Air Act matters affecting manufacturers and the energy industry, including NESHAP, operating permit and regulatory compliance strategies.

13. In my previous position as an Executive Team Leader at Compliance Management International from 1995 to 2001, I managed the environmental consulting staff from 1995-1998 and the technical staff from 1998-2001. In this role, I assisted clients in all aspects of environmental compliance, including air, waste, water, energy efficiency and pollution prevention.

**EPA's and NHTSA's Final action will result in
Increased Greenhouse Gas emissions**

14. In the SAFE Vehicles Part 2 Rule, NHTSA and EPA project an increase of nearly 1 billion metric tons of GHG emissions as a result of the final rule.¹

15. These projected increases are extraordinarily ill-timed, as evidenced by the acceleration of global warming and the need to accelerate the reduction of GHG emissions.

Impacts on Pennsylvania

16. The Commonwealth faces two fundamental threats related to climate change: (1) sea level rise and its impact on communities and cities in the Delaware River Basin, including the City of Philadelphia; and (2) more frequent extreme storm weather events, including large storms, periods of drought, heat waves, heavier snowfalls, and an increase in overall precipitation variability.

17. Based on studies commissioned by PADEP, as part of its mandate under the Pennsylvania Climate Change Act, Pennsylvania has undergone a long-term warming of more than 1 degree Celsius over the past 110 years.²

¹ 85 Fed. Reg. at 24,180-81.

² Pennsylvania Dep't of Env't'l Prot., "Pennsylvania Climate Impacts Assessment Update," April 2020, p. 6, available at: <http://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/ClimateChange/2020ClimateChangeImpactsAssessmentUpdate.pdf>.

18. The models used in the May 2015 Pennsylvania Climate Impacts Assessment Update, which remain largely the same as of the April 2020 Update, suggest this warming is a result of anthropogenic influence, and that this trend is accelerating. Projections in the 2015 Update show that by the middle of the 21st Century, Pennsylvania will be about 3 degrees Celsius warmer than it was at the end of the 20th century.³

19. As documented in these Updated Impacts Assessments, these warming trends will threaten Pennsylvania in a number of ways.

a. The public health of Pennsylvanians is threatened because climate change will worsen air quality relative to what it would otherwise be, causing increased respiratory and cardiac illness. The linkage between climate change and air quality is most strongly established for ground-level ozone creation during summer, but there is some evidence that higher temperatures and higher precipitation will result in increased allergen (pollen and mold) levels as well.

b. Pennsylvania agriculture will have to adapt to greater extremes in temperature and precipitation. Pennsylvania dairy production is likely to be

³ Pennsylvania Dep't of Env't'l Prot., "Pennsylvania Climate Impacts Assessment Update," May 2015, pp. 44 and 101, available at: <http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=5002&DocName=2015%20PENNSYLVANIA%20CLIMATE%20IMPACTS%20ASSESSMENT%20UPDATE.PDF%20#>

negatively affected by climate change due to losses in milk yields caused by heat stress, additional expenditures to mitigate that heat stress, and lower levels of forage quality.

c. Pennsylvania's forests and orchards will be subject to multiple stressors. The warming climate will cause tree species' decreasingly suitable habitat to become stressed. Mortality rates are likely to increase and regeneration success is expected to decline for these tree species, resulting in declining importance of those species in the state.

d. Suitable habitat for plant and wildlife species is expected to shift to higher latitudes and elevations. This will reduce the amount of suitable habitat in Pennsylvania for species that are at the southern extent of their range in Pennsylvania or that are found primarily at high latitudes; the amount of habitat in the state that is suitable for species that are at the northern extent of their range in Pennsylvania will increase. The Canada lynx, which is already rare in Pennsylvania, will likely be extirpated from the state.

e. West Nile disease is endemic in Pennsylvania. It is currently most prevalent in Southeastern and Central parts of the state, and less prevalent in the Laurel Highlands and the Allegheny Plateau. However, climate change is expected to increase the prevalence of West Nile disease in the higher-elevation areas, due to higher temperatures. In addition to its range, the duration of the transmission season

for West Nile disease is sensitive to climate. Warmer temperatures result in a longer transmission season, and therefore greater infection risk.

f. Climate change poses a threat to the fauna of the tidal freshwater portion of the Delaware estuary in Pennsylvania. One reason is that increased water temperatures with climate change decrease the solubility of oxygen in water and will increase respiration rates, both of which will result in declines in dissolved oxygen concentration. Thus, climate change will worsen the currently substandard water quality in the tidal freshwater region of the Delaware Estuary. The salt intrusion associated with the combination of sea-level rise and summertime streamflow declines associated with climate change poses a threat to the City of Philadelphia's drinking water as the saltwater line extends further north on the Delaware River.

g. The freshwater tidal wetlands along Pennsylvania's southeastern coast are a rare, diverse, and ecologically important resource. Climate change poses a threat to these wetlands because of salinity intrusion and sea-level rise. Sea-level rise, however, has the potential to drown wetlands if their accretion rates are less than rates of sea-level rise.

h. Climate change poses a continued risk to roads, bridges, dams and other critical infrastructure in Pennsylvania due to the increase in flooding as a result of more frequent and extreme storm events.

Costs to Pennsylvania

20. Climate change impacts have co-related costs which will be experienced in all the above-referenced areas.

21. One such cost will be the increase in medical costs that are borne in large part by the Commonwealth through its Medicaid and Childhood Health Insurance Programs. One of the medical cost impacts will be an increase in asthma cases and episodes, and thus, asthma-related expenditures. Asthma places a significant economic burden on the United States, with a total cost of asthma including costs of missed work and school and mortality of \$81.9 billion in 2013. Approximately 2,480,000 Pennsylvanians are on Medicaid and CHIP; these programs bear a large part of the asthma-related costs in the Commonwealth, with for example, Medicaid alone bearing 37% of asthma related hospitalization costs.⁴

22. Another such cost to the will be the increase in costs associated with damages to infrastructure owned and maintained by the Commonwealth as a result of more frequent extreme storm events associated with climate change. In 2018 alone, climate-related costs to the Commonwealth totaled at least \$261 million

⁴ U.S. Dep't of Health and Human Services, Medicaid.gov, August 2020 Medicaid & CHIP Enrollment Data Highlights, available at: <https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html>; See Pennsylvania Dep't of Health, 2012 Pennsylvania Asthma Burden Report, p. 37, available at: http://www.paasthma.org/images/docs/2012_asthma_burden_report.pdf

dollars, which included \$125.7 million in infrastructure damages as a result of flooding and landslides.⁵ From April 2011 through September 2018, there has been about \$212 million in costs to the Commonwealth as result of damages to state-maintained roads and bridges from flooding and landslide events.⁶

Conclusion

23. In sum, the NHTSA and EPA SAFE Vehicles Part 2 Rule will injure the Commonwealth and its residents by increasing emissions of GHGs that will harm the health of Pennsylvanians, cause damage to public and private properties, hinder the Commonwealth's air quality planning efforts to attain air pollution standards and increase the medical and infrastructure-related costs that are borne, in substantial part, by the Commonwealth.

⁵ Pennsylvania Auditor General Eugene A. DePasquale, Climate Crisis Special Report: The Rising Cost of Inaction, pp. 1 available at: https://www.paauditor.gov/Media/Default/Reports/RPT_Climate_crisis_111219_FINAL.pdf; See Pennsylvania Dep't of Env't'l Prot., "Climate Change in PA," available at: <https://www.depgis.state.pa.us/ClimateChange/index.html>

⁶ Pennsylvania Dep't of Transportation, PennDOT Flooding/Slide Damages- April 2011 to September 2018, available at: <https://www.penndot.gov/PennDOTWay/Pages/Article.aspx?post=165>

I declare under penalty of perjury under the laws of the United States of America that I believe the foregoing to be true and correct to the best of my knowledge and belief. Executed on January TH12, 2021 in Harrisburg, Pennsylvania.



MARK HAMMOND

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT, *et al.*

Petitioners,

v.

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION, *et al.*

Respondents.

No. 20-1173
(consolidated with 20-1145 (lead),
20-1167, 20-1168, 20-1169, 20-1174,
20-1176, 20-1177)

**DECLARATION OF SARAH REES ON BEHALF OF PETITIONER
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

I, Sarah Rees, declare:

1. I submit this declaration in support of the standing of Petitioner Air Districts to challenge the final actions of the National Highway Traffic Safety Administration (NHTSA) and the United States Environmental Protection Agency to weaken the federal standards for vehicle fuel efficiency and greenhouse gas emissions, the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks,” 85 Fed. Reg. 24,174-25,278 (April 30, 2020) (“Final Rules”). The following statements are true and correct to the best of my knowledge and belief and are

based on my own personal knowledge or on information supplied to me by staff under my supervision.

2. I am the Assistant Deputy Executive Officer in the Planning, Rule Development, and Area Sources Division at the South Coast Air Quality Management District (“District”). I have a managing role in the implementation of transportation and mobile source programs, as well as the development of the Air Quality Management Plan (or “attainment plan”) for areas under the District’s jurisdiction. My professional background includes more than twenty years of management experience in air quality and climate change matters at state and federal levels and a PhD in Engineering and Public Policy from Carnegie Mellon University.
3. The District is a political subdivision of California responsible for air pollution control in the Los Angeles metropolitan area and parts of surrounding counties that make up the South Coast Air Basin. The South Coast Air Basin is home to more than 16.9 million people and spans 10,743 square miles. This region faces the most challenging, persistent air quality problems in the nation. The South Coast Air Basin violates several National Ambient Air Quality Standards (NAAQS) for pollutants under the Clean Air Act. Of greatest priority, the South Coast Air Basin is designated extreme nonattainment for multiple 8-Hour Ozone Standards (1997, 2008, and 2015). The South Coast Air Basin is also designated nonattainment for multiple fine

particulate matter standards, i.e., the PM-2.5 (2006 and 2012) NAAQS. 40 C.F.R. § 81.305.

4. Pollution from stationary and mobile sources—compounded by geography and climate in the region—negatively impacts human health and welfare in the region on a massive scale. To illustrate, well over three-fourths of the nation’s population living in any area designated serious, severe or extreme for ozone pollution resides in the District’s jurisdiction. Emissions from motor vehicles, fuel refining, and fuel truck deliveries, and gas station fuel dispensing have a significant role in continued poor air quality, as discussed in more detail below.
5. The Clean Air Act requires each State to address its nonattainment areas by developing plans for how the areas will eventually comply with the National Ambient Air Quality Standards. 42 U.S.C. §§ 7407(a), 7410. Under California law, the District is responsible for preparing that portion of the State Implementation Plan called for under Section 110 of the Clean Air Act, 42 U.S.C. § 7410, applicable to its geographic jurisdiction. Cal. Health & Safety Code §§ 40460–40470.
6. The District develops and uses emission inventories to help determine significant sources of air pollutants and to target regulatory actions. This is consistent with the Clean Air Act requirement that attainment plans use a “comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant.” 42 U.S.C. § 7502(c)(3).

7. The District's inventory for ozone precursor pollutants (nitrogen oxides and volatile organic compounds) and fine particulates includes the emissions in the air basin from mobile sources, including tailpipe emissions from passenger automobiles, light trucks, and gasoline delivery vehicles. These emissions are quantified for use in attainment planning, as legally required, according to the numerical models and calculation methods that EPA formally reviews and approves. To illustrate, the District's ozone attainment demonstration relies on reductions of 5.6 tons per day of nitrogen oxides by 2031 from all passenger vehicles and light-duty trucks, a category that includes vehicles sold in upcoming years under the Final Rules. This amount represents nearly a 50% reduction in emissions beyond those secured by existing regulations, even as total vehicles and total driving miles will increase.
8. The District's inventory for ozone precursors and fine particulates also includes emissions from stationary sources, including as relevant here oil refineries, gas stations, and gasoline dispensing facilities, i.e., the "upstream" chain of production and distribution for the gasoline and diesel fuels that power mobile sources in the South Coast Air Basin and elsewhere. For example, the ozone attainment demonstration for the South Coast Air Basin for the year 2031 projects nitrogen oxides emissions from local petroleum refineries at 6.0 tons per day and volatile organic compound emissions from gas stations at 11.1 tons per day. The methods for quantifying these emissions

for use in a Clean Air Act attainment plan are also well-established and subject to EPA review and approval. *See* 84 Fed. Reg. 52,005 (October 1, 2019) (EPA approval of the same emissions inventory for South Coast Air Basin that is referenced in this Declaration).

9. Clean Air Act requirements dictate that the District must attain the 2008 ozone standard no later than July 20, 2032, and the 2015 ozone standard no later than August 3, 2038.
10. The Final Rules injure the District and its interests. Specifically, the Agencies' actions to weaken fuel economy standards and tailpipe greenhouse gas emission standards will increase ozone and particulate matter emissions in the South Coast Air Basin. *See* 84 Fed. Reg. at 25,057 and 25,059. These emission increases will principally come from sources involved in refining, storing, transporting, and dispensing fuel to the vehicles that will fall under the Final Rules.
11. As the preamble to the Final Rules twice states, “[c]hanges in overall fuel consumption do lead to changes in emissions from ‘upstream’ processes involved in supplying fuel to vehicles.” 85 Fed. Reg. at 24,859 and 25,254. The Final Rules are mistaken, however, in asserting that these emission increases will have “small in magnitude” impacts on air quality. *See* 85 Fed. Reg. at 24,859. For the South Coast Air Basin, which is in extreme nonattainment for Federal ozone standards, a Federal action resulting in an increase of even ten

tons of ozone precursor pollutants cannot be dismissed as having a small impact on air quality in the District. *See* 40 CFR § 93.153. In fact, the District commonly pursues regulatory control measures to secure even a fraction of a ton per day of reductions in ozone precursor pollutants.

12. Because the Final Rules will allow model year 2021–2026 vehicles to have worse fuel efficiency than under the previously-established standards, a greater proportion of on-road vehicles during the next decade and beyond (i.e., the operational lifetimes for model year 2021–2026 vehicles) will consume more gasoline. 85 Fed. Reg. at 25,180–81 (EPA and NHTSA project that the Final Rules' weakened standards will increase gasoline use by 78–84 billion gallons). The Final Rules will result in increased gasoline production, as well as consumption, in the South Coast Air Basin. *See* 85 Fed. Reg. at 25,848 (“...this final rulemaking will result in increases in the amount of gasoline produced....”). In association with this increased gasoline production and consumption, increased emissions of ozone precursors and fine particulates and their precursors in the South Coast Air Basin are both foreseeable and readily quantifiable. These increases are ascertainable according to the conventional calculation methods and tools regularly used in developing emissions inventories, including the emission inventory the District developed in planning to achieve federal ozone standards.

13. In 2019, EPA approved the District's plan (including the accompanying inventory) to achieve the ozone standard. 84 Fed. Reg. 52,005 (October 1, 2019). With their Final Rules, however, the agencies denied being subject to the Clean Air Act prohibition on federal agency activities that fail to "conform to an implementation plan after it has been approved." 42 U.S.C. § 7506(c); *see* 85 Fed. Reg. at 24,858-59. Instead, the agencies stated they expect "states will evaluate any adverse emissions or air quality impacts that will result from the finalization of this rule in the context of state implementation plan development..." 85 Fed. Reg. at 24,858. Put differently, the District is left holding the bag for the adverse air quality impacts caused by the Final Rules, including the increased burden the District will confront in meeting federal air quality standards.

14. Increases in gasoline production and consumption relate to increased upstream emissions in the South Coast Air Basin in several ways. First, the South Coast Air Basin is home to five oil refineries; increased gasoline demand increases production at those refineries, which in turn increases emissions of ozone precursor pollutants and particulates. Second, increased refinery utilization also increases deliveries of crude oil and other materials to the refineries, as conveyed by road, rail, or sea; those mobile sources have their own associated, calculable emissions of pollutants. Finally, once refined, vehicle fuels are delivered to markets. In the South Coast Air Basin, increased gasoline

consumption spurs greater deliveries by gasoline delivery trucks to approximately 3,140 retail gas stations within the South Coast Air Basin and increased transportation of fuels from local refineries to consumers and markets outside the District. The Final Rule will result in more gasoline deliveries hence more tailpipe emissions from gasoline delivery trucks, as well as greater gas station throughput, which implicates more gasoline vapors, including ozone precursor volatile organic compounds. These many sources of increased emissions are all associated with supplying the additional gasoline fuel for future-year vehicles under the Final Rules.

15. The anticipated net increases in emissions expected under the Final Rules are not “small” for purposes of Clean Air Act planning for an area designated extreme nonattainment for ozone standards. By conservative estimation methods, the Final Rules will result in hundreds of additional tons of ozone precursor pollutants just by the year 2024. Emissions of volatile organic compounds and oxides of nitrogen would continue to grow and continue to calculably impact the South Coast Air Basin, frustrating attainment by the deadline of 2031 and beyond. Increased emissions from gasoline distribution tanker trucks alone—just a small fraction of the impacts—will reach eight tons of nitrogen oxides per year by 2031.

16. These above-discussed impacts solely relate to changes the Final Rules will make in terms of increased gasoline consumption for vehicles sold and

manufactured for model years 2021–2026. The impacts of the Final Rules are expected to be much greater, though difficult to quantify, in considering how the weakness of the standards will hamper the baseline and trajectory of progress for future vehicle standards. Moreover, by lessening applicable legal inducements for technological advancements in light-duty vehicles in the next several years, the Final Rules are frustrating the possibilities of beneficial technology transfer to all types of mobile sources. Advancements in zero-emission technologies for light duty vehicles will be critically useful for heavy-duty trucks and off-road vehicle and equipment applications. Since mobile source emissions represent over 80% of nitrogen oxide pollution in the South Coast Air Basin, mobile source technology advancement is vitally needed to achieve federal ozone standards by upcoming deadlines. The District particularly needs greater deployment of zero-emission technologies and supporting infrastructure, but the Final Rules' weaker standards will impede that trajectory, as well.

17. In sum, the Final Rules will increase air pollutant emissions in the South Coast Basin. These increases injure the District both by adding to the pollution burden of the South Coast Air Basin, and by making it more difficult and onerous for the District to devise plans to meet federal air quality standards.
18. As an added complicating factor, the Final Rules will cause an increase of more than 900 million metric tons of greenhouse gases in the atmosphere. *See*

85 Fed. Reg. at 24,180-81. Increased greenhouse gases cause climate change and susceptibility to hotter weather and enhanced atmospheric stagnation, both of which are conducive to ozone formation. As EPA has previously identified, “Increases in ambient ozone are expected to occur [as a result of climate change]...and they are expected to increase serious adverse health effects in large population areas that are and may continue to be in nonattainment.” 74 Fed. Reg. 66,496, 66,526 (December 15, 2009) (finding greenhouse gas emissions from “new motor vehicles” endanger public health and welfare). Increased ozone due to the exacerbation of climate change effects in the Basin attributable to the Final Rules’ addition of nearly one billion metric tons of greenhouse gases will also make it more difficult for the District meet its legal mandate to reduce ozone pollution and achieve attainment according to its deadlines assigned by the Clean Air Act.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed this 4th day of January, 2021, in Los Angeles County, California.



Sarah Rees

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

STATE OF CALIFORNIA, et al.,

Petitioners,

v.

ANDREW WHEELER, et al.,

Respondents.

No. 20-1167
(and consolidated cases)

DECLARATION OF GAIL GOOD

I, Gail Good, declare as follows:

1. I am the Director for the Air Management Program of the Wisconsin Department of Natural Resources (department), which is the agency charged with implementation of the Clean Air Act in the state of Wisconsin. In my capacity, I am responsible for oversight of the department's programs related to ozone and mobile source issues.

2. I submit this declaration on behalf of the State of Wisconsin in opposition to the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (Rule), finalized on April 30, 2020. As this declaration will describe in greater detail, the United States Environmental Protection Agency

(EPA) and National Highway Traffic Safety Administration (NHTSA)'s replacement of more stringent emission and fuel-economy standards for vehicles jeopardizes public health and substantially interferes with the state's efforts to reduce ozone emissions in Wisconsin.

I. Experience and Qualifications

3. This declaration is based upon my experience and professional background. I hold a bachelor's degree from Central Michigan University in Earth Science, with a concentration in Meteorology. I also hold two master's degrees from the University of Wisconsin – Madison: one in Atmospheric Science and one in Land Resources Management, with a certificate in Air Resources Management.

4. I have more than 20 years of experience at the department. My current responsibilities include statewide oversight of the air management program, including all air quality planning and implementation activities in accordance with the Clean Air Act and state law. I supervise staff working on ozone policy issues, mobile source issues, State Implementation Plan development and implementation, and ambient air quality monitoring.

II. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

5. On April 30, 2020, EPA and NHTSA finalized the SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (Rule). 85 Fed. Reg. 24,174 (Apr. 30, 2020).

6. The Rule replaces the motor vehicle standards for model years 2021-2025 established in the “2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy [CAFE] Standards”, promulgated by EPA and NHTSA in 2012 (the “2012 standards”). 77 Fed. Reg. 62,623 (Oct. 15, 2012).

7. While the Rule changes federal emissions standards only for greenhouse gas emissions from these vehicles, the Rule also results in changes in emissions of other pollutants, including those that cause ground-level ozone.

III. The SAFE Rule Eliminates Emissions Reductions that Wisconsin Relies on to Attain and Maintain Federal Ozone Standards

8. Wisconsin has historically been challenged to attain and maintain the national ambient air quality standards (NAAQS) for ozone. This is due to a combination of factors, including many that are

beyond Wisconsin's ability to control, such as meteorology and geography, as well as transported pollution originating from out of state, which can result in elevated ozone concentrations in the southeastern part of the state and along the Lake Michigan shoreline during the summer months. In-state emissions also contribute to these ozone levels.

9. Wisconsin currently has one area that remains designated as nonattainment for the 2008 ozone NAAQS and four areas that are designated nonattainment for the 2015 ozone NAAQS. In addition, Wisconsin has several areas that remain in maintenance for these NAAQS as well as previous standards, including the 1997 ozone NAAQS. *See, e.g.*, 83 Fed. Reg. 25,776 (June 4, 2018) (designating portions of Kenosha, Milwaukee, Ozaukee, Sheboygan, and Manitowoc Counties to nonattainment under the 2015 standard); 85 Fed. Reg. 41,405 (July 10, 2020) (redesignating Shoreland Sheboygan County to maintenance under the 2008 standard).

10. Both state law and the Clean Air Act (Act) require Wisconsin to revise its State Implementation Plan to ensure that ozone nonattainment areas can attain ozone NAAQS on the timelines

specified in the Act, as well as maintain the NAAQS following attainment.

11. The ground-level ozone regulated by the NAAQS is not directly emitted by sources. Rather, it is formed when two precursor pollutants—nitrogen oxides (NO_x) and volatile organic compounds (VOCs)—react chemically in the presence of sunlight. Therefore, to decrease ozone concentrations, emissions of NO_x and VOCs must be reduced.

12. Federal and state control programs regulating NO_x and VOC emissions have, over the past several decades, been successful in reducing ozone concentrations in Wisconsin. However, since ozone levels remain above the NAAQS in several areas of the state, continued reductions are necessary to reduce ozone to attainment levels as required by the Act.

13. Emissions from on-road mobile sources, including light duty vehicles, comprise a significant percentage of NO_x and VOC emissions throughout the Midwest, including in Wisconsin's ozone nonattainment areas. For example, according to EPA's National Emissions Inventory (NEI), in the partial Kenosha County 2008 ozone NAAQS "serious"

nonattainment area, on-road emissions comprised 19.8% of all NO_x emissions and 23.5% of VOC emissions in 2017, the most recent year for which data is available. *See* United States Environmental Protection Agency, *2017 National Emissions Inventory (NEI) Data*, <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data>. Similarly, the 2017 NEI data shows that on-road emissions were responsible for 17.9% of NO_x emissions and 16.6% of VOC emissions in the Shoreline Sheboygan County 2015 ozone NAAQS nonattainment area, an area that historically registers some of the highest ozone concentrations in the region. *Id.*

14. These emissions contribute directly to the ozone values measured by ambient air quality monitors in Wisconsin. Photochemical modeling conducted by the Lake Michigan Air Directors Consortium (LADCO) concludes that, in 2023, on-road sources will still be responsible for approximately 14 percent of the ozone measured at air quality monitors located in Sheboygan and Milwaukee.

15. Any emissions reductions used to comply with Clean Air Act requirements to address nonattainment or maintenance must be permanent and federally enforceable. Wisconsin relies upon federal

action (including federal standards for criteria pollutants from on-road sources, and also the 2012 standards and the weaker standards established in the Rule that indirectly impact on-road emissions of criteria pollutants) to control and reduce NO_x and VOC emissions from on-road sources. Wisconsin's State Implementation Plan assumes continued implementation of the 2012 standards and relies upon the reduction of NO_x and VOCs emissions resulting from those standards in future years to meet Clean Air Act requirements.

16. In addition to emissions from on-road sources, the weaker standards in the Rule will increase gasoline consumption, *see* 85 Fed. Reg. at 24,180-81, which results in increased emissions of NO_x and VOCs from "upstream" sources, *id.* at 25,051 (Table VII-11). Due largely to this increase in upstream emissions, NHTSA's Final Environmental Impact Statement concludes that the Rule will increase NO_x and VOC emissions in future years when compared to the 2012 standards it replaced. These increases are projected to occur in many of Wisconsin's nonattainment areas, including areas that are currently in nonattainment for the 2008 and 2015 ozone NAAQS. For example, in the three-state Chicago-Naperville (IL-IN-WI) 2008 ozone NAAQS

nonattainment area, which includes part of Kenosha County, Wisconsin, the Rule is projected to increase NO_x emissions by 46.14 tons per summer day (tpsd) in 2025, 344.71 tpsd in 2035 and 429.88 tpsd in 2050. Similarly, in that same nonattainment area, NHTSA projects VOC emissions will increase 4.6 tpsd in 2025, 329.07 tpsd in 2030, and 657.06 tpsd in 2050. National Highway Traffic Safety Administration, *Final Environmental Impact Statement – Appendix A* (March 2020), https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/safe_vehicles_rule_feis_appendices_0.pdf.

17. The increase in NO_x and VOC emissions under the Rule runs directly counter to the federal mandate under the Clean Air Act requiring Wisconsin to reduce these ozone-forming compounds in future years to meet its statutory obligations to attain the NAAQS. Specifically, these emissions increases will make it significantly harder for Wisconsin to reduce ozone concentrations to attainment levels by required dates, meet any future reasonable further progress requirements for ozone areas, and ensure maintenance of ozone NAAQS in areas that have attained or will attain.

18. Failure of Wisconsin to timely attain the health-based primary ozone NAAQS will mean that Wisconsin residents located in ozone nonattainment areas will continue to experience air quality that fails to meet the NAAQS, with the attendant consequences on the health and well-being of that population.

19. In addition, by operation of law, ozone nonattainment areas that fail to attain by their attainment date are reclassified to the next higher classification specified in the Act. While each reclassification provides more time to attain the standard, it also results in more stringent requirements to control emissions. These changes include greater emissions offset ratios for new or modified sources that need to increase emissions in order to increase operations, and, at times, more stringent major source thresholds for nonattainment new source review permitting that results in stricter emission controls. These changes make it more challenging and costly for certain businesses to open, relocate to, or expand operations in these nonattainment areas.

20. To prevent these consequences, the loss of future reductions in VOC and NO_x emissions due to the Rule will require offsetting reductions from stationary and other classes of sources, other than the

on-road sector, over which Wisconsin has authority—namely, businesses and industry. This would require imposition of additional control programs on these sources, which would entail additional expenses for both Wisconsin businesses, residents, and state regulators. Increased state expenses would include department staff time developing and implementing these programs, as well as monitoring compliance.

21. Should Wisconsin fail to find such emissions reductions or otherwise fail to submit an approvable implementation plan demonstrating attainment by the deadlines under the Clean Air Act, the state would become subject to additional consequences under the Act, including sanctions and ultimately a Federal Implementation Plan.

IV. Conclusion

22. The Rule eliminates critical reductions in NO_x and VOC emissions that Wisconsin relies upon in its State Implementation Plan to meet ozone NAAQS obligations under the Act. The Rule will instead cause increased emissions of those pollutants in Wisconsin's ozone nonattainment areas. As a result, Wisconsin must either find offsetting emissions from other sectors, where possible, or fail to meet its

statutory obligations, with the attendant consequences as described by the Act.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed in Madison, Wisconsin on December 21, 2020

A handwritten signature in blue ink that reads "Gail E. Good". The signature is written in a cursive style.

GAIL E. GOOD

DIRECTOR, AIR MANAGEMENT

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF CALIFORNIA, et al.,

Petitioners,

v.

ANDREW WHEELER, et al.,

Respondents.

No. 20-1167
(and consolidated cases)

DECLARATION OF DREUX J. WATERMOLEN

I, Dreux J. Watermolen, declare as follows:

1. I am an ecologist and serve as Chief of Analysis Services for the Wisconsin Department of Natural Resources (the department), which is the agency charged in the state with implementation of the Clean Air Act.

2. I submit this declaration on behalf of the State of Wisconsin in opposition to the Safer Affordable Fuel Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, finalized on April 30, 2020 (Rule). The revised standards in the Rule will cause a net increase in carbon dioxide (CO₂) and other greenhouse gas emissions from the transportation sector. Greenhouse gases are the

primary driver of climate change, the effects of which are already being experienced in Wisconsin. As this declaration will describe in greater detail, the Environmental Protection Agency's (EPA's) and the National Highway Transportation Administration's (NHTSA's) replacement of the more stringent existing vehicle emission and fuel economy standards further jeopardizes Wisconsin's economy, natural resources, infrastructure, and public health and substantially interferes with the state's efforts to reduce greenhouse gas emissions and minimize the effects of climate change in Wisconsin.

I. Experience and Qualifications

3. This Declaration is based upon my experience and professional background. I hold a bachelor's degree from St. Norbert College and pursued graduate studies in environmental science and policy at the University of Wisconsin-Green Bay. I have more than 34 years of experience at the department and a decade of experience as an Associate Academic Fellow with the University of Wisconsin. My current responsibilities include managing the department's Analysis Services Section which includes the department's social science

research, economics analysis, archaeology and cultural resources compliance, and Wisconsin Environmental Policy Act compliance functions. I supervise staff working on climate change and clean energy policy, represent the department on the Wisconsin Initiative on Climate Change Impacts (the Initiative) Coordination Team, and serve as co-leader of the department's Climate Action Team.

4. The Initiative was formed in 2007 by the department and the University of Wisconsin Nelson Institute for Environmental Studies. The Initiative has engaged citizens, private and public decision-makers, and scientists from Wisconsin and the region in a collaborative network to develop scientific understanding of climate impacts, identify vulnerability to climate change and climatic variability, and enable better planning, investment, and other adaptation activities. In 2011, the Initiative published a report entitled *Wisconsin's Changing Climate: Impacts and Adaptation*, which summarized some of the information on climate change impacts that had been gathered. Wisconsin Initiative on Climate Change Impacts, *Wisconsin's Changing Climate: Impacts and Adaptation (2011)*, <https://wicci.wisc.edu/wp-content/uploads/2019/12/2011-wicci-report.pdf>.

In 2020, the Initiative published a follow-up report, including climate science updates and additional information regarding the impacts on Wisconsin's natural environment. Wisconsin Initiative on Climate Change Impacts, *Report to the Governor's Task Force on Climate Change* (July 31, 2020), <https://wicci.wisc.edu/wp-content/uploads/wicci-report-to-governors-task-force.pdf>.

II. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

5. On April 30, 2020, the United States EPA and the NHTSA finalized the Rule. 85 Fed. Reg. 24,174 (Apr. 30, 2020).

6. The Rule replaces the motor vehicle standards for model years 2021-2025 that were established in the "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards" (2012 standards), promulgated in 2012. 77 Fed. Reg. 62,623 (Oct. 15, 2012). Passenger cars and light trucks currently account for 20 percent of CO₂ emissions in the United States.

7. EPA estimates that the Rule will lead to between 78 and 84 billion additional gallons of fuel being consumed as compared to the

2012 standards. 85 Fed. Reg. at 24,176, fn. 6 (Apr. 30, 2020). This additional fuel consumption is projected to lead to the emissions of between 867,000,000 and 923,000,000 metric tons of CO₂ into the atmosphere. *Id.* The increase in CO₂ emissions will contribute to climate change, resulting in temperature rises and other changes that will impact Wisconsin negatively.

III. Climate Change Harms Threatening Wisconsin

8. I am aware of and familiar with the science related to greenhouse gas emissions and global climate change. My knowledge comes from personal study and professional research; I was on the editorial team for the Initiative's *Wisconsin's Changing Climate* publication, and much of the information in this Declaration comes from that publication and subsequent research published by Initiative collaborators and others. *Supra* ¶4.

9. Climate change impacts to Wisconsin include increased temperatures and increased and altered precipitation patterns. These in turn impact – and pose serious threats to – Wisconsin's economy (particularly its agricultural and forestry sectors and tourism;

communities and infrastructure; public health; surface and ground water resources; flora and fauna; shorelines; and other natural resources).

10. Most of the state has warmed since 1950. The 2000s and the 2010s are the warmest two decades on record for Wisconsin, and the average annual temperature rose by about 2° to 3° F between 1950 and 2018, with warming in all seasons, but the most warming occurring in winter. For example, northwestern Wisconsin has seen a wintertime temperature increase of 4.5° F during the 1950 to 2018 timeframe. By the middle of this century, statewide average annual temperatures are projected to warm by an additional 4° to 9° F from 1980 annual average temperatures.

11. Annual precipitation in Wisconsin has also increased. The past decade has been by far the wettest on record, with 2019 the wettest year on record. Between 1950 and 2018, western and southcentral Wisconsin have seen a 20 percent increase in annual precipitation, southeastern Wisconsin has seen a 15 percent increase, and northern Wisconsin has seen a 5 percent increase. In addition, the frequency and magnitude of heavy rainfall events have increased significantly in

Wisconsin. Statewide, the amount of precipitation that falls as rain rather than as snow during winter is also projected to increase significantly and freezing rain is more likely to occur. As a result, snowfall, snow depth, and the extent of snow cover across the state are all expected to decrease significantly.

12. Negative climate impacts on human health are anticipated from increased temperatures, particularly in communities that lack the resources and geographic mobility to adapt to changes. Heat waves are becoming longer and more intense. *See, e.g.,* S.C. Pryor, et al., *Chapter 18: Midwest*, in J.M. Melillo, Terese (T.C.) Richmond, and G.W. Yohe, Eds., *Climate Change Impacts in the United States: The Third National Climate Assessment* 418-440, U.S. Global Change Research Program, 418-440 (2014), <https://nca2014.globalchange.gov/report/regions/midwest>. Heat-related mortality disproportionately affects elderly populations and socially isolated individuals who may not have access to air conditioning or cooling shelters, as well as those with pre-existing chronic conditions such as cardiovascular disease. *See, e.g.,* M. Christenson, et al., *Heat Vulnerability Index Mapping for Milwaukee and Wisconsin*, 23(4)

Journal of Public Health Management and Practice 396-403 (2017).

People living in cities are particularly vulnerable to heat waves because of the “urban heat island effect,” which results from the dry, impervious characteristics of buildings, roads, and other paved structures radiating heat like a slow burning furnace. An increase in temperatures is also expected to lead to an increase in ground-level ozone, which in turn would worsen conditions such as asthma and lung diseases, and make it more difficult for Wisconsin to meet its federal air quality mandates.

13. Warmer temperatures and increased precipitation also threaten Wisconsin’s agricultural industry. Agriculture is an essential component of Wisconsin’s economy, identity, and culture, generating \$104.8 billion in economic activity and 437,700 jobs. Climate impacts on agriculture include: more spring precipitation moisture; higher humidity; higher nighttime temperatures in summer; more droughts; more flooding; and more vigorous weed growth. These impacts delay or prevent spring planting due to excess soil moisture and waterlogging of soils; threaten field equipment; stress plants and livestock; promote disease and fungus; result in reduced yields; and, for unplanted acres, result in higher requested crop insurance payments. Heat waves during

pollination of field crops such as corn and soybean have reduced crop yields. In 2019, the USDA's Farm Service Agency reported that, due to historically high flooding and precipitation, 19.4 million acres across the country went unplanted, the highest number ever reported and more than double the previous record for prevented plantings from 2011. *See, e.g.,* United States Department of Agriculture Farm Service Agency, *Crop Acreage Data*, <https://www.fsa.usda.gov/news-room/efoia/electronic-reading-room/frequently-requested-information/crop-acreage-data/index>. This led to more than \$4 billion in claims for crop insurance. In Wisconsin, 592,808 acres went unplanted in 2019, principally due to historically high flooding and precipitation.

14. Warmer winter temperatures also pose ecological and economic impacts to Wisconsin's forests and timber industry. *See, e.g.,* C.D. Rittenhouse and A.R. Rissman, *Changes in Winter Conditions Impact Forest Management in North Temperate Forests*, 149 *Journal of Environmental Management* 157-167 (2015). Warming temperatures led to a two- to three-week shortening of frozen ground conditions from 1948 to 2012. This has impacted which areas and types of timber can be harvested and has resulted in longer periods of roadway weight

restrictions, which in turn restricts the period during which forest products can be transported.

15. Wisconsin boasts a wealth of water resources. The Mississippi River, Lake Superior, Lake Michigan, 88,000 miles of streams, 15,000 lakes, 5.3 million acres of wetlands, and more than 1.2 quadrillion gallons of groundwater provide multiple environmental services. These resources nourish plants and animals, provide drinking water for urban and rural communities, support industry and agriculture, and enrich recreational activities. The combination of warmer temperatures and changing precipitation patterns is having major impacts on these water resources, including (1) increased average surface water and groundwater temperatures, (2) shorter periods of ice cover on lakes and streams, (3) decreases in the thickness of ice cover, (4) increased evapotranspiration rates during the longer growing season, (5) increased numbers of freeze-thaw events, (6) more groundwater recharge due to increases in winter and spring precipitation, (7) changes in recharge and discharge based on whether precipitation falls as rain or snow, and (8) increased number of high-water events causing flooding.

16. The increased frequency and magnitude of heavy rainfall events has led to significant flooding and major concerns about the resiliency of Wisconsin's built infrastructure, as well as flooding of basements, homes, wastewater treatment systems, and septic systems. Flooding can cause septic systems to overflow, which can contaminate drinking water wells and surface waters. The contamination can impact recreational uses of waters and drinking water sources, causing gastrointestinal illnesses and respiratory effects.

17. According to an analysis by the Associated Press, between 2012 and 2018, communities in northwest Wisconsin suffered more than \$50 million in damage to public infrastructure from repeated historic storms and floods. *See, e.g.,* Will Cushman, *Wisconsin is Paying a High Price from the Storm Damage Caused by Extreme Weather*, Milwaukee Independent (Aug. 27, 2019), <http://www.milwaukeeindependent.com/syndicated/wisconsin-paying-high-price-storm-damage-caused-extreme-weather/>. For example, in July 2016, the Saxon Harbor area in Iron County received 11 to 14 inches of rain in just a few hours. The resulting flood waters decimated the marina, with the cost of damages around \$14 million, with Iron

County funding around \$2 million and the remaining funding coming from the state and federal governments. *See* Danielle Kaeding, *Marina to Reopen at Northern Wisconsin Harbor Destroyed by Flood*, Wisconsin Public Radio (Aug. 19, 2019), <https://www.wpr.org/marina-reopen-northern-wisconsin-harbor-destroyed-flood>. On August 20 and 21, 2018, areas in and around Madison in Dane County experienced an intense rainfall event, with some areas receiving 12 to 15 inches of rain, resulting in significant flooding. The City of Madison incurred over \$1.6 million in emergency costs, and Dane County estimated damages at over \$150 million. The Mississippi River at La Crosse experienced its longest duration flooding event in recorded history in 2019. The unprecedented flooding resulted in the closing of numerous outdoor recreation facilities, and threatened to overwhelm sump pumps, cause sewerage backups, and collapse basement walls. Flooding directly impacts state infrastructure. In June 2018, an intense storm in northwestern Wisconsin lead to washouts of Highway 77 at the St. Croix Bridge along the Minnesota border and U.S. Highway 2 about 10 miles west of Ashland, severing a major transportation route across northwestern Wisconsin. Rising water forced the closure of Highways 2

and 53 on the east side of Superior and Highway 63 near Drummond.

Other highways in the area were inundated and unpassable for days.

Wisconsin's governor declared a state of emergency in Ashland,

Bayfield, Burnett, Douglas, and Iron counties as a result of the massive storm and its impacts.

18. Similarly, Lake Michigan water levels hit record highs in 2020—nearly three feet above the long-term average—with August 2020 marking the eighth consecutive month of record high monthly mean water levels on the lake. High water levels inundated the beaches at Whitefish Dunes and Harrington Beach state parks and Point Beach State Forest, severely limiting recreational opportunities and impacting tourism.

19. Researchers now suggest that today's 100-year storm is likely to be a 20-year storm by the late 21st century. An increase in the size and frequency of heavy rainfall events and a shift to more rainfall in winter and spring, both being effects of climate change in Wisconsin, will increase runoff to surface waters. *See, e.g.,* A.C. Mednick, T.M.P. Nelson, and D.J. Watermolen, *Assessing Long-Term Hydrologic Impacts of Climate Change across Wisconsin*, Wisconsin Focus on Energy (2012),

www.focusonenergy.com/node/401. Lakes will be impacted by increased nutrient and sediment loading from runoff which in turn increases the length of toxic blue-green algae blooms, reduces visibility in the water for recreation, diving birds, and sight-feeding fish, and limits photosynthesis, making it difficult for submerged aquatic vegetation to grow.

20. Wisconsin is one of only eight states with a Great Lakes coastline, bordering both Lake Superior and Lake Michigan. Predicted increasing wind strength over the Great Lakes resulting from climate change is expected to influence wave characteristics and increase erosion along the coastlines, thus impacting the stability of bluffs and sandy beach–dune systems. Additional climate change effects, such as fluctuating lake levels and the absence of ice during winter, are expected to exacerbate these problems as shorelines become more vulnerable to increased wave activity. Many lakeshore communities and property owners, including the department, are already struggling with significant bluff erosion, beach inundation and erosion, and changes to dangerous rip currents, which has led to the loss of property and homes and safety concerns. In 2019, Governor Evers issued an Executive

Order declaring a state of emergency in three southeastern Wisconsin counties due to significant flooding and coastal erosion along Lake Michigan. In 2020, high water levels inundated the beach and eroded the sand dunes at Whitefish Dunes State Park, precluding beach use and exposing significant archaeological resources.

21. Climate change impacts are also expected to alter fish habitat in Wisconsin. Rising water temperatures, changes to groundwater recharge and stream baseflow, and an increase in large runoff events from heavy storms may all affect stream channels or other habitat characteristics that fish require for survival. For example, Wisconsin is renowned for its abundance of cold-water streams which provide fisheries for brook and brown trout. Considerable efforts have been made over the past three decades to restore more than 450 miles of trout streams in western Wisconsin's Driftless Area, leading to the area becoming a popular destination for recreational trout anglers. One recent study found trout anglers produce an economic benefit to the Driftless Area in excess of \$1.1 billion annually, with the state budget benefiting from this economic activity as well as recreational license fees. Because these trout are very sensitive to changes in water

temperature and can survive and reproduce only if temperatures remain below a certain threshold, rising stream temperatures are a real concern for the future vitality of angling in Wisconsin. *See, e.g.,* Mitro, M.G., *et al., Projected Changes in Brook Trout and Brown Trout Distribution in Wisconsin Streams in the Mid-Twenty-First Century in Response to Climate Change*. 840 *Hydrobiologia* 215-226 (2019); and M.G. Mitro, *Brook Trout, Brown Trout, and Ectoparasitic Copepods Salmincola edwardsii: Species Interactions as a Proximate Cause of Brook Trout Loss under Changing Environmental Conditions*, 145(6) *Transactions of the American Fisheries Society* 1223–1233 (2016).

22. Wisconsin's northern forests, southern prairies, and interior and coastal wetlands are home to diverse plant and animal species, which bring various benefits to Wisconsin's residents. For example, wildlife viewing for recreation, particularly of rare species, supports local economies with more than \$700 million in associated expenditures per year in Wisconsin. Climate change is altering the behavior, distribution, development, reproduction, and survival of plant and wildlife populations. In turn, these changes alter the benefits Wisconsin citizens receive from those populations.

23. Warmer temperatures in winter are leading to reduced snow cover which impacts Wisconsin's plant and animal communities. For example, lowland conifers require snow to insulate their fragile root systems. The American marten, a state endangered mammal, has limited fat reserves and relies on snow cover for insulation and protection from predators.

IV. Anticipated Impacts of the Rule

24. Motor vehicle emissions of greenhouse gasses directly relate to all of the impacts described above. Nationwide, passenger cars and light trucks account for 20 percent of CO₂ emissions. The transportation sector is the second largest source of greenhouse gas emissions in Wisconsin, representing 24 percent of total emissions in 2017. Weaker standards for the emission of greenhouse gases from motor vehicles will result in increased emissions, additional climate change and health impacts to citizens, and further threats to Wisconsin's iconic agricultural, forestry, hunting, fishing, and outdoor recreation opportunities.

25. The federal government's own EIS for the Rule states that increases in greenhouse gas emissions will be a direct effect of the reduced stringency in passenger car and light truck standards associated with the replacement standards in the Rule. The EIS further states that the increases in CO₂ emissions, in turn, will contribute to climate change. National Highway Traffic Safety Administration, *Final Environmental Impact Statement* S-11 – S-17 (March 2020) https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/safe_vehicles_rule_feis.pdf.

26. Greenhouse gas emissions from the transportation sector in Wisconsin decreased approximately 1.9 million metric tons of CO₂ equivalent (MtCO₂e), or 6.1 percent, from 2005 through 2017. The Rule will result in a reversal of these trends in emissions reductions that Wisconsin has seen over recent decades.

V. Conclusion

27. Wisconsin will be forced to incur additional costs in its effort to mitigate the effects of increased emissions and preserve important components of the state's heritage, quality of life, and economy. Because

the revised Rule will not assist Wisconsin in achieving its clean energy and greenhouse gas emissions reduction goals, Wisconsin will need to develop and implement additional greenhouse gas emissions reduction efforts to meet those goals.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed in Madison, Wisconsin on December 21, 2020



DREUX J. WATERMOLEN

CHIEF OF ANALYSIS SERVICES