

## ORAL ARGUMENT NOT YET SCHEDULED

No. 19-1230

Consolidated with Nos. 19-1239, 19-1241, 19-1242, 19-1243,  
19-1245, 19-1246, 19-1249, 20-1175, and 20-1178

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

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UNION OF CONCERNED SCIENTISTS et al.,  
*Petitioners,*

v.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION,  
*Respondent,*

COALITION FOR SUSTAINABLE AUTOMOTIVE REGULATION et al.,  
*Respondent-Intervenors.*

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**STATE AND LOCAL GOVERNMENT PETITIONERS AND PUBLIC  
INTEREST PETITIONERS' ADDENDUM OF STATUTES,  
REGULATIONS, AND STANDING DECLARATIONS**

**VOLUME A: STATUTES AND REGULATIONS**

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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.
806.	Applicability; severability.
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

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.<sup>1</sup>

(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 decision-making 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

<sup>1</sup> So in original. The period probably should be a semicolon.



- Sec.  
6401. Repealed.
- PART C—CONGRESSIONAL REVIEW
6421. Procedure for Congressional review of Presidential requests to implement certain authorities.
6422. Expedited procedure for Congressional consideration of certain authorities.

### § 6201. Congressional statement of purpose

The purposes of this chapter are—

(1) to grant specific authority to the President 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) Repealed. Pub. L. 106-469, title I, §102(2), Nov. 9, 2000, 114 Stat. 2029;

(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) Repealed. Pub. L. 106-469, title I, §102(2), Nov. 9, 2000, 114 Stat. 2029;

(7) to provide a means for verification of energy data to assure the reliability of energy data; and

(8) to conserve water by improving the water efficiency of certain plumbing products and appliances.

(Pub. L. 94-163, §2, Dec. 22, 1975, 89 Stat. 874; Pub. L. 102-486, title I, §123(a), Oct. 24, 1992, 106 Stat. 2817; Pub. L. 106-469, title I, §102, Nov. 9, 2000, 114 Stat. 2029.)

#### REFERENCES IN TEXT

This chapter, referred to in introductory clause, was in the original “this Act”, meaning Pub. L. 94-163, Dec. 22, 1975, 89 Stat. 871, known as the Energy Policy and Conservation Act. For complete classification of this Act to the Code, see Short Title note set out below and Tables.

#### AMENDMENTS

2000—Par. (1). Pub. L. 106-469, §102(1), struck out “standby” after “grant specific” and “”, subject to congressional review, to impose rationing, to reduce demand for energy through the implementation of energy conservation plans, and” after “the President”.

Par. (3). Pub. L. 106-469, §102(2), struck out par. (3) which read as follows: “to increase the supply of fossil fuels in the United States, through price incentives and production requirements;”.

Par. (6). Pub. L. 106-469, §102(2), struck out par. (6) which read as follows: “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;”.

1992—Par. (8). Pub. L. 102-486 added par. (8).

#### SHORT TITLE OF 2018 AMENDMENT

Pub. L. 115-115, §1, Jan. 12, 2018, 131 Stat. 2280, provided that: “This Act [amending sections 6291, 6294, 6295, 6311, and 6313 of this title] may be cited as the ‘EPS Improvement Act of 2017’.”

#### SHORT TITLE OF 2017 AMENDMENT

Pub. L. 115-78, §1, Nov. 2, 2017, 131 Stat. 1256, provided that: “This Act [amending section 6295 of this title] may be cited as the ‘Power And Security Systems (PASS) Act’.”

#### SHORT TITLE OF 2014 AMENDMENT

Pub. L. 113-263, §1, Dec. 18, 2014, 128 Stat. 2937, provided that: “This Act [amending section 6295 of this title] may be cited as the ‘EPS Service Parts Act of 2014’.”

Pub. L. 113-79, title XII, §12401, Feb. 7, 2014, 128 Stat. 997, provided that: “This subtitle [subtitle D (§§12401-12410) of title XII of Pub. L. 113-79, amending provisions set out as a note under this section] may be cited as the ‘Oilheat Efficiency, Renewable Fuel Research and Jobs Training Act of 2014’.”

#### SHORT TITLE OF 2012 AMENDMENT

Pub. L. 112-210, §1, Dec. 18, 2012, 126 Stat. 1514, provided that: “This Act [enacting section 6351 of this title, amending sections 6291, 6294, 6295, 6297, 6311, 6313, 6314, 6316, and 8253 of this title, and enacting provisions set out as notes under sections 6291 and 6295 of this title] may be cited as the ‘American Energy Manufacturing Technical Corrections Act’.”

#### SHORT TITLE OF 2000 AMENDMENT

Pub. L. 106-469, §1, Nov. 9, 2000, 114 Stat. 2029, provided that: “This Act [see Tables for classification] may be cited as the ‘Energy Act of 2000’.”

Pub. L. 106-469, title I, §101, Nov. 9, 2000, 114 Stat. 2029, provided that: “This title [amending this section and sections 6231, 6232, 6234, 6239 to 6241, 6245 to 6247, 6249, 6249a, 6251, 6276 and 6285 of this title, repealing sections 6211, 6214, 6233, 6235 to 6238, 6244, 6249b, 6261 to 6264, 6281 and 6282 of this title, and repealing provisions set out as notes under section 4511 of Title 50, War and National Defense] may be cited as the ‘Energy Policy and Conservation Act Amendments of 2000’.”

#### SHORT TITLE OF 1998 AMENDMENT

Pub. L. 105-388, §1, Nov. 13, 1998, 112 Stat. 3477, provided that: “This Act [enacting section 13220 of this title, amending sections 2296a, 2296a-2, 2297g-1, 6241, 6291, 6292, 6294, 6295, 6306, 6316, 6322, 6325, 6371, 6371c, 6371f, 6371i, 6372c, 6372h, 6374, 6383, 6422, 6802, 6872, 8217, 8231, 8235e, 8259, 8287, 8287c, and 13218 of this title and section 3503 of Title 25, Indians, enacting provisions set out as notes under section 6241 of this title, and amending and repealing provisions set out as notes under section 4511 of Title 50, War and National Defense] may be cited as the ‘Energy Conservation Reauthorization Act of 1998’.”

#### SHORT TITLE OF 1994 AMENDMENT

Pub. L. 103-406, §1, Oct. 22, 1994, 108 Stat. 4209, provided: “That this Act [amending sections 6251 and 6285 of this title and enacting provisions set out as a note below] may be cited as the ‘Energy Policy and Conservation Act Amendments Act of 1994’.”

Pub. L. 103-406, title I, §101, Oct. 22, 1994, 108 Stat. 4209, provided that: “This title [amending sections 6251 and 6285 of this title] may be cited as the ‘Energy Policy and Conservation Act Amendments of 1994’.”

#### SHORT TITLE OF 1990 AMENDMENT

Pub. L. 101-440, §1, Oct. 18, 1990, 104 Stat. 1006, provided that: “This Act [amending sections 6322, 6323, 6324 to 6326, 6371, 6371e, 6371f, 6861 to 6865, 6871, and 6872 of this title and repealing section 6327 of this title] may be cited as the ‘State Energy Efficiency Programs Improvement Act of 1990’.”

Pub. L. 101-383, §1, Sept. 15, 1990, 104 Stat. 727, provided that: “This Act [enacting sections 6249 to 6249c of this title, amending sections 6202, 6232, 6239 to 6241, 6247, 6251, and 6285 of this title, and amending provisions set out as a note under section 4511 of Title 50, War and National Defense] may be referred to as the ‘Energy Policy and Conservation Act Amendments of 1990’.”

Pub. L. 101-360, §1, Aug. 10, 1990, 104 Stat. 421, provided: “That this Act [amending sections 6251 and 6285 of this title and provisions set out as a note under sec-

tion 4511 of Title 50, War and National Defense] may be referred to as the 'Energy Policy and Conservation Act Short-Term Extension Amendment of 1990'."

Pub. L. 101-262, §1, Mar. 31, 1990, 104 Stat. 124, provided: "That this Act [amending sections 6251 and 6285 of this title and provisions set out as a note under section 4511 of Title 50, War and National Defense] may be referred to as the 'Energy Policy and Conservation Act Extension Amendment of 1990'."

SHORT TITLE OF 1988 AMENDMENT

Pub. L. 100-494, §1, Oct. 14, 1988, 102 Stat. 2441, provided that: "This Act [enacting sections 6374 to 6374d of this title and section 2013 of Title 15, Commerce and Trade, amending sections 2001, 2002, and 2006 of Title 15, and enacting provisions set out as notes under section 6374 of this title and sections 2006, 2013, and 2512 of Title 15] may be cited as the 'Alternative Motor Fuels Act of 1988'."

Pub. L. 100-357, §1, June 28, 1988, 102 Stat. 671, provided that: "This Act [amending sections 6291 to 6295 and 6297 of this title] may be referred to as the 'National Appliance Energy Conservation Amendments of 1988'."

SHORT TITLE OF 1987 AMENDMENT

Pub. L. 100-12, §1, Mar. 17, 1987, 101 Stat. 103, provided that: "This Act [amending sections 6291 to 6297, 6299, 6302, 6303, 6305, 6306, 6308, and 6309 of this title] may be referred to as the 'National Appliance Energy Conservation Act of 1987'."

SHORT TITLE OF 1985 AMENDMENT

Pub. L. 99-58, §1, July 2, 1985, 99 Stat. 102, provided that: "This Act [enacting sections 6251, 6264, 6285, and 7277 of this title, amending sections 6239, 6240, 6241, 6247, and 6272 of this title, repealing section 6401 of this title, enacting provisions set out as notes under section 7277 of this title, and amending provisions set out as a note under section 4511 of Title 50, War and National Defense] may be cited as the 'Energy and Conservation Amendments Act of 1985'."

SHORT TITLE OF 1984 AMENDMENT

Pub. L. 98-370, §1, July 18, 1984, 98 Stat. 1211, provided: "That this Act [enacting section 6276 of this title and a provision set out as a note under section 627] may be cited as the 'Renewable Energy Industry Development Act of 1983'."

SHORT TITLE OF 1982 AMENDMENT

Pub. L. 97-229, §1, Aug. 3, 1982, 96 Stat. 248, provided that: "This Act [enacting sections 6281, 6282, and 6385 of this title, amending sections 6239, 6240, 6247, 6271, and 6272 of this title, and enacting provisions set out as notes under sections 6234, 6240, and 6245 of this title] may be cited as the 'Energy Emergency Preparedness Act of 1982'."

SHORT TITLE OF 1981 AMENDMENT

Pub. L. 97-35, title X, §1031, Aug. 13, 1981, 95 Stat. 618, provided that: "This subtitle [subtitle C (§§ 1031-1038) of title X of Pub. L. 97-35, enacting section 6247 of this title, amending sections 6240, 6245, and 6246 of this title, and enacting provisions set out as notes under sections 6231, 6240, and 6247 of this title] may be cited as the 'Strategic Petroleum Reserve Amendments Act of 1981'."

SHORT TITLE

Pub. L. 94-163, §1, Dec. 22, 1975, 89 Stat. 871, provided in part: "That this Act [enacting this chapter and sections 757 to 760h and 2001 to 2012 of Title 15, Commerce and Trade, amending sections 753, 754, 755, 792, 796, and 1901 of Title 15 and section 4511 of Title 50, War and National Defense, enacting provisions set out as notes under this section, sections 753 and 796 of Title 15, and section 4511 of Title 50, and repealing provisions for-

merly set out as a note under section 1904 of Title 12, Banks and Banking] may be cited as the 'Energy Policy and Conservation Act'."

NATIONAL OILHEAT RESEARCH ALLIANCE

Pub. L. 106-469, title VII, Nov. 9, 2000, 114 Stat. 2043, as amended by Pub. L. 109-58, title III, §302, Aug. 8, 2005, 119 Stat. 685; Pub. L. 113-79, title XII, §§ 12402-12410, Feb. 7, 2014, 128 Stat. 997-1005; Pub. L. 115-334, title XII, §12531, Dec. 20, 2018, 132 Stat. 5002, provided that:

"SEC. 701. SHORT TITLE.

"This title may be cited as the 'National Oilheat Research Alliance Act of 2000'.

"SEC. 702. FINDINGS.

"Congress finds that—

"(1) oilheat fuel is an important commodity relied on by approximately 30,000,000 Americans as an efficient and economical energy source for commercial and residential space and hot water heating;

"(2) oilheat fuel equipment operates at efficiencies among the highest of any space heating energy source, reducing fuel costs and making oilheat fuel an economical means of space heating;

"(3) the production, distribution, and marketing of oilheat fuel and oilheat fuel equipment plays a significant role in the economy of the United States, accounting for approximately \$12,900,000,000 in expenditures annually and employing millions of Americans in all aspects of the oilheat fuel industry;

"(4) only very limited Federal resources have been made available for oilheat fuel research, development, safety, training, and education efforts, to the detriment of both the oilheat fuel industry and its 30,000,000 consumers;

"(5) the cooperative development, self-financing, and implementation of a coordinated national oilheat fuel industry program of research and development, training, and consumer education is necessary and important for the welfare of the oilheat fuel industry, the general economy of the United States, and the millions of Americans that rely on oilheat fuel for commercial and residential space and hot water heating;

"(6) consumers of oilheat fuel fuel [sic] are provided service by thousands of small businesses that are unable to individually develop training programs to facilitate the entry of new and qualified workers into the oilheat fuel fuel [sic] industry;

"(7) small businesses and trained employees are in an ideal position—

"(A) to provide information to consumers about the benefits of improved efficiency; and

"(B) to encourage consumers to value efficiency in energy choices and assist individuals in conserving energy;

"(8) additional research is necessary—

"(A) to improve oilheat fuel fuel [sic] equipment; and

"(B) to develop domestic renewable resources that can be used to safely and affordably heat homes;

"(9) since there are no Federal resources available to assist the oilheat fuel fuel [sic] industry, it is necessary and appropriate to develop a self-funded program dedicated—

"(A) to improving efficiency in customer homes;

"(B) to assist individuals to gain employment in the oilheat fuel fuel [sic] industry; and

"(C) to develop domestic renewable resources;

"(10) both consumers of oilheat fuel fuel [sic] and retailers would benefit from the self-funded program; and

"(11) the oilheat fuel fuel [sic] industry is committed to providing appropriate funding necessary to carry out the purposes of this title without passing additional costs on to residential consumers.

"SEC. 703. DEFINITIONS.

"In this title:

“(1) ALLIANCE.—The term ‘Alliance’ means a national oilheat fuel research alliance established under section 704.

“(2) CONSUMER EDUCATION.—The term ‘consumer education’ means the provision of information to assist consumers and other persons in making evaluations and decisions regarding oilheat fuel and other nonindustrial commercial or residential space or hot water heating fuels.

“(3) COST-EFFECTIVE.—The term ‘cost-effective’, with respect to a program or activity carried out under section 707(f)(4), means that the program or activity meets a total resource cost test under which—

“(A) the net present value of economic benefits over the life of the program or activity, including avoided supply and delivery costs and deferred or avoided investments; is greater than

“(B) the net present value of the economic costs over the life of the program or activity, including program costs and incremental costs borne by the energy consumer.

“(4) EXCHANGE.—The term ‘exchange’ means an agreement that—

“(A) entitles each party or its customers to receive oilheat fuel from the other party; and

“(B) requires only an insubstantial portion of the volumes involved in the exchange to be settled in cash or property other than the oilheat fuel.

“(5) INDUSTRY TRADE ASSOCIATION.—The term ‘industry trade association’ means an organization described in paragraph (3) or (6) of section 501(c) of the Internal Revenue Code of 1986 [26 U.S.C. 501(c)(3), (6)] that is exempt from taxation under section 501(a) of that Code and is organized for the purpose of representing the oilheat fuel industry.

“(6) NO. 1 DISTILLATE.—The term ‘No. 1 distillate’ means fuel oil classified as No. 1 distillate by the American Society for Testing and Materials.

“(7) NO. 2 DYED DISTILLATE.—The term ‘No. 2 dyed distillate’ means fuel oil classified as No. 2 distillate by the American Society for Testing and Materials that is indelibly dyed in accordance with regulations prescribed by the Secretary of the Treasury under section 4082(a)(2) of the Internal Revenue Code of 1986 [26 U.S.C. 4082(a)(2)].

“(8) OILHEAT FUEL.—The term ‘oilheat fuel’ means fuel that—

“(A) is—

“(i) No. 1 distillate;

“(ii) No. 2 dyed distillate;

“(iii) a liquid blended with No. 1 distillate or No. 2 dyed distillate; or

“(iv) a biobased liquid; and

“(B) is used as a fuel for nonindustrial commercial or residential space or hot water heating.

“(9) OILHEAT FUEL INDUSTRY.—

“(A) IN GENERAL.—The term ‘oilheat fuel industry’ means—

“(i) persons in the production, transportation, or sale of oilheat fuel; and

“(ii) persons engaged in the manufacture or distribution of oilheat fuel utilization equipment.

“(B) EXCLUSION.—The term ‘oilheat fuel industry’ does not include ultimate consumers of oilheat fuel.

“(10) PUBLIC MEMBER.—The term ‘public member’ means a member of the Alliance described in section 705(c)(1)(F).

“(11) QUALIFIED INDUSTRY ORGANIZATION.—The term ‘qualified industry organization’ means the National Association for Oilheat Research and Education or a successor organization.

“(12) QUALIFIED STATE ASSOCIATION.—The term ‘qualified State association’ means the industry trade association or other organization that the qualified industry organization or the Alliance determines best represents retail marketers in a State.

“(13) RETAIL MARKETER.—The term ‘retail marketer’ means a person engaged primarily in the sale of oilheat fuel to ultimate consumers.

“(14) SECRETARY.—The term ‘Secretary’ means the Secretary of Energy.

“(15) WHOLESALE DISTRIBUTOR.—The term ‘wholesale distributor’ means a person that—

“(A)(i) produces No. 1 distillate or No. 2 dyed distillate;

“(ii) imports No. 1 distillate or No. 2 dyed distillate; or

“(iii) transports No. 1 distillate or No. 2 dyed distillate across State boundaries or among local marketing areas; and

“(B) sells the distillate to another person that does not produce, import, or transport No. 1 distillate or No. 2 dyed distillate across State boundaries or among local marketing areas.

“(16) STATE.—The term ‘State’ means the several States, except the State of Alaska.

“SEC. 704. REFERENDA.

“(a) CREATION OF PROGRAM.—

“(1) IN GENERAL.—The oilheat fuel industry, through the qualified industry organization, may conduct, at its own expense, a referendum among retail marketers and wholesale distributors for the establishment of a national oilheat fuel research alliance.

“(2) REIMBURSEMENT OF COST.—The Alliance, if established, shall reimburse the qualified industry organization for the cost of accounting and documentation for the referendum.

“(3) CONDUCT.—A referendum under paragraph (1) shall be conducted by an independent auditing firm.

“(4) VOTING RIGHTS.—

“(A) RETAIL MARKETERS.—Voting rights of retail marketers in a referendum under paragraph (1) shall be based on the volume of oilheat fuel sold in a State by each retail marketer in the calendar year previous to the year in which the referendum is conducted or in another representative period.

“(B) WHOLESALE DISTRIBUTORS.—Voting rights of wholesale distributors in a referendum under paragraph (1) shall be based on the volume of No. 1 distillate and No. 2 dyed distillate sold in a State by each wholesale distributor in the calendar year previous to the year in which the referendum is conducted or in another representative period, weighted by the ratio of the total volume of No. 1 distillate and No. 2 dyed distillate sold for nonindustrial commercial and residential space and hot water heating in the State to the total volume of No. 1 distillate and No. 2 dyed distillate sold in that State.

“(5) ESTABLISHMENT BY APPROVAL OF TWO-THIRDS.—

“(A) IN GENERAL.—Subject to subparagraph (B), on approval of persons representing two-thirds of the total volume of oilheat fuel voted in the retail marketer class and two-thirds of the total weighted volume of No. 1 distillate and No. 2 dyed distillate voted in the wholesale distributor class, the Alliance shall be established and shall be authorized to levy assessments under section 707.

“(B) REQUIREMENT OF MAJORITY OF RETAIL MARKETERS.—Except as provided in subsection (b), the oilheat fuel industry in a State shall not participate in the Alliance if less than 50 percent of the retail marketer vote in the State approves establishment of the Alliance.

“(6) CERTIFICATION OF VOLUMES.—Each person voting in the referendum shall certify to the independent auditing firm the volume of oilheat fuel, No. 1 distillate, or No. 2 dyed distillate represented by the vote of the person.

“(7) NOTIFICATION.—Not later than 90 days after the date of the enactment of this title [Nov. 9, 2000], a qualified State association may notify the qualified industry organization in writing that a referendum under paragraph (1) will not be conducted in the State.

“(b) SUBSEQUENT STATE PARTICIPATION.—The oilheat fuel industry in a State that has not participated ini-

tially in the Alliance may subsequently elect to participate by conducting a referendum under subsection (a).

“(c) TERMINATION OR SUSPENSION.—

“(1) IN GENERAL.—On the initiative of the Alliance or on petition to the Alliance by retail marketers and wholesale distributors representing 25 percent of the volume of oilheat fuel or weighted No. 1 distillate and No. 2 dyed distillate in each class, the Alliance shall, at its own expense, hold a referendum, to be conducted by an independent auditing firm selected by the Alliance, to determine whether the oilheat fuel industry favors termination or suspension of the Alliance.

“(2) VOLUME PERCENTAGES REQUIRED TO TERMINATE OR SUSPEND.—Termination or suspension shall not take effect unless termination or suspension is approved by persons representing more than one-half of the total volume of oilheat fuel voted in the retail marketer class or more than one-half of the total volume of weighted No. 1 distillate and No. 2 dyed distillate voted in the wholesale distributor class.

“(3) TERMINATION BY A STATE.—A State may elect to terminate participation by notifying the Alliance that 50 percent of the oilheat fuel volume in the State has voted in a referendum to withdraw.

“(d) CALCULATION OF OILHEAT FUEL SALES.—For the purposes of this section and section 705, the volume of oilheat fuel sold annually in a State shall be determined on the basis of information provided by the Energy Information Administration with respect to a calendar year or other representative period.

“SEC. 705. MEMBERSHIP.

“(a) SELECTION.—

“(1) LIST.—

“(A) IN GENERAL.—The Alliance shall provide to the Secretary a list of qualified nominees for membership in the Alliance.

“(B) REQUIREMENT.—Except as provided in subsection (c)(1)(C), members of the Alliance shall be representatives of the oilheat fuel industry in a State, selected from a list of nominees submitted by the qualified State association in the State.

“(2) VACANCIES.—A vacancy in the Alliance shall be filled in the same manner as the original selection.

“(3) SECRETARIAL ACTION.—

“(A) IN GENERAL.—The Secretary shall have 60 days to review nominees provided under paragraph (1).

“(B) FAILURE TO ACT.—If the Secretary takes no action during the 60-day period described in subparagraph (A), the nominees shall be considered to be members of the Alliance.

“(b) REPRESENTATION.—In selecting members of the Alliance, the Alliance shall make best efforts to select members that are representative of the oilheat fuel industry, including representation of—

“(1) interstate and intrastate operators among retail marketers;

“(2) wholesale distributors of No. 1 distillate and No. 2 dyed distillate;

“(3) large and small companies among wholesale distributors and retail marketers; and

“(4) diverse geographic regions of the country.

“(c) NUMBER OF MEMBERS.—

“(1) IN GENERAL.—The Alliance shall be composed of the following members:

“(A) 1 member representing each State participating in the Alliance.

“(B) 5 representatives of retail marketers, of whom 1 shall be selected by each of the qualified State associations of the 5 States with the highest volume of annual oilheat fuel sales.

“(C) 5 additional representatives of retail marketers.

“(D) 21 representatives of wholesale distributors.

“(E) 6 public members, who shall be representatives of significant users of oilheat fuel, the oilheat fuel research community, State energy officials, or

other groups with expertise in oilheat fuel, including consumer and low-income advocacy groups.

“(2) FULL-TIME OWNERS OR EMPLOYEES.—Other than the public members, Alliance members shall be full-time owners or employees of members of the oilheat fuel industry, except that members described in subparagraphs (C), (D), and (E) of paragraph (1) may be employees of an industry trade association.

“(d) COMPENSATION.—Alliance members shall receive no compensation for their service, nor shall Alliance members be reimbursed for expenses relating to their service, except that public members, on request, may be reimbursed for reasonable expenses directly related to participation in meetings of the Alliance.

“(e) TERMS.—

“(1) IN GENERAL.—Subject to paragraph (4), a member of the Alliance shall serve a term of 3 years, except that a member filling an unexpired term may serve a total of 7 consecutive years.

“(2) TERM LIMIT.—A member may serve not more than two full consecutive terms.

“(3) FORMER MEMBERS.—A former member of the Alliance may be returned to the Alliance if the member has not been a member for a period of 2 years.

“(4) INITIAL APPOINTMENTS.—Initial appointments to the Alliance shall be for terms of 1, 2, and 3 years, as determined by the qualified industry organization, staggered to provide for the subsequent selection of one-third of the members each year.

“SEC. 706. FUNCTIONS.

“(a) IN GENERAL.—

“(1) PROGRAMS, PROJECTS; CONTRACTS AND OTHER AGREEMENTS.—The Alliance—

“(A) shall develop programs and projects and enter into contracts or other agreements with other persons and entities for implementing this title, including programs—

“(i) to enhance consumer and employee safety and training;

“(ii) to provide for research, development, and demonstration of clean and efficient oilheat fuel utilization equipment; and

“(iii) for consumer education; and

“(B) may provide for the payment of the costs of carrying out subparagraph (A) with assessments collected under section 707.

“(2) COORDINATION.—The Alliance shall coordinate its activities with industry trade associations and other persons as appropriate to provide efficient delivery of services and to avoid unnecessary duplication of activities.

“(3) ACTIVITIES.—

“(A) EXCLUSIONS.—Activities under clause (i) or (ii) of paragraph (1)(A) shall not include advertising, promotions, or consumer surveys in support of advertising or promotions.

“(B) RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACTIVITIES.—

“(i) IN GENERAL.—Research, development, and demonstration activities under paragraph (1)(A)(ii) shall include—

“(I) all activities incidental to research, development, and demonstration of clean and efficient oilheat fuel utilization equipment, including research to develop renewable fuels and to examine the compatibility of different renewable fuels with oilheat fuel utilization equipment, with priority given to research on the development and use of advanced biofuels; and

“(II) the obtaining of patents, including payment of attorney’s fees for making and perfecting a patent application.

“(ii) EXCLUDED ACTIVITIES.—Research, development, and demonstration activities under paragraph (1)(A)(ii) shall not include research, development, and demonstration of oilheat fuel utilization equipment with respect to which technically feasible and commercially feasible operations have been verified, except that funds may

be provided for improvements to existing equipment until the technical feasibility and commercial feasibility of the operation of those improvements have been verified.

“(b) PRIORITIES.—In the development of programs and projects, the Alliance shall give priority to issues relating to—

- “(1) research, development, and demonstration;
- “(2) safety;
- “(3) consumer education; and
- “(4) training.

“(c) ADMINISTRATION.—

“(1) OFFICERS; COMMITTEES; BYLAWS.—The Alliance—

“(A) shall select from among its members a chairperson and other officers as necessary;

“(B) may establish and authorize committees and subcommittees of the Alliance to take specific actions that the Alliance is authorized to take; and

“(C) shall adopt bylaws for the conduct of business and the implementation of this title.

“(2) SOLICITATION OF OILHEAT FUEL INDUSTRY COMMENT AND RECOMMENDATIONS.—The Alliance shall establish procedures for the solicitation of oilheat fuel industry comment and recommendations on any significant contracts and other agreements, programs, and projects to be funded by the Alliance.

“(3) ADVISORY COMMITTEES.—The Alliance may establish advisory committees consisting of persons other than Alliance members.

“(4) VOTING.—Each member of the Alliance shall have one vote in matters before the Alliance.

“(d) ADMINISTRATIVE EXPENSES.—

“(1) IN GENERAL.—The administrative expenses of operating the Alliance (not including costs incurred in the collection of assessments under section 707) plus amounts paid under paragraph (2) shall not exceed 7 percent of the amount of assessments collected in any calendar year that are permitted to be obligated in that calendar year.

“(2) REIMBURSEMENT OF THE SECRETARY.—

“(A) IN GENERAL.—The Alliance shall annually reimburse the Secretary for costs incurred by the Federal Government relating to the Alliance.

“(B) LIMITATION.—Reimbursement under subparagraph (A) for any calendar year shall not exceed the amount that the Secretary determines is twice the average annual salary of one employee of the Department of Energy.

“(e) BUDGET.—

“(1) PUBLICATION OF PROPOSED BUDGET.—Not later than August 1, 2014, and every 2 years thereafter, the Alliance shall, in consultation with the Secretary, develop and publish for public review and comment a proposed biennial budget for the next 2 calendar years, including the probable operating and planning costs of all programs, projects, and contracts and other agreements.

“(2) SUBMISSION TO THE SECRETARY AND CONGRESS.—After review and comment under paragraph (1), the Alliance shall submit the proposed budget to the Secretary and Congress.

“(3) RECOMMENDATIONS BY THE SECRETARY.—The Secretary may recommend for inclusion in the budget programs and activities that the Secretary considers appropriate.

“(4) IMPLEMENTATION.—

“(A) IN GENERAL.—The Alliance shall not implement a proposed budget until the expiration of 60 days after submitting the proposed budget to the Secretary.

“(B) RECOMMENDATIONS FOR CHANGES BY SECRETARY.—

“(i) IN GENERAL.—The Secretary may recommend to the Alliance changes to the budget programs and activities of the Alliance that the Secretary considers appropriate.

“(ii) RESPONSE BY ALLIANCE.—Not later than 30 days after the receipt of any recommendations made under clause (i), the Alliance shall submit

to the Secretary a final budget for the next 2 calendar years that incorporates or includes a description of the response of the Alliance to any changes recommended under clause (i).

“(f) RECORDS; AUDITS.—

“(1) RECORDS.—The Alliance shall—

“(A) keep records that clearly reflect all of the acts and transactions of the Alliance; and

“(B) make the records available to the public.

“(2) AUDITS.—

“(A) IN GENERAL.—The records of the Alliance (including fee assessment reports and applications for refunds under section 707(b)(4)) shall be audited by a certified public accountant at least once each year and at such other times as the Alliance may designate.

“(B) AVAILABILITY OF AUDIT REPORTS.—Copies of each audit report shall be provided to the Secretary, the members of the Alliance, and the qualified industry organization, and, on request, to other members of the oilheat fuel industry.

“(C) POLICIES AND PROCEDURES.—

“(i) IN GENERAL.—The Alliance shall establish policies and procedures for auditing compliance with this title.

“(ii) CONFORMITY WITH GAAP.—The policies and procedures established under clause (i) shall conform with generally accepted accounting principles.

“(g) PUBLIC ACCESS TO ALLIANCE PROCEEDINGS.—

“(1) PUBLIC NOTICE.—The Alliance shall give at least 30 days' public notice of each meeting of the Alliance.

“(2) MEETINGS OPEN TO THE PUBLIC.—Each meeting of the Alliance shall be open to the public.

“(3) MINUTES.—The minutes of each meeting of the Alliance shall be made available to and readily accessible by the public.

“(h) ANNUAL REPORT.—Each year the Alliance shall prepare and make publicly available a report that—

“(1) includes a description of all programs, projects, and contracts and other agreements undertaken by the Alliance during the previous year and those planned for the current year; and

“(2) details the allocation of Alliance resources for each such program and project.

“SEC. 707. ASSESSMENTS.

“(a) RATE.—The assessment rate shall be equal to 3/4 of 1 cent per gallon of oilheat fuel.

“(b) COLLECTION RULES.—

“(1) COLLECTION AT POINT OF SALE.—The assessment shall be collected at the point of sale of No. 1 distillate and No. 2 dyed distillate by a wholesale distributor to a person other than a wholesale distributor, including a sale made pursuant to an exchange.

“(2) RESPONSIBILITY FOR PAYMENT.—A wholesale distributor—

“(A) shall be responsible for payment of an assessment to the Alliance on a quarterly basis; and

“(B) shall provide to the Alliance certification of the volume of fuel sold.

“(3) NO OWNERSHIP INTEREST.—A person that has no ownership interest in No. 1 distillate or No. 2 dyed distillate shall not be responsible for payment of an assessment under this section.

“(4) FAILURE TO RECEIVE PAYMENT.—

“(A) REFUND.—A wholesale distributor that does not receive payments from a purchaser for No. 1 distillate or No. 2 dyed distillate within 1 year of the date of sale may apply for a refund from the Alliance of the assessment paid.

“(B) AMOUNT.—The amount of a refund shall not exceed the amount of the assessment levied on the No. 1 distillate or No. 2 dyed distillate for which payment was not received.

“(5) IMPORTATION AFTER POINT OF SALE.—The owner of No. 1 distillate or No. 2 dyed distillate imported after the point of sale—

“(A) shall be responsible for payment of the assessment to the Alliance at the point at which the product enters the United States; and

“(B) shall provide to the Alliance certification of the volume of fuel imported.

“(6) LATE PAYMENT CHARGE.—The Alliance may establish a late payment charge and rate of interest to be imposed on any person who fails to remit or pay to the Alliance any amount due under this title.

“(7) ALTERNATIVE COLLECTION RULES.—The Alliance may establish, or approve a request of the oilheat fuel industry in a State for, an alternative means of collecting the assessment if another means is determined to be more efficient or more effective.

“(8) PROHIBITION ON PASS THROUGH.—None of the assessments collected under this title may be passed through or otherwise required to be paid by residential consumers of oilheat fuel.

“(c) SALE FOR USE OTHER THAN AS OILHEAT FUEL.—No. 1 distillate and No. 2 dyed distillate sold for uses other than as oilheat fuel are excluded from the assessment.

“(d) INVESTMENT OF FUNDS.—Pending disbursement under a program, project or contract or other agreement the Alliance may invest funds collected through assessments, and any other funds received by the Alliance, only—

“(1) in obligations of the United States or any agency of the United States;

“(2) in general obligations of any State or any political subdivision of a State;

“(3) in any interest-bearing account or certificate of deposit of a bank that is a member of the Federal Reserve System; or

“(4) in obligations fully guaranteed as to principal and interest by the United States.

“(e) STATE, LOCAL, AND REGIONAL PROGRAMS.—

“(1) COORDINATION.—The Alliance shall establish a program coordinating the operation of the Alliance with the operator of any similar State, local, or regional program created under State law (including a regulation), or similar entity.

“(2) FUNDS MADE AVAILABLE TO QUALIFIED STATE ASSOCIATIONS.—

“(A) IN GENERAL.—

“(i) BASE AMOUNT.—The Alliance shall make available to the qualified State association of each State an amount equal to 15 percent of the amount of assessments collected in the State that are permitted to be obligated.

“(ii) ADDITIONAL AMOUNT.—

“(I) IN GENERAL.—A qualified State association may request that the Alliance provide to the association any portion of the remaining 85 percent of the amount of assessments collected in the State that are permitted to be obligated.

“(II) REQUEST REQUIREMENTS.—A request under this clause shall—

“(aa) specify the amount of funds requested;

“(bb) describe in detail the specific uses for which the requested funds are sought;

“(cc) include a commitment to comply with this title in using the requested funds; and

“(dd) be made publicly available.

“(III) DIRECT BENEFIT.—The Alliance shall not provide any funds in response to a request under this clause unless the Alliance determines that the funds will be used to directly benefit the oilheat fuel industry.

“(IV) MONITORING; TERMS, CONDITIONS, AND REPORTING REQUIREMENTS.—The Alliance shall—

“(aa) monitor the use of funds provided under this clause; and

“(bb) impose whatever terms, conditions, and reporting requirements that the Alliance considers necessary to ensure compliance with this title.

“(B) SEPARATE ACCOUNTS.—As a condition of receipt of funds made available to a qualified State association under this title, the qualified State association shall deposit the funds in an account that is separate from other funds of the qualified State association.

“(f) USE OF ASSESSMENTS.—

“(1) IN GENERAL.—Notwithstanding any other provision of this title, the Secretary and the Alliance shall ensure that assessments collected and permitted to be obligated for each calendar year under this title are allocated and used in accordance with this subsection.

“(2) RESEARCH, DEVELOPMENT, AND DEMONSTRATION.—

“(A) IN GENERAL.—The Alliance shall ensure that not less than 30 percent of the assessments collected and permitted to be obligated for each calendar year under this title are used by qualified State associations or the Alliance to conduct research, development, and demonstration activities relating to oilheat fuel, including the development of energy-efficient heating and the transition and facilitation of the entry of energy efficient heating systems into the marketplace.

“(B) COORDINATION.—The Alliance shall coordinate with the Secretary to develop priorities for the use of assessments under this paragraph.

“(C) PLAN.—The Alliance shall develop a coordinated research plan to carry out research programs and activities under this section.

“(D) REPORT.—

“(i) IN GENERAL.—No later than 1 year after the date of enactment of this subsection [Feb. 7, 2014], the Alliance shall prepare a report on the use of biofuels in oilheat fuel utilization equipment.

“(ii) CONTENTS.—The report required under clause (i) shall—

“(I) provide information on the environmental benefits, economic benefits, and any technical limitations on the use of biofuels in oilheat fuel utilization equipment; and

“(II) describe market acceptance of the fuel, and information on State and local governments that are encouraging the use of biofuels in oilheat fuel utilization equipment.

“(iii) COPIES.—The Alliance shall submit a copy of the report required under clause (i) to—

“(I) Congress;

“(II) the Governor of each State, and other appropriate State leaders, in which the Alliance is operating; and

“(III) the Administrator of the Environmental Protection Agency.

“(E) CONSUMER EDUCATION MATERIALS.—The Alliance, in conjunction with an institution or organization engaged in biofuels research, shall develop consumer education materials describing the benefits of using biofuels as or in oilheat fuel based on the technical information developed in the report required under subparagraph (D) and other information generally available.

“(3) COST SHARING.—

“(A) IN GENERAL.—In carrying out a research, development, demonstration, or commercial application program or activity that is commenced after the date of enactment of this subsection, the Alliance shall require cost-sharing in accordance with this section.

“(B) RESEARCH AND DEVELOPMENT.—

“(i) IN GENERAL.—Except as provided in clauses (ii) and (iii), the Alliance shall require that not less than 20 percent of the cost of a research or development program or activity described in subparagraph (A) to be provided by a source other than the Alliance.

“(ii) EXCLUSION.—Clause (i) shall not apply to a research or development program or activity described in subparagraph (A) that is of a basic or fundamental nature, as determined by the Alliance.

“(iii) REDUCTION.—The Alliance may reduce or eliminate the requirement of clause (i) for a research and development program or activity of an applied nature if the Alliance determines that the reduction is necessary and appropriate.

“(C) DEMONSTRATION AND COMMERCIAL APPLICATION.—The Alliance shall require that not less than 50 percent of the cost of a demonstration or commercial application program or activity described in subparagraph (A) to be provided by a source other than the Alliance.

“(4) HEATING OIL EFFICIENCY AND UPGRADE PROGRAM.—

“(A) IN GENERAL.—The Alliance shall ensure that not less than 15 percent of the assessments collected and permitted to be obligated for each calendar year under this title are used by qualified State associations or the Alliance to carry out programs to assist consumers—

“(i) to make cost-effective upgrades to more fuel efficient heating oil systems or otherwise make cost-effective modifications to an existing heating system to improve the efficiency of the system;

“(ii) to improve energy efficiency or reduce energy consumption through cost-effective energy efficiency programs for consumers; or

“(iii) to improve the safe operation of a heating system.

“(B) PLAN.—The Alliance shall, to the maximum extent practicable, coordinate, develop, and implement the programs and activities of the Alliance in conjunction with existing State energy efficiency program administrators.

“(C) ADMINISTRATION.—

“(i) IN GENERAL.—In carrying out this paragraph, the Alliance shall, to the maximum extent practicable, ensure that heating system conversion assistance is coordinated with, and developed after consultation with, persons or organizations responsible for administering—

“(I) the low-income home energy assistance program established under the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621 et seq.);

“(II) the Weatherization Assistance Program for Low-Income Persons established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.); or

“(III) other energy efficiency programs administered by the State or other parties in the State.

“(ii) DISTRIBUTION OF FUNDS.—The Alliance shall ensure that funds distributed to carry out this paragraph are—

“(I) distributed equitably to States based on the proportional contributions of the States through collected assessments;

“(II) used to supplement (and not supplant) State or alternative sources of funding for energy efficiency programs; and

“(III) used only to carry out this paragraph.

“(5) CONSUMER EDUCATION, SAFETY, AND TRAINING.—The Alliance shall ensure that not more than 30 percent of the assessments collected and permitted to be obligated for each calendar year under this title are used—

“(A) to conduct consumer education activities relating to oilheat fuel, including providing information to consumers on—

“(i) energy conservation strategies;

“(ii) safety;

“(iii) new technologies that reduce consumption or improve safety and comfort;

“(iv) the use of biofuels blends; and

“(v) Federal, State, and local programs designed to assist oilheat fuel consumers;

“(B) to conduct worker safety and training activities relating to oilheat fuel, including energy efficiency training (including classes to obtain Building Performance Institute or Residential Energy Services Network certification);

“(C) to carry out other activities recommended by the Secretary; or

“(D) to the maximum extent practicable, a data collection process established, in collaboration

with the Secretary or other appropriate Federal agencies, to track equipment, service, and related safety issues and to develop measures to improve safety.

“(6) ADMINISTRATIVE COSTS.—

“(A) IN GENERAL.—The Alliance shall ensure that not more than 5 percent of the assessments collected and permitted to be obligated for each calendar year under this title are used for—

“(i) administrative costs; or

“(ii) indirect costs incurred in carrying out paragraphs (1) through (5).

“(B) ADMINISTRATION.—Activities under this section shall be documented pursuant to a transparent process and procedures developed in coordination with the Secretary.

“(7) REPORTS.—

“(A) ANNUAL REPORTS.—

“(i) IN GENERAL.—Each qualified State association or the Alliance shall prepare an annual report describing the development and administration of this section, and yearly expenditures under this section.

“(ii) CONTENTS.—Each report required under clause (i) shall include a description of the use of proceeds under this section, including a description of—

“(I) advancements made in energy-efficient heating systems and biofuel heating oil blends; and

“(II) heating system upgrades and modifications and energy efficiency programs funded under this section.

“(iii) VERIFICATION.—

“(I) IN GENERAL.—The Alliance shall ensure that an independent third-party reviews each report described in clause (i) and verifies the accuracy of the report.

“(II) COUNCILS.—If a State has a stakeholder efficiency oversight council, the council shall be the entity that reviews and verifies the report of the State association or Alliance for the State under clause (i).

“(B) REPORTS ON HEATING OIL EFFICIENCY AND UPGRADE PROGRAM.—At least once every 3 years, the Alliance shall prepare a detailed report describing the consumer savings, cost-effectiveness of, and the lifetime and annual energy savings achieved by heating system upgrades and modifications and energy efficiency programs funded under paragraph (4).

“(C) AVAILABILITY.—Each report, and any subsequent changes to the report, described in this paragraph shall be made publically available, with notice of availability provided to the Secretary, and posted on the website of the Alliance.

“SEC. 708. LIMITATION ON OBLIGATION OF FUNDS.

“(a) IN GENERAL.—In each calendar year of the covered period, the Alliance may not obligate an amount greater than the sum of—

“(1) 75 percent of the amount of assessments estimated to be collected under section 707 in that calendar year;

“(2) 75 percent of the amount of assessments actually collected under section 707 in the most recent calendar year for which an audit report has been submitted under section 706(f)(2)(B) as of the beginning of the calendar year for which the amount that may be obligated is being determined, less the estimate made pursuant to paragraph (1) for that most recent calendar year; and

“(3) amounts permitted in preceding calendar years to be obligated pursuant to this subsection that have not been obligated.

“(b) EXCESS AMOUNTS DEPOSITED IN ESCROW ACCOUNT.—Assessments collected under section 707 in excess of the amount permitted to be obligated under subsection (a) in a calendar year shall be deposited in an escrow account for the duration of the covered period.

“(c) TREATMENT OF AMOUNTS IN ESCROW ACCOUNT.—  
“(1) IN GENERAL.—During the covered period, the Alliance may not obligate, expend, or borrow against amounts required under subsection (b) to be deposited in the escrow account.

“(2) INTEREST.—Any interest earned on amounts described in paragraph (1) shall be—

“(A) deposited in the escrow account; and

“(B) unavailable for obligation for the duration of the covered period.

“(d) RELEASE OF AMOUNTS IN ESCROW ACCOUNT.—Beginning on October 1, 2028, the Alliance may withdraw and obligate any amount in the escrow account.

“(e) COVERED PERIOD DEFINED.—In this section, the term ‘covered period’ means the period that begins on February 6, 2019, and ends on September 30, 2028.

“SEC. 709. COMPLIANCE.

“(a) IN GENERAL.—The Alliance may bring a civil action in United States district court to compel payment of an assessment under section 707.

“(b) COSTS.—A successful action for compliance under this section may also require payment by the defendant of the costs incurred by the Alliance in bringing the action.

“SEC. 710. LOBBYING RESTRICTIONS.

“(a) IN GENERAL.—No funds derived from assessments under section 707 collected by the Alliance shall be used to influence legislation or elections or to lobby, except that the Alliance may use such funds to formulate and submit to the Secretary recommendations for amendments to this title or other laws that would further the purposes of this title.

“(b) ASSESSMENTS.—

“(1) IN GENERAL.—Subject to paragraph (2), no funds derived from assessments collected by the Alliance under section 707 shall be used, directly or indirectly, to influence Federal, State, or local legislation or elections, or the manner of administering of a law.

“(2) INFORMATION.—The Alliance may use funds described in paragraph (1) to provide information requested by a Member of Congress, or an official of any Federal, State, or local agency, in the course of the official business of the Member or official.

“SEC. 711. DISCLOSURE.

“Any consumer education activity undertaken with funds provided by the Alliance shall include a statement that the activities were supported, in whole or in part, by the Alliance.

“SEC. 712. VIOLATIONS.

“(a) PROHIBITION.—It shall be unlawful for any person to conduct a consumer education activity, undertaken with funds derived from assessments collected by the Alliance under section 707, that includes—

“(1) a reference to a private brand name;

“(2) a false or unwarranted claim on behalf of oilheat fuel or related products; or

“(3) a reference with respect to the attributes or use of any competing product.

“(b) COMPLAINTS.—

“(1) IN GENERAL.—A public utility that is aggrieved by a violation described in subsection (a) may file a complaint with the Alliance.

“(2) TRANSMITTAL TO QUALIFIED STATE ASSOCIATION.—A complaint shall be transmitted concurrently to any qualified State association undertaking the consumer education activity with respect to which the complaint is made.

“(3) CESSATION OF ACTIVITIES.—On receipt of a complaint under this subsection, the Alliance, and any qualified State association undertaking the consumer education activity with respect to which the complaint is made, shall cease that consumer education activity until—

“(A) the complaint is withdrawn; or

“(B) a court determines that the conduct of the activity complained of does not constitute a violation of subsection (a).

“(c) RESOLUTION BY PARTIES.—

“(1) IN GENERAL.—Not later than 10 days after a complaint is filed and transmitted under subsection (b), the complaining party, the Alliance, and any qualified State association undertaking the consumer education activity with respect to which the complaint is made shall meet to attempt to resolve the complaint.

“(2) WITHDRAWAL OF COMPLAINT.—If the issues in dispute are resolved in those discussions, the complaining party shall withdraw its complaint.

“(d) JUDICIAL REVIEW.—

“(1) IN GENERAL.—A public utility filing a complaint under this section, the Alliance, a qualified State association undertaking the consumer education activity with respect to which a complaint under this section is made, or any person aggrieved by a violation of subsection (a) may seek appropriate relief in United States district court.

“(2) RELIEF.—A public utility filing a complaint under this section shall be entitled to temporary and injunctive relief enjoining the consumer education activity with respect to which a complaint under this section is made until—

“(A) the complaint is withdrawn; or

“(B) the court has determined that the consumer education activity complained of does not constitute a violation of subsection (a).

“(e) ATTORNEY’S FEES.—

“(1) MERITORIOUS CASE.—In a case in Federal court in which the court grants a public utility injunctive relief under subsection (d), the public utility shall be entitled to recover an attorney’s fee from the Alliance and any qualified State association undertaking the consumer education activity with respect to which a complaint under this section is made.

“(2) NONMERITORIOUS CASE.—In any case under subsection (d) in which the court determines a complaint under subsection (b) to be frivolous and without merit, the prevailing party shall be entitled to recover an attorney’s fee.

“(f) SAVINGS CLAUSE.—Nothing in this section shall limit causes of action brought under any other law.

“(g) NONCOMPLIANCE.—If the Alliance, a qualified State association, or any other entity or person violates this title, the Secretary shall—

“(1) notify Congress of the noncompliance; and

“(2) provide notice of the noncompliance on the Alliance website.

“SEC. 713. SUNSET.

“This title shall cease to be effective as of the date that is 28 years after the date on which the Alliance is established.”

EX. ORD. NO. 11912. DELEGATION OF AUTHORITIES

Ex. Ord. No. 11912, April 13, 1976, 41 F.R. 15825, as amended by Ex. Ord. No. 12003, July 20, 1977, 42 F.R. 37523; Ex. Ord. No. 12038, Feb. 3, 1978, 43 F.R. 4957; Ex. Ord. No. 12148, July 20, 1979, 44 F.R. 4323 Ex. Ord. No. 12375, Aug. 4, 1982, 47 F.R. 34105; Ex. Ord. No. 12919, §904(a)(7), June 3, 1994, 59 F.R. 29533, provided:

By virtue of the authority vested in me by the Constitution and the statutes of the United States of America, including the Energy Policy and Conservation Act (Public Law 94-163, 89 Stat. 8, 42 U.S.C. 6201 et seq.), the Motor Vehicle Information and Cost Savings Act, as amended (15 U.S.C. 1901 et seq.), the Defense Production Act of 1950, as amended (50 U.S.C. App. 2061 et seq.) [now 50 U.S.C. 4501 et seq.], and section 301 of Title 3 of the United States Code, and as President of the United States of America, it is hereby ordered as follows:

SECTION 1. (a) The Administrator of General Services is designated and empowered to perform without approval, ratification, or other action by the President, the functions vested in the President by Section 510 of the Motor Vehicle Information and Cost Savings Act, as amended (89 Stat. 915, 15 U.S.C. 2010). The Administrator shall exercise that authority to ensure that pas-



senger automobiles acquired by all Executive agencies in each fiscal year achieve a fleet average fuel economy standard that is not less than the average fuel economy standard for automobiles manufactured for the model year which includes January 1 of each fiscal year.

(b) The Administrator of General Services shall also promulgate rules which will ensure that each class of nonpassenger automobiles acquired by all Executive agencies in each fiscal year achieves a fleet average fuel economy that is not less than the average fuel economy standard for such class, established pursuant to Section 502(b) of the Motor Vehicle Information and Cost Savings Act, as amended (89 Stat. 903, 15 U.S.C. 2002(b)), for the model year which includes January 1 of such fiscal year. Such rules shall not apply to nonpassenger automobiles intended for use in combat-related missions for the Armed Forces or intended for use in law enforcement work or emergency rescue work. The Administrator may provide for granting exceptions for individual nonpassenger automobiles or categories of nonpassenger automobiles as he determines to be appropriate in terms of energy conservation, economy, efficiency, or service.

(c) In performing these functions, the Administrator of General Services shall consult with the Secretary of Transportation and the Secretary of Energy.

SEC. 2. The Secretary of Commerce is designated and empowered to perform without approval, ratification, or other action by the President, the functions vested in the President by section 103 of the Energy Policy and Conservation Act (89 Stat. 877, [former] 42 U.S.C. 6212). In performing each of these functions, the Secretary of Commerce shall consult with appropriate Executive agencies, as set forth in the provisions of section 5(a) of the Export Administration Act of 1969, as amended ([former] 50 U.S.C. App. 2404(a)).

SEC. 3. The Administrator of the Office of Federal Procurement Policy, in the exercise of his statutory responsibility to provide overall direction of procurement policy (41 U.S.C. 405), shall, after consultation with the heads of appropriate agencies, including those responsible for developing energy conservation and efficiency standards, and to the extent he considers appropriate and with due regard to the program activities of the Executive agencies, provide policy guidance governing the application of energy conservation and efficiency standards in the Federal procurement process in accord with section 381(a)(1) of the Energy Policy and Conservation Act (89 Stat. 939, 42 U.S.C. 6361(a)(1)).

SEC. 4. (a) The Secretary of Energy, in consultation with the heads of appropriate agencies, is hereby authorized and directed to develop for the President's consideration, in accord with section 201 of the Energy Policy and Conservation Act (89 Stat. 890, 42 U.S.C. 6261), the energy conservation and rationing contingency plans prescribed under sections 202 and 203 of the Energy Policy and Conservation Act (89 Stat. 892, 42 U.S.C. 6262 and 6263).

(b) The Secretary of Energy shall prepare, with the assistance of the heads of appropriate agencies, for the President's consideration, the annual reports provided by section 381(c) of the Energy Policy and Conservation Act (89 Stat. 939, 42 U.S.C. 6361(c)).

SEC. 5. The Secretary of State is hereby delegated the authority vested in the President by Section 252(c)(1)(A)(iii) of the Energy Policy and Conservation Act (89 Stat. 895, 42 U.S.C. 6272(c)(1)(A)(iii)).

SEC. 6. The Secretary of Energy is designated and empowered to perform without approval, ratification, or other action by the President, the functions vested in the President by:

(a) Section 251 of the Energy Policy and Conservation Act (89 Stat. 894, 42 U.S.C. 6271), except the making of the findings provided by subparagraph (b)(1)(B) thereof; however, in performing these functions, the Secretary shall consult with the Secretary of Commerce with respect to the international allocation of petroleum products which are within the territorial jurisdiction of the United States; and *provided that* the Secretary of Commerce shall promulgate rules, pursuant to the proce-

dures established by the Export Administration Act of 1969, as amended [former 50 U.S.C. App. 2401 et seq.], to authorize the export of petroleum and petroleum products, as may be necessary for implementation of the obligations of the United States under the International Energy Program, and in accordance with the rules promulgated under Section 251 of the Energy Policy and Conservation Act by the Secretary pursuant to this subsection.

(b) Section 253(c) of the Energy Policy and Conservation Act (89 Stat. 898, 42 U.S.C. 6273);

(c) Section 254(a) of the Energy Policy and Conservation Act (89 Stat. 899, 42 U.S.C. 6274(a)), including the receipt of petitions under section 254(a)(3)(B); *provided that*, the authority under section 254(a) may be exercised only after consultation with the Secretary of State;

(d) Section 254(b) of the Energy Policy and Conservation Act (89 Stat. 900, 42 U.S.C. 6274(b)); *provided that*, in determining whether the transmittal of data would prejudice competition or violate the antitrust laws, the Secretary shall consult with the Attorney General, and in determining whether the transmittal of data would be inconsistent with national security interests, he shall consult with the Secretaries of State and Defense, and the heads of such other agencies as he deems appropriate;

(e) Section 523(a)(2)(A) of the Energy Policy and Conservation Act (89 Stat. 962, 42 U.S.C. 6393(a)(2)(A)), but only to the extent applicable to other functions delegated or assigned by this Order to the Secretary of Energy.

[SECS. 7 and 8. Revoked by Ex. Ord. No. 12919, §904(a)(7), June 3, 1994, 59 F.R. 29533.]

SEC. 9. All orders, regulations, circulars or other directives issued and all other action taken prior to the date of this order that would be valid under the authority delegated by this Order, are hereby confirmed and ratified and shall be deemed to have been issued under this order.

SEC. 10. (a)(1) The Secretary of Energy, hereinafter referred to as the Secretary, shall develop, with the concurrence of the Director of the Office of Management and Budget, and in consultation with the Secretary of Defense, the Secretary of Housing and Urban Development, the Administrator of Veterans' Affairs, the Administrator of General Services, and the heads of such other Executive agencies as he deems appropriate, the ten-year plan for energy conservation with respect to Government buildings, as provided by section 381(a)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6361(a)(2)).

(2) The goals established in subsection (b) shall apply to the following categories of Federally-owned buildings: (i) office buildings, (ii) hospitals, (iii) schools, (iv) prison facilities, (v) multi-family dwellings, (vi) storage facilities, and (vii) such other categories of buildings for which the Administrator determines the establishment of energy-efficiency performance goals is feasible.

(b) The Secretary shall establish requirements and procedures, which shall be observed by each agency unless a waiver is granted by the Secretary, designed to ensure that each agency to the maximum extent practicable aims to achieve the following goals:

(1) For the total of all Federally-owned existing buildings the goal shall be a reduction of 20 percent in the average annual energy use per gross square foot of floor area in 1985 from the average energy use per gross square foot of floor area in 1975. This goal shall apply to all buildings for which construction was or design specifications were completed prior to the date of promulgation of the guidelines pursuant to subsection (d) of this Section.

(2) For the total of all Federally-owned new buildings the goal shall be a reduction of 45 percent in the average annual energy requirement per gross square foot of floor area in 1985 from the average annual energy use per gross square foot of floor area in 1975. This goal shall apply to all new buildings for which design speci-

fications are completed after the date of promulgation of the guidelines pursuant to subsection (d) of this Section.

(c) The Secretary with the concurrence of the Director of the Office of Management and Budget, in consultation with the heads of the Executive agencies specified in subsection (a) and the Director of the National Bureau of Standards, shall establish, for purposes of developing the ten-year plan, a practical and effective method for estimating and comparing life cycle capital and operating costs for Federal buildings, including residential, commercial, and industrial type categories. Such method shall be consistent with the Office of Management and Budget Circular No. A-94, and shall be adopted and used by all agencies in developing their plans pursuant to subsection (e), annual reports pursuant to subsection (g), and budget estimates pursuant to subsection (h). For purposes of this paragraph, the term "life cycle cost" means the total costs of owning, operating, and maintaining a building over its economic life, including its fuel and energy costs, determined on the basis of a systematic evaluation and comparison of alternative building systems. [References to National Bureau of Standards deemed to refer to National Institute of Standards and Technology pursuant to section 5115(c) of Pub. L. 100-418, set out as a Change of Name note under 15 U.S.C. 271.]

(d) Not later than November 1, 1977, the Secretary, with the concurrence of the Director of the Office of Management and Budget, and after consultation with the Administrator of General Services and the heads of the Executive agencies specified in subsection (a) shall issue guidelines for the plans to be submitted pursuant to subsection (e).

(e)(1) The head of each Executive agency that maintains any existing building or will maintain any new building shall submit no later than six months after the issuance of guidelines pursuant to subsection (d), to the Secretary a ten-year plan designed to the maximum extent practicable to meet the goals in subsection (b) for the total of existing or new Federal buildings. Such ten-year plans shall only consider improvements that are cost-effective consistent with the criteria established by the Director of the Office of Management and Budget (OMB Circular A-94) and the method established pursuant to subsection (c) of this Section. The plan submitted shall specify appropriate energy-saving initiatives and shall estimate the expected improvements by fiscal year in terms of specific accomplishments—energy savings and cost savings—together with the estimated costs of achieving the savings.

(2) The plans submitted shall, to the maximum extent practicable, include the results of preliminary energy audits of all existing buildings with over 30,000 gross square feet of space owned and maintained by Executive agencies. Further, the second annual report submitted under subsection (g)(2) of this Section shall, to the maximum extent practicable, include the results of preliminary energy audits of all existing buildings with more than 5,000 but not more than 30,000 gross square feet of space. The purpose of such preliminary energy audits shall be to identify the type, size, energy use level and major energy using systems of existing Federal buildings.

(3) The Secretary shall evaluate agency plans relative to the guidelines established pursuant to subsection (d) for such plans and relative to the cost estimating method established pursuant to subsection (c). Plans determined to be deficient by the Secretary will be returned to the submitting agency head for revision and resubmission within 60 days.

(4) The head of any Executive agency submitting a plan, should he disagree with the Secretary's determination with respect to that plan, may appeal to the Director of the Office of Management and Budget for resolution of the disagreement.

(f) The head of each agency submitting a plan or revised plan determined not deficient by the Secretary or, on appeal, by the Director of the Office of Management and Budget, shall implement the plan in accord with approved budget estimates.

(g)(1) Each Executive agency shall submit to the Secretary an overall plan for conserving fuel and energy in all operations of the agency. This overall plan shall be in addition to and include any ten-year plan for energy conservation in Government buildings submitted in accord with Subsection (e).

(2) By July 1 of each year, each Executive agency shall submit a report to the Secretary on progress made toward achieving the goals established in the overall plan required by paragraph (1) of this subsection. The annual report shall include quantitative measures and accomplishment with respect to energy saving actions taken, the cost of these actions, the energy saved, the costs saved, and other benefits realized.

(3) The Secretary shall prepare a consolidated annual report on Federal government progress toward achieving the goals, including aggregate quantitative measures of accomplishment as well as suggested revisions to the ten-year plan, and submit the report to the President by August 15 of each year.

(h) Each agency required to submit a plan shall submit to the Director of the Office of Management and Budget with the agency's annual budget submission, and in accordance with procedures and requirements that the Director shall establish, estimates for implementation of the agency's plan. The Director of the Office of Management and Budget shall consult with the Secretary about the agency budget estimates.

(i) Each agency shall program its proposed energy conservation improvements of buildings so as to give the highest priority to the most cost-effective projects.

(j) No agency of the Federal government may enter into a lease or a commitment to lease a building the construction of which has not commenced by the effective date of this Order unless the building will likely meet or exceed the general goal set forth in subsection (b)(2).

(k) The provisions of this Section do not apply to housing units repossessed by the Federal Government.

#### EXECUTIVE ORDER NO. 12759

Ex. Ord. No. 12759, Apr. 17, 1991, 56 F.R. 16257, as amended by Ex. Ord. No. 12902, §701, Mar. 8, 1994, 59 F.R. 11471, which provided for minimization of petroleum use in Federal facilities, vehicle fuel efficiency outreach programs, and Federal vehicle fuel efficiency, was revoked by Ex. Ord. No. 13123, §604, June 3, 1999, 64 F.R. 30859, formerly set out as a note under section 8251 of this title.

#### EXECUTIVE ORDER NO. 12902

Ex. Ord. No. 12902, Mar. 8, 1994, 59 F.R. 11463, which directed executive agencies to implement programs to reduce energy consumption, increase energy efficiency, and conserve water, was revoked by Ex. Ord. No. 13123, §604, June 3, 1999, 64 F.R. 30859, formerly set out as a note under section 8251 of this title.

### § 6202. Definitions

As used in this chapter:

(1) The term "Secretary" means the Secretary of Energy.

(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, the Trust Territory of the Pacific Islands, or any territory or possession of the United States.

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This memorandum shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) 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.

(d) You are hereby authorized and directed to publish this memorandum in the Federal Register.

DONALD J. TRUMP.

#### § 7402. Cooperative activities

##### (a) Interstate cooperation; uniform State laws; State compacts

The Administrator shall encourage cooperative activities by the States and local governments for the prevention and control of air pollution; encourage the enactment of improved and, so far as practicable in the light of varying conditions and needs, uniform State and local laws relating to the prevention and control of air pollution; and encourage the making of agreements and compacts between States for the prevention and control of air pollution.

##### (b) Federal cooperation

The Administrator shall cooperate with and encourage cooperative activities by all Federal departments and agencies having functions relating to the prevention and control of air pollution, so as to assure the utilization in the Federal air pollution control program of all appropriate and available facilities and resources within the Federal Government.

##### (c) Consent of Congress to compacts

The consent of the Congress is hereby given to two or more States to negotiate and enter into agreements or compacts, not in conflict with any law or treaty of the United States, for (1) cooperative effort and mutual assistance for the prevention and control of air pollution and the enforcement of their respective laws relating thereto, and (2) the establishment of such agencies, joint or otherwise, as they may deem desirable for making effective such agreements or compacts. No such agreement or compact shall be binding or obligatory upon any State a party thereto unless and until it has been approved by Congress. It is the intent of Congress that no agreement or compact entered into between States after November 21, 1967, which relates to the control and abatement of air pollution in an air quality control region, shall provide for participation by a State which is not included (in whole or in part) in such air quality control region.

(July 14, 1955, ch. 360, title I, §102, formerly §2, as added Pub. L. 88–206, §1, Dec. 17, 1963, 77 Stat. 393; renumbered §102, Pub. L. 89–272, title I, §101(3), Oct. 20, 1965, 79 Stat. 992; amended Pub. L. 90–148, §2, Nov. 21, 1967, 81 Stat. 485; Pub. L. 91–604, §15(c)(2), Dec. 31, 1970, 84 Stat. 1713.)

#### CODIFICATION

Section was formerly classified to section 1857a of this title.

#### PRIOR PROVISIONS

Provisions similar to those in the first clause of subsec. (a) of this section were contained in subsec. (b)(1) of a prior section 1857a, of this title, act July 14, 1955, ch. 360, §2, 69 Stat. 322, prior to the general amendment of this chapter by Pub. L. 88–206.

#### AMENDMENTS

1970—Subsecs. (a), (b). Pub. L. 91–604 substituted “Administrator” for “Secretary” wherever appearing.

1967—Subsec. (c). Pub. L. 90–148 inserted declaration that it is the intent of Congress that no agreement or compact entered into between States after the date of enactment of the Air Quality Act of 1967, which for purposes of codification was changed to November 21, 1967, the date of approval of such Act, relating to the control and abatement of air pollution in an air quality control region, shall provide for participation by a State which is not included (in whole or in part) in such air quality control region.

#### § 7403. Research, investigation, training, and other activities

##### (a) Research and development program for prevention and control of air pollution

The Administrator shall establish a national research and development program for the prevention and control of air pollution and as part of such program shall—

(1) conduct, and promote the coordination and acceleration of, research, investigations, experiments, demonstrations, surveys, and studies relating to the causes, effects (including health and welfare effects), extent, prevention, and control of air pollution;

(2) encourage, cooperate with, and render technical services and provide financial assistance to air pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals in the conduct of such activities;

(3) conduct investigations and research and make surveys concerning any specific problem of air pollution in cooperation with any air pollution control agency with a view to recommending a solution of such problem, if he is requested to do so by such agency or if, in his judgment, such problem may affect any community or communities in a State other than that in which the source of the matter causing or contributing to the pollution is located;

(4) establish technical advisory committees composed of recognized experts in various aspects of air pollution to assist in the examination and evaluation of research progress and proposals and to avoid duplication of research; and

(5) conduct and promote coordination and acceleration of training for individuals relating to the causes, effects, extent, prevention, and control of air pollution.

##### (b) Authorized activities of Administrator in establishing research and development program

In carrying out the provisions of the preceding subsection the Administrator is authorized to—

(1) collect and make available, through publications and other appropriate means, the results of and other information, including appropriate recommendations by him in connection therewith, pertaining to such research and other activities;

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)<sup>1</sup> 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)<sup>1</sup> 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)<sup>1</sup> 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

<sup>1</sup> 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-10<sup>1</sup> of this title, as in effect before August 7, 1977, or section 7413(d)<sup>1</sup> 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-10<sup>1</sup> of this title as in effect before August 7, 1977, or under section 7413(d)<sup>1</sup> 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)<sup>1</sup> 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 development<sup>2</sup> 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.

<sup>2</sup> 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.

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.

POWER SECTOR CARBON POLLUTION STANDARDS

Memorandum of President of the United States, June 25, 2013, 78 F.R. 39535, which related to carbon pollution standards for power plants, was revoked by Ex. Ord. No. 13783, §3(a)(ii), Mar. 28, 2017, 82 F.R. 16094, set out as a note under section 13201 of this title.

§ 7412. Hazardous air pollutants

(a) Definitions

For purposes of this section, except subsection (r)—

(1) Major source

The term “major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The Administrator may establish a lesser quantity, or in the case of radionuclides different criteria, for a major source than that specified in the previous sentence, on the basis of the potency of the air pollutant, persistence, potential for bioaccumulation, other characteristics of the air pollutant, or other relevant factors.

(2) Area source

The term “area source” means any stationary source of hazardous air pollutants that is not a major source. For purposes of this section, the term “area source” shall not include motor vehicles or nonroad vehicles subject to regulation under subchapter II.

(3) Stationary source

The term “stationary source” shall have the same meaning as such term has under section 7411(a) of this title.

(4) New source

The term “new source” means a stationary source the construction or reconstruction of which is commenced after the Administrator first proposes regulations under this section establishing an emission standard applicable to such source.

(5) Modification

The term “modification” means any physical change in, or change in the method of operation of, a major source which increases the actual emissions of any hazardous air pollutant emitted by such source by more than a de minimis amount or which results in the emission of any hazardous air pollutant not previously emitted by more than a de minimis amount.

(6) Hazardous air pollutant

The term “hazardous air pollutant” means any air pollutant listed pursuant to subsection (b).

(7) Adverse environmental effect

The term “adverse environmental effect” means any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.

(8) Electric utility steam generating unit

The term “electric utility steam generating unit” means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

(9) Owner or operator

The term “owner or operator” means any person who owns, leases, operates, controls, or supervises a stationary source.

(10) Existing source

The term “existing source” means any stationary source other than a new source.

(11) Carcinogenic effect

Unless revised, the term “carcinogenic effect” shall have the meaning provided by the Administrator under Guidelines for Carcinogenic Risk Assessment as of the date of enactment.<sup>1</sup> Any revisions in the existing Guidelines shall be subject to notice and opportunity for comment.

(b) List of pollutants

(1) Initial list

The Congress establishes for purposes of this section a list of hazardous air pollutants as follows:

CAS number	Chemical name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene

<sup>1</sup> See References in Text note below.

CAS number	Chemical name	CAS number	Chemical name
156627	Calcium cyanamide	58899	Lindane (all isomers)
105602	Caprolactam	108316	Maleic anhydride
133062	Captan	67561	Methanol
63252	Carbaryl	72435	Methoxychlor
75150	Carbon disulfide	74839	Methyl bromide (Bromomethane)
56235	Carbon tetrachloride	74873	Methyl chloride (Chloromethane)
463581	Carbonyl sulfide	71556	Methyl chloroform (1,1,1-Trichloroethane)
120809	Catechol	78933	Methyl ethyl ketone (2-Butanone)
133904	Chloramben	60344	Methyl hydrazine
57749	Chlordane	74884	Methyl iodide (Iodomethane)
7782505	Chlorine	108101	Methyl isobutyl ketone (Hexone)
79118	Chloroacetic acid	624839	Methyl isocyanate
532274	2-Chloroacetophenone	80626	Methyl methacrylate
108907	Chlorobenzene	1634044	Methyl tert butyl ether
510156	Chlorobenzilate	101144	4,4-Methylene bis(2-chloroaniline)
67663	Chloroform	75092	Methylene chloride (Dichloromethane)
107302	Chloromethyl methyl ether	101688	Methylene diphenyl diisocyanate (MDI)
126998	Chloroprene	101779	4,4'-Methylenedianiline
1319773	Cresols/Cresylic acid (isomers and mixture)	91203	Naphthalene
95487	o-Cresol	98953	Nitrobenzene
108394	m-Cresol	92933	4-Nitrobiphenyl
106445	p-Cresol	100027	4-Nitrophenol
98828	Cumene	79469	2-Nitropropane
94757	2,4-D, salts and esters	684935	N-Nitroso-N-methylurea
3547044	DDE	62759	N-Nitrosodimethylamine
334883	Diazomethane	59892	N-Nitrosomorpholine
132649	Dibenzofurans	56382	Parathion
96128	1,2-Dibromo-3-chloropropane	96388	Pentachloronitrobenzene (Quintobenzene)
84742	Dibutylphthalate	87865	Pentachlorophenol
106467	1,4-Dichlorobenzene(p)	108952	Phenol
91941	3,3-Dichlorobenzidene	106503	p-Phenylenediamine
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	75445	Phosgene
542756	1,3-Dichloropropene	7803512	Phosphine
62737	Dichlorvos	7723140	Phosphorus
111422	Diethanolamine	85449	Phthalic anhydride
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)	1336363	Polychlorinated biphenyls (Aroclors)
64675	Diethyl sulfite	1120714	1,3-Propane sultone
119904	3,3-Dimethoxybenzidine	57578	beta-Propiolactone
60117	Dimethyl aminoazobenzene	123386	Propionaldehyde
119937	3,3'-Dimethyl benzidine	114261	Propoxur (Baygon)
79447	Dimethyl carbamoyl chloride	78875	Propylene dichloride (1,2-Dichloropropane)
68122	Dimethyl formamide	75569	Propylene oxide
57147	1,1-Dimethyl hydrazine	75558	1,2-Propylenimine (2-Methyl aziridine)
131113	Dimethyl phthalate	91225	Quinoline
77781	Dimethyl sulfate	106514	Quinone
534521	4,6-Dinitro-o-cresol, and salts	100425	Styrene
51285	2,4-Dinitrophenol	96093	Styrene oxide
121142	2,4-Dinitrotoluene	1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
123911	1,4-Dioxane (1,4-Diethyleneoxide)	79345	1,1,2,2-Tetrachloroethane
122667	1,2-Diphenylhydrazine	127184	Tetrachloroethylene (Perchloroethylene)
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	7550450	Titanium tetrachloride
106887	1,2-Epoxybutane	108883	Toluene
140885	Ethyl acrylate	95807	2,4-Toluene diamine
100414	Ethyl benzene	584849	2,4-Toluene diisocyanate
51796	Ethyl carbamate (Urethane)	95534	o-Toluidine
75003	Ethyl chloride (Chloroethane)	8001352	Toxaphene (chlorinated camphene)
106934	Ethylene dibromide (Dibromoethane)	120821	1,2,4-Trichlorobenzene
107062	Ethylene dichloride (1,2-Dichloroethane)	79005	1,1,2-Trichloroethane
107211	Ethylene glycol	79016	Trichloroethylene
151564	Ethylene imine (Aziridine)	95954	2,4,5-Trichlorophenol
75218	Ethylene oxide	88062	2,4,6-Trichlorophenol
96457	Ethylene thiourea	121448	Triethylamine
75343	Ethylidene dichloride (1,1-Dichloroethane)	1582098	Trifluralin
50000	Formaldehyde	540841	2,2,4-Trimethylpentane
76448	Heptachlor	108054	Vinyl acetate
118741	Hexachlorobenzene	593602	Vinyl bromide
87683	Hexachlorobutadiene	75014	Vinyl chloride
77474	Hexachlorocyclopentadiene	75354	Vinylidene chloride (1,1-Dichloroethylene)
67721	Hexachloroethane	1330207	Xylenes (isomers and mixture)
822060	Hexamethylene-1,6-diisocyanate	95476	o-Xylenes
680319	Hexamethylphosphoramide	108383	m-Xylenes
110543	Hexane	106423	p-Xylenes
302012	Hydrazine	0	Antimony Compounds
7647010	Hydrochloric acid	0	Arsenic Compounds (inorganic including arsine)
7664393	Hydrogen fluoride (Hydrofluoric acid)	0	Beryllium Compounds
123319	Hydroquinone	0	Cadmium Compounds
78591	Isophorone	0	

CAS number	Chemical name
0	Chromium Compounds
0	Cobalt Compounds
0	Coke Oven Emissions
0	Cyanide Compounds <sup>1</sup>
0	Glycol ethers <sup>2</sup>
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine mineral fibers <sup>3</sup>
0	Nickel Compounds
0	Polycyclic Organic Matter <sup>4</sup>
0	Radionuclides (including radon) <sup>5</sup>
0	Selenium Compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

<sup>1</sup>XCN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)<sub>2</sub>.

<sup>2</sup>Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR' where

n = 1, 2, or 3

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OH. Polymers are excluded from the glycol category.

<sup>3</sup>Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

<sup>4</sup>Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

<sup>5</sup>A type of atom which spontaneously undergoes radioactive decay.

## (2) Revision of the list

The Administrator shall periodically review the list established by this subsection and publish the results thereof and, where appropriate, revise such list by rule, adding pollutants which present, or may present, through inhalation or other routes of exposure, a threat of adverse human health effects (including, but not limited to, substances which are known to be, or may reasonably be anticipated to be, carcinogenic, mutagenic, teratogenic, neurotoxic, which cause reproductive dysfunction, or which are acutely or chronically toxic) or adverse environmental effects whether through ambient concentrations, bioaccumulation, deposition, or otherwise, but not including releases subject to regulation under subsection (r) as a result of emissions to the air. No air pollutant which is listed under section 7408(a) of this title may be added to the list under this section, except that the prohibition of this sentence shall not apply to any pollutant which independently meets the listing criteria of this paragraph and is a precursor to a pollutant which is listed under section 7408(a) of this title or to any pollutant which is in a class of pollutants listed under such section. No substance, practice, process or activity regulated under subchapter VI of this chapter shall be subject to regulation under this section solely due to its adverse effects on the environment.

## (3) Petitions to modify the list

(A) Beginning at any time after 6 months after November 15, 1990, any person may peti-

tion the Administrator to modify the list of hazardous air pollutants under this subsection by adding or deleting a substance or, in case of listed pollutants without CAS numbers (other than coke oven emissions, mineral fibers, or polycyclic organic matter) removing certain unique substances. Within 18 months after receipt of a petition, the Administrator shall either grant or deny the petition by publishing a written explanation of the reasons for the Administrator's decision. Any such petition shall include a showing by the petitioner that there is adequate data on the health or environmental defects<sup>2</sup> of the pollutant or other evidence adequate to support the petition. The Administrator may not deny a petition solely on the basis of inadequate resources or time for review.

(B) The Administrator shall add a substance to the list upon a showing by the petitioner or on the Administrator's own determination that the substance is an air pollutant and that emissions, ambient concentrations, bioaccumulation or deposition of the substance are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects.

(C) The Administrator shall delete a substance from the list upon a showing by the petitioner or on the Administrator's own determination that there is adequate data on the health and environmental effects of the substance to determine that emissions, ambient concentrations, bioaccumulation or deposition of the substance may not reasonably be anticipated to cause any adverse effects to the human health or adverse environmental effects.

(D) The Administrator shall delete one or more unique chemical substances that contain a listed hazardous air pollutant not having a CAS number (other than coke oven emissions, mineral fibers, or polycyclic organic matter) upon a showing by the petitioner or on the Administrator's own determination that such unique chemical substances that contain the named chemical of such listed hazardous air pollutant meet the deletion requirements of subparagraph (C). The Administrator must grant or deny a deletion petition prior to promulgating any emission standards pursuant to subsection (d) applicable to any source category or subcategory of a listed hazardous air pollutant without a CAS number listed under subsection (b) for which a deletion petition has been filed within 12 months of November 15, 1990.

## (4) Further information

If the Administrator determines that information on the health or environmental effects of a substance is not sufficient to make a determination required by this subsection, the Administrator may use any authority available to the Administrator to acquire such information.

## (5) Test methods

The Administrator may establish, by rule, test measures and other analytic procedures

<sup>2</sup>So in original. Probably should be "effects".

for monitoring and measuring emissions, ambient concentrations, deposition, and bioaccumulation of hazardous air pollutants.

**(6) Prevention of significant deterioration**

The provisions of part C (prevention of significant deterioration) shall not apply to pollutants listed under this section.

**(7) Lead**

The Administrator may not list elemental lead as a hazardous air pollutant under this subsection.

**(c) List of source categories**

**(1) In general**

Not later than 12 months after November 15, 1990, the Administrator shall publish, and shall from time to time, but no less often than every 8 years, revise, if appropriate, in response to public comment or new information, a list of all categories and subcategories of major sources and area sources (listed under paragraph (3)) of the air pollutants listed pursuant to subsection (b). To the extent practicable, the categories and subcategories listed under this subsection shall be consistent with the list of source categories established pursuant to section 7411 of this title and part C. Nothing in the preceding sentence limits the Administrator's authority to establish subcategories under this section, as appropriate.

**(2) Requirement for emissions standards**

For the categories and subcategories the Administrator lists, the Administrator shall establish emissions standards under subsection (d), according to the schedule in this subsection and subsection (e).

**(3) Area sources**

The Administrator shall list under this subsection each category or subcategory of area sources which the Administrator finds presents a threat of adverse effects to human health or the environment (by such sources individually or in the aggregate) warranting regulation under this section. The Administrator shall, not later than 5 years after November 15, 1990, and pursuant to subsection (k)(3)(B), list, based on actual or estimated aggregate emissions of a listed pollutant or pollutants, sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas are subject to regulation under this section. Such regulations shall be promulgated not later than 10 years after November 15, 1990.

**(4) Previously regulated categories**

The Administrator may, in the Administrator's discretion, list any category or subcategory of sources previously regulated under this section as in effect before November 15, 1990.

**(5) Additional categories**

In addition to those categories and subcategories of sources listed for regulation pursuant to paragraphs (1) and (3), the Adminis-

trator may at any time list additional categories and subcategories of sources of hazardous air pollutants according to the same criteria for listing applicable under such paragraphs. In the case of source categories and subcategories listed after publication of the initial list required under paragraph (1) or (3), emission standards under subsection (d) for the category or subcategory shall be promulgated within 10 years after November 15, 1990, or within 2 years after the date on which such category or subcategory is listed, whichever is later.

**(6) Specific pollutants**

With respect to alkylated lead compounds, polycyclic organic matter, hexachlorobenzene, mercury, polychlorinated biphenyls, 2,3,7,8-tetrachlorodibenzofurans and 2,3,7,8-tetrachlorodibenzo-p-dioxin, the Administrator shall, not later than 5 years after November 15, 1990, list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4). Such standards shall be promulgated not later than 10 years after November 15, 1990. This paragraph shall not be construed to require the Administrator to promulgate standards for such pollutants emitted by electric utility steam generating units.

**(7) Research facilities**

The Administrator shall establish a separate category covering research or laboratory facilities, as necessary to assure the equitable treatment of such facilities. For purposes of this section, "research or laboratory facility" means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

**(8) Boat manufacturing**

When establishing emissions standards for styrene, the Administrator shall list boat manufacturing as a separate subcategory unless the Administrator finds that such listing would be inconsistent with the goals and requirements of this chapter.

**(9) Deletions from the list**

(A) Where the sole reason for the inclusion of a source category on the list required under this subsection is the emission of a unique chemical substance, the Administrator shall delete the source category from the list if it is appropriate because of action taken under either subparagraphs (C) or (D) of subsection (b)(3).

(B) The Administrator may delete any source category from the list under this subsection, on petition of any person or on the Administrator's own motion, whenever the Administrator makes the following determination or determinations, as applicable:

(i) In the case of hazardous air pollutants emitted by sources in the category that may



result in cancer in humans, a determination that no source in the category (or group of sources in the case of area sources) emits such hazardous air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source (or group of sources in the case of area sources).

(ii) In the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer or adverse environmental effects, a determination that emissions from no source in the category or subcategory concerned (or group of sources in the case of area sources) exceed a level which is adequate to protect public health with an ample margin of safety and no adverse environmental effect will result from emissions from any source (or from a group of sources in the case of area sources).

The Administrator shall grant or deny a petition under this paragraph within 1 year after the petition is filed.

**(d) Emission standards**

**(1) In general**

The Administrator shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants listed for regulation pursuant to subsection (c) in accordance with the schedules provided in subsections (c) and (e). The Administrator may distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards except that, there shall be no delay in the compliance date for any standard applicable to any source under subsection (i) as the result of the authority provided by this sentence.

**(2) Standards and methods**

Emissions standards promulgated under this subsection and applicable to new or existing sources of hazardous air pollutants shall require the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies, through application of measures, processes, methods, systems or techniques including, but not limited to, measures which—

(A) reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications,

(B) enclose systems or processes to eliminate emissions,

(C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point,

(D) are design, equipment, work practice, or operational standards (including require-

ments for operator training or certification) as provided in subsection (h), or

(E) are a combination of the above.

None of the measures described in subparagraphs (A) through (D) shall, consistent with the provisions of section 7414(c) of this title, in any way compromise any United States patent or United States trademark right, or any confidential business information, or any trade secret or any other intellectual property right.

**(3) New and existing sources**

The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than—

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined by section 7501 of this title) applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(B) the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

**(4) Health threshold**

With respect to pollutants for which a health threshold has been established, the Administrator may consider such threshold level, with an ample margin of safety, when establishing emission standards under this subsection.

**(5) Alternative standard for area sources**

With respect only to categories and subcategories of area sources listed pursuant to subsection (c), the Administrator may, in lieu of the authorities provided in paragraph (2) and subsection (f), elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants.

**(6) Review and revision**

The Administrator shall review, and revise as necessary (taking into account develop-

ments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years.

**(7) Other requirements preserved**

No emission standard or other requirement promulgated under this section shall be interpreted, construed or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established pursuant to section 7411 of this title, part C or D, or other authority of this chapter or a standard issued under State authority.

**(8) Coke ovens**

(A) Not later than December 31, 1992, the Administrator shall promulgate regulations establishing emission standards under paragraphs (2) and (3) of this subsection for coke oven batteries. In establishing such standards, the Administrator shall evaluate—

(i) the use of sodium silicate (or equivalent) luting compounds to prevent door leaks, and other operating practices and technologies for their effectiveness in reducing coke oven emissions, and their suitability for use on new and existing coke oven batteries, taking into account costs and reasonable commercial door warranties; and

(ii) as a basis for emission standards under this subsection for new coke oven batteries that begin construction after the date of proposal of such standards, the Jewell design Thompson non-recovery coke oven batteries and other non-recovery coke oven technologies, and other appropriate emission control and coke production technologies, as to their effectiveness in reducing coke oven emissions and their capability for production of steel quality coke.

Such regulations shall require at a minimum that coke oven batteries will not exceed 8 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking offtakes, and 16 seconds visible emissions per charge, with no exclusion for emissions during the period after the closing of self-sealing oven doors. Notwithstanding subsection (i), the compliance date for such emission standards for existing coke oven batteries shall be December 31, 1995.

(B) The Administrator shall promulgate work practice regulations under this subsection for coke oven batteries requiring, as appropriate—

(i) the use of sodium silicate (or equivalent) luting compounds, if the Administrator determines that use of sodium silicate is an effective means of emissions control and is achievable, taking into account costs and reasonable commercial warranties for doors and related equipment; and

(ii) door and jam cleaning practices.

Notwithstanding subsection (i), the compliance date for such work practice regulations for coke oven batteries shall be not later than the date 3 years after November 15, 1990.

(C) For coke oven batteries electing to qualify for an extension of the compliance date for

standards promulgated under subsection (f) in accordance with subsection (i)(8), the emission standards under this subsection for coke oven batteries shall require that coke oven batteries not exceed 8 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking offtakes, and 16 seconds visible emissions per charge, with no exclusion for emissions during the period after the closing of self-sealing doors. Notwithstanding subsection (i), the compliance date for such emission standards for existing coke oven batteries seeking an extension shall be not later than the date 3 years after November 15, 1990.

**(9) Sources licensed by the Nuclear Regulatory Commission**

No standard for radionuclide emissions from any category or subcategory of facilities licensed by the Nuclear Regulatory Commission (or an Agreement State) is required to be promulgated under this section if the Administrator determines, by rule, and after consultation with the Nuclear Regulatory Commission, that the regulatory program established by the Nuclear Regulatory Commission pursuant to the Atomic Energy Act [42 U.S.C. 2011 et seq.] for such category or subcategory provides an ample margin of safety to protect the public health. Nothing in this subsection shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce any standard or limitation respecting emissions of radionuclides which is more stringent than the standard or limitation in effect under section 7411 of this title or this section.

**(10) Effective date**

Emission standards or other regulations promulgated under this subsection shall be effective upon promulgation.

**(e) Schedule for standards and review**

**(1) In general**

The Administrator shall promulgate regulations establishing emission standards for categories and subcategories of sources initially listed for regulation pursuant to subsection (c)(1) as expeditiously as practicable, assuring that—

(A) emission standards for not less than 40 categories and subcategories (not counting coke oven batteries) shall be promulgated not later than 2 years after November 15, 1990;

(B) emission standards for coke oven batteries shall be promulgated not later than December 31, 1992;

(C) emission standards for 25 per centum of the listed categories and subcategories shall be promulgated not later than 4 years after November 15, 1990;

(D) emission standards for an additional 25 per centum of the listed categories and subcategories shall be promulgated not later than 7 years after November 15, 1990; and

(E) emission standards for all categories and subcategories shall be promulgated not later than 10 years after November 15, 1990.

**(2) Priorities**

In determining priorities for promulgating standards under subsection (d), the Administrator shall consider—

(A) the known or anticipated adverse effects of such pollutants on public health and the environment;

(B) the quantity and location of emissions or reasonably anticipated emissions of hazardous air pollutants that each category or subcategory will emit; and

(C) the efficiency of grouping categories or subcategories according to the pollutants emitted, or the processes or technologies used.

**(3) Published schedule**

Not later than 24 months after November 15, 1990, and after opportunity for comment, the Administrator shall publish a schedule establishing a date for the promulgation of emission standards for each category and subcategory of sources listed pursuant to subsection (c)(1) and (3) which shall be consistent with the requirements of paragraphs (1) and (2). The determination of priorities for the promulgation of standards pursuant to this paragraph is not a rulemaking and shall not be subject to judicial review, except that, failure to promulgate any standard pursuant to the schedule established by this paragraph shall be subject to review under section 7604 of this title.

**(4) Judicial review**

Notwithstanding section 7607 of this title, no action of the Administrator adding a pollutant to the list under subsection (b) or listing a source category or subcategory under subsection (c) shall be a final agency action subject to judicial review, except that any such action may be reviewed under such section 7607 of this title when the Administrator issues emission standards for such pollutant or category.

**(5) Publicly owned treatment works**

The Administrator shall promulgate standards pursuant to subsection (d) applicable to publicly owned treatment works (as defined in title II of the Federal Water Pollution Control Act [33 U.S.C. 1281 et seq.]) not later than 5 years after November 15, 1990.

**(f) Standard to protect health and environment**

**(1) Report**

Not later than 6 years after November 15, 1990, the Administrator shall investigate and report, after consultation with the Surgeon General and after opportunity for public comment, to Congress on—

(A) methods of calculating the risk to public health remaining, or likely to remain, from sources subject to regulation under this section after the application of standards under subsection (d);

(B) the public health significance of such estimated remaining risk and the technologically and commercially available methods and costs of reducing such risks;

(C) the actual health effects with respect to persons living in the vicinity of sources, any available epidemiological or other health studies, risks presented by background concentrations of hazardous air pollutants, any uncertainties in risk assess-

ment methodology or other health assessment technique, and any negative health or environmental consequences to the community of efforts to reduce such risks; and

(D) recommendations as to legislation regarding such remaining risk.

**(2) Emission standards**

(A) If Congress does not act on any recommendation submitted under paragraph (1), the Administrator shall, within 8 years after promulgation of standards for each category or subcategory of sources pursuant to subsection (d), promulgate standards for such category or subcategory if promulgation of such standards is required in order to provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990) or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. Emission standards promulgated under this subsection shall provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990), unless the Administrator determines that a more stringent standard is necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. If standards promulgated pursuant to subsection (d) and applicable to a category or subcategory of sources emitting a pollutant (or pollutants) classified as a known, probable or possible human carcinogen do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than one in one million, the Administrator shall promulgate standards under this subsection for such source category.

(B) Nothing in subparagraph (A) or in any other provision of this section shall be construed as affecting, or applying to the Administrator's interpretation of this section, as in effect before November 15, 1990, and set forth in the Federal Register of September 14, 1989 (54 Federal Register 38044).

(C) The Administrator shall determine whether or not to promulgate such standards and, if the Administrator decides to promulgate such standards, shall promulgate the standards 8 years after promulgation of the standards under subsection (d) for each source category or subcategory concerned. In the case of categories or subcategories for which standards under subsection (d) are required to be promulgated within 2 years after November 15, 1990, the Administrator shall have 9 years after promulgation of the standards under subsection (d) to make the determination under the preceding sentence and, if required, to promulgate the standards under this paragraph.

**(3) Effective date**

Any emission standard established pursuant to this subsection shall become effective upon promulgation.

**(4) Prohibition**

No air pollutant to which a standard under this subsection applies may be emitted from

any stationary source in violation of such standard, except that in the case of an existing source—

(A) such standard shall not apply until 90 days after its effective date, and

(B) the Administrator may grant a waiver permitting such source a period of up to 2 years after the effective date of a standard to comply with the standard if the Administrator finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

**(5) Area sources**

The Administrator shall not be required to conduct any review under this subsection or promulgate emission limitations under this subsection for any category or subcategory of area sources that is listed pursuant to subsection (c)(3) and for which an emission standard is promulgated pursuant to subsection (d)(5).

**(6) Unique chemical substances**

In establishing standards for the control of unique chemical substances of listed pollutants without CAS numbers under this subsection, the Administrator shall establish such standards with respect to the health and environmental effects of the substances actually emitted by sources and direct transformation byproducts of such emissions in the categories and subcategories.

**(g) Modifications**

**(1) Offsets**

(A) A physical change in, or change in the method of operation of, a major source which results in a greater than de minimis increase in actual emissions of a hazardous air pollutant shall not be considered a modification, if such increase in the quantity of actual emissions of any hazardous air pollutant from such source will be offset by an equal or greater decrease in the quantity of emissions of another hazardous air pollutant (or pollutants) from such source which is deemed more hazardous, pursuant to guidance issued by the Administrator under subparagraph (B). The owner or operator of such source shall submit a showing to the Administrator (or the State) that such increase has been offset under the preceding sentence.

(B) The Administrator shall, after notice and opportunity for comment and not later than 18 months after November 15, 1990, publish guidance with respect to implementation of this subsection. Such guidance shall include an identification, to the extent practicable, of the relative hazard to human health resulting from emissions to the ambient air of each of the pollutants listed under subsection (b) sufficient to facilitate the offset showing authorized by subparagraph (A). Such guidance shall not authorize offsets between pollutants where the increased pollutant (or more than one pollutant in a stream of pollutants) causes adverse effects to human health for which no safety threshold for exposure can be determined unless there are corresponding decreases in such types of pollutant(s).

**(2) Construction, reconstruction and modifications**

(A) After the effective date of a permit program under subchapter V in any State, no person may modify a major source of hazardous air pollutants in such State, unless the Administrator (or the State) determines that the maximum achievable control technology emission limitation under this section for existing sources will be met. Such determination shall be made on a case-by-case basis where no applicable emissions limitations have been established by the Administrator.

(B) After the effective date of a permit program under subchapter V in any State, no person may construct or reconstruct any major source of hazardous air pollutants, unless the Administrator (or the State) determines that the maximum achievable control technology emission limitation under this section for new sources will be met. Such determination shall be made on a case-by-case basis where no applicable emission limitations have been established by the Administrator.

**(3) Procedures for modifications**

The Administrator (or the State) shall establish reasonable procedures for assuring that the requirements applying to modifications under this section are reflected in the permit.

**(h) Work practice standards and other requirements**

**(1) In general**

For purposes of this section, if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants, the Administrator may, in lieu thereof, promulgate a design, equipment, work practice, or operational standard, or combination thereof, which in the Administrator's judgment is consistent with the provisions of subsection (d) or (f). In the event the Administrator promulgates a design or equipment standard under this subsection, the Administrator shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

**(2) Definition**

For the purpose of this subsection, the phrase "not feasible to prescribe or enforce an emission standard" means any situation in which the Administrator determines that—

(A) a hazardous air pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State or local law, or

(B) the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.

**(3) Alternative standard**

If after notice and opportunity for comment, the owner or operator of any source estab-

lishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

**(4) Numerical standard required**

Any standard promulgated under paragraph (1) shall be promulgated in terms of an emission standard whenever it is feasible to promulgate and enforce a standard in such terms.

**(i) Schedule for compliance**

**(1) Preconstruction and operating requirements**

After the effective date of any emission standard, limitation, or regulation under subsection (d), (f) or (h), no person may construct any new major source or reconstruct any existing major source subject to such emission standard, regulation or limitation unless the Administrator (or a State with a permit program approved under subchapter V) determines that such source, if properly constructed, reconstructed and operated, will comply with the standard, regulation or limitation.

**(2) Special rule**

Notwithstanding the requirements of paragraph (1), a new source which commences construction or reconstruction after a standard, limitation or regulation applicable to such source is proposed and before such standard, limitation or regulation is promulgated shall not be required to comply with such promulgated standard until the date 3 years after the date of promulgation if—

(A) the promulgated standard, limitation or regulation is more stringent than the standard, limitation or regulation proposed; and

(B) the source complies with the standard, limitation, or regulation as proposed during the 3-year period immediately after promulgation.

**(3) Compliance schedule for existing sources**

(A) After the effective date of any emissions standard, limitation or regulation promulgated under this section and applicable to a source, no person may operate such source in violation of such standard, limitation or regulation except, in the case of an existing source, the Administrator shall establish a compliance date or dates for each category or subcategory of existing sources, which shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the effective date of such standard, except as provided in subparagraph (B) and paragraphs (4) through (8).

(B) The Administrator (or a State with a program approved under subchapter V) may issue a permit that grants an extension permitting an existing source up to 1 additional year to comply with standards under sub-

section (d) if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 4-year compliance time is insufficient to dry and cover mining waste in order to reduce emissions of any pollutant listed under subsection (b).

**(4) Presidential exemption**

The President may exempt any stationary source from compliance with any standard or limitation under this section for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years. The President shall report to Congress with respect to each exemption (or extension thereof) made under this paragraph.

**(5) Early reduction**

(A) The Administrator (or a State acting pursuant to a permit program approved under subchapter V) shall issue a permit allowing an existing source, for which the owner or operator demonstrates that the source has achieved a reduction of 90 per centum or more in emissions of hazardous air pollutants (95 per centum in the case of hazardous air pollutants which are particulates) from the source, to meet an alternative emission limitation reflecting such reduction in lieu of an emission limitation promulgated under subsection (d) for a period of 6 years from the compliance date for the otherwise applicable standard, provided that such reduction is achieved before the otherwise applicable standard under subsection (d) is first proposed. Nothing in this paragraph shall preclude a State from requiring reductions in excess of those specified in this subparagraph as a condition of granting the extension authorized by the previous sentence.

(B) An existing source which achieves the reduction referred to in subparagraph (A) after the proposal of an applicable standard but before January 1, 1994, may qualify under subparagraph (A), if the source makes an enforceable commitment to achieve such reduction before the proposal of the standard. Such commitment shall be enforceable to the same extent as a regulation under this section.

(C) The reduction shall be determined with respect to verifiable and actual emissions in a base year not earlier than calendar year 1987, provided that, there is no evidence that emissions in the base year are artificially or substantially greater than emissions in other years prior to implementation of emissions reduction measures. The Administrator may allow a source to use a baseline year of 1985 or 1986 provided that the source can demonstrate to the satisfaction of the Administrator that emissions data for the source reflects verifiable data based on information for such source, received by the Administrator prior to November 15, 1990, pursuant to an information request issued under section 7414 of this title.

(D) For each source granted an alternative emission limitation under this paragraph there shall be established by a permit issued pursuant to subchapter V an enforceable emission limitation for hazardous air pollutants reflecting the reduction which qualifies the source for an alternative emission limitation under this paragraph. An alternative emission limitation under this paragraph shall not be available with respect to standards or requirements promulgated pursuant to subsection (f) and the Administrator shall, for the purpose of determining whether a standard under subsection (f) is necessary, review emissions from sources granted an alternative emission limitation under this paragraph at the same time that other sources in the category or subcategory are reviewed.

(E) With respect to pollutants for which high risks of adverse public health effects may be associated with exposure to small quantities including, but not limited to, chlorinated dioxins and furans, the Administrator shall by regulation limit the use of offsetting reductions in emissions of other hazardous air pollutants from the source as counting toward the 90 per centum reduction in such high-risk pollutants qualifying for an alternative emissions limitation under this paragraph.

**(6) Other reductions**

Notwithstanding the requirements of this section, no existing source that has installed—

(A) best available control technology (as defined in section 7479(3) of this title), or

(B) technology required to meet a lowest achievable emission rate (as defined in section 7501 of this title),

prior to the promulgation of a standard under this section applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to an action described in subparagraph (A) or (B) shall be required to comply with such standard under this section until the date 5 years after the date on which such installation or reduction has been achieved, as determined by the Administrator. The Administrator may issue such rules and guidance as are necessary to implement this paragraph.

**(7) Extension for new sources**

A source for which construction or reconstruction is commenced after the date an emission standard applicable to such source is proposed pursuant to subsection (d) but before the date an emission standard applicable to such source is proposed pursuant to subsection (f) shall not be required to comply with the emission standard under subsection (f) until the date 10 years after the date construction or reconstruction is commenced.

**(8) Coke ovens**

(A) Any coke oven battery that complies with the emission limitations established under subsection (d)(8)(C), subparagraph (B), and subparagraph (C), and complies with the provisions of subparagraph (E), shall not be required to achieve emission limitations promulgated under subsection (f) until January 1, 2020.

(B)(i) Not later than December 31, 1992, the Administrator shall promulgate emission limitations for coke oven emissions from coke oven batteries. Notwithstanding paragraph (3) of this subsection, the compliance date for such emission limitations for existing coke oven batteries shall be January 1, 1998. Such emission limitations shall reflect the lowest achievable emission rate as defined in section 7501 of this title for a coke oven battery that is rebuilt or a replacement at a coke oven plant for an existing battery. Such emission limitations shall be no less stringent than—

(I) 3 per centum leaking doors (5 per centum leaking doors for six meter batteries);

(II) 1 per centum leaking lids;

(III) 4 per centum leaking offtakes; and

(IV) 16 seconds visible emissions per charge,

with an exclusion for emissions during the period after the closing of self-sealing oven doors (or the total mass emissions equivalent). The rulemaking in which such emission limitations are promulgated shall also establish an appropriate measurement methodology for determining compliance with such emission limitations, and shall establish such emission limitations in terms of an equivalent level of mass emissions reduction from a coke oven battery, unless the Administrator finds that such a mass emissions standard would not be practicable or enforceable. Such measurement methodology, to the extent it measures leaking doors, shall take into consideration alternative test methods that reflect the best technology and practices actually applied in the affected industries, and shall assure that the final test methods are consistent with the performance of such best technology and practices.

(ii) If the Administrator fails to promulgate such emission limitations under this subparagraph prior to the effective date of such emission limitations, the emission limitations applicable to coke oven batteries under this subparagraph shall be—

(I) 3 per centum leaking doors (5 per centum leaking doors for six meter batteries);

(II) 1 per centum leaking lids;

(III) 4 per centum leaking offtakes; and

(IV) 16 seconds visible emissions per charge,

or the total mass emissions equivalent (if the total mass emissions equivalent is determined to be practicable and enforceable), with no exclusion for emissions during the period after the closing of self-sealing oven doors.

(C) Not later than January 1, 2007, the Administrator shall review the emission limitations promulgated under subparagraph (B) and revise, as necessary, such emission limitations to reflect the lowest achievable emission rate as defined in section 7501 of this title at the time for a coke oven battery that is rebuilt or a replacement at a coke oven plant for an existing battery. Such emission limitations shall be no less stringent than the emission limitation promulgated under subparagraph (B). Notwithstanding paragraph (2) of this subsection, the compliance date for such emission

limitations for existing coke oven batteries shall be January 1, 2010.

(D) At any time prior to January 1, 1998, the owner or operator of any coke oven battery may elect to comply with emission limitations promulgated under subsection (f) by the date such emission limitations would otherwise apply to such coke oven battery, in lieu of the emission limitations and the compliance dates provided under subparagraphs (B) and (C) of this paragraph. Any such owner or operator shall be legally bound to comply with such emission limitations promulgated under subsection (f) with respect to such coke oven battery as of January 1, 2003. If no such emission limitations have been promulgated for such coke oven battery, the Administrator shall promulgate such emission limitations in accordance with subsection (f) for such coke oven battery.

(E) Coke oven batteries qualifying for an extension under subparagraph (A) shall make available not later than January 1, 2000, to the surrounding communities the results of any risk assessment performed by the Administrator to determine the appropriate level of any emission standard established by the Administrator pursuant to subsection (f).

(F) Notwithstanding the provisions of this section, reconstruction of any source of coke oven emissions qualifying for an extension under this paragraph shall not subject such source to emission limitations under subsection (f) more stringent than those established under subparagraphs (B) and (C) until January 1, 2020. For the purposes of this subparagraph, the term "reconstruction" includes the replacement of existing coke oven battery capacity with new coke oven batteries of comparable or lower capacity and lower potential emissions.

**(j) Equivalent emission limitation by permit**

**(1) Effective date**

The requirements of this subsection shall apply in each State beginning on the effective date of a permit program established pursuant to subchapter V in such State, but not prior to the date 42 months after November 15, 1990.

**(2) Failure to promulgate a standard**

In the event that the Administrator fails to promulgate a standard for a category or subcategory of major sources by the date established pursuant to subsection (e)(1) and (3), and beginning 18 months after such date (but not prior to the effective date of a permit program under subchapter V), the owner or operator of any major source in such category or subcategory shall submit a permit application under paragraph (3) and such owner or operator shall also comply with paragraphs (5) and (6).

**(3) Applications**

By the date established by paragraph (2), the owner or operator of a major source subject to this subsection shall file an application for a permit. If the owner or operator of a source has submitted a timely and complete application for a permit required by this subsection, any failure to have a permit shall not be a vio-

lation of paragraph (2), unless the delay in final action is due to the failure of the applicant to timely submit information required or requested to process the application. The Administrator shall not later than 18 months after November 15, 1990, and after notice and opportunity for comment, establish requirements for applications under this subsection including a standard application form and criteria for determining in a timely manner the completeness of applications.

**(4) Review and approval**

Permit applications submitted under this subsection shall be reviewed and approved or disapproved according to the provisions of section 7661d of this title. In the event that the Administrator (or the State) disapproves a permit application submitted under this subsection or determines that the application is incomplete, the applicant shall have up to 6 months to revise the application to meet the objections of the Administrator (or the State).

**(5) Emission limitation**

The permit shall be issued pursuant to subchapter V and shall contain emission limitations for the hazardous air pollutants subject to regulation under this section and emitted by the source that the Administrator (or the State) determines, on a case-by-case basis, to be equivalent to the limitation that would apply to such source if an emission standard had been promulgated in a timely manner under subsection (d). In the alternative, if the applicable criteria are met, the permit may contain an emissions limitation established according to the provisions of subsection (i)(5). For purposes of the preceding sentence, the reduction required by subsection (i)(5)(A) shall be achieved by the date on which the relevant standard should have been promulgated under subsection (d). No such pollutant may be emitted in amounts exceeding an emission limitation contained in a permit immediately for new sources and, as expeditiously as practicable, but not later than the date 3 years after the permit is issued for existing sources or such other compliance date as would apply under subsection (i).

**(6) Applicability of subsequent standards**

If the Administrator promulgates an emission standard that is applicable to the major source prior to the date on which a permit application is approved, the emission limitation in the permit shall reflect the promulgated standard rather than the emission limitation determined pursuant to paragraph (5), provided that the source shall have the compliance period provided under subsection (i). If the Administrator promulgates a standard under subsection (d) that would be applicable to the source in lieu of the emission limitation established by permit under this subsection after the date on which the permit has been issued, the Administrator (or the State) shall revise such permit upon the next renewal to reflect the standard promulgated by the Administrator providing such source a reasonable time to comply, but no longer than 8 years after such standard is promulgated or 8

years after the date on which the source is first required to comply with the emissions limitation established by paragraph (5), whichever is earlier.

**(k) Area source program**

**(1) Findings and purpose**

The Congress finds that emissions of hazardous air pollutants from area sources may individually, or in the aggregate, present significant risks to public health in urban areas. Considering the large number of persons exposed and the risks of carcinogenic and other adverse health effects from hazardous air pollutants, ambient concentrations characteristic of large urban areas should be reduced to levels substantially below those currently experienced. It is the purpose of this subsection to achieve a substantial reduction in emissions of hazardous air pollutants from area sources and an equivalent reduction in the public health risks associated with such sources including a reduction of not less than 75 per centum in the incidence of cancer attributable to emissions from such sources.

**(2) Research program**

The Administrator shall, after consultation with State and local air pollution control officials, conduct a program of research with respect to sources of hazardous air pollutants in urban areas and shall include within such program—

(A) ambient monitoring for a broad range of hazardous air pollutants (including, but not limited to, volatile organic compounds, metals, pesticides and products of incomplete combustion) in a representative number of urban locations;

(B) analysis to characterize the sources of such pollution with a focus on area sources and the contribution that such sources make to public health risks from hazardous air pollutants; and

(C) consideration of atmospheric transformation and other factors which can elevate public health risks from such pollutants.

Health effects considered under this program shall include, but not be limited to, carcinogenicity, mutagenicity, teratogenicity, neurotoxicity, reproductive dysfunction and other acute and chronic effects including the role of such pollutants as precursors of ozone or acid aerosol formation. The Administrator shall report the preliminary results of such research not later than 3 years after November 15, 1990.

**(3) National strategy**

(A) Considering information collected pursuant to the monitoring program authorized by paragraph (2), the Administrator shall, not later than 5 years after November 15, 1990, and after notice and opportunity for public comment, prepare and transmit to the Congress a comprehensive strategy to control emissions of hazardous air pollutants from area sources in urban areas.

(B) The strategy shall—

(i) identify not less than 30 hazardous air pollutants which, as the result of emissions

from area sources, present the greatest threat to public health in the largest number of urban areas and that are or will be listed pursuant to subsection (b), and

(ii) identify the source categories or subcategories emitting such pollutants that are or will be listed pursuant to subsection (c). When identifying categories and subcategories of sources under this subparagraph, the Administrator shall assure that sources accounting for 90 per centum or more of the aggregate emissions of each of the 30 identified hazardous air pollutants are subject to standards pursuant to subsection (d).

(C) The strategy shall include a schedule of specific actions to substantially reduce the public health risks posed by the release of hazardous air pollutants from area sources that will be implemented by the Administrator under the authority of this or other laws (including, but not limited to, the Toxic Substances Control Act [15 U.S.C. 2601 et seq.], the Federal Insecticide, Fungicide and Rodenticide Act [7 U.S.C. 136 et seq.] and the Resource Conservation and Recovery Act [42 U.S.C. 6901 et seq.]) or by the States. The strategy shall achieve a reduction in the incidence of cancer attributable to exposure to hazardous air pollutants emitted by stationary sources of not less than 75 per centum, considering control of emissions of hazardous air pollutants from all stationary sources and resulting from measures implemented by the Administrator or by the States under this or other laws.

(D) The strategy may also identify research needs in monitoring, analytical methodology, modeling or pollution control techniques and recommendations for changes in law that would further the goals and objectives of this subsection.

(E) Nothing in this subsection shall be interpreted to preclude or delay implementation of actions with respect to area sources of hazardous air pollutants under consideration pursuant to this or any other law and that may be promulgated before the strategy is prepared.

(F) The Administrator shall implement the strategy as expeditiously as practicable assuring that all sources are in compliance with all requirements not later than 9 years after November 15, 1990.

(G) As part of such strategy the Administrator shall provide for ambient monitoring and emissions modeling in urban areas as appropriate to demonstrate that the goals and objectives of the strategy are being met.

**(4) Areawide activities**

In addition to the national urban air toxics strategy authorized by paragraph (3), the Administrator shall also encourage and support areawide strategies developed by State or local air pollution control agencies that are intended to reduce risks from emissions by area sources within a particular urban area. From the funds available for grants under this section, the Administrator shall set aside not less than 10 per centum to support areawide strategies addressing hazardous air pollutants



emitted by area sources and shall award such funds on a demonstration basis to those States with innovative and effective strategies. At the request of State or local air pollution control officials, the Administrator shall prepare guidelines for control technologies or management practices which may be applicable to various categories or subcategories of area sources.

#### **(5) Report**

The Administrator shall report to the Congress at intervals not later than 8 and 12 years after November 15, 1990, on actions taken under this subsection and other parts of this chapter to reduce the risk to public health posed by the release of hazardous air pollutants from area sources. The reports shall also identify specific metropolitan areas that continue to experience high risks to public health as the result of emissions from area sources.

### **(I) State programs**

#### **(1) In general**

Each State may develop and submit to the Administrator for approval a program for the implementation and enforcement (including a review of enforcement delegations previously granted) of emission standards and other requirements for air pollutants subject to this section or requirements for the prevention and mitigation of accidental releases pursuant to subsection (r). A program submitted by a State under this subsection may provide for partial or complete delegation of the Administrator's authorities and responsibilities to implement and enforce emissions standards and prevention requirements but shall not include authority to set standards less stringent than those promulgated by the Administrator under this chapter.

#### **(2) Guidance**

Not later than 12 months after November 15, 1990, the Administrator shall publish guidance that would be useful to the States in developing programs for submittal under this subsection. The guidance shall also provide for the registration of all facilities producing, processing, handling or storing any substance listed pursuant to subsection (r) in amounts greater than the threshold quantity. The Administrator shall include as an element in such guidance an optional program begun in 1986 for the review of high-risk point sources of air pollutants including, but not limited to, hazardous air pollutants listed pursuant to subsection (b).

#### **(3) Technical assistance**

The Administrator shall establish and maintain an air toxics clearinghouse and center to provide technical information and assistance to State and local agencies and, on a cost recovery basis, to others on control technology, health and ecological risk assessment, risk analysis, ambient monitoring and modeling, and emissions measurement and monitoring. The Administrator shall use the authority of section 7403 of this title to examine methods for preventing, measuring, and controlling emissions and evaluating associated health

and ecological risks. Where appropriate, such activity shall be conducted with not-for-profit organizations. The Administrator may conduct research on methods for preventing, measuring and controlling emissions and evaluating associated health and environment risks. All information collected under this paragraph shall be available to the public.

#### **(4) Grants**

Upon application of a State, the Administrator may make grants, subject to such terms and conditions as the Administrator deems appropriate, to such State for the purpose of assisting the State in developing and implementing a program for submittal and approval under this subsection. Programs assisted under this paragraph may include program elements addressing air pollutants or extremely hazardous substances other than those specifically subject to this section. Grants under this paragraph may include support for high-risk point source review as provided in paragraph (2) and support for the development and implementation of areawide area source programs pursuant to subsection (k).

#### **(5) Approval or disapproval**

Not later than 180 days after receiving a program submitted by a State, and after notice and opportunity for public comment, the Administrator shall either approve or disapprove such program. The Administrator shall disapprove any program submitted by a State, if the Administrator determines that—

(A) the authorities contained in the program are not adequate to assure compliance by all sources within the State with each applicable standard, regulation or requirement established by the Administrator under this section;

(B) adequate authority does not exist, or adequate resources are not available, to implement the program;

(C) the schedule for implementing the program and assuring compliance by affected sources is not sufficiently expeditious; or

(D) the program is otherwise not in compliance with the guidance issued by the Administrator under paragraph (2) or is not likely to satisfy, in whole or in part, the objectives of this chapter.

If the Administrator disapproves a State program, the Administrator shall notify the State of any revisions or modifications necessary to obtain approval. The State may revise and re-submit the proposed program for review and approval pursuant to the provisions of this subsection.

#### **(6) Withdrawal**

Whenever the Administrator determines, after public hearing, that a State is not administering and enforcing a program approved pursuant to this subsection in accordance with the guidance published pursuant to paragraph (2) or the requirements of paragraph (5), the Administrator shall so notify the State and, if action which will assure prompt compliance is not taken within 90 days, the Administrator shall withdraw approval of the program. The

Administrator shall not withdraw approval of any program unless the State shall have been notified and the reasons for withdrawal shall have been stated in writing and made public.

**(7) Authority to enforce**

Nothing in this subsection shall prohibit the Administrator from enforcing any applicable emission standard or requirement under this section.

**(8) Local program**

The Administrator may, after notice and opportunity for public comment, approve a program developed and submitted by a local air pollution control agency (after consultation with the State) pursuant to this subsection and any such agency implementing an approved program may take any action authorized to be taken by a State under this section.

**(9) Permit authority**

Nothing in this subsection shall affect the authorities and obligations of the Administrator or the State under subchapter V.

**(m) Atmospheric deposition to Great Lakes and coastal waters**

**(1) Deposition assessment**

The Administrator, in cooperation with the Under Secretary of Commerce for Oceans and Atmosphere, shall conduct a program to identify and assess the extent of atmospheric deposition of hazardous air pollutants (and in the discretion of the Administrator, other air pollutants) to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters. As part of such program, the Administrator shall—

(A) monitor the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters, including monitoring of the Great Lakes through the monitoring network established pursuant to paragraph (2) of this subsection and designing and deploying an atmospheric monitoring network for coastal waters pursuant to paragraph (4);

(B) investigate the sources and deposition rates of atmospheric deposition of air pollutants (and their atmospheric transformation precursors);

(C) conduct research to develop and improve monitoring methods and to determine the relative contribution of atmospheric pollutants to total pollution loadings to the Great Lakes, the Chesapeake Bay, Lake Champlain, and coastal waters;

(D) evaluate any adverse effects to public health or the environment caused by such deposition (including effects resulting from indirect exposure pathways) and assess the contribution of such deposition to violations of water quality standards established pursuant to the Federal Water Pollution Control Act [33 U.S.C. 1251 et seq.] and drinking water standards established pursuant to the Safe Drinking Water Act [42 U.S.C. 300f et seq.]; and

(E) sample for such pollutants in biota, fish, and wildlife of the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters and characterize the sources of such pollutants.

**(2) Great Lakes monitoring network**

The Administrator shall oversee, in accordance with Annex 15 of the Great Lakes Water Quality Agreement, the establishment and operation of a Great Lakes atmospheric deposition network to monitor atmospheric deposition of hazardous air pollutants (and in the Administrator's discretion, other air pollutants) to the Great Lakes.

(A) As part of the network provided for in this paragraph, and not later than December 31, 1991, the Administrator shall establish in each of the 5 Great Lakes at least 1 facility capable of monitoring the atmospheric deposition of hazardous air pollutants in both dry and wet conditions.

(B) The Administrator shall use the data provided by the network to identify and track the movement of hazardous air pollutants through the Great Lakes, to determine the portion of water pollution loadings attributable to atmospheric deposition of such pollutants, and to support development of remedial action plans and other management plans as required by the Great Lakes Water Quality Agreement.

(C) The Administrator shall assure that the data collected by the Great Lakes atmospheric deposition monitoring network is in a format compatible with databases sponsored by the International Joint Commission, Canada, and the several States of the Great Lakes region.

**(3) Monitoring for the Chesapeake Bay and Lake Champlain**

The Administrator shall establish at the Chesapeake Bay and Lake Champlain atmospheric deposition stations to monitor deposition of hazardous air pollutants (and in the Administrator's discretion, other air pollutants) within the Chesapeake Bay and Lake Champlain watersheds. The Administrator shall determine the role of air deposition in the pollutant loadings of the Chesapeake Bay and Lake Champlain, investigate the sources of air pollutants deposited in the watersheds, evaluate the health and environmental effects of such pollutant loadings, and shall sample such pollutants in biota, fish and wildlife within the watersheds, as necessary to characterize such effects.

**(4) Monitoring for coastal waters**

The Administrator shall design and deploy atmospheric deposition monitoring networks for coastal waters and their watersheds and shall make any information collected through such networks available to the public. As part of this effort, the Administrator shall conduct research to develop and improve deposition monitoring methods, and to determine the relative contribution of atmospheric pollutants to pollutant loadings. For purposes of this subsection, "coastal waters" shall mean estuaries selected pursuant to section 320(a)(2)(A) of the Federal Water Pollution Control Act [33 U.S.C. 1330(a)(2)(A)] or listed pursuant to section 320(a)(2)(B) of such Act [33 U.S.C. 1330(a)(2)(B)] or estuarine research reserves designated pursuant to section 1461 of title 16.

**(5) Report**

Within 3 years of November 15, 1990, and biennially thereafter, the Administrator, in cooperation with the Under Secretary of Commerce for Oceans and Atmosphere, shall submit to the Congress a report on the results of any monitoring, studies, and investigations conducted pursuant to this subsection. Such report shall include, at a minimum, an assessment of—

(A) the contribution of atmospheric deposition to pollution loadings in the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters;

(B) the environmental and public health effects of any pollution which is attributable to atmospheric deposition to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters;

(C) the source or sources of any pollution to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters which is attributable to atmospheric deposition;

(D) whether pollution loadings in the Great Lakes, the Chesapeake Bay, Lake Champlain or coastal waters cause or contribute to exceedances of drinking water standards pursuant to the Safe Drinking Water Act [42 U.S.C. 300f et seq.] or water quality standards pursuant to the Federal Water Pollution Control Act [33 U.S.C. 1251 et seq.] or, with respect to the Great Lakes, exceedances of the specific objectives of the Great Lakes Water Quality Agreement; and

(E) a description of any revisions of the requirements, standards, and limitations pursuant to this chapter and other applicable Federal laws as are necessary to assure protection of human health and the environment.

**(6) Additional regulation**

As part of the report to Congress, the Administrator shall determine whether the other provisions of this section are adequate to prevent serious adverse effects to public health and serious or widespread environmental effects, including such effects resulting from indirect exposure pathways, associated with atmospheric deposition to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters of hazardous air pollutants (and their atmospheric transformation products). The Administrator shall take into consideration the tendency of such pollutants to bioaccumulate. Within 5 years after November 15, 1990, the Administrator shall, based on such report and determination, promulgate, in accordance with this section, such further emission standards or control measures as may be necessary and appropriate to prevent such effects, including effects due to bioaccumulation and indirect exposure pathways. Any requirements promulgated pursuant to this paragraph with respect to coastal waters shall only apply to the coastal waters of the States which are subject to section 7627(a) of this title.

**(n) Other provisions**

**(1) Electric utility steam generating units**

(A) The Administrator shall perform a study of the hazards to public health reasonably an-

ticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) after imposition of the requirements of this chapter. The Administrator shall report the results of this study to the Congress within 3 years after November 15, 1990. The Administrator shall develop and describe in the Administrator's report to Congress alternative control strategies for emissions which may warrant regulation under this section. The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph.

(B) The Administrator shall conduct, and transmit to the Congress not later than 4 years after November 15, 1990, a study of mercury emissions from electric utility steam generating units, municipal waste combustion units, and other sources, including area sources. Such study shall consider the rate and mass of such emissions, the health and environmental effects of such emissions, technologies which are available to control such emissions, and the costs of such technologies.

(C) The National Institute of Environmental Health Sciences shall conduct, and transmit to the Congress not later than 3 years after November 15, 1990, a study to determine the threshold level of mercury exposure below which adverse human health effects are not expected to occur. Such study shall include a threshold for mercury concentrations in the tissue of fish which may be consumed (including consumption by sensitive populations) without adverse effects to public health.

**(2) Coke oven production technology study**

(A) The Secretary of the Department of Energy and the Administrator shall jointly undertake a 6-year study to assess coke oven production emission control technologies and to assist in the development and commercialization of technically practicable and economically viable control technologies which have the potential to significantly reduce emissions of hazardous air pollutants from coke oven production facilities. In identifying control technologies, the Secretary and the Administrator shall consider the range of existing coke oven operations and battery design and the availability of sources of materials for such coke ovens as well as alternatives to existing coke oven production design.

(B) The Secretary and the Administrator are authorized to enter into agreements with persons who propose to develop, install and operate coke production emission control technologies which have the potential for significant emissions reductions of hazardous air pollutants provided that Federal funds shall not exceed 50 per centum of the cost of any project assisted pursuant to this paragraph.

(C) On completion of the study, the Secretary shall submit to Congress a report on the results of the study and shall make recommendations to the Administrator identifying practicable and economically viable control technologies for coke oven production facili-

ties to reduce residual risks remaining after implementation of the standard under subsection (d).

(D) There are authorized to be appropriated \$5,000,000 for each of the fiscal years 1992 through 1997 to carry out the program authorized by this paragraph.

**(3) Publicly owned treatment works**

The Administrator may conduct, in cooperation with the owners and operators of publicly owned treatment works, studies to characterize emissions of hazardous air pollutants emitted by such facilities, to identify industrial, commercial and residential discharges that contribute to such emissions and to demonstrate control measures for such emissions. When promulgating any standard under this section applicable to publicly owned treatment works, the Administrator may provide for control measures that include pretreatment of discharges causing emissions of hazardous air pollutants and process or product substitutions or limitations that may be effective in reducing such emissions. The Administrator may prescribe uniform sampling, modeling and risk assessment methods for use in implementing this subsection.

**(4) Oil and gas wells; pipeline facilities**

(A) Notwithstanding the provisions of subsection (a), emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

(B) The Administrator shall not list oil and gas production wells (with its associated equipment) as an area source category under subsection (c), except that the Administrator may establish an area source category for oil and gas production wells located in any metropolitan statistical area or consolidated metropolitan statistical area with a population in excess of 1 million, if the Administrator determines that emissions of hazardous air pollutants from such wells present more than a negligible risk of adverse effects to public health.

**(5) Hydrogen sulfide**

The Administrator is directed to assess the hazards to public health and the environment resulting from the emission of hydrogen sulfide associated with the extraction of oil and natural gas resources. To the extent practicable, the assessment shall build upon and not duplicate work conducted for an assessment pursuant to section 8002(m) of the Solid Waste Disposal Act [42 U.S.C. 6982(m)] and shall reflect consultation with the States. The assessment shall include a review of existing State and industry control standards, techniques and enforcement. The Administrator shall report to the Congress within 24 months after November 15, 1990, with the findings of

such assessment, together with any recommendations, and shall, as appropriate, develop and implement a control strategy for emissions of hydrogen sulfide to protect human health and the environment, based on the findings of such assessment, using authorities under this chapter including sections<sup>3</sup> 7411 of this title and this section.

**(6) Hydrofluoric acid**

Not later than 2 years after November 15, 1990, the Administrator shall, for those regions of the country which do not have comprehensive health and safety regulations with respect to hydrofluoric acid, complete a study of the potential hazards of hydrofluoric acid and the uses of hydrofluoric acid in industrial and commercial applications to public health and the environment considering a range of events including worst-case accidental releases and shall make recommendations to the Congress for the reduction of such hazards, if appropriate.

**(7) RCRA facilities**

In the case of any category or subcategory of sources the air emissions of which are regulated under subtitle C of the Solid Waste Disposal Act [42 U.S.C. 6921 et seq.], the Administrator shall take into account any regulations of such emissions which are promulgated under such subtitle and shall, to the maximum extent practicable and consistent with the provisions of this section, ensure that the requirements of such subtitle and this section are consistent.

**(o) National Academy of Sciences study**

**(1) Request of the Academy**

Within 3 months of November 15, 1990, the Administrator shall enter into appropriate arrangements with the National Academy of Sciences to conduct a review of—

(A) risk assessment methodology used by the Environmental Protection Agency to determine the carcinogenic risk associated with exposure to hazardous air pollutants from source categories and subcategories subject to the requirements of this section; and

(B) improvements in such methodology.

**(2) Elements to be studied**

In conducting such review, the National Academy of Sciences should consider, but not be limited to, the following—

(A) the techniques used for estimating and describing the carcinogenic potency to humans of hazardous air pollutants; and

(B) the techniques used for estimating exposure to hazardous air pollutants (for hypothetical and actual maximally exposed individuals as well as other exposed individuals).

**(3) Other health effects of concern**

To the extent practicable, the Academy shall evaluate and report on the methodology for assessing the risk of adverse human health effects other than cancer for which safe thresholds of exposure may not exist, includ-

<sup>3</sup> So in original. Probably should be "section".

ing, but not limited to, inheritable genetic mutations, birth defects, and reproductive dysfunctions.

**(4) Report**

A report on the results of such review shall be submitted to the Senate Committee on Environment and Public Works, the House Committee on Energy and Commerce, the Risk Assessment and Management Commission established by section 303 of the Clean Air Act Amendments of 1990 and the Administrator not later than 30 months after November 15, 1990.

**(5) Assistance**

The Administrator shall assist the Academy in gathering any information the Academy deems necessary to carry out this subsection. The Administrator may use any authority under this chapter to obtain information from any person, and to require any person to conduct tests, keep and produce records, and make reports respecting research or other activities conducted by such person as necessary to carry out this subsection.

**(6) Authorization**

Of the funds authorized to be appropriated to the Administrator by this chapter, such amounts as are required shall be available to carry out this subsection.

**(7) Guidelines for carcinogenic risk assessment**

The Administrator shall consider, but need not adopt, the recommendations contained in the report of the National Academy of Sciences prepared pursuant to this subsection and the views of the Science Advisory Board, with respect to such report. Prior to the promulgation of any standard under subsection (f), and after notice and opportunity for comment, the Administrator shall publish revised Guidelines for Carcinogenic Risk Assessment or a detailed explanation of the reasons that any recommendations contained in the report of the National Academy of Sciences will not be implemented. The publication of such revised Guidelines shall be a final Agency action for purposes of section 7607 of this title.

**(p) Mickey Leland National Urban Air Toxics Research Center**

**(1) Establishment**

The Administrator shall oversee the establishment of a National Urban Air Toxics Research Center, to be located at a university, a hospital, or other facility capable of undertaking and maintaining similar research capabilities in the areas of epidemiology, oncology, toxicology, pulmonary medicine, pathology, and biostatistics. The center shall be known as the Mickey Leland National Urban Air Toxics Research Center. The geographic site of the National Urban Air Toxics Research Center should be further directed to Harris County, Texas, in order to take full advantage of the well developed scientific community presence on-site at the Texas Medical Center as well as the extensive data previously compiled for the comprehensive monitoring system currently in place.

**(2) Board of Directors**

The National Urban Air Toxics Research Center shall be governed by a Board of Directors to be comprised of 9 members, the appointment of which shall be allocated pro rata among the Speaker of the House, the Majority Leader of the Senate and the President. The members of the Board of Directors shall be selected based on their respective academic and professional backgrounds and expertise in matters relating to public health, environmental pollution and industrial hygiene. The duties of the Board of Directors shall be to determine policy and research guidelines, submit views from center sponsors and the public and issue periodic reports of center findings and activities.

**(3) Scientific Advisory Panel**

The Board of Directors shall be advised by a Scientific Advisory Panel, the 13 members of which shall be appointed by the Board, and to include eminent members of the scientific and medical communities. The Panel membership may include scientists with relevant experience from the National Institute of Environmental Health Sciences, the Center for Disease Control, the Environmental Protection Agency, the National Cancer Institute, and others, and the Panel shall conduct peer review and evaluate research results. The Panel shall assist the Board in developing the research agenda, reviewing proposals and applications, and advise on the awarding of research grants.

**(4) Funding**

The center shall be established and funded with both Federal and private source funds.

**(q) Savings provision**

**(1) Standards previously promulgated**

Any standard under this section in effect before the date of enactment of the Clean Air Act Amendments of 1990 [November 15, 1990] shall remain in force and effect after such date unless modified as provided in this section before the date of enactment of such Amendments or under such Amendments. Except as provided in paragraph (4), any standard under this section which has been promulgated, but has not taken effect, before such date shall not be affected by such Amendments unless modified as provided in this section before such date or under such Amendments. Each standard shall be reviewed and, if appropriate, revised, to comply with the requirements of subsection (d) within 10 years after the date of enactment of the Clean Air Act Amendments of 1990. If a timely petition for review of any such standard under section 7607 of this title is pending on such date of enactment, the standard shall be upheld if it complies with this section as in effect before that date. If any such standard is remanded to the Administrator, the Administrator may in the Administrator's discretion apply either the requirements of this section, or those of this section as in effect before the date of enactment of the Clean Air Act Amendments of 1990.

**(2) Special rule**

Notwithstanding paragraph (1), no standard shall be established under this section, as amended by the Clean Air Act Amendments of 1990, for radionuclide emissions from (A) elemental phosphorous plants, (B) grate calcination elemental phosphorous plants, (C) phosphogypsum stacks, or (D) any subcategory of the foregoing. This section, as in effect prior to the date of enactment of the Clean Air Act Amendments of 1990 [November 15, 1990], shall remain in effect for radionuclide emissions from such plants and stacks.

**(3) Other categories**

Notwithstanding paragraph (1), this section, as in effect prior to the date of enactment of the Clean Air Act Amendments of 1990 [November 15, 1990], shall remain in effect for radionuclide emissions from non-Department of Energy Federal facilities that are not licensed by the Nuclear Regulatory Commission, coal-fired utility and industrial boilers, underground uranium mines, surface uranium mines, and disposal of uranium mill tailings piles, unless the Administrator, in the Administrator's discretion, applies the requirements of this section as modified by the Clean Air Act Amendments of 1990 to such sources of radionuclides.

**(4) Medical facilities**

Notwithstanding paragraph (1), no standard promulgated under this section prior to November 15, 1990, with respect to medical research or treatment facilities shall take effect for two years following November 15, 1990, unless the Administrator makes a determination pursuant to a rulemaking under subsection (d)(9). If the Administrator determines that the regulatory program established by the Nuclear Regulatory Commission for such facilities does not provide an ample margin of safety to protect public health, the requirements of this section shall fully apply to such facilities. If the Administrator determines that such regulatory program does provide an ample margin of safety to protect the public health, the Administrator is not required to promulgate a standard under this section for such facilities, as provided in subsection (d)(9).

**(r) Prevention of accidental releases**

**(1) Purpose and general duty**

It shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance. The owners and operators of stationary sources producing, processing, handling or storing such substances have a general duty in the same manner and to the same extent as section 654 of title 29 to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur. For purposes of this

paragraph, the provisions of section 7604 of this title shall not be available to any person or otherwise be construed to be applicable to this paragraph. Nothing in this section shall be interpreted, construed, implied or applied to create any liability or basis for suit for compensation for bodily injury or any other injury or property damages to any person which may result from accidental releases of such substances.

**(2) Definitions**

(A) The term "accidental release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

(B) The term "regulated substance" means a substance listed under paragraph (3).

(C) The term "stationary source" means any buildings, structures, equipment, installations or substance emitting stationary activities (i) which belong to the same industrial group, (ii) which are located on one or more contiguous properties, (iii) which are under the control of the same person (or persons under common control), and (iv) from which an accidental release may occur.

(D) The term "retail facility" means a stationary source at which more than one-half of the income is obtained from direct sales to end users or at which more than one-half of the fuel sold, by volume, is sold through a cylinder exchange program.

**(3) List of substances**

The Administrator shall promulgate not later than 24 months after November 15, 1990, an initial list of 100 substances which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. For purposes of promulgating such list, the Administrator shall use, but is not limited to, the list of extremely hazardous substances published under the Emergency Planning and Community Right-to-Know<sup>4</sup> Act of 1986 [42 U.S.C. 11001 et seq.], with such modifications as the Administrator deems appropriate. The initial list shall include chlorine, anhydrous ammonia, methyl chloride, ethylene oxide, vinyl chloride, methyl isocyanate, hydrogen cyanide, ammonia, hydrogen sulfide, toluene diisocyanate, phosgene, bromine, anhydrous hydrogen chloride, hydrogen fluoride, anhydrous sulfur dioxide, and sulfur trioxide. The initial list shall include at least 100 substances which pose the greatest risk of causing death, injury, or serious adverse effects to human health or the environment from accidental releases. Regulations establishing the list shall include an explanation of the basis for establishing the list. The list may be revised from time to time by the Administrator on the Administrator's own motion or by petition and shall be reviewed at least every 5 years. No air pollutant for which a national primary ambient air quality standard has been established shall be included on any such list. No substance, practice, process, or activity regulated

<sup>4</sup>So in original. Probably should be "Right-To-Know".

under subchapter VI shall be subject to regulations under this subsection. The Administrator shall establish procedures for the addition and deletion of substances from the list established under this paragraph consistent with those applicable to the list in subsection (b).

**(4) Factors to be considered**

In listing substances under paragraph (3), the Administrator—

(A) shall consider—

(i) the severity of any acute adverse health effects associated with accidental releases of the substance;

(ii) the likelihood of accidental releases of the substance; and

(iii) the potential magnitude of human exposure to accidental releases of the substance; and

(B) shall not list a flammable substance when used as a fuel or held for sale as a fuel at a retail facility under this subsection solely because of the explosive or flammable properties of the substance, unless a fire or explosion caused by the substance will result in acute adverse health effects from human exposure to the substance, including the unburned fuel or its combustion byproducts, other than those caused by the heat of the fire or impact of the explosion.

**(5) Threshold quantity**

At the time any substance is listed pursuant to paragraph (3), the Administrator shall establish by rule, a threshold quantity for the substance, taking into account the toxicity, reactivity, volatility, dispersibility, combustibility, or flammability of the substance and the amount of the substance which, as a result of an accidental release, is known to cause or may reasonably be anticipated to cause death, injury or serious adverse effects to human health for which the substance was listed. The Administrator is authorized to establish a greater threshold quantity for, or to exempt entirely, any substance that is a nutrient used in agriculture when held by a farmer.

**(6) Chemical Safety Board**

(A) There is hereby established an independent safety board to be known as the Chemical Safety and Hazard Investigation Board.

(B) The Board shall consist of 5 members, including a Chairperson, who shall be appointed by the President, by and with the advice and consent of the Senate. Members of the Board shall be appointed on the basis of technical qualification, professional standing, and demonstrated knowledge in the fields of accident reconstruction, safety engineering, human factors, toxicology, or air pollution regulation. The terms of office of members of the Board shall be 5 years. Any member of the Board, including the Chairperson, may be removed for inefficiency, neglect of duty, or malfeasance in office. The Chairperson shall be the Chief Executive Officer of the Board and shall exercise the executive and administrative functions of the Board.

(C) The Board shall—

(i) investigate (or cause to be investigated), determine and report to the public

in writing the facts, conditions, and circumstances and the cause or probable cause of any accidental release resulting in a fatality, serious injury or substantial property damages;

(ii) issue periodic reports to the Congress, Federal, State and local agencies, including the Environmental Protection Agency and the Occupational Safety and Health Administration, concerned with the safety of chemical production, processing, handling and storage, and other interested persons recommending measures to reduce the likelihood or the consequences of accidental releases and proposing corrective steps to make chemical production, processing, handling and storage as safe and free from risk of injury as is possible and may include in such reports proposed rules or orders which should be issued by the Administrator under the authority of this section or the Secretary of Labor under the Occupational Safety and Health Act [29 U.S.C. 651 et seq.] to prevent or minimize the consequences of any release of substances that may cause death, injury or other serious adverse effects on human health or substantial property damage as the result of an accidental release; and

(iii) establish by regulation requirements binding on persons for reporting accidental releases into the ambient air subject to the Board's investigatory jurisdiction. Reporting releases to the National Response Center, in lieu of the Board directly, shall satisfy such regulations. The National Response Center shall promptly notify the Board of any releases which are within the Board's jurisdiction.

(D) The Board may utilize the expertise and experience of other agencies.

(E) The Board shall coordinate its activities with investigations and studies conducted by other agencies of the United States having a responsibility to protect public health and safety. The Board shall enter into a memorandum of understanding with the National Transportation Safety Board to assure coordination of functions and to limit duplication of activities which shall designate the National Transportation Safety Board as the lead agency for the investigation of releases which are transportation related. The Board shall not be authorized to investigate marine oil spills, which the National Transportation Safety Board is authorized to investigate. The Board shall enter into a memorandum of understanding with the Occupational Safety and Health Administration so as to limit duplication of activities. In no event shall the Board forego an investigation where an accidental release causes a fatality or serious injury among the general public, or had the potential to cause substantial property damage or a number of deaths or injuries among the general public.

(F) The Board is authorized to conduct research and studies with respect to the potential for accidental releases, whether or not an accidental release has occurred, where there is evidence which indicates the presence of a potential hazard or hazards. To the extent prac-

ticable, the Board shall conduct such studies in cooperation with other Federal agencies having emergency response authorities, State and local governmental agencies and associations and organizations from the industrial, commercial, and nonprofit sectors.

(G) No part of the conclusions, findings, or recommendations of the Board relating to any accidental release or the investigation thereof shall be admitted as evidence or used in any action or suit for damages arising out of any matter mentioned in such report.

(H) Not later than 18 months after November 15, 1990, the Board shall publish a report accompanied by recommendations to the Administrator on the use of hazard assessments in preventing the occurrence and minimizing the consequences of accidental releases of extremely hazardous substances. The recommendations shall include a list of extremely hazardous substances which are not regulated substances (including threshold quantities for such substances) and categories of stationary sources for which hazard assessments would be an appropriate measure to aid in the prevention of accidental releases and to minimize the consequences of those releases that do occur. The recommendations shall also include a description of the information and analysis which would be appropriate to include in any hazard assessment. The Board shall also make recommendations with respect to the role of risk management plans as required by paragraph (8)(B)<sup>5</sup> in preventing accidental releases. The Board may from time to time review and revise its recommendations under this subparagraph.

(I) Whenever the Board submits a recommendation with respect to accidental releases to the Administrator, the Administrator shall respond to such recommendation formally and in writing not later than 180 days after receipt thereof. The response to the Board's recommendation by the Administrator shall indicate whether the Administrator will—

(i) initiate a rulemaking or issue such orders as are necessary to implement the recommendation in full or in part, pursuant to any timetable contained in the recommendation;<sup>6</sup>

(ii) decline to initiate a rulemaking or issue orders as recommended.

Any determination by the Administrator not to implement a recommendation of the Board or to implement a recommendation only in part, including any variation from the schedule contained in the recommendation, shall be accompanied by a statement from the Administrator setting forth the reasons for such determination.

(J) The Board may make recommendations with respect to accidental releases to the Secretary of Labor. Whenever the Board submits such recommendation, the Secretary shall respond to such recommendation formally and in writing not later than 180 days after receipt thereof. The response to the Board's recom-

mendation by the Administrator<sup>7</sup> shall indicate whether the Secretary will—

(i) initiate a rulemaking or issue such orders as are necessary to implement the recommendation in full or in part, pursuant to any timetable contained in the recommendation;<sup>6</sup>

(ii) decline to initiate a rulemaking or issue orders as recommended.

Any determination by the Secretary not to implement a recommendation or to implement a recommendation only in part, including any variation from the schedule contained in the recommendation, shall be accompanied by a statement from the Secretary setting forth the reasons for such determination.

(K) Within 2 years after November 15, 1990, the Board shall issue a report to the Administrator of the Environmental Protection Agency and to the Administrator of the Occupational Safety and Health Administration recommending the adoption of regulations for the preparation of risk management plans and general requirements for the prevention of accidental releases of regulated substances into the ambient air (including recommendations for listing substances under paragraph (3)) and for the mitigation of the potential adverse effect on human health or the environment as a result of accidental releases which should be applicable to any stationary source handling any regulated substance in more than threshold amounts. The Board may include proposed rules or orders which should be issued by the Administrator under authority of this subsection or by the Secretary of Labor under the Occupational Safety and Health Act [29 U.S.C. 651 et seq.]. Any such recommendations shall be specific and shall identify the regulated substance or class of regulated substances (or other substances) to which the recommendations apply. The Administrator shall consider such recommendations before promulgating regulations required by paragraph (7)(B).

(L) The Board, or upon authority of the Board, any member thereof, any administrative law judge employed by or assigned to the Board, or any officer or employee duly designated by the Board, may for the purpose of carrying out duties authorized by subparagraph (C)—

(i) hold such hearings, sit and act at such times and places, administer such oaths, and require by subpoena or otherwise attendance and testimony of such witnesses and the production of evidence and may require by order that any person engaged in the production, processing, handling, or storage of extremely hazardous substances submit written reports and responses to requests and questions within such time and in such form as the Board may require; and

(ii) upon presenting appropriate credentials and a written notice of inspection authority, enter any property where an accidental release causing a fatality, serious injury or substantial property damage has occurred and do all things therein necessary

<sup>5</sup> So in original. Probably should be paragraph "(7)(B)".

<sup>6</sup> So in original. The word "or" probably should appear.

<sup>7</sup> So in original. The word "Administrator" probably should be "Secretary".



for a proper investigation pursuant to subparagraph (C) and inspect at reasonable times records, files, papers, processes, controls, and facilities and take such samples as are relevant to such investigation.

Whenever the Administrator or the Board conducts an inspection of a facility pursuant to this subsection, employees and their representatives shall have the same rights to participate in such inspections as provided in the Occupational Safety and Health Act [29 U.S.C. 651 et seq.].

(M) In addition to that described in subparagraph (L), the Board may use any information gathering authority of the Administrator under this chapter, including the subpoena power provided in section 7607(a)(1) of this title.

(N) The Board is authorized to establish such procedural and administrative rules as are necessary to the exercise of its functions and duties. The Board is authorized without regard to section 6101 of title 41 to enter into contracts, leases, cooperative agreements or other transactions as may be necessary in the conduct of the duties and functions of the Board with any other agency, institution, or person.

(O) After the effective date of any reporting requirement promulgated pursuant to subparagraph (C)(iii) it shall be unlawful for any person to fail to report any release of any extremely hazardous substance as required by such subparagraph. The Administrator is authorized to enforce any regulation or requirements established by the Board pursuant to subparagraph (C)(iii) using the authorities of sections 7413 and 7414 of this title. Any request for information from the owner or operator of a stationary source made by the Board or by the Administrator under this section shall be treated, for purposes of sections 7413, 7414, 7416, 7420, 7603, 7604 and 7607 of this title and any other enforcement provisions of this chapter, as a request made by the Administrator under section 7414 of this title and may be enforced by the Chairperson of the Board or by the Administrator as provided in such section.

(P) The Administrator shall provide to the Board such support and facilities as may be necessary for operation of the Board.

(Q) Consistent with subsection<sup>8</sup> (G) and section 7414(c) of this title any records, reports or information obtained by the Board shall be available to the Administrator, the Secretary of Labor, the Congress and the public, except that upon a showing satisfactory to the Board by any person that records, reports, or information, or particular part thereof (other than release or emissions data) to which the Board has access, if made public, is likely to cause substantial harm to the person's competitive position, the Board shall consider such record, report, or information or particular portion thereof confidential in accordance with section 1905 of title 18, except that such record, report, or information may be disclosed to other officers, employees, and authorized representatives of the United States concerned

with carrying out this chapter or when relevant under any proceeding under this chapter. This subparagraph does not constitute authority to withhold records, reports, or information from the Congress.

(R) Whenever the Board submits or transmits any budget estimate, budget request, supplemental budget request, or other budget information, legislative recommendation, prepared testimony for congressional hearings, recommendation or study to the President, the Secretary of Labor, the Administrator, or the Director of the Office of Management and Budget, it shall concurrently transmit a copy thereof to the Congress. No report of the Board shall be subject to review by the Administrator or any Federal agency or to judicial review in any court. No officer or agency of the United States shall have authority to require the Board to submit its budget requests or estimates, legislative recommendations, prepared testimony, comments, recommendations or reports to any officer or agency of the United States for approval or review prior to the submission of such recommendations, testimony, comments or reports to the Congress. In the performance of their functions as established by this chapter, the members, officers and employees of the Board shall not be responsible to or subject to supervision or direction, in carrying out any duties under this subsection, of any officer or employee or agent of the Environmental Protection Agency, the Department of Labor or any other agency of the United States except that the President may remove any member, officer or employee of the Board for inefficiency, neglect of duty or malfeasance in office. Nothing in this section shall affect the application of title 5 to officers or employees of the Board.

(S) The Board shall submit an annual report to the President and to the Congress which shall include, but not be limited to, information on accidental releases which have been investigated by or reported to the Board during the previous year, recommendations for legislative or administrative action which the Board has made, the actions which have been taken by the Administrator or the Secretary of Labor or the heads of other agencies to implement such recommendations, an identification of priorities for study and investigation in the succeeding year, progress in the development of risk-reduction technologies and the response to and implementation of significant research findings on chemical safety in the public and private sector.

#### **(7) Accident prevention**

(A) In order to prevent accidental releases of regulated substances, the Administrator is authorized to promulgate release prevention, detection, and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements. Regulations promulgated under this paragraph may make distinctions between various types, classes, and kinds of facilities, devices and systems taking into consideration factors in-

<sup>8</sup> So in original. Probably should be "subparagraph".

cluding, but not limited to, the size, location, process, process controls, quantity of substances handled, potency of substances, and response capabilities present at any stationary source. Regulations promulgated pursuant to this subparagraph shall have an effective date, as determined by the Administrator, assuring compliance as expeditiously as practicable.

(B)(i) Within 3 years after November 15, 1990, the Administrator shall promulgate reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases. The Administrator shall utilize the expertise of the Secretaries of Transportation and Labor in promulgating such regulations. As appropriate, such regulations shall cover the use, operation, repair, replacement, and maintenance of equipment to monitor, detect, inspect, and control such releases, including training of persons in the use and maintenance of such equipment and in the conduct of periodic inspections. The regulations shall include procedures and measures for emergency response after an accidental release of a regulated substance in order to protect human health and the environment. The regulations shall cover storage, as well as operations. The regulations shall, as appropriate, recognize differences in size, operations, processes, class and categories of sources and the voluntary actions of such sources to prevent such releases and respond to such releases. The regulations shall be applicable to a stationary source 3 years after the date of promulgation, or 3 years after the date on which a regulated substance present at the source in more than threshold amounts is first listed under paragraph (3), whichever is later.

(ii) The regulations under this subparagraph shall require the owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a risk management plan to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment. Such plan shall provide for compliance with the requirements of this subsection and shall also include each of the following:

(I) a hazard assessment to assess the potential effects of an accidental release of any regulated substance. This assessment shall include an estimate of potential release quantities and a determination of downwind effects, including potential exposures to affected populations. Such assessment shall include a previous release history of the past 5 years, including the size, concentration, and duration of releases, and shall include an evaluation of worst case accidental releases;

(II) a program for preventing accidental releases of regulated substances, including safety precautions and maintenance, mon-

itoring and employee training measures to be used at the source; and

(III) a response program providing for specific actions to be taken in response to an accidental release of a regulated substance so as to protect human health and the environment, including procedures for informing the public and local agencies responsible for responding to accidental releases, emergency health care, and employee training measures.

At the time regulations are promulgated under this subparagraph, the Administrator shall promulgate guidelines to assist stationary sources in the preparation of risk management plans. The guidelines shall, to the extent practicable, include model risk management plans.

(iii) The owner or operator of each stationary source covered by clause (ii) shall register a risk management plan prepared under this subparagraph with the Administrator before the effective date of regulations under clause (i) in such form and manner as the Administrator shall, by rule, require. Plans prepared pursuant to this subparagraph shall also be submitted to the Chemical Safety and Hazard Investigation Board, to the State in which the stationary source is located, and to any local agency or entity having responsibility for planning for or responding to accidental releases which may occur at such source, and shall be available to the public under section 7414(c) of this title. The Administrator shall establish, by rule, an auditing system to regularly review and, if necessary, require revision in risk management plans to assure that the plans comply with this subparagraph. Each such plan shall be updated periodically as required by the Administrator, by rule.

(C) Any regulations promulgated pursuant to this subsection shall to the maximum extent practicable, consistent with this subsection, be consistent with the recommendations and standards established by the American Society of Mechanical Engineers (ASME), the American National Standards Institute (ANSI) or the American Society of Testing Materials (ASTM). The Administrator shall take into consideration the concerns of small business in promulgating regulations under this subsection.

(D) In carrying out the authority of this paragraph, the Administrator shall consult with the Secretary of Labor and the Secretary of Transportation and shall coordinate any requirements under this paragraph with any requirements established for comparable purposes by the Occupational Safety and Health Administration or the Department of Transportation. Nothing in this subsection shall be interpreted, construed or applied to impose requirements affecting, or to grant the Administrator, the Chemical Safety and Hazard Investigation Board, or any other agency any authority to regulate (including requirements for hazard assessment), the accidental release of radionuclides arising from the construction and operation of facilities licensed by the Nuclear Regulatory Commission.

(E) After the effective date of any regulation or requirement imposed under this subsection,

it shall be unlawful for any person to operate any stationary source subject to such regulation or requirement in violation of such regulation or requirement. Each regulation or requirement under this subsection shall for purposes of sections 7413, 7414, 7416, 7420, 7604, and 7607 of this title and other enforcement provisions of this chapter, be treated as a standard in effect under subsection (d).

(F) Notwithstanding the provisions of subchapter V or this section, no stationary source shall be required to apply for, or operate pursuant to, a permit issued under such subchapter solely because such source is subject to regulations or requirements under this subsection.

(G) In exercising any authority under this subsection, the Administrator shall not, for purposes of section 653(b)(1) of title 29, be deemed to be exercising statutory authority to prescribe or enforce standards or regulations affecting occupational safety and health.

(H) PUBLIC ACCESS TO OFF-SITE CONSEQUENCE ANALYSIS INFORMATION.—

(i) DEFINITIONS.—In this subparagraph:

(I) COVERED PERSON.—The term “covered person” means—

(aa) an officer or employee of the United States;

(bb) an officer or employee of an agent or contractor of the Federal Government;

(cc) an officer or employee of a State or local government;

(dd) an officer or employee of an agent or contractor of a State or local government;

(ee) an individual affiliated with an entity that has been given, by a State or local government, responsibility for preventing, planning for, or responding to accidental releases;

(ff) an officer or employee or an agent or contractor of an entity described in item (ee); and

(gg) a qualified researcher under clause (vii).

(II) OFFICIAL USE.—The term “official use” means an action of a Federal, State, or local government agency or an entity referred to in subclause (I)(ee) intended to carry out a function relevant to preventing, planning for, or responding to accidental releases.

(III) OFF-SITE CONSEQUENCE ANALYSIS INFORMATION.—The term “off-site consequence analysis information” means those portions of a risk management plan, excluding the executive summary of the plan, consisting of an evaluation of 1 or more worst-case release scenarios or alternative release scenarios, and any electronic data base created by the Administrator from those portions.

(IV) RISK MANAGEMENT PLAN.—The term “risk management plan” means a risk management plan submitted to the Administrator by an owner or operator of a stationary source under subparagraph (B)(iii).

(ii) REGULATIONS.—Not later than 1 year after August 5, 1999, the President shall—

(I) assess—

(aa) the increased risk of terrorist and other criminal activity associated with the posting of off-site consequence analysis information on the Internet; and

(bb) the incentives created by public disclosure of off-site consequence analysis information for reduction in the risk of accidental releases; and

(II) based on the assessment under subclause (I), promulgate regulations governing the distribution of off-site consequence analysis information in a manner that, in the opinion of the President, minimizes the likelihood of accidental releases and the risk described in subclause (I)(aa) and the likelihood of harm to public health and welfare, and—

(aa) allows access by any member of the public to paper copies of off-site consequence analysis information for a limited number of stationary sources located anywhere in the United States, without any geographical restriction;

(bb) allows other public access to off-site consequence analysis information as appropriate;

(cc) allows access for official use by a covered person described in any of items (cc) through (ff) of clause (i)(I) (referred to in this subclause as a “State or local covered person”) to off-site consequence analysis information relating to stationary sources located in the person’s State;

(dd) allows a State or local covered person to provide, for official use, off-site consequence analysis information relating to stationary sources located in the person’s State to a State or local covered person in a contiguous State; and

(ee) allows a State or local covered person to obtain for official use, by request to the Administrator, off-site consequence analysis information that is not available to the person under item (cc).

(iii) AVAILABILITY UNDER FREEDOM OF INFORMATION ACT.—

(I) FIRST YEAR.—Off-site consequence analysis information, and any ranking of stationary sources derived from the information, shall not be made available under section 552 of title 5 during the 1-year period beginning on August 5, 1999.

(II) AFTER FIRST YEAR.—If the regulations under clause (ii) are promulgated on or before the end of the period described in subclause (I), off-site consequence analysis information covered by the regulations, and any ranking of stationary sources derived from the information, shall not be made available under section 552 of title 5 after the end of that period.

(III) APPLICABILITY.—Subclauses (I) and (II) apply to off-site consequence analysis information submitted to the Administrator before, on, or after August 5, 1999.

(iv) AVAILABILITY OF INFORMATION DURING TRANSITION PERIOD.—The Administrator

shall make off-site consequence analysis information available to covered persons for official use in a manner that meets the requirements of items (cc) through (ee) of clause (ii)(II), and to the public in a form that does not make available any information concerning the identity or location of stationary sources, during the period—

(I) beginning on August 5, 1999; and

(II) ending on the earlier of the date of promulgation of the regulations under clause (ii) or the date that is 1 year after August 5, 1999.

(v) PROHIBITION ON UNAUTHORIZED DISCLOSURE OF INFORMATION BY COVERED PERSONS.—

(I) IN GENERAL.—Beginning on August 5, 1999, a covered person shall not disclose to the public off-site consequence analysis information in any form, or any statewide or national ranking of identified stationary sources derived from such information, except as authorized by this subparagraph (including the regulations promulgated under clause (ii)). After the end of the 1-year period beginning on August 5, 1999, if regulations have not been promulgated under clause (ii), the preceding sentence shall not apply.

(II) CRIMINAL PENALTIES.—Notwithstanding section 7413 of this title, a covered person that willfully violates a restriction or prohibition established by this subparagraph (including the regulations promulgated under clause (ii)) shall, upon conviction, be fined for an infraction under section 3571 of title 18 (but shall not be subject to imprisonment) for each unauthorized disclosure of off-site consequence analysis information, except that subsection (d) of such section 3571 shall not apply to a case in which the offense results in pecuniary loss unless the defendant knew that such loss would occur. The disclosure of off-site consequence analysis information for each specific stationary source shall be considered a separate offense. The total of all penalties that may be imposed on a single person or organization under this item shall not exceed \$1,000,000 for violations committed during any 1 calendar year.

(III) APPLICABILITY.—If the owner or operator of a stationary source makes off-site consequence analysis information relating to that stationary source available to the public without restriction—

(aa) subclauses (I) and (II) shall not apply with respect to the information; and

(bb) the owner or operator shall notify the Administrator of the public availability of the information.

(IV) LIST.—The Administrator shall maintain and make publicly available a list of all stationary sources that have provided notification under subclause (III)(bb).

(vi) NOTICE.—The Administrator shall provide notice of the definition of official use as

provided in clause (i)(III)<sup>9</sup> and examples of actions that would and would not meet that definition, and notice of the restrictions on further dissemination and the penalties established by this chapter to each covered person who receives off-site consequence analysis information under clause (iv) and each covered person who receives off-site consequence analysis information for an official use under the regulations promulgated under clause (ii).

(vii) QUALIFIED RESEARCHERS.—

(I) IN GENERAL.—Not later than 180 days after August 5, 1999, the Administrator, in consultation with the Attorney General, shall develop and implement a system for providing off-site consequence analysis information, including facility identification, to any qualified researcher, including a qualified researcher from industry or any public interest group.

(II) LIMITATION ON DISSEMINATION.—The system shall not allow the researcher to disseminate, or make available on the Internet, the off-site consequence analysis information, or any portion of the off-site consequence analysis information, received under this clause.

(viii) READ-ONLY INFORMATION TECHNOLOGY SYSTEM.—In consultation with the Attorney General and the heads of other appropriate Federal agencies, the Administrator shall establish an information technology system that provides for the availability to the public of off-site consequence analysis information by means of a central data base under the control of the Federal Government that contains information that users may read, but that provides no means by which an electronic or mechanical copy of the information may be made.

(ix) VOLUNTARY INDUSTRY ACCIDENT PREVENTION STANDARDS.—The Environmental Protection Agency, the Department of Justice, and other appropriate agencies may provide technical assistance to owners and operators of stationary sources and participate in the development of voluntary industry standards that will help achieve the objectives set forth in paragraph (1).

(x) EFFECT ON STATE OR LOCAL LAW.—

(I) IN GENERAL.—Subject to subclause (II), this subparagraph (including the regulations promulgated under this subparagraph) shall supersede any provision of State or local law that is inconsistent with this subparagraph (including the regulations).

(II) AVAILABILITY OF INFORMATION UNDER STATE LAW.—Nothing in this subparagraph precludes a State from making available data on the off-site consequences of chemical releases collected in accordance with State law.

(xi) REPORT.—

(I) IN GENERAL.—Not later than 3 years after August 5, 1999, the Attorney General, in consultation with appropriate State,

<sup>9</sup> So in original. Probably should be "(i)(II)".

local, and Federal Government agencies, affected industry, and the public, shall submit to Congress a report that describes the extent to which regulations promulgated under this paragraph have resulted in actions, including the design and maintenance of safe facilities, that are effective in detecting, preventing, and minimizing the consequences of releases of regulated substances that may be caused by criminal activity. As part of this report, the Attorney General, using available data to the extent possible, and a sampling of covered stationary sources selected at the discretion of the Attorney General, and in consultation with appropriate State, local, and Federal governmental agencies, affected industry, and the public, shall review the vulnerability of covered stationary sources to criminal and terrorist activity, current industry practices regarding site security, and security of transportation of regulated substances. The Attorney General shall submit this report, containing the results of the review, together with recommendations, if any, for reducing vulnerability of covered stationary sources to criminal and terrorist activity, to the Committee on Commerce of the United States House of Representatives and the Committee on Environment and Public Works of the United States Senate and other relevant committees of Congress.

(II) INTERIM REPORT.—Not later than 12 months after August 5, 1999, the Attorney General shall submit to the Committee on Commerce of the United States House of Representatives and the Committee on Environment and Public Works of the United States Senate, and other relevant committees of Congress, an interim report that includes, at a minimum—

(aa) the preliminary findings under subclause (I);

(bb) the methods used to develop the findings; and

(cc) an explanation of the activities expected to occur that could cause the findings of the report under subclause (I) to be different than the preliminary findings.

(III) AVAILABILITY OF INFORMATION.—Information that is developed by the Attorney General or requested by the Attorney General and received from a covered stationary source for the purpose of conducting the review under subclauses (I) and (II) shall be exempt from disclosure under section 552 of title 5 if such information would pose a threat to national security.

(xii) SCOPE.—This subparagraph—

(I) applies only to covered persons; and

(II) does not restrict the dissemination of off-site consequence analysis information by any covered person in any manner or form except in the form of a risk management plan or an electronic data base created by the Administrator from off-site consequence analysis information.

(xiii) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrator and the Attorney General such sums as are necessary to carry out this subparagraph (including the regulations promulgated under clause (ii)), to remain available until expended.

#### **(8) Research on hazard assessments**

The Administrator may collect and publish information on accident scenarios and consequences covering a range of possible events for substances listed under paragraph (3). The Administrator shall establish a program of long-term research to develop and disseminate information on methods and techniques for hazard assessment which may be useful in improving and validating the procedures employed in the preparation of hazard assessments under this subsection.

#### **(9) Order authority**

(A) In addition to any other action taken, when the Administrator determines that there may be an imminent and substantial endangerment to the human health or welfare or the environment because of an actual or threatened accidental release of a regulated substance, the Administrator may secure such relief as may be necessary to abate such danger or threat, and the district court of the United States in the district in which the threat occurs shall have jurisdiction to grant such relief as the public interest and the equities of the case may require. The Administrator may also, after notice to the State in which the stationary source is located, take other action under this paragraph including, but not limited to, issuing such orders as may be necessary to protect human health. The Administrator shall take action under section 7603 of this title rather than this paragraph whenever the authority of such section is adequate to protect human health and the environment.

(B) Orders issued pursuant to this paragraph may be enforced in an action brought in the appropriate United States district court as if the order were issued under section 7603 of this title.

(C) Within 180 days after November 15, 1990, the Administrator shall publish guidance for using the order authorities established by this paragraph. Such guidance shall provide for the coordinated use of the authorities of this paragraph with other emergency powers authorized by section 9606 of this title, sections 311(c), 308, 309 and 504(a) of the Federal Water Pollution Control Act [33 U.S.C. 1321(c), 1318, 1319, 1364(a)], sections 3007, 3008, 3013, and 7003 of the Solid Waste Disposal Act [42 U.S.C. 6927, 6928, 6934, 6973], sections 1445 and 1431 of the Safe Drinking Water Act [42 U.S.C. 300j-4, 300i], sections 5 and 7 of the Toxic Substances Control Act [15 U.S.C. 2604, 2606], and sections 7413, 7414, and 7603 of this title.

#### **(10) Presidential review**

The President shall conduct a review of release prevention, mitigation and response authorities of the various Federal agencies and shall clarify and coordinate agency responsibilities to assure the most effective and effi-

cient implementation of such authorities and to identify any deficiencies in authority or resources which may exist. The President may utilize the resources and solicit the recommendations of the Chemical Safety and Hazard Investigation Board in conducting such review. At the conclusion of such review, but not later than 24 months after November 15, 1990, the President shall transmit a message to the Congress on the release prevention, mitigation and response activities of the Federal Government making such recommendations for change in law as the President may deem appropriate. Nothing in this paragraph shall be interpreted, construed or applied to authorize the President to modify or reassign release prevention, mitigation or response authorities otherwise established by law.

#### (11) State authority

Nothing in this subsection shall preclude, deny or limit any right of a State or political subdivision thereof to adopt or enforce any regulation, requirement, limitation or standard (including any procedural requirement) that is more stringent than a regulation, requirement, limitation or standard in effect under this subsection or that applies to a substance not subject to this subsection.

#### (s) Periodic report

Not later than January 15, 1993 and every 3 years thereafter, the Administrator shall prepare and transmit to the Congress a comprehensive report on the measures taken by the Agency and by the States to implement the provisions of this section. The Administrator shall maintain a database on pollutants and sources subject to the provisions of this section and shall include aggregate information from the database in each annual report. The report shall include, but not be limited to—

- (1) a status report on standard-setting under subsections (d) and (f);
- (2) information with respect to compliance with such standards including the costs of compliance experienced by sources in various categories and subcategories;
- (3) development and implementation of the national urban air toxics program; and
- (4) recommendations of the Chemical Safety and Hazard Investigation Board with respect to the prevention and mitigation of accidental releases.

(July 14, 1955, ch. 360, title I, §112, as added Pub. L. 91-604, §4(a), Dec. 31, 1970, 84 Stat. 1685; amended Pub. L. 95-95, title I, §§109(d)(2), 110, title IV, §401(c), Aug. 7, 1977, 91 Stat. 701, 703, 791; Pub. L. 95-623, §13(b), Nov. 9, 1978, 92 Stat. 3458; Pub. L. 101-549, title III, §301, Nov. 15, 1990, 104 Stat. 2531; Pub. L. 102-187, Dec. 4, 1991, 105 Stat. 1285; Pub. L. 105-362, title IV, §402(b), Nov. 10, 1998, 112 Stat. 3283; Pub. L. 106-40, §§2, 3(a), Aug. 5, 1999, 113 Stat. 207, 208.)

#### REFERENCES IN TEXT

The date of enactment, referred to in subsec. (a)(11), probably means the date of enactment of Pub. L. 101-549, which amended this section generally and was approved Nov. 15, 1990.

The Atomic Energy Act, referred to in subsec. (d)(9), probably means the Atomic Energy Act of 1954, act

Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, §1, 68 Stat. 919, which is classified principally to chapter 23 (§2011 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

The Federal Water Pollution Control Act, referred to in subsecs. (e)(5) and (m)(1)(D), (5)(D), is act June 30, 1948, ch. 758, as amended generally by Pub. L. 92-500, §2, Oct. 18, 1972, 86 Stat. 816, which is classified generally to chapter 26 (§1251 et seq.) of Title 33, Navigation and Navigable Waters. Title II of the Act is classified generally to subchapter II (§1281 et seq.) of chapter 26 of Title 33. For complete classification of this Act to the Code, see Short Title note set out under section 1251 of Title 33 and Tables.

The Toxic Substances Control Act, referred to in subsec. (k)(3)(C), is Pub. L. 94-469, Oct. 11, 1976, 90 Stat. 2003, as amended, which is classified generally to chapter 53 (§2601 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 2601 of Title 15 and Tables.

The Federal Insecticide, Fungicide and Rodenticide Act, referred to in subsec. (k)(3)(C), probably means the Federal Insecticide, Fungicide, and Rodenticide Act, act June 25, 1947, ch. 125, as amended generally by Pub. L. 92-516, Oct. 21, 1972, 86 Stat. 973, which is classified generally to subchapter II (§136 et seq.) of chapter 6 of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 136 of Title 7 and Tables.

The Resource Conservation and Recovery Act, referred to in subsec. (k)(3)(C), probably means the Resource Conservation and Recovery Act of 1976, Pub. L. 94-580, Oct. 21, 1976, 90 Stat. 2796, as amended, which is classified generally to chapter 82 (§6901 et seq.) of this title. For complete classification of this Act to the Code, see Short Title of 1976 Amendment note set out under section 6901 of this title and Tables.

The Safe Drinking Water Act, referred to in subsec. (m)(1)(D), (5)(D), is title XIV of act July 1, 1944, as added Dec. 16, 1974, Pub. L. 93-523, §2(a), 88 Stat. 1660, as amended, which is classified generally to subchapter XII (§300f et seq.) of chapter 6A of this title. For complete classification of this Act to the Code, see Short Title note set out under section 201 of this title and Tables.

The Solid Waste Disposal Act, referred to in subsec. (n)(7), is title II of Pub. L. 89-272, Oct. 20, 1965, 79 Stat. 997, as amended generally by Pub. L. 94-580, §2, Oct. 21, 1976, 90 Stat. 2795. Subtitle C of the Act is classified generally to subchapter III (§6921 et seq.) of chapter 82 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6901 of this title and Tables.

Section 303 of the Clean Air Act Amendments of 1990, referred to in subsec. (o)(4), probably means section 303 of Pub. L. 101-549, which is set out below.

The Clean Air Act Amendments of 1990, referred to in subsec. (q)(1)–(3), probably means Pub. L. 101-549, Nov. 15, 1990, 104 Stat. 2399. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

The Emergency Planning and Community Right-To-Know Act of 1986, referred to in subsec. (r)(3), is title III of Pub. L. 99-499, Oct. 17, 1986, 100 Stat. 1728, which is classified generally to chapter 116 (§11001 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 11001 of this title and Tables.

The Occupational Safety and Health Act, referred to in subsec. (r)(6)(C)(ii), (K), (L), probably means the Occupational Safety and Health Act of 1970, Pub. L. 91-596, Dec. 29, 1970, 84 Stat. 1590, as amended, which is classified principally to chapter 15 (§651 et seq.) of Title 29, Labor. For complete classification of this Act to the Code, see Short Title note set out under section 651 of Title 29 and Tables.

#### CODIFICATION

In subsec. (r)(6)(N), “section 6101 of title 41” substituted for “section 5 of title 41 of the United States

Code” on authority of Pub. L. 111-350, §6(c), Jan. 4, 2011, 124 Stat. 3854, which Act enacted Title 41, Public Contracts.

Section was formerly classified to section 1857c-7 of this title.

AMENDMENTS

1999—Subsec. (r)(2)(D). Pub. L. 106-40, §2(5), added subpar. (D).

Subsec. (r)(4). Pub. L. 106-40, §2, substituted “Administrator—

“(A) shall consider—” for “Administrator shall consider each of the following criteria—” in introductory provisions, redesignated subpars. (A) to (C) as cls. (i) to (iii), respectively, of subpar. (A) and added subpar. (B).

Subsec. (r)(7)(H). Pub. L. 106-40, §3(a), added subpar. (H).

1998—Subsec. (n)(2)(C). Pub. L. 105-362 substituted “On completion of the study, the Secretary shall submit to Congress a report on the results of the study and” for “The Secretary shall prepare annual reports to Congress on the status of the research program and at the completion of the study”.

1991—Subsec. (b)(1). Pub. L. 102-187 struck out “7783064 Hydrogen sulfide” from list of pollutants.

1990—Pub. L. 101-549 amended section generally, substituting present provisions for provisions which related to: in subsec. (a), definitions; in subsec. (b), list of hazardous air pollutants, emission standards, and pollution control techniques; in subsec. (c), prohibited acts and exemption; in subsec. (d), State implementation and enforcement; and in subsec. (e), design, equipment, work practice, and operational standards.

1978—Subsec. (e)(5). Pub. L. 95-623 added par. (5).

1977—Subsec. (a)(1). Pub. L. 95-95, §401(c), substituted “causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness” for “may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness”.

Subsec. (d)(1). Pub. L. 95-95, §109(d)(2), struck out “(except with respect to stationary sources owned or operated by the United States)” after “implement and enforce such standards”.

Subsec. (e). Pub. L. 95-95, §110, added subsec. (e).

CHANGE OF NAME

Committee on Energy and Commerce of House of Representatives treated as referring to Committee on Commerce of House of Representatives by section 1(a) of Pub. L. 104-14, set out as a note preceding section 21 of Title 2, The Congress. Committee on Commerce of House of Representatives changed to Committee on Energy and Commerce of House of Representatives, and jurisdiction over matters relating to securities and exchanges and insurance generally transferred to Committee on Financial Services of House of Representatives by House Resolution No. 5, One Hundred Seventh Congress, Jan. 3, 2001.

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 REPORTING REQUIREMENTS

For termination, effective May 15, 2000, of provisions of law requiring submittal to Congress of any annual, semiannual, or other regular periodic report listed in House Document No. 103-7 (in which reports required under subsecs. (m)(5), (r)(6)(C)(ii), and (s) of this section are listed, respectively, as the 8th item on page 162, the 9th item on page 198, and the 9th item on page 162), see section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance.

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.

DELEGATION OF AUTHORITY

Memorandum of President of the United States, Aug. 19, 1993, 58 F.R. 52397, provided:

Memorandum for the Administrator of the Environmental Protection Agency

WHEREAS, the Environmental Protection Agency, the agencies and departments that are members of the National Response Team (authorized under Executive Order No. 12580, 52 Fed. Reg. 2923 (1987) [42 U.S.C. 9615 note]), and other Federal agencies and departments undertake emergency release prevention, mitigation, and response activities pursuant to various authorities;

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 112(r)(10) of the Clean Air Act (the “Act”) (section 7412(r)(10) of title 42 of the United States Code) and section 301 of title 3 of the United States Code, and in order to provide for the delegation of certain functions under the Act [42 U.S.C. 7401 et seq.], I hereby:

(1) Authorize you, in coordination with agencies and departments that are members of the National Response Team and other appropriate agencies and departments, to conduct a review of release prevention, mitigation, and response authorities of Federal agencies in order to assure the most effective and efficient implementation of such authorities and to identify any deficiencies in authority or resources that may exist, to the extent such review is required by section 112(r)(10) of the Act; and

(2) Authorize you, in coordination with agencies and departments that are members of the National Response Team and other appropriate agencies and departments, to prepare and transmit a message to the Congress concerning the release prevention, mitigation, and response activities of the Federal Government with such recommendations for change in law as you deem appropriate, to the extent such message is required by section 112(r)(10) of the Act.

The authority delegated by this memorandum may be further redelegated within the Environmental Protection Agency.

You are hereby authorized and directed to publish this memorandum in the Federal Register.

WILLIAM J. CLINTON.

Memorandum of President of the United States, Jan. 27, 2000, 65 F.R. 8631, provided:

Memorandum for the Attorney General[, ] the Administrator of the Environmental Protection Agency[, and] the Director of the Office of Management and Budget

By the authority vested in me as President by the Constitution and laws of the United States of America, including section 112(r)(7)(H) of the Clean Air Act (“Act”) (42 U.S.C. 7412(r)(7)(H)), as added by section 3 of the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (Public Law 106-40), and section 301 of title 3, United States Code, I hereby delegate to:

(1) the Attorney General the authority vested in the President under section 112(r)(7)(H)(ii)(I)(aa) of the Act to assess the increased risk of terrorist and other criminal activity associated with the posting of off-site consequence analysis information on the Internet;

(2) the Administrator of the Environmental Protection Agency (EPA) the authority vested in the President under section 112(r)(7)(H)(ii)(I)(bb) of the Act to assess the incentives created by public disclosure of off-site consequence analysis information for reduction in the risk of accidental releases; and

(3) the Attorney General and the Administrator of EPA, jointly, the authority vested in the President under section 112(r)(7)(H)(ii)(II) of the Act to promulgate regulations, based on these assessments, governing the distribution of off-site consequence analysis information. These regulations, in proposed and final form, shall be subject to review and approval by the Director of the Office of Management and Budget.

The Administrator of EPA is authorized and directed to publish this memorandum in the Federal Register.

WILLIAM J. CLINTON.

#### REPORTS

Pub. L. 106-40, §3(b), Aug. 5, 1999, 113 Stat. 213, provided that:

“(1) DEFINITION OF ACCIDENTAL RELEASE.—In this subsection, the term ‘accidental release’ has the meaning given the term in section 112(r)(2) of the Clean Air Act (42 U.S.C. 7412(r)(2)).

“(2) REPORT ON STATUS OF CERTAIN AMENDMENTS.—Not later than 2 years after the date of enactment of this Act [Aug. 5, 1999], the Comptroller General of the United States shall submit to Congress a report on the status of the development of amendments to the National Fire Protection Association Code for Liquefied Petroleum Gas that will result in the provision of information to local emergency response personnel concerning the off-site effects of accidental releases of substances exempted from listing under section 112(r)(4)(B) of the Clean Air Act (as added by section 3).

“(3) REPORT ON COMPLIANCE WITH CERTAIN INFORMATION SUBMISSION REQUIREMENTS.—Not later than 3 years after the date of enactment of this Act, the Comptroller General of the United States shall submit to Congress a report that—

“(A) describes the level of compliance with Federal and State requirements relating to the submission to local emergency response personnel of information intended to help the local emergency response personnel respond to chemical accidents or related environmental or public health threats; and

“(B) contains an analysis of the adequacy of the information required to be submitted and the efficacy of the methods for delivering the information to local emergency response personnel.”

#### REEVALUATION OF REGULATIONS

Pub. L. 106-40, §3(c), Aug. 5, 1999, 113 Stat. 213, provided that: “The President shall reevaluate the regulations promulgated under this section within 6 years after the enactment of this Act [Aug. 5, 1999]. If the President determines not to modify such regulations, the President shall publish a notice in the Federal Register stating that such reevaluation has been completed and that a determination has been made not to modify the regulations. Such notice shall include an explanation of the basis of such decision.”

#### PUBLIC MEETING DURING MORATORIUM PERIOD

Pub. L. 106-40, §4, Aug. 5, 1999, 113 Stat. 214, provided that:

“(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act [Aug. 5, 1999], each owner or operator of a stationary source covered by section 112(r)(7)(B)(ii) of the Clean Air Act [42 U.S.C. 7412(r)(7)(B)(ii)] shall convene a public meeting, after reasonable public notice, in order to describe and discuss the local implications of the risk management plan submitted by the stationary source pursuant to section 112(r)(7)(B)(iii) of the Clean Air Act, including a summary of the off-site consequence analysis portion of the plan. Two or more stationary sources may conduct a joint meeting. In lieu of conducting such a meeting, small business stationary sources as defined in section 507(c)(1) of the Clean Air Act [42 U.S.C. 7661f(c)(1)] may comply with this section by publicly posting a summary of the off-site consequence analysis information for their facility not later than 180 days after the enactment of this Act. Not later than 10 months after the date of enactment of this Act, each such owner or operator shall send a certification to the director of the Federal Bureau of Investigation stating that such meeting has been held, or that such summary has been posted, within 1 year prior to, or within 6 months after, the date of the enactment of this Act. This section shall not apply to sources that employ only Program 1 processes within the meaning of regulations promulgated under section 112(r)(7)(B)(i) of the Clean Air Act.

“(b) ENFORCEMENT.—The Administrator of the Environmental Protection Agency may bring an action in the appropriate United States district court against any person who fails or refuses to comply with the requirements of this section, and such court may issue such orders, and take such other actions, as may be necessary to require compliance with such requirements.”

#### RISK ASSESSMENT AND MANAGEMENT COMMISSION

Pub. L. 101-549, title III, §303, Nov. 15, 1990, 104 Stat. 2574, provided that:

“(a) ESTABLISHMENT.—There is hereby established a Risk Assessment and Management Commission (hereafter referred to in this section as the ‘Commission’), which shall commence proceedings not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990] and which shall make a full investigation of the policy implications and appropriate uses of risk assessment and risk management in regulatory programs under various Federal laws to prevent cancer and other chronic human health effects which may result from exposure to hazardous substances.

“(b) CHARGE.—The Commission shall consider—

“(1) the report of the National Academy of Sciences authorized by section 112(o) of the Clean Air Act [42 U.S.C. 7412(o)], the use and limitations of risk assessment in establishing emission or effluent standards, ambient standards, exposure standards, acceptable concentration levels, tolerances or other environmental criteria for hazardous substances that present a risk of carcinogenic effects or other chronic health effects and the suitability of risk assessment for such purposes;

“(2) the most appropriate methods for measuring and describing cancer risks or risks of other chronic health effects from exposure to hazardous substances considering such alternative approaches as the lifetime risk of cancer or other effects to the individual or individuals most exposed to emissions from a source or sources on both an actual and worst case basis, the range of such risks, the total number of health effects avoided by exposure reductions, effluent standards, ambient standards, exposures standards, acceptable concentration levels, tolerances and other environmental criteria, reductions in the number of persons exposed at various levels of risk, the incidence of cancer, and other public health factors;

“(3) methods to reflect uncertainties in measurement and estimation techniques, the existence of synergistic or antagonistic effects among hazardous substances, the accuracy of extrapolating human



health risks from animal exposure data, and the existence of unquantified direct or indirect effects on human health in risk assessment studies;

“(4) risk management policy issues including the use of lifetime cancer risks to individuals most exposed, incidence of cancer, the cost and technical feasibility of exposure reduction measures and the use of site-specific actual exposure information in setting emissions standards and other limitations applicable to sources of exposure to hazardous substances; and

“(5) and comment on the degree to which it is possible or desirable to develop a consistent risk assessment methodology, or a consistent standard of acceptable risk, among various Federal programs.

“(c) MEMBERSHIP.—Such Commission shall be composed of ten members who shall have knowledge or experience in fields of risk assessment or risk management, including three members to be appointed by the President, two members to be appointed by the Speaker of the House of Representatives, one member to be appointed by the Minority Leader of the House of Representatives, two members to be appointed by the Majority Leader of the Senate, one member to be appointed by the Minority Leader of the Senate, and one member to be appointed by the President of the National Academy of Sciences. Appointments shall be made not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990].

“(d) ASSISTANCE FROM AGENCIES.—The Administrator of the Environmental Protection Agency and the heads of all other departments, agencies, and instrumentalities of the executive branch of the Federal Government shall, to the maximum extent practicable, assist the Commission in gathering such information as the Commission deems necessary to carry out this section subject to other provisions of law.

“(e) STAFF AND CONTRACTS.—

“(1) In the conduct of the study required by this section, the Commission is authorized to contract (in accordance with Federal contract law) with non-governmental entities that are competent to perform research or investigations within the Commission’s mandate, and to hold public hearings, forums, and workshops to enable full public participation.

“(2) The Commission may appoint and fix the pay of such staff as it deems necessary in accordance with the provisions of title 5, United States Code. The Commission may request the temporary assignment of personnel from the Environmental Protection Agency or other Federal agencies.

“(3) The members of the Commission who are not officers or employees of the United States, while attending conferences or meetings of the Commission or while otherwise serving at the request of the Chair, shall be entitled to receive compensation at a rate not in excess of the maximum rate of pay for Grade GS-18, as provided in the General Schedule under section 5332 of title 5 of the United States Code, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence as authorized by law for persons in the Government service employed intermittently.

“(f) REPORT.—A report containing the results of all Commission studies and investigations under this section, together with any appropriate legislative recommendations or administrative recommendations, shall be made available to the public for comment not later than 42 months after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990] and shall be submitted to the President and to the Congress not later than 48 months after such date of enactment. In the report, the Commission shall make recommendations with respect to the appropriate use of risk assessment and risk management in Federal regulatory programs to prevent cancer or other chronic health effects which may result from exposure to hazardous substances. The Commission shall cease to exist upon the date determined by the Commission, but not later than 9 months after the submission of such report.

“(g) AUTHORIZATION.—There are authorized to be appropriated such sums as are necessary to carry out the activities of the Commission established by this section.”

[References in laws to the rates of pay for GS-16, 17, or 18, or to maximum rates of pay under the General Schedule, to be considered references to rates payable under specified sections of Title 5, Government Organization and Employees, see section 529 [title I, §101(c)(1)] of Pub. L. 101-509, set out in a note under section 5376 of Title 5.]

FLEXIBLE IMPLEMENTATION OF THE MERCURY AND AIR TOXICS STANDARDS RULE

Memorandum of President of the United States, Dec. 21, 2011, 76 F.R. 80727, provided:

Memorandum for the Administrator of the Environmental Protection Agency

Today’s issuance, by the Environmental Protection Agency (EPA), of the final Mercury and Air Toxics Standards rule for power plants (the “MATS Rule”) represents a major step forward in my Administration’s efforts to protect public health and the environment.

This rule, issued after careful consideration of public comments, prescribes standards under section 112 of the Clean Air Act to control emissions of mercury and other toxic air pollutants from power plants, which collectively are among the largest sources of such pollution in the United States. The EPA estimates that by substantially reducing emissions of pollutants that contribute to neurological damage, cancer, respiratory illnesses, and other health risks, the MATS Rule will produce major health benefits for millions of Americans—including children, older Americans, and other vulnerable populations. Consistent with Executive Order 13563 (Improving Regulation and Regulatory Review), the estimated benefits of the MATS Rule far exceed the estimated costs.

The MATS Rule can be implemented through the use of demonstrated, existing pollution control technologies. The United States is a global market leader in the design and manufacture of these technologies, and it is anticipated that U.S. firms and workers will provide much of the equipment and labor needed to meet the substantial investments in pollution control that the standards are expected to spur.

These new standards will promote the transition to a cleaner and more efficient U.S. electric power system. This system as a whole is critical infrastructure that plays a key role in the functioning of all facets of the U.S. economy, and maintaining its stability and reliability is of critical importance. It is therefore crucial that implementation of the MATS Rule proceed in a cost-effective manner that ensures electric reliability.

Analyses conducted by the EPA and the Department of Energy (DOE) indicate that the MATS Rule is not anticipated to compromise electric generating resource adequacy in any region of the country. The Clean Air Act offers a number of implementation flexibilities, and the EPA has a long and successful history of using those flexibilities to ensure a smooth transition to cleaner technologies.

The Clean Air Act provides 3 years from the effective date of the MATS Rule for sources to comply with its requirements. In addition, section 112(i)(3)(B) of the Act allows the issuance of a permit granting a source up to one additional year where necessary for the installation of controls. As you stated in the preamble to the MATS Rule, this additional fourth year should be broadly available to sources, consistent with the requirements of the law.

The EPA has concluded that 4 years should generally be sufficient to install the necessary emission control equipment, and DOE has issued analysis consistent with that conclusion. While more time is generally not expected to be needed, the Clean Air Act offers other important flexibilities as well. For example, section 113(a) of the Act provides the EPA with flexibility to bring sources into compliance over the course of an additional year, should unusual circumstances arise that warrant such flexibility.

To address any concerns with respect to electric reliability while assuring MATS' public health benefits, I direct you to take the following actions:

1. Building on the information and guidance that you have provided to the public, relevant stakeholders, and permitting authorities in the preamble of the MATS Rule, work with State and local permitting authorities to make the additional year for compliance with the MATS Rule provided under section 112(i)(3)(B) of the Clean Air Act broadly available to sources, consistent with law, and to invoke this flexibility expeditiously where justified.

2. Promote early, coordinated, and orderly planning and execution of the measures needed to implement the MATS Rule while maintaining the reliability of the electric power system. Consistent with Executive Order 13563, this process should be designed to "promote predictability and reduce uncertainty," and should include engagement and coordination with DOE, the Federal Energy Regulatory Commission, State utility regulators, Regional Transmission Organizations, the North American Electric Reliability Corporation and regional electric reliability organizations, other grid planning authorities, electric utilities, and other stakeholders, as appropriate.

3. Make available to the public, including relevant stakeholders, information concerning any anticipated use of authorities: (a) under section 112(i)(3)(B) of the Clean Air Act in the event that additional time to comply with the MATS Rule is necessary for the installation of technology; and (b) under section 113(a) of the Clean Air Act in the event that additional time to comply with the MATS Rule is necessary to address a specific and documented electric reliability issue. This information should describe the process for working with entities with relevant expertise to identify circumstances where electric reliability concerns might justify allowing additional time to comply.

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.

You are hereby authorized and directed to publish this memorandum in the Federal Register.

BARACK OBAMA.

### § 7413. Federal enforcement

#### (a) In general

##### (1) Order to comply with SIP

Whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit, the Administrator shall notify the person and the State in which the plan applies of such finding. At any time after the expiration of 30 days following the date on which such notice of a violation is issued, the Administrator may, without regard to the period of violation (subject to section 2462 of title 28)—

(A) issue an order requiring such person to comply with the requirements or prohibitions of such plan or permit,

(B) issue an administrative penalty order in accordance with subsection (d), or

(C) bring a civil action in accordance with subsection (b).

##### (2) State failure to enforce SIP or permit program

Whenever, on the basis of information available to the Administrator, the Administrator

finds that violations of an applicable implementation plan or an approved permit program under subchapter V are so widespread that such violations appear to result from a failure of the State in which the plan or permit program applies to enforce the plan or permit program effectively, the Administrator shall so notify the State. In the case of a permit program, the notice shall be made in accordance with subchapter V. If the Administrator finds such failure extends beyond the 30th day after such notice (90 days in the case of such permit program), the Administrator shall give public notice of such finding. During the period beginning with such public notice and ending when such State satisfies the Administrator that it will enforce such plan or permit program (hereafter referred to in this section as "period of federally assumed enforcement"), the Administrator may enforce any requirement or prohibition of such plan or permit program with respect to any person by—

(A) issuing an order requiring such person to comply with such requirement or prohibition,

(B) issuing an administrative penalty order in accordance with subsection (d), or

(C) bringing a civil action in accordance with subsection (b).

##### (3) EPA enforcement of other requirements

Except for a requirement or prohibition enforceable under the preceding provisions of this subsection, whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any other requirement or prohibition of this subchapter, section 7603 of this title, subchapter IV-A, subchapter V, or subchapter VI, including, but not limited to, a requirement or prohibition of any rule, plan, order, waiver, or permit promulgated, issued, or approved under those provisions or subchapters, or for the payment of any fee owed to the United States under this chapter (other than subchapter II), the Administrator may—

(A) issue an administrative penalty order in accordance with subsection (d),

(B) issue an order requiring such person to comply with such requirement or prohibition,

(C) bring a civil action in accordance with subsection (b) or section 7605 of this title, or

(D) request the Attorney General to commence a criminal action in accordance with subsection (c).

##### (4) Requirements for orders

An order issued under this subsection (other than an order relating to a violation of section 7412 of this title) shall not take effect until the person to whom it is issued has had an opportunity to confer with the Administrator concerning the alleged violation. A copy of any order issued under this subsection shall be sent to the State air pollution control agency of any State in which the violation occurs. Any order issued under this subsection shall state with reasonable specificity the nature of the violation and specify a time for compli-

(July 14, 1955, ch. 360, title I, §114, as added Pub. L. 91-604, §4(a), Dec. 31, 1970, 84 Stat. 1687; amended Pub. L. 93-319, §6(a)(4), June 22, 1974, 88 Stat. 259; Pub. L. 95-95, title I, §§109(d)(3), 113, title III, §305(d), Aug. 7, 1977, 91 Stat. 701, 709, 776; Pub. L. 95-190, §14(a)(22), (23), Nov. 16, 1977, 91 Stat. 1400; Pub. L. 101-549, title III, §302(c), title VII, §702(a), (b), Nov. 15, 1990, 104 Stat. 2574, 2680, 2681.)

## REFERENCES IN TEXT

Section 7413(d) of this title, referred to in subsec. (d)(1), was 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.

## CODIFICATION

Section was formerly classified to section 1857c-9 of this title.

## AMENDMENTS

1990—Subsec. (a). Pub. L. 101-549, §702(a)(1), which directed that “or” be struck out in first sentence immediately before “any emission standard under section 7412 of this title,” could not be executed because of the prior amendment by Pub. L. 101-549, §302(c), see below.

Pub. L. 101-549, §702(a)(2), inserted “or any regulation under section 7429 of this title (relating to solid waste combustion),” before “(ii) of determining”.

Pub. L. 101-549, §302(c), struck out “or” after “performance under section 7411 of this title,” and inserted “, or any regulation of solid waste combustion under section 7429 of this title,” after “standard under section 7412 of this title”.

Subsec. (a)(1). Pub. L. 101-549, §702(a)(3), amended par. (1) generally. Prior to amendment, par. (1) read as follows: “the Administrator may require any person who owns or operates any emission source or who is subject to any requirement of this chapter (other than a manufacturer subject to the provisions of section 7525(c) or 7542 of this title) with respect to a provision of subchapter II of this chapter to (A) establish and maintain such records, (B) make such reports, (C) install, use, and maintain such monitoring equipment or methods, (D) sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (E) provide such other information as he may reasonably require; and”.

Subsec. (a)(3). Pub. L. 101-549, §702(b), added par. (3). 1977—Subsec. (a). Pub. L. 95-190, §14(a)(22), inserted reference to subchapter II of this chapter and “new” before “motor” in two places.

Pub. L. 95-95, §305(d), substituted “carrying out any provision of this chapter (except with respect to a manufacturer of motor vehicles or motor vehicle engines)” for “carrying out sections 119 or 303” in cl. (iii) preceding par. (1), substituted “any person subject to any requirement of this chapter (other than a manufacturer subject to the provisions of sections 7525(c) or 7542 of this title)” for “the owner or operator of any emission source” in par. (1), substituted “any premises of such person” for “any premises in which an emission source is located” in subpar. (A) of par. (2), and substituted “emissions which such person is required to sample” for “emissions which the owner or operator of such source is required to sample” in subpar. (B) of subpar. (2).

Subsec. (a)(1). Pub. L. 95-190, §14(a)(23), inserted reference to subchapter II of this chapter and “who owns or operates any emission source or who is” after “any person”.

Subsec. (b)(1). Pub. L. 95-95, §109(d)(3), struck out “(except with respect to new sources owned or operated by the United States)” after “to carry out this section”.

Subsec. (d). Pub. L. 95-95, §113, added subsec. (d). 1974—Subsec. (a). Pub. L. 93-319 inserted reference to section 119.

## 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.

**§ 7415. International air pollution****(a) Endangerment of public health or welfare in foreign countries from pollution emitted in United States**

Whenever the Administrator, upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.

**(b) Prevention or elimination of endangerment**

The notice of the Administrator shall be deemed to be a finding under section 7410(a)(2)(H)(ii) of this title which requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to in subsection (a). Any foreign country so affected by such emission of pollutant or pollutants shall be invited to appear at any public hearing associated with any revision of the appropriate portion of the applicable implementation plan.

**(c) Reciprocity**

This section shall apply only to a foreign country which the Administrator determines has given the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country by this section.

**(d) Recommendations**

Recommendations issued following any abatement conference conducted prior to August 7, 1977, shall remain in effect with respect to any pollutant for which no national ambient air quality standard has been established under section 7409 of this title unless the Administrator, after consultation with all agencies which were party to the conference, rescinds any such recommendation on grounds of obsolescence.

(July 14, 1955, ch. 360, title I, §115, formerly §5, as added Pub. L. 88-206, §1, Dec. 17, 1963, 77 Stat. 396; renumbered §105 and amended Pub. L. 89-272, title I, §§101(2), (3), 102, Oct. 20, 1965, 79 Stat. 992, 995, renumbered §108 and amended Pub. L. 90-148, §2, Nov. 21, 1967, 81 Stat. 491, renumbered §115 and amended Pub. L. 91-604, §§4(a), (b)(2)-(10), 15(c)(2), Dec. 31, 1970, 84 Stat. 1678, 1688, 1689, 1713; Pub. L. 95-95, title I, §114, Aug. 7, 1977, 91 Stat. 710.)

CODIFICATION

Section was formerly classified to section 1857d of this title.

AMENDMENTS

1977—Pub. L. 95-95 completely revised section by substituting provisions establishing a mechanism for the Administrator to trigger a revision of a State implementation plan under section 7410(a)(2)(H) upon a petition of an international agency or the Secretary of State if he finds that emissions originating in a State endanger the health or welfare of persons in a foreign country for provisions calling for the abatement of air pollution by means of conference procedures.

1970—Subsec. (a). Pub. L. 91-604, §4(b)(2), inserted “and which is covered by subsection (b) or (c)” after “persons”.

Subsec. (b). Pub. L. 91-604, §§4(b)(3), (4), (5), 15(c)(2), redesignated former subsec. (d)(1)(A), (B), and (C) as (b)(1), (2), and (3), substituted “Administrator” for “Secretary” wherever appearing, and added subsec. (b)(4). Former subsec. (b), which related to the encouragement of municipal, State, and interstate action to abate air pollution, was struck out.

Subsec. (c). Pub. L. 91-604, §§4(b)(3), (6), 15(c)(2), redesignated former subsec. (d)(1)(D) as (c) and substituted “Administrator” for “Secretary” and “Secretary of Health, Education, and Welfare” wherever appearing and “subsection” for “subparagraph” wherever appearing. Former subsec. (c), which related to the procedure for the promulgation of State air quality standards, was struck out.

Subsec. (d). Pub. L. 91-604, §§4(b)(4), (6), (7), (8), 15(c)(2), redesignated former subsec. (d)(2) and (3) as (d)(1) and (2), in (d)(1) substituted “Administrator” for “Secretary” wherever appearing and “any conference under this section” for “such conference”, and in (d)(2) substituted “Administrator” for “Secretary”. Former subsec. (d)(1)(A), (B), and (C) were redesignated as (b)(1), (2), and (3), respectively, and subsec. (d)(1)(D) was redesignated as (c).

Subsec. (e). Pub. L. 91-604, §15(c)(2), substituted “Administrator” for “Secretary” wherever appearing.

Subsec. (f). Pub. L. 91-604, §15(c)(2), substituted “Administrator” for “Secretary” wherever appearing and “Environmental Protection Agency” for “Department of Health, Education, and Welfare”.

Subsec. (g). Pub. L. 91-604, §§4(b)(9), 15(c)(2), substituted “Administrator” for “Secretary” and “subsection (c)” for “subparagraph (D) of subsection (d)”.

Subsecs. (i), (j). Pub. L. 91-604, §15(c)(2), substituted “Administrator” for “Secretary” wherever appearing.

Subsec. (k). Pub. L. 91-604, §4(b)(3), (10), substituted provisions relating to compliance with any requirement of an applicable implementation plan or with any

standard prescribed under section 7411 of this title or section 7412 of this title, for provisions relating to the enjoining of imminent and substantial endangerment from pollution sources.

1967—Subsec. (b). Pub. L. 90-148 substituted reference to subsec. (c), (h), or (k) of this section for reference to subsec. (g) of this section.

Subsecs. (c), (d). Pub. L. 90-148 added subsec. (c), redesignated former subsec. (c) as (d), inserted in par. (2) provisions for the delivery prior to the conference of a Federal report to agencies and interested parties covering matters before the conference, raised from three weeks to thirty days the required notice of the conference, and inserted provisions for notice by newspapers, presentation of views on the Federal report, and transcript of proceedings. Former subsec. (d) redesignated (e).

Subsec. (e). Pub. L. 90-148 redesignated former subsec. (d) as (e). Former subsec. (e) redesignated (f) and amended.

Subsec. (f). Pub. L. 90-148 redesignated former subsec. (e) as (f) and inserted in par. (1) requirement that all interested parties be given a reasonable opportunity to present evidence to the hearing board. Former subsec. (f) redesignated (g) and amended.

Subsec. (g). Pub. L. 90-148 redesignated former subsec. (f) as (g) and substituted reference to subsec. (d) of this section for reference to subsec. (c) of this section. Former subsec. (g) redesignated (h) and amended.

Subsec. (h). Pub. L. 90-148 redesignated former subsec. (g) as (h) and substituted reference to subsec. (g) of this section for reference to subsec. (f) of this section. Former subsec. (h) redesignated (i) and amended.

Subsec. (i). Pub. L. 90-148 redesignated former subsec. (h) as (i) and substituted reference to subsec. (f) of this section for reference to subsec. (e) of this section and raised the per diem maximum from \$50 to \$100. Former subsec. (i) redesignated (j).

Subsec. (j). Pub. L. 90-148 redesignated former subsec. (i) as (j).

Subsec. (k). Pub. L. 90-148 added subsec. (k).  
1965—Subsec. (b). Pub. L. 89-272, §101(2), substituted “this title” for “this Act”, which for purposes of codification has been changed to “this subchapter”.

Subsec. (c)(1)(D). Pub. L. 89-272, §102(a), added subpar. (D).

Subsec. (d)(3). Pub. L. 89-272, §101(2), substituted “subchapter” for “chapter”.

Subsec. (f)(1). Pub. L. 89-272, §102(b), designated existing provisions as cl. (A) and added cl. (B).

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.

UNITED STATES-CANADIAN NEGOTIATIONS ON AIR QUALITY

Pub. L. 95-426, title VI, §612, Oct. 7, 1978, 92 Stat. 990, provided that:

“(a) The Congress finds that—

“(1) the United States and Canada share a common environment along a 5,500 mile border;

“(2) the United States and Canada are both becoming increasingly concerned about the effects of pollution, particularly that resulting from power generation facilities, since the facilities of each country affect the environment of the other;

“(3) the United States and Canada have subscribed to international conventions; have joined in the environmental work of the United Nations, the Organization for Economic Cooperation and Development, and other international environmental forums; and have entered into and implemented effectively the provisions of the historic Boundary Waters Treaty of 1909; and

“(4) the United States and Canada have a tradition of cooperative resolution of issues of mutual concern which is nowhere more evident than in the environmental area.

“(b) It is the sense of the Congress that the President should make every effort to negotiate a cooperative agreement with the Government of Canada aimed at preserving the mutual airshed of the United States and Canada so as to protect and enhance air resources and insure the attainment and maintenance of air quality protective of public health and welfare.

“(c) It is further the sense of the Congress that the President, through the Secretary of State working in concert with interested Federal agencies and the affected States, should take whatever diplomatic actions appear necessary to reduce or eliminate any undesirable impact upon the United States and Canada resulting from air pollution from any source.”

#### § 7416. Retention of State authority

Except as otherwise provided in sections 1857c-10(c), (e), and (f) (as in effect before August 7, 1977), 7543, 7545(c)(4), and 7573 of this title (preempting certain State regulation of moving sources) nothing in this chapter shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting emissions of air pollutants or (2) any requirement respecting control or abatement of air pollution; except that if an emission standard or limitation is in effect under an applicable implementation plan or under section 7411 or section 7412 of this title, such State or political subdivision may not adopt or enforce any emission standard or limitation which is less stringent than the standard or limitation under such plan or section.

(July 14, 1955, ch. 360, title I, § 116, formerly § 109, as added Pub. L. 90-148, § 2, Nov. 21, 1967, 81 Stat. 497; renumbered § 116 and amended Pub. L. 91-604, § 4(a), (c), Dec. 31, 1970, 84 Stat. 1678, 1689; Pub. L. 93-319, § 6(b), June 22, 1974, 88 Stat. 259; Pub. L. 95-190, § 14(a)(24), Nov. 16, 1977, 91 Stat. 1400.)

#### REFERENCES IN TEXT

1857c-10(c), (e), and (f) (as in effect before August 7, 1977), referred to in text, was in the original “119(c), (e), and (f) (as in effect before the date of the 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

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.

#### CODIFICATION

Section was formerly classified to section 1857d-1 of this title.

#### AMENDMENTS

1977—Pub. L. 95-190 inserted reference to specified provisions in effect before Aug. 7, 1977.

1974—Pub. L. 93-319 inserted reference to section 1857c-10(c), (e), and (f).

1970—Pub. L. 91-604, § 4(c), substituted provisions which authorized any State or political subdivision thereof to adopt or enforce, except as otherwise provided, emission standards or limitations under the specified conditions, or any requirement respecting control or abatement of air pollution, for provisions which authorized any State, political subdivision, or intermunicipal or interstate agency to adopt standards and plans to achieve a higher level of air quality than approved by the Secretary.

#### 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.

#### § 7417. Advisory committees

##### (a) Establishment; membership

In order to obtain assistance in the development and implementation of the purposes of this chapter including air quality criteria, recommended control techniques, standards, research and development, and to encourage the continued efforts on the part of industry to improve air quality and to develop economically feasible methods for the control and abatement of air pollution, the Administrator shall from time to time establish advisory committees. Committee members shall include, but not be limited to, persons who are knowledgeable concerning air quality from the standpoint of health, welfare, economics or technology.

##### (b) Compensation

The members of any other advisory committees appointed pursuant to this chapter who are not officers or employees of the United States while attending conferences or meetings or while otherwise serving at the request of the Administrator, shall be entitled to receive compensation at a rate to be fixed by the Administrator, but not exceeding \$100 per diem, including traveltime, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5 for persons in the Government service employed intermittently.

“(2) the United States and Canada are both becoming increasingly concerned about the effects of pollution, particularly that resulting from power generation facilities, since the facilities of each country affect the environment of the other;

“(3) the United States and Canada have subscribed to international conventions; have joined in the environmental work of the United Nations, the Organization for Economic Cooperation and Development, and other international environmental forums; and have entered into and implemented effectively the provisions of the historic Boundary Waters Treaty of 1909; and

“(4) the United States and Canada have a tradition of cooperative resolution of issues of mutual concern which is nowhere more evident than in the environmental area.

“(b) It is the sense of the Congress that the President should make every effort to negotiate a cooperative agreement with the Government of Canada aimed at preserving the mutual airshed of the United States and Canada so as to protect and enhance air resources and insure the attainment and maintenance of air quality protective of public health and welfare.

“(c) It is further the sense of the Congress that the President, through the Secretary of State working in concert with interested Federal agencies and the affected States, should take whatever diplomatic actions appear necessary to reduce or eliminate any undesirable impact upon the United States and Canada resulting from air pollution from any source.”

#### § 7416. Retention of State authority

Except as otherwise provided in sections 1857c-10(c), (e), and (f) (as in effect before August 7, 1977), 7543, 7545(c)(4), and 7573 of this title (preempting certain State regulation of moving sources) nothing in this chapter shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting emissions of air pollutants or (2) any requirement respecting control or abatement of air pollution; except that if an emission standard or limitation is in effect under an applicable implementation plan or under section 7411 or section 7412 of this title, such State or political subdivision may not adopt or enforce any emission standard or limitation which is less stringent than the standard or limitation under such plan or section.

(July 14, 1955, ch. 360, title I, § 116, formerly § 109, as added Pub. L. 90-148, § 2, Nov. 21, 1967, 81 Stat. 497; renumbered § 116 and amended Pub. L. 91-604, § 4(a), (c), Dec. 31, 1970, 84 Stat. 1678, 1689; Pub. L. 93-319, § 6(b), June 22, 1974, 88 Stat. 259; Pub. L. 95-190, § 14(a)(24), Nov. 16, 1977, 91 Stat. 1400.)

#### REFERENCES IN TEXT

1857c-10(c), (e), and (f) (as in effect before August 7, 1977), referred to in text, was in the original “119(c), (e), and (f) (as in effect before the date of the 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

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.

#### CODIFICATION

Section was formerly classified to section 1857d-1 of this title.

#### AMENDMENTS

1977—Pub. L. 95-190 inserted reference to specified provisions in effect before Aug. 7, 1977.

1974—Pub. L. 93-319 inserted reference to section 1857c-10(c), (e), and (f).

1970—Pub. L. 91-604, § 4(c), substituted provisions which authorized any State or political subdivision thereof to adopt or enforce, except as otherwise provided, emission standards or limitations under the specified conditions, or any requirement respecting control or abatement of air pollution, for provisions which authorized any State, political subdivision, or intermunicipal or interstate agency to adopt standards and plans to achieve a higher level of air quality than approved by the Secretary.

#### 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.

#### § 7417. Advisory committees

##### (a) Establishment; membership

In order to obtain assistance in the development and implementation of the purposes of this chapter including air quality criteria, recommended control techniques, standards, research and development, and to encourage the continued efforts on the part of industry to improve air quality and to develop economically feasible methods for the control and abatement of air pollution, the Administrator shall from time to time establish advisory committees. Committee members shall include, but not be limited to, persons who are knowledgeable concerning air quality from the standpoint of health, welfare, economics or technology.

##### (b) Compensation

The members of any other advisory committees appointed pursuant to this chapter who are not officers or employees of the United States while attending conferences or meetings or while otherwise serving at the request of the Administrator, shall be entitled to receive compensation at a rate to be fixed by the Administrator, but not exceeding \$100 per diem, including traveltime, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5 for persons in the Government service employed intermittently.

(1) the Governor of any State in which a major fuel burning stationary source referred to in this subsection (or class or category thereof) is located,

- (2) the Administrator, or
- (3) the President (or his designee),

may determine that action under subsection (b) of this section is necessary to prevent or minimize significant local or regional economic disruption or unemployment which would otherwise result from use by such source (or class or category) of—

- (A) coal or coal derivatives other than locally or regionally available coal,
- (B) petroleum products,
- (C) natural gas, or
- (D) any combination of fuels referred to in subparagraphs (A) through (C),

to comply with the requirements of a State implementation plan.

**(b) Use of locally or regionally available coal or coal derivatives to comply with implementation plan requirements**

Upon a determination under subsection (a)—

- (1) such Governor, with the written consent of the President or his designee,
- (2) the President's designee with the written consent of such Governor, or
- (3) the President

may by rule or order prohibit any such major fuel burning stationary source (or class or category thereof) from using fuels other than locally or regionally available coal or coal derivatives to comply with implementation plan requirements. In taking any action under this subsection, the Governor, the President, or the President's designee as the case may be, shall take into account, the final cost to the consumer of such an action.

**(c) Contracts; schedules**

The Governor, in the case of action under subsection (b)(1), or the Administrator, in the case of an action under subsection (b)(2) or (3) shall, by rule or order, require each source to which such action applies to—

- (1) enter into long-term contracts of at least ten years in duration (except as the President or his designee may otherwise permit or require by rule or order for good cause) for supplies of regionally available coal or coal derivatives,
- (2) enter into contracts to acquire any additional means of emission limitation which the Administrator or the State determines may be necessary to comply with the requirements of this chapter while using such coal or coal derivatives as fuel, and
- (3) comply with such schedules (including increments of progress), timetables and other requirements as may be necessary to assure compliance with the requirements of this chapter.

Requirements under this subsection shall be established simultaneously with, and as a condition of, any action under subsection (b).

**(d) Existing or new major fuel burning stationary sources**

This section applies only to existing or new major fuel burning stationary sources—

(1) which have the design capacity to produce 250,000,000 Btu's per hour (or its equivalent), as determined by the Administrator, and

(2) which are not in compliance with the requirements of an applicable implementation plan or which are prohibited from burning oil or natural gas, or both, under any other authority of law.

**(e) Actions not to be deemed modifications of major fuel burning stationary sources**

Except as may otherwise be provided by rule by the State or the Administrator for good cause, any action required to be taken by a major fuel burning stationary source under this section shall not be deemed to constitute a modification for purposes of section 7411(a)(2) and (4) of this title.

**(f) Treatment of prohibitions, rules, or orders as requirements or parts of plans under other provisions**

For purposes of sections 7413 and 7420 of this title a prohibition under subsection (b), and a corresponding rule or order under subsection (c), shall be treated as a requirement of section 7413 of this title. For purposes of any plan (or portion thereof) promulgated under section 7410(c) of this title, any rule or order under subsection (c) corresponding to a prohibition under subsection (b), shall be treated as a part of such plan. For purposes of section 7413 of this title, a prohibition under subsection (b), applicable to any source, and a corresponding rule or order under subsection (c), shall be treated as part of the applicable implementation plan for the State in which subject source is located.

**(g) Delegation of Presidential authority**

The President may delegate his authority under this section to an officer or employee of the United States designated by him on a case-by-case basis or in any other manner he deems suitable.

**(h) "Locally or regionally available coal or coal derivatives" defined**

For the purpose of this section the term "locally or regionally available coal or coal derivatives" means coal or coal derivatives which is, or can in the judgment of the State or the Administrator feasibly be, mined or produced in the local or regional area (as determined by the Administrator) in which the major fuel burning stationary source is located.

(July 14, 1955, ch. 360, title I, §125, as added Pub. L. 95-95, title I, §122, Aug. 7, 1977, 91 Stat. 722.)

EFFECTIVE DATE

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

**§ 7426. Interstate pollution abatement**

**(a) Written notice to all nearby States**

Each applicable implementation plan shall—

- (1) require each major proposed new (or modified) source—
  - (A) subject to part C (relating to significant deterioration of air quality) or

(B) which may significantly contribute to levels of air pollution in excess of the national ambient air quality standards in any air quality control region outside the State in which such source intends to locate (or make such modification),

to provide written notice to all nearby States the air pollution levels of which may be affected by such source at least sixty days prior to the date on which commencement of construction is to be permitted by the State providing notice, and

(2) identify all major existing stationary sources which may have the impact described in paragraph (1) with respect to new or modified sources and provide notice to all nearby States of the identity of such sources not later than three months after August 7, 1977.

**(b) Petition for finding that major sources emit or would emit prohibited air pollutants**

Any State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of section 7410(a)(2)(D)(ii) of this title or this section. Within 60 days after receipt of any petition under this subsection and after public hearing, the Administrator shall make such a finding or deny the petition.

**(c) Violations; allowable continued operation**

Notwithstanding any permit which may have been granted by the State in which the source is located (or intends to locate), it shall be a violation of this section and the applicable implementation plan in such State—

(1) for any major proposed new (or modified) source with respect to which a finding has been made under subsection (b) to be constructed or to operate in violation of the prohibition of section 7410(a)(2)(D)(ii) of this title or this section, or

(2) for any major existing source to operate more than three months after such finding has been made with respect to it.

The Administrator may permit the continued operation of a source referred to in paragraph (2) beyond the expiration of such three-month period if such source complies with such emission limitations and compliance schedules (containing increments of progress) as may be provided by the Administrator to bring about compliance with the requirements contained in section 7410(a)(2)(D)(ii) of this title or this section as expeditiously as practicable, but in no case later than three years after the date of such finding. Nothing in the preceding sentence shall be construed to preclude any such source from being eligible for an enforcement order under section 7413(d)<sup>1</sup> of this title after the expiration of such period during which the Administrator has permitted continuous operation.

(July 14, 1955, ch. 360, title I, §126, as added Pub. L. 95-95, title I, §123, Aug. 7, 1977, 91 Stat. 724; amended Pub. L. 95-190, §14(a)(39), Nov. 16, 1977, 91 Stat. 1401; Pub. L. 101-549, title I, §109(a), Nov. 15, 1990, 104 Stat. 2469.)

<sup>1</sup> See References in Text note below.

REFERENCES IN TEXT

Section 7413(d) of this title, referred to in subsec. (c), was 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.

AMENDMENTS

1990—Subsec. (b). Pub. L. 101-549, §109(a)(1), inserted “or group of stationary sources” after “any major source” and substituted “section 7410(a)(2)(D)(ii) of this title or this section” for “section 7410(a)(2)(E)(i) of this title”.

Subsec. (c). Pub. L. 101-549, §109(a)(2)(A), which directed the insertion of “this section and” after “violation of”, was executed by making the insertion after first reference to “violation of” to reflect the probable intent of Congress.

Pub. L. 101-549, §109(a)(2)(B), substituted “section 7410(a)(2)(D)(ii) of this title or this section” for “section 7410(a)(2)(E)(i) of this title” in par. (1) and penultimate sentence.

1977—Subsec. (a)(1). Pub. L. 95-190 substituted “(relating to significant deterioration of air quality)” for “, relating to significant deterioration of air quality”.

EFFECTIVE DATE

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

**§ 7427. Public notification**

**(a) Warning signs; television, radio, or press notices or information**

Each State plan shall contain measures which will be effective to notify the public during any calendar<sup>1</sup> on a regular basis of instances or areas in which any national primary ambient air quality standard is exceeded or was exceeded during any portion of the preceding calendar year to advise the public of the health hazards associated with such pollution, and to enhance public awareness of the measures which can be taken to prevent such standards from being exceeded and the ways in which the public can participate in regulatory and other efforts to improve air quality. Such measures may include the posting of warning signs on interstate highway access points to metropolitan areas or television, radio, or press notices or information.

**(b) Grants**

The Administrator is authorized to make grants to States to assist in carrying out the requirements of subsection (a).

(July 14, 1955, ch. 360, title I, §127, as added Pub. L. 95-95, title I, §124, Aug. 7, 1977, 91 Stat. 725.)

EFFECTIVE DATE

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

**§ 7428. State boards**

(a)<sup>1</sup> Not later than the date one year after August 7, 1977, each applicable implementation plan shall contain requirements that—

(1) any board or body which approves permits or enforcement orders under this chapter

<sup>1</sup> So in original. Probably should be “calendar year”.

<sup>1</sup> So in original. Section enacted without a subsec. (b).



and the reports pursuant to subsection (d)(2) and any other relevant information, within eighteen months of receipt of the report referred to in subsection (d)(2) of this section, carry out the Administrator's regulatory responsibilities under section 7491 of this title, including criteria for measuring "reasonable progress" toward the national goal.

(2) Any regulations promulgated under section 7491 of this title pursuant to this subsection shall require affected States to revise within 12 months their implementation plans under section 7410 of this title to contain such emission limits, schedules of compliance, and other measures as may be necessary to carry out regulations promulgated pursuant to this subsection.

**(f) Grand Canyon visibility transport commission**

The Administrator pursuant to subsection (c)(1) shall, within 12 months, establish a visibility transport commission for the region affecting the visibility of the Grand Canyon National Park.

(July 14, 1955, ch. 360, title I, §169B, as added Pub. L. 101-549, title VIII, §816, Nov. 15, 1990, 104 Stat. 2695.)

REFERENCES IN TEXT

The Clean Air Act Amendments of 1990, referred to in subsec. (b), probably means Pub. L. 101-549, Nov. 15, 1990, 104 Stat. 2399. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

The Federal Advisory Committee Act, referred to in subsec. (c)(4), 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.

PART D—PLAN REQUIREMENTS FOR  
NONATTAINMENT AREAS

SUBPART 1—NONATTAINMENT AREAS IN GENERAL

**§ 7501. Definitions**

For the purpose of this part—

(1) REASONABLE FURTHER PROGRESS.—The term "reasonable further progress" means such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date.

(2) NONATTAINMENT AREA.—The term "nonattainment area" means, for any air pollutant, an area which is designated "nonattainment" with respect to that pollutant within the meaning of section 7407(d) of this title.

(3) The term "lowest achievable emission rate" means for any source, that rate of emissions which reflects—

(A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or

(B) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent.

In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.

(4) The terms "modifications" and "modified" mean the same as the term "modification" as used in section 7411(a)(4) of this title.

(July 14, 1955, ch. 360, title I, §171, as added Pub. L. 95-95, title I, §129(b), Aug. 7, 1977, 91 Stat. 745; amended Pub. L. 101-549, title I, §102(a)(2), Nov. 15, 1990, 104 Stat. 2412.)

AMENDMENTS

1990—Pub. L. 101-549, §102(a)(2)(A), struck out "and section 7410(a)(2)(I) of this title" after "purpose of this part".

Pars. (1), (2), Pub. L. 101-549, §102(a)(2)(B), (C), amended pars. (1) and (2) generally. Prior to amendment, pars. (1) and (2) read as follows:

"(1) The term 'reasonable further progress' means annual incremental reductions in emissions of the applicable air pollutant (including substantial reductions in the early years following approval or promulgation of plan provisions under this part and section 7410(a)(2)(I) of this title and regular reductions thereafter) which are sufficient in the judgment of the Administrator, to provide for attainment of the applicable national ambient air quality standard by the date required in section 7502(a) of this title.

"(2) The term 'nonattainment area' means, for any air pollutant an area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the Administrator to be reliable) to exceed any national ambient air quality standard for such pollutant. Such term includes any area identified under subparagraphs (A) through (C) of section 7407(d)(1) of this title."

EFFECTIVE DATE

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

**§ 7502. Nonattainment plan provisions in general**

**(a) Classifications and attainment dates**

**(1) Classifications**

(A) On or after the date the Administrator promulgates the designation of an area as a nonattainment area pursuant to section 7407(d) of this title with respect to any national ambient air quality standard (or any revised standard, including a revision of any standard in effect on November 15, 1990), the Administrator may classify the area for the purpose of applying an attainment date pursuant to paragraph (2), and for other purposes. In determining the appropriate classification, if any, for a nonattainment area, the Administrator may consider such factors as the severity of nonattainment in such area and the availability and feasibility of the pollution control measures that the Administrator believes may be necessary to provide for attainment of such standard in such area.

(B) The Administrator shall publish a notice in the Federal Register announcing each classification under subparagraph (A), except the Administrator shall provide an opportunity for at least 30 days for written comment. Such classification shall not be subject to the provisions of sections 553 through 557 of title 5 (con-

cerning notice and comment) and shall not be subject to judicial review until the Administrator takes final action under subsection (k) or (l) of section 7410 of this title (concerning action on plan submissions) or section 7509 of this title (concerning sanctions) with respect to any plan submissions required by virtue of such classification.

(C) This paragraph shall not apply with respect to nonattainment areas for which classifications are specifically provided under other provisions of this part.

**(2) Attainment dates for nonattainment areas**

(A) The attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment under section 7407(d) of this title, except that the Administrator may extend the attainment date to the extent the Administrator determines appropriate, for a period no greater than 10 years from the date of designation as nonattainment, considering the severity of nonattainment and the availability and feasibility of pollution control measures.

(B) The attainment date for an area designated nonattainment with respect to a secondary national ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable after the date such area was designated nonattainment under section 7407(d) of this title.

(C) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the "Extension Year") the attainment date determined by the Administrator under subparagraph (A) or (B) if—

(i) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(ii) in accordance with guidance published by the Administrator, no more than a minimal number of exceedances of the relevant national ambient air quality standard has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this subparagraph for a single nonattainment area.

(D) This paragraph shall not apply with respect to nonattainment areas for which attainment dates are specifically provided under other provisions of this part.

**(b) Schedule for plan submissions**

At the time the Administrator promulgates the designation of an area as nonattainment with respect to a national ambient air quality standard under section 7407(d) of this title, the Administrator shall establish a schedule according to which the State containing such area shall submit a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 7410(a)(2) of this title. Such schedule shall at a minimum, in-

clude a date or dates, extending no later than 3 years from the date of the nonattainment designation, for the submission of a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 7410(a)(2) of this title.

**(c) Nonattainment plan provisions**

The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:

**(1) In general**

Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.

**(2) RFP**

Such plan provisions shall require reasonable further progress.

**(3) Inventory**

Such plan provisions shall include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area, including such periodic revisions as the Administrator may determine necessary to assure that the requirements of this part are met.

**(4) Identification and quantification**

Such plan provisions shall expressly identify and quantify the emissions, if any, of any such pollutant or pollutants which will be allowed, in accordance with section 7503(a)(1)(B) of this title, from the construction and operation of major new or modified stationary sources in each such area. The plan shall demonstrate to the satisfaction of the Administrator that the emissions quantified for this purpose will be consistent with the achievement of reasonable further progress and will not interfere with attainment of the applicable national ambient air quality standard by the applicable attainment date.

**(5) Permits for new and modified major stationary sources**

Such plan provisions shall require permits for the construction and operation of new or modified major stationary sources anywhere in the nonattainment area, in accordance with section 7503 of this title.

**(6) Other measures**

Such plan provisions shall include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date specified in this part.

**(7) Compliance with section 7410(a)(2)**

Such plan provisions shall also meet the applicable provisions of section 7410(a)(2) of this title.

**(8) Equivalent techniques**

Upon application by any State, the Administrator may allow the use of equivalent modeling, emission inventory, and planning procedures, unless the Administrator determines that the proposed techniques are, in the aggregate, less effective than the methods specified by the Administrator.

**(9) Contingency measures**

Such plan shall provide for the implementation of specific measures to be undertaken if the area fails to make reasonable further progress, or to attain the national primary ambient air quality standard by the attainment date applicable under this part. Such measures shall be included in the plan revision as contingency measures to take effect in any such case without further action by the State or the Administrator.

**(d) Plan revisions required in response to finding of plan inadequacy**

Any plan revision for a nonattainment area which is required to be submitted in response to a finding by the Administrator pursuant to section 7410(k)(5) of this title (relating to calls for plan revisions) must correct the plan deficiency (or deficiencies) specified by the Administrator and meet all other applicable plan requirements of section 7410 of this title and this part. The Administrator may reasonably adjust the dates otherwise applicable under such requirements to such revision (except for attainment dates that have not yet elapsed), to the extent necessary to achieve a consistent application of such requirements. In order to facilitate submittal by the States of adequate and approvable plans consistent with the applicable requirements of this chapter, the Administrator shall, as appropriate and from time to time, issue written guidelines, interpretations, and information to the States which shall be available to the public, taking into consideration any such guidelines, interpretations, or information provided before November 15, 1990.

**(e) Future modification of standard**

If the Administrator relaxes a national primary ambient air quality standard after November 15, 1990, the Administrator shall, within 12 months after the relaxation, promulgate requirements applicable to all areas which have not attained that standard as of the date of such relaxation. Such requirements shall provide for controls which are not less stringent than the controls applicable to areas designated nonattainment before such relaxation.

(July 14, 1955, ch. 360, title I, § 172, as added Pub. L. 95-95, title I, § 129(b), Aug. 7, 1977, 91 Stat. 746; amended Pub. L. 95-190, § 14(a)(55), (56), Nov. 16, 1977, 91 Stat. 1402; Pub. L. 101-549, title I, § 102(b), Nov. 15, 1990, 104 Stat. 2412.)

## AMENDMENTS

1990—Pub. L. 101-549 amended section generally, substituting present provisions for provisions which related to: in subsec. (a), expeditious attainment of national ambient air quality standards; in subsec. (b), requisite provisions of plan; and in subsec. (c), attainment of applicable standard not later than July 1, 1987.

1977—Subsec. (b)(4). Pub. L. 95-190, § 14(a)(55), substituted “subsection (a)” for “paragraph (1)”.

Subsec. (c). Pub. L. 95-190, § 14(a)(56), substituted “December 31” for “July 1”.

## NONATTAINMENT AREAS

Pub. L. 95-95, title I, § 129(a), Aug. 7, 1977, 91 Stat. 745, as amended by Pub. L. 95-190, § 14(b)(2), (3), Nov. 16, 1977, 91 Stat. 1404, provided that:

“(1) Before July 1, 1979, the interpretative regulation of the Administrator of the Environmental Protection Agency published in 41 Federal Register 55524-30, December 21, 1976, as may be modified by rule of the Administrator, shall apply except that the baseline to be used for determination of appropriate emission offsets under such regulation shall be the applicable implementation plan of the State in effect at the time of application for a permit by a proposed major stationary source (within the meaning of section 302 of the Clean Air Act) [section 7602 of this title].

“(2) Before July 1, 1979, the requirements of the regulation referred to in paragraph (1) shall be waived by the Administrator with respect to any pollutant if he determines that the State has—

“(A) an inventory of emissions of the applicable pollutant for each nonattainment area (as defined in section 171 of the Clean Air Act [section 7501 of this title]) that identifies the type, quantity, and source of such pollutant so as to provide information sufficient to demonstrate that the requirements of subparagraph (C) are being met;

“(B) an enforceable permit program which—

“(i) requires new or modified major stationary sources to meet emission limitations at least as stringent as required under the permit requirements referred to in paragraphs (2) and (3) of section 173 of the Clean Air Act [section 7503 of this title] (relating to lowest achievable emission rate and compliance by other sources) and which assures compliance with the annual reduction requirements of subparagraph (C); and

“(ii) requires existing sources to achieve such reduction in emissions in the area as may be obtained through the adoption, at a minimum of reasonably available control technology, and

“(C) a program which requires reductions in total allowable emissions in the area prior to July 1, 1979, so as to provide for the same level of emission reduction as would result from the application of the regulation referred to in paragraph (1).

The Administrator shall terminate such waiver if in his judgment the reduction in emissions actually being attained is less than the reduction on which the waiver was conditioned pursuant to subparagraph (C), or if the Administrator determines that the State is no longer in compliance with any requirement of this paragraph. Upon application by the State, the Administrator may reinstate a waiver terminated under the preceding sentence if he is satisfied that such State is in compliance with all requirements of this subsection.

“(3) Operating permits may be issued to those applicants who were properly granted construction permits, in accordance with the law and applicable regulations in effect at the time granted, for construction of a new or modified source in areas exceeding national primary air quality standards on or before the date of the enactment of this Act [Aug. 7, 1977] if such construction permits were granted prior to the date of the enactment of this Act and the person issued any such permit is able to demonstrate that the emissions from the source will be within the limitations set forth in such construction permit.”

## STATE IMPLEMENTATION PLAN REVISION

Pub. L. 95-95, title I, § 129(c), Aug. 7, 1977, 91 Stat. 750, as amended by Pub. L. 95-190, § 14(b)(4), Nov. 16, 1977, 91 Stat. 1405, provided that: “Notwithstanding the requirements of section 406(d)(2) [set out as an Effective Date of 1977 Amendment note under section 7401 of this title] (relating to date required for submission of certain implementation plan revisions), for purposes of

section 110(a)(2) of the Clean Air Act [section 7410(a)(2) of this title] each State in which there is any non-attainment area (as defined in part D of title I of the Clean Air Act) [this part] shall adopt and submit an implementation plan revision which meets the requirements of section 110(a)(2)(I) [section 7410(a)(2)(I) of this title] and part D of title I of the Clean Air Act [this part] not later than January 1, 1979. In the case of any State for which a plan revision adopted and submitted before such date has made the demonstration required under section 172(a)(2) of the Clean Air Act [subsec. (a)(2) of this section] (respecting impossibility of attainment before 1983), such State shall adopt and submit to the Administrator a plan revision before July 1, 1982, which meets the requirements of section 172(b) and (c) of such Act [subsecs. (b) and (c) of this section].”

### § 7503. Permit requirements

#### (a) In general

The permit program required by section 7502(b)(6)<sup>1</sup> of this title shall provide that permits to construct and operate may be issued if—

(1) in accordance with regulations issued by the Administrator for the determination of baseline emissions in a manner consistent with the assumptions underlying the applicable implementation plan approved under section 7410 of this title and this part, the permitting agency determines that—

(A) by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained, such that total allowable emissions from existing sources in the region, from new or modified sources which are not major emitting facilities, and from the proposed source will be sufficiently less than total emissions from existing sources (as determined in accordance with the regulations under this paragraph) prior to the application for such permit to construct or modify so as to represent (when considered together with the plan provisions required under section 7502 of this title) reasonable further progress (as defined in section 7501 of this title); or

(B) in the case of a new or modified major stationary source which is located in a zone (within the nonattainment area) identified by the Administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted, that emissions of such pollutant resulting from the proposed new or modified major stationary source will not cause or contribute to emissions levels which exceed the allowance permitted for such pollutant for such area from new or modified major stationary sources under section 7502(c) of this title;

(2) the proposed source is required to comply with the lowest achievable emission rate;

(3) the owner or operator of the proposed new or modified source has demonstrated that all major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in such State are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applica-

ble emission limitations and standards under this chapter; and<sup>2</sup>

(4) the Administrator has not determined that the applicable implementation plan is not being adequately implemented for the non-attainment area in which the proposed source is to be constructed or modified in accordance with the requirements of this part; and

(5) an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Any emission reductions required as a precondition of the issuance of a permit under paragraph (1) shall be federally enforceable before such permit may be issued.

#### (b) Prohibition on use of old growth allowances

Any growth allowance included in an applicable implementation plan to meet the requirements of section 7502(b)(5) of this title (as in effect immediately before November 15, 1990) shall not be valid for use in any area that received or receives a notice under section 7410(a)(2)(H)(ii) of this title (as in effect immediately before November 15, 1990) or under section 7410(k)(1) of this title that its applicable implementation plan containing such allowance is substantially inadequate.

#### (c) Offsets

(1) The owner or operator of a new or modified major stationary source may comply with any offset requirement in effect under this part for increased emissions of any air pollutant only by obtaining emission reductions of such air pollutant from the same source or other sources in the same nonattainment area, except that the State may allow the owner or operator of a source to obtain such emission reductions in another non-attainment area if (A) the other area has an equal or higher nonattainment classification than the area in which the source is located and (B) emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located. Such emission reductions shall be, by the time a new or modified source commences operation, in effect and enforceable and shall assure that the total tonnage of increased emissions of the air pollutant from the new or modified source shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources in the area.

(2) Emission reductions otherwise required by this chapter shall not be creditable as emissions reductions for purposes of any such offset requirement. Incidental emission reductions which are not otherwise required by this chapter shall be creditable as emission reductions for such purposes if such emission reductions meet the requirements of paragraph (1).

#### (d) Control technology information

The State shall provide that control technology information from permits issued under

<sup>1</sup> See References in Text note below.

<sup>2</sup> So in original. The word “and” probably should not appear.

**§ 7504. Planning procedures****(a) In general**

For any ozone, carbon monoxide, or PM-10 nonattainment area, the State containing such area and elected officials of affected local governments shall, before the date required for submittal of the inventory described under sections 7511a(a)(1) and 7512a(a)(1) of this title, jointly review and update as necessary the planning procedures adopted pursuant to this subsection as in effect immediately before November 15, 1990, or develop new planning procedures pursuant to this subsection, as appropriate. In preparing such procedures the State and local elected officials shall determine which elements of a revised implementation plan will be developed, adopted, and implemented (through means including enforcement) by the State and which by local governments or regional agencies, or any combination of local governments, regional agencies, or the State. The implementation plan required by this part shall be prepared by an organization certified by the State, in consultation with elected officials of local governments and in accordance with the determination under the second sentence of this subsection. Such organization shall include elected officials of local governments in the affected area, and representatives of the State air quality planning agency, the State transportation planning agency, the metropolitan planning organization designated to conduct the continuing, cooperative and comprehensive transportation planning process for the area under section 134 of title 23, the organization responsible for the air quality maintenance planning process under regulations implementing this chapter, and any other organization with responsibilities for developing, submitting, or implementing the plan required by this part. Such organization may be one that carried out these functions before November 15, 1990.

**(b) Coordination**

The preparation of implementation plan provisions and subsequent plan revisions under the continuing transportation-air quality planning process described in section 7408(e) of this title shall be coordinated with the continuing, cooperative and comprehensive transportation planning process required under section 134 of title 23, and such planning processes shall take into account the requirements of this part.

**(c) Joint planning**

In the case of a nonattainment area that is included within more than one State, the affected States may jointly, through interstate compact or otherwise, undertake and implement all or part of the planning procedures described in this section.

(July 14, 1955, ch. 360, title I, §174, as added Pub. L. 95-95, title I, §129(b), Aug. 7, 1977, 91 Stat. 748; amended Pub. L. 101-549, title I, §102(d), Nov. 15, 1990, 104 Stat. 2417.)

## AMENDMENTS

1990—Pub. L. 101-549 amended section generally, substituting present provisions for provisions which related to: in subsec. (a), preparation of implementation plan by designated organization; and in subsec. (b), coordination of plan preparation.

**§ 7505. Environmental Protection Agency grants****(a) Plan revision development costs**

The Administrator shall make grants to any organization of local elected officials with transportation or air quality maintenance planning responsibilities recognized by the State under section 7504(a) of this title for payment of the reasonable costs of developing a plan revision under this part.

**(b) Uses of grant funds**

The amount granted to any organization under subsection (a) shall be 100 percent of any additional costs of developing a plan revision under this part for the first two fiscal years following receipt of the grant under this paragraph, and shall supplement any funds available under Federal law to such organization for transportation or air quality maintenance planning. Grants under this section shall not be used for construction.

(July 14, 1955, ch. 360, title I, §175, as added Pub. L. 95-95, title I, §129(b), Aug. 7, 1977, 91 Stat. 749.)

**§ 7505a. Maintenance plans****(a) Plan revision**

Each State which submits a request under section 7407(d) of this title for redesignation of a nonattainment area for any air pollutant as an area which has attained the national primary ambient air quality standard for that air pollutant shall also submit a revision of the applicable State implementation plan to provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation. The plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance.

**(b) Subsequent plan revisions**

8 years after redesignation of any area as an attainment area under section 7407(d) of this title, the State shall submit to the Administrator an additional revision of the applicable State implementation plan for maintaining the national primary ambient air quality standard for 10 years after the expiration of the 10-year period referred to in subsection (a).

**(c) Nonattainment requirements applicable pending plan approval**

Until such plan revision is approved and an area is redesignated as attainment for any area designated as a nonattainment area, the requirements of this part shall continue in force and effect with respect to such area.

**(d) Contingency provisions**

Each plan revision submitted under this section shall contain such contingency provisions as the Administrator deems necessary to assure that the State will promptly correct any violation of the standard which occurs after the redesignation of the area as an attainment area. Such provisions shall include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation

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.

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)<sup>1</sup> 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,<sup>2</sup> 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 7505a<sup>1</sup> of this title (including any pre-existing national ambient air

<sup>1</sup> See References in Text note below.

<sup>2</sup> 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. Notwithstanding<sup>3</sup> 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-

<sup>3</sup> 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—

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;

(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".

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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 the<sup>1</sup> 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)<sup>2</sup> of this title.

<sup>1</sup> So in original. Probably should be "this".

<sup>2</sup> So in original. Section 7512(b) of this title does not contain a par. (9).

2018, 132 Stat. 4264. See Transitional and Savings Provisions note preceding section 101 of Title 46, Shipping, and section 70011 of Title 46.

#### AMENDMENTS

1998—Subsec. (h). Pub. L. 105–286 added subsec. (h).

#### EFFECTIVE DATE OF 1998 AMENDMENT; PUBLICATION OF PROHIBITION

Pub. L. 105–286, § 3, Oct. 27, 1998, 112 Stat. 2774, provided that:

“(a) IN GENERAL.—The amendment made by section 2 [amending this section] takes effect 180 days after the date of the enactment of this Act [Oct. 27, 1998]. Nothing in that amendment shall require action that is inconsistent with the obligations of the United States under any international agreement.

“(b) INFORMATION.—As soon as practicable after the date of the enactment of this Act, the appropriate agency of the United States shall distribute information to publicize the prohibition set forth in the amendment made by section 2.”

#### TRANSFER OF FUNCTIONS

For transfer of authorities, functions, personnel, and assets of the Coast Guard, including the authorities and functions of the Secretary of Transportation relating thereto, to the Department of Homeland Security, and for treatment of related references, see sections 468(b), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

### § 7511c. Control of interstate ozone air pollution

#### (a) Ozone transport regions

A single transport region for ozone (within the meaning of section 7506a(a) of this title), comprised of the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the Consolidated Metropolitan Statistical Area that includes the District of Columbia, is hereby established by operation of law. The provisions of section 7506a(a)(1) and (2) of this title shall apply with respect to the transport region established under this section and any other transport region established for ozone, except to the extent inconsistent with the provisions of this section. The Administrator shall convene the commission required (under section 7506a(b) of this title) as a result of the establishment of such region within 6 months of November 15, 1990.

#### (b) Plan provisions for States in ozone transport regions

(1) In accordance with section 7410 of this title, not later than 2 years after November 15, 1990 (or 9 months after the subsequent inclusion of a State in a transport region established for ozone), each State included within a transport region established for ozone shall submit a State implementation plan or revision thereof to the Administrator which requires the following—

(A) that each area in such State that is in an ozone transport region, and that is a metropolitan statistical area or part thereof with a population of 100,000 or more comply with the provisions of section 7511a(c)(2)(A) of this title (pertaining to enhanced vehicle inspection and maintenance programs); and

(B) implementation of reasonably available control technology with respect to all sources

of volatile organic compounds in the State covered by a control techniques guideline issued before or after November 15, 1990.

(2) Within 3 years after November 15, 1990, the Administrator shall complete a study identifying control measures capable of achieving emission reductions comparable to those achievable through vehicle refueling controls contained in section 7511a(b)(3) of this title, and such measures or such vehicle refueling controls shall be implemented in accordance with the provisions of this section. Notwithstanding other deadlines in this section, the applicable implementation plan shall be revised to reflect such measures within 1 year of completion of the study. For purposes of this section any stationary source that emits or has the potential to emit at least 50 tons per year of volatile organic compounds shall be considered a major stationary source and subject to the requirements which would be applicable to major stationary sources if the area were classified as a Moderate nonattainment area.

#### (c) Additional control measures

##### (1) Recommendations

Upon petition of any State within a transport region established for ozone, and based on a majority vote of the Governors on the Commission<sup>1</sup> (or their designees), the Commission<sup>1</sup> may, after notice and opportunity for public comment, develop recommendations for additional control measures to be applied within all or a part of such transport region if the commission determines such measures are necessary to bring any area in such region into attainment by the dates provided by this subpart. The commission shall transmit such recommendations to the Administrator.

##### (2) Notice and review

Whenever the Administrator receives recommendations prepared by a commission pursuant to paragraph (1) (the date of receipt of which shall hereinafter in this section be referred to as the “receipt date”), the Administrator shall—

(A) immediately publish in the Federal Register a notice stating that the recommendations are available and provide an opportunity for public hearing within 90 days beginning on the receipt date; and

(B) commence a review of the recommendations to determine whether the control measures in the recommendations are necessary to bring any area in such region into attainment by the dates provided by this subpart and are otherwise consistent with this chapter.

##### (3) Consultation

In undertaking the review required under paragraph (2)(B), the Administrator shall consult with members of the commission of the affected States and shall take into account the data, views, and comments received pursuant to paragraph (2)(A).

##### (4) Approval and disapproval

Within 9 months after the receipt date, the Administrator shall (A) determine whether to

<sup>1</sup> So in original. Probably should not be capitalized.



approve, disapprove, or partially disapprove and partially approve the recommendations; (B) notify the commission in writing of such approval, disapproval, or partial disapproval; and (C) publish such determination in the Federal Register. If the Administrator disapproves or partially disapproves the recommendations, the Administrator shall specify—

(i) why any disapproved additional control measures are not necessary to bring any area in such region into attainment by the dates provided by this subpart or are otherwise not consistent with the<sup>2</sup> chapter; and

(ii) recommendations concerning equal or more effective actions that could be taken by the commission to conform the disapproved portion of the recommendations to the requirements of this section.

**(5) Finding**

Upon approval or partial approval of recommendations submitted by a commission, the Administrator shall issue to each State which is included in the transport region and to which a requirement of the approved plan applies, a finding under section 7410(k)(5) of this title that the implementation plan for such State is inadequate to meet the requirements of section 7410(a)(2)(D) of this title. Such finding shall require each such State to revise its implementation plan to include the approved additional control measures within one year after the finding is issued.

**(d) Best available air quality monitoring and modeling**

For purposes of this section, not later than 6 months after November 15, 1990, the Administrator shall promulgate criteria for purposes of determining the contribution of sources in one area to concentrations of ozone in another area which is a nonattainment area for ozone. Such criteria shall require that the best available air quality monitoring and modeling techniques be used for purposes of making such determinations.

(July 14, 1955, ch. 360, title I, §184, as added Pub. L. 101-549, title I, §103, Nov. 15, 1990, 104 Stat. 2448.)

**§ 7511d. Enforcement for Severe and Extreme ozone nonattainment areas for failure to attain**

**(a) General rule**

Each implementation plan revision required under section 7511a(d) and (e) of this title (relating to the attainment plan for Severe and Extreme ozone nonattainment areas) shall provide that, if the area to which such plan revision applies has failed to attain the national primary ambient air quality standard for ozone by the applicable attainment date, each major stationary source of VOCs located in the area shall, except as otherwise provided under subsection (c), pay a fee to the State as a penalty for such failure, computed in accordance with subsection (b), for each calendar year beginning after the attainment date, until the area is redesignated as

<sup>2</sup> So in original. Probably should be "this".

an attainment area for ozone. Each such plan revision should include procedures for assessment and collection of such fees.

**(b) Computation of fee**

**(1) Fee amount**

The fee shall equal \$5,000, adjusted in accordance with paragraph (3), per ton of VOC emitted by the source during the calendar year in excess of 80 percent of the baseline amount, computed under paragraph (2).

**(2) Baseline amount**

For purposes of this section, the baseline amount shall be computed, in accordance with such guidance as the Administrator may provide, as the lower of the amount of actual VOC emissions ("actuals") or VOC emissions allowed under the permit applicable to the source (or, if no such permit has been issued for the attainment year, the amount of VOC emissions allowed under the applicable implementation plan ("allowables")) during the attainment year. Notwithstanding the preceding sentence, the Administrator may issue guidance authorizing the baseline amount to be determined in accordance with the lower of average actuals or average allowables, determined over a period of more than one calendar year. Such guidance may provide that such average calculation for a specific source may be used if that source's emissions are irregular, cyclical, or otherwise vary significantly from year to year.

**(3) Annual adjustment**

The fee amount under paragraph (1) shall be adjusted annually, beginning in the year beginning after 1990, in accordance with section 7661a(b)(3)(B)(v) of this title (relating to inflation adjustment).

**(c) Exception**

Notwithstanding any provision of this section, no source shall be required to pay any fee under subsection (a) with respect to emissions during any year that is treated as an Extension Year under section 7511(a)(5) of this title.

**(d) Fee collection by Administrator**

If the Administrator has found that the fee provisions of the implementation plan do not meet the requirements of this section, or if the Administrator makes a finding that the State is not administering and enforcing the fee required under this section, the Administrator shall, in addition to any other action authorized under this subchapter, collect, in accordance with procedures promulgated by the Administrator, the unpaid fees required under subsection (a). If the Administrator makes such a finding under section 7509(a)(4) of this title, the Administrator may collect fees for periods before the determination, plus interest computed in accordance with section 6621(a)(2) of title 26 (relating to computation of interest on underpayment of Federal taxes), to the extent the Administrator finds such fees have not been paid to the State. The provisions of clauses (ii) through (iii) of section 7661a(b)(3)(C) of this title (relating to penalties and use of the funds, respectively) shall apply with respect to fees collected under this subsection.

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<sub>x</sub>) 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)<sup>1</sup> 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

<sup>1</sup> 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),<sup>1</sup> 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)<sup>2</sup> 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 subparagraph<sup>3</sup> granted to any manufacturer shall apply to more than 5 percent of such manufacturer’s production or

<sup>2</sup> So in original. Probably should be “(4)”.

<sup>3</sup> 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) <sup>4</sup> 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.

<sup>4</sup> 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<sub>x</sub>**

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<sub>x</sub>) 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<sub>x</sub> 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 <sub>x</sub>	NMHC	CO	NO <sub>x</sub>
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<sub>x</sub>, the applicable standards for NO<sub>x</sub> 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<sub>x</sub>), 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 <sub>x</sub>	NMHC	CO	NO <sub>x</sub>	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 <sub>x</sub> .....	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<sub>x</sub>), 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) <sup>5</sup> 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).

<sup>5</sup> 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



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

(B) the manufacturer of any additive to notify him as to the chemical composition of such additive.

(2) For the purpose of registration of fuels and fuel additives, the Administrator shall, on a regular basis, require the manufacturer of any fuel or fuel additive—

(A) to conduct tests to determine potential public health and environmental effects of the fuel or additive (including carcinogenic, teratogenic, or mutagenic effects); and

(B) to furnish the description of any analytical technique that can be used to detect and measure any additive in such fuel, the recommended range of concentration of such additive, and the recommended purpose-in-use of such additive, and such other information as is reasonable and necessary to determine the emissions resulting from the use of the fuel or additive contained in such fuel, the effect of such fuel or additive on the emission control performance of any vehicle, vehicle engine, nonroad engine or nonroad vehicle, or the extent to which such emissions affect the public health or welfare.

Tests under subparagraph (A) shall be conducted in conformity with test procedures and protocols established by the Administrator. The result of such tests shall not be considered confidential.

(3) Upon compliance with the provision of this subsection, including assurances that the Administrator will receive changes in the information required, the Administrator shall register such fuel or fuel additive.

(4) STUDY ON CERTAIN FUEL ADDITIVES AND BLENDSTOCKS.—

(A) IN GENERAL.—Not later than 2 years after August 8, 2005, the Administrator shall—

(i) conduct a study on the effects on public health (including the effects on children, pregnant women, minority or low-income communities, and other sensitive populations), air quality, and water resources of increased use of, and the feasibility of using as substitutes for methyl tertiary butyl ether in gasoline—

- (I) ethyl tertiary butyl ether;
- (II) tertiary amyl methyl ether;
- (III) di-isopropyl ether;
- (IV) tertiary butyl alcohol;
- (V) other ethers and heavy alcohols, as determined by then<sup>1</sup> Administrator;
- (VI) ethanol;
- (VII) iso-octane; and
- (VIII) alkylates; and

(ii) conduct a study on the effects on public health (including the effects on children, pregnant women, minority or low-income communities, and other sensitive populations), air quality, and water resources of the adjustment for ethanol-blended reformulated gasoline to the volatile organic compounds performance requirements that are applicable under paragraphs (1) and (3) of subsection (k); and

(iii) submit to the Committee on Environment and Public Works of the Senate and

the Committee on Energy and Commerce of the House of Representatives a report describing the results of the studies under clauses (i) and (ii).

(B) CONTRACTS FOR STUDY.—In carrying out this paragraph, the Administrator may enter into one or more contracts with nongovernmental entities such as—

- (i) the national energy laboratories; and
- (ii) institutions of higher education (as defined in section 1001 of title 20).

**(c) Offending fuels and fuel additives; control; prohibition**

(1) The Administrator may, from time to time on the basis of information obtained under subsection (b) of this section or other information available to him, by regulation, control or prohibit the manufacture, introduction into commerce, offering for sale, or sale of any fuel or fuel additive for use in a motor vehicle, motor vehicle engine, or nonroad engine or nonroad vehicle if, in the judgment of the Administrator, any fuel or fuel additive or any emission product of such fuel or fuel additive causes, or contributes, to air pollution or water pollution (including any degradation in the quality of groundwater) that may reasonably be anticipated to endanger the public health or welfare, or (B)<sup>2</sup> if emission products of such fuel or fuel additive will impair to a significant degree the performance of any emission control device or system which is in general use, or which the Administrator finds has been developed to a point where in a reasonable time it would be in general use were such regulation to be promulgated.

(2)(A) No fuel, class of fuels, or fuel additive may be controlled or prohibited by the Administrator pursuant to clause (A) of paragraph (1) except after consideration of all relevant medical and scientific evidence available to him, including consideration of other technologically or economically feasible means of achieving emission standards under section 7521 of this title.

(B) No fuel or fuel additive may be controlled or prohibited by the Administrator pursuant to clause (B) of paragraph (1) except after consideration of available scientific and economic data, including a cost benefit analysis comparing emission control devices or systems which are or will be in general use and require the proposed control or prohibition with emission control devices or systems which are or will be in general use and do not require the proposed control or prohibition. On request of a manufacturer of motor vehicles, motor vehicle engines, fuels, or fuel additives submitted within 10 days of notice of proposed rulemaking, the Administrator shall hold a public hearing and publish findings with respect to any matter he is required to consider under this subparagraph. Such findings shall be published at the time of promulgation of final regulations.

(C) No fuel or fuel additive may be prohibited by the Administrator under paragraph (1) unless he finds, and publishes such finding, that in his judgment such prohibition will not cause the use of any other fuel or fuel additive which will produce emissions which will endanger the pub-

<sup>1</sup> So in original. Probably should be "the".

<sup>2</sup> So in original. Par. (1) does not contain a cl. (A).

lic health or welfare to the same or greater degree than the use of the fuel or fuel additive proposed to be prohibited.

(3)(A) For the purpose of obtaining evidence and data to carry out paragraph (2), the Administrator may require the manufacturer of any motor vehicle or motor vehicle engine to furnish any information which has been developed concerning the emissions from motor vehicles resulting from the use of any fuel or fuel additive, or the effect of such use on the performance of any emission control device or system.

(B) In obtaining information under subparagraph (A), section 7607(a) of this title (relating to subpoenas) shall be applicable.

(4)(A) Except as otherwise provided in subparagraph (B) or (C), no State (or political subdivision thereof) may prescribe or attempt to enforce, for purposes of motor vehicle emission control, any control or prohibition respecting any characteristic or component of a fuel or fuel additive in a motor vehicle or motor vehicle engine—

(i) if the Administrator has found that no control or prohibition of the characteristic or component of a fuel or fuel additive under paragraph (1) is necessary and has published his finding in the Federal Register, or

(ii) if the Administrator has prescribed under paragraph (1) a control or prohibition applicable to such characteristic or component of a fuel or fuel additive, unless State prohibition or control is identical to the prohibition or control prescribed by the Administrator.

(B) Any State for which application of section 7543(a) of this title has at any time been waived under section 7543(b) of this title may at any time prescribe and enforce, for the purpose of motor vehicle emission control, a control or prohibition respecting any fuel or fuel additive.

(C)(i) A State may prescribe and enforce, for purposes of motor vehicle emission control, a control or prohibition respecting the use of a fuel or fuel additive in a motor vehicle or motor vehicle engine if an applicable implementation plan for such State under section 7410 of this title so provides. The Administrator may approve such provision in an implementation plan, or promulgate an implementation plan containing such a provision, only if he finds that the State control or prohibition is necessary to achieve the national primary or secondary ambient air quality standard which the plan implements. The Administrator may find that a State control or prohibition is necessary to achieve that standard if no other measures that would bring about timely attainment exist, or if other measures exist and are technically possible to implement, but are unreasonable or impracticable. The Administrator may make a finding of necessity under this subparagraph even if the plan for the area does not contain an approved demonstration of timely attainment.

(ii) The Administrator may temporarily waive a control or prohibition respecting the use of a fuel or fuel additive required or regulated by the Administrator pursuant to subsection (c), (h), (i), (k), or (m) of this section or prescribed in an applicable implementation plan under section 7410 of this title approved by the Administrator

under clause (i) of this subparagraph if, after consultation with, and concurrence by, the Secretary of Energy, the Administrator determines that—

(I) extreme and unusual fuel or fuel additive supply circumstances exist in a State or region of the Nation which prevent the distribution of an adequate supply of the fuel or fuel additive to consumers;

(II) such extreme and unusual fuel and fuel additive supply circumstances are the result of a natural disaster, an Act of God, a pipeline or refinery equipment failure, or another event that could not reasonably have been foreseen or prevented and not the lack of prudent planning on the part of the suppliers of the fuel or fuel additive to such State or region; and

(III) it is in the public interest to grant the waiver (for example, when a waiver is necessary to meet projected temporary shortfalls in the supply of the fuel or fuel additive in a State or region of the Nation which cannot otherwise be compensated for).

(iii) If the Administrator makes the determinations required under clause (ii), such a temporary extreme and unusual fuel and fuel additive supply circumstances waiver shall be permitted only if—

(I) the waiver applies to the smallest geographic area necessary to address the extreme and unusual fuel and fuel additive supply circumstances;

(II) the waiver is effective for a period of 20 calendar days or, if the Administrator determines that a shorter waiver period is adequate, for the shortest practicable time period necessary to permit the correction of the extreme and unusual fuel and fuel additive supply circumstances and to mitigate impact on air quality;

(III) the waiver permits a transitional period, the exact duration of which shall be determined by the Administrator (but which shall be for the shortest practicable period), after the termination of the temporary waiver to permit wholesalers and retailers to blend down their wholesale and retail inventory;

(IV) the waiver applies to all persons in the motor fuel distribution system; and

(V) the Administrator has given public notice to all parties in the motor fuel distribution system, and local and State regulators, in the State or region to be covered by the waiver.

The term “motor fuel distribution system” as used in this clause shall be defined by the Administrator through rulemaking.

(iv) Within 180 days of August 8, 2005, the Administrator shall promulgate regulations to implement clauses (ii) and (iii).

(v)<sup>3</sup> Nothing in this subparagraph shall—

(I) limit or otherwise affect the application of any other waiver authority of the Administrator pursuant to this section or pursuant to a regulation promulgated pursuant to this section; and

(II) subject any State or person to an enforcement action, penalties, or liability solely

<sup>3</sup> So in original. Two cls. (v) have been enacted.

arising from actions taken pursuant to the issuance of a waiver under this subparagraph.

(v)(I)<sup>3</sup> The Administrator shall have no authority, when considering a State implementation plan or a State implementation plan revision, to approve under this paragraph any fuel included in such plan or revision if the effect of such approval increases the total number of fuels approved under this paragraph as of September 1, 2004, in all State implementation plans.

(II) The Administrator, in consultation with the Secretary of Energy, shall determine the total number of fuels approved under this paragraph as of September 1, 2004, in all State implementation plans and shall publish a list of such fuels, including the States and Petroleum Administration for Defense District in which they are used, in the Federal Register for public review and comment no later than 90 days after August 8, 2005.

(III) The Administrator shall remove a fuel from the list published under subclause (II) if a fuel ceases to be included in a State implementation plan or if a fuel in a State implementation plan is identical to a Federal fuel formulation implemented by the Administrator, but the Administrator shall not reduce the total number of fuels authorized under the list published under subclause (II).

(IV) Subclause (I) shall not limit the Administrator's authority to approve a control or prohibition respecting any new fuel under this paragraph in a State implementation plan or revision to a State implementation plan if such new fuel—

(aa) completely replaces a fuel on the list published under subclause (II); or

(bb) does not increase the total number of fuels on the list published under subclause (II) as of September 1, 2004.

In the event that the total number of fuels on the list published under subclause (II) at the time of the Administrator's consideration of a control or prohibition respecting a new fuel is lower than the total number of fuels on such list as of September 1, 2004, the Administrator may approve a control or prohibition respecting a new fuel under this subclause if the Administrator, after consultation with the Secretary of Energy, publishes in the Federal Register after notice and comment a finding that, in the Administrator's judgment, such control or prohibition respecting a new fuel will not cause fuel supply or distribution interruptions or have a significant adverse impact on fuel producibility in the affected area or contiguous areas.

(V) The Administrator shall have no authority under this paragraph, when considering any particular State's implementation plan or a revision to that State's implementation plan, to approve any fuel unless that fuel was, as of the date of such consideration, approved in at least one State implementation plan in the applicable Petroleum Administration for Defense District. However, the Administrator may approve as part of a State implementation plan or State implementation plan revision a fuel with a summertime Reid Vapor Pressure of 7.0 psi. In no event shall such approval by the Administrator

cause an increase in the total number of fuels on the list published under subclause (II).

(VI) Nothing in this clause shall be construed to have any effect regarding any available authority of States to require the use of any fuel additive registered in accordance with subsection (b), including any fuel additive registered in accordance with subsection (b) after August 8, 2005.

**(d) Penalties and injunctions**

**(1) Civil penalties**

Any person who violates subsection (a), (f), (g), (k), (l), (m), (n), or (o) of this section or the regulations prescribed under subsection (c), (h), (i), (k), (l), (m), (n), or (o) of this section or who fails to furnish any information or conduct any tests required by the Administrator under subsection (b) of this section shall be liable to the United States for a civil penalty of not more than the sum of \$25,000 for every day of such violation and the amount of economic benefit or savings resulting from the violation. Any violation with respect to a regulation prescribed under subsection (c), (k), (l), (m), or (o) of this section which establishes a regulatory standard based upon a multiday averaging period shall constitute a separate day of violation for each and every day in the averaging period. Civil penalties shall be assessed in accordance with subsections (b) and (c) of section 7524 of this title.

**(2) Injunctive authority**

The district courts of the United States shall have jurisdiction to restrain violations of subsections (a), (f), (g), (k), (l), (m), (n), and (o) of this section and of the regulations prescribed under subsections (c), (h), (i), (k), (l), (m), (n), and (o) of this section, to award other appropriate relief, and to compel the furnishing of information and the conduct of tests required by the Administrator under subsection (b) of this section. Actions to restrain such violations and compel such actions shall be brought by and in the name of the United States. In any such action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

**(e) Testing of fuels and fuel additives**

(1) Not later than one year after August 7, 1977, and after notice and opportunity for a public hearing, the Administrator shall promulgate regulations which implement the authority under subsection (b)(2)(A) and (B) with respect to each fuel or fuel additive which is registered on the date of promulgation of such regulations and with respect to each fuel or fuel additive for which an application for registration is filed thereafter.

(2) Regulations under subsection (b) to carry out this subsection shall require that the requisite information be provided to the Administrator by each such manufacturer—

(A) prior to registration, in the case of any fuel or fuel additive which is not registered on the date of promulgation of such regulations; or

(B) not later than three years after the date of promulgation of such regulations, in the

case of any fuel or fuel additive which is registered on such date.

(3) In promulgating such regulations, the Administrator may—

(A) exempt any small business (as defined in such regulations) from or defer or modify the requirements of, such regulations with respect to any such small business;

(B) provide for cost-sharing with respect to the testing of any fuel or fuel additive which is manufactured or processed by two or more persons or otherwise provide for shared responsibility to meet the requirements of this section without duplication; or

(C) exempt any person from such regulations with respect to a particular fuel or fuel additive upon a finding that any additional testing of such fuel or fuel additive would be duplicative of adequate existing testing.

**(f) New fuels and fuel additives**

(1)(A) Effective upon March 31, 1977, it shall be unlawful for any manufacturer of any fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for general use in light duty motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 7525 of this title.

(B) Effective upon November 15, 1990, it shall be unlawful for any manufacturer of any fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for use by any person in motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 7525 of this title.

(2) Effective November 30, 1977, it shall be unlawful for any manufacturer of any fuel to introduce into commerce any gasoline which contains a concentration of manganese in excess of .0625 grams per gallon of fuel, except as otherwise provided pursuant to a waiver under paragraph (4).

(3) Any manufacturer of any fuel or fuel additive which prior to March 31, 1977, and after January 1, 1974, first introduced into commerce or increased the concentration in use of a fuel or fuel additive that would otherwise have been prohibited under paragraph (1)(A) if introduced on or after March 31, 1977 shall, not later than September 15, 1978, cease to distribute such fuel or fuel additive in commerce. During the period beginning 180 days after August 7, 1977, and before September 15, 1978, the Administrator shall prohibit, or restrict the concentration of any fuel additive which he determines will cause or contribute to the failure of an emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emission standards with respect to which it has been certified under section 7525 of this title.

(4) The Administrator, upon application of any manufacturer of any fuel or fuel additive, may

waive the prohibitions established under paragraph (1) or (3) of this subsection or the limitation specified in paragraph (2) of this subsection, if he determines that the applicant has established that such fuel or fuel additive or a specified concentration thereof, and the emission products of such fuel or fuel additive or specified concentration thereof, will not cause or contribute to a failure of any emission control device or system (over the useful life of the motor vehicle, motor vehicle engine, nonroad engine or nonroad vehicle in which such device or system is used) to achieve compliance by the vehicle or engine with the emission standards with respect to which it has been certified pursuant to sections 7525 and 7547(a) of this title. The Administrator shall take final action to grant or deny an application submitted under this paragraph, after public notice and comment, within 270 days of the receipt of such an application.

(5) No action of the Administrator under this section may be stayed by any court pending judicial review of such action.

**(g) Misfueling**

(1) No person shall introduce, or cause or allow the introduction of, leaded gasoline into any motor vehicle which is labeled "unleaded gasoline only," which is equipped with a gasoline tank filler inlet designed for the introduction of unleaded gasoline, which is a 1990 or later model year motor vehicle, or which such person knows or should know is a vehicle designed solely for the use of unleaded gasoline.

(2) Beginning October 1, 1993, no person shall introduce or cause or allow the introduction into any motor vehicle of diesel fuel which such person knows or should know contains a concentration of sulfur in excess of 0.05 percent (by weight) or which fails to meet a cetane index minimum of 40 or such equivalent alternative aromatic level as prescribed by the Administrator under subsection (i)(2).

**(h) Reid Vapor Pressure requirements**

**(1) Prohibition**

Not later than 6 months after November 15, 1990, the Administrator shall promulgate regulations making it unlawful for any person during the high ozone season (as defined by the Administrator) to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure in excess of 9.0 pounds per square inch (psi). Such regulations shall also establish more stringent Reid Vapor Pressure standards in a nonattainment area as the Administrator finds necessary to generally achieve comparable evaporative emissions (on a per-vehicle basis) in nonattainment areas, taking into consideration the enforceability of such standards, the need of an area for emission control, and economic factors.

**(2) Attainment areas**

The regulations under this subsection shall not make it unlawful for any person to sell, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure of 9.0 pounds per square inch (psi) or lower in any area designated under section 7407 of this title as an attainment area. Not-

ards are established and administered by the State of California, the least stringent set of qualifying California standards shall apply to the clean-fuel vehicles concerned in lieu of the standards otherwise applicable to such vehicles under section 7582 of this title and this section.

**(f) Less stringent CARB standards**

If the Low-Emission Vehicle and Clean Fuels Regulations of the California Air Resources Board applicable to any category of vehicles referred to in subsection (a), (b), (c), or (d) of this section are modified after November 15, 1990, to provide an emissions standard which is less stringent than the otherwise applicable standard set forth in subsection (a), (b), (c), or (d), or if any effective date contained in such regulations is delayed, such modified standards or such delay (or both, as the case may be) shall apply, for an interim period, in lieu of the standard or effective date otherwise applicable under subsection (a), (b), (c), or (d) to any vehicles covered by such modified standard or delayed effective date. The interim period shall be a period of not more than 2 model years from the effective date otherwise applicable under subsection (a), (b), (c), or (d). After such interim period, the otherwise applicable standard set forth in subsection (a), (b), (c), or (d) shall take effect with respect to such vehicles (unless subsequently replaced under subsection (e)).

**(g) Not applicable to heavy-duty vehicles**

Notwithstanding any provision of the Low-Emission Vehicle and Clean Fuels Regulations of the California Air Resources Board nothing in this section shall apply to heavy-duty engines in vehicles of more than 8,500 lbs. GVWR.

(July 14, 1955, ch. 360, title II, § 243, as added Pub. L. 101-549, title II, § 229(a), Nov. 15, 1990, 104 Stat. 2514.)

**§ 7584. Administration and enforcement as per California standards**

Where the numerical clean-fuel vehicle standards applicable under this part to vehicles of not more than 8,500 lbs. GVWR are the same as numerical emission standards applicable in California under the Low-Emission Vehicle and Clean Fuels Regulations of the California Air Resources Board (“CARB”), such standards shall be administered and enforced by the Administrator—

(1) in the same manner and with the same flexibility as the State of California administers and enforces corresponding standards applicable under the Low-Emission Vehicle and Clean Fuels Regulations of the California Air Resources Board (“CARB”); and

(2) subject to the same requirements, and utilizing the same interpretations and policy judgments, as are applicable in the case of such CARB standards, including, but not limited to, requirements regarding certification, production-line testing, and in-use compliance,

unless the Administrator determines (in promulgating the rules establishing the clean fuel vehicle program under this section) that any such

administration and enforcement would not meet the criteria for a waiver under section 7543 of this title. Nothing in this section shall apply in the case of standards under section 7585 of this title for heavy-duty vehicles.

(July 14, 1955, ch. 360, title II, § 244, as added Pub. L. 101-549, title II, § 229(a), Nov. 15, 1990, 104 Stat. 2519.)

**§ 7585. Standards for heavy-duty clean-fuel vehicles (GVWR above 8,500 up to 26,000 lbs.)**

**(a) Model years after 1997; combined NO<sub>x</sub> and NMHC standard**

For classes or categories of heavy-duty vehicles or engines manufactured for the model year 1998 or thereafter and having a GVWR greater than 8,500 lbs. and up to 26,000 lbs. GVWR, the standards under this part for clean-fuel vehicles shall require that combined emissions of oxides of nitrogen (NO<sub>x</sub>) and nonmethane hydrocarbons (NMHC) shall not exceed 3.15 grams per brake horsepower hour (equivalent to 50 percent of the combined emission standards applicable under section 7521 of this title for such air pollutants in the case of a conventional model year 1994 heavy-duty diesel-fueled vehicle or engine). No standard shall be promulgated as provided in this section for any heavy-duty vehicle of more than 26,000 lbs. GVWR.

**(b) Revised standards that are less stringent**

(1) The Administrator may promulgate a revised less stringent standard for the vehicles or engines referred to in subsection (a) if the Administrator determines that the 50 percent reduction required under subsection (a) is not technologically feasible for clean diesel-fueled vehicles and engines, taking into account durability, costs, lead time, safety, and other relevant factors. To provide adequate lead time the Administrator shall make a determination with regard to the technological feasibility of such 50 percent reduction before December 31, 1993.

(2) Any person may at any time petition the Administrator to make a determination under paragraph (1). The Administrator shall act on such a petition within 6 months after the petition is filed.

(3) Any revised less stringent standards promulgated as provided in this subsection shall require at least a 30 percent reduction in lieu of the 50 percent reduction referred to in paragraph (1).

(July 14, 1955, ch. 360, title II, § 245, as added Pub. L. 101-549, title II, § 229(a), Nov. 15, 1990, 104 Stat. 2519.)

**§ 7586. Centrally fueled fleets**

**(a) Fleet program required for certain nonattainment areas**

**(1) SIP revision**

Each State in which there is located all or part of a covered area (as defined in paragraph (2)) shall submit, within 42 months after November 15, 1990, a State implementation plan revision under section 7410 of this title and part D of subchapter I to establish a clean-fuel vehicle program for fleets under this section.

**(2) Covered areas**

For purposes of this subsection, each of the following shall be a “covered area”:

**(A) Ozone nonattainment areas**

Any ozone nonattainment area with a 1980 population of 250,000 or more classified under subpart 2 of part D of subchapter I of this chapter as Serious, Severe, or Extreme based on data for the calendar years 1987, 1988, and 1989. In determining the ozone nonattainment areas to be treated as covered areas pursuant to this subparagraph, the Administrator shall use the most recent interpretation methodology issued by the Administrator prior to November 15, 1990.

**(B) Carbon monoxide nonattainment areas**

Any carbon monoxide nonattainment area with a 1980 population of 250,000 or more and a carbon monoxide design value at or above 16.0 parts per million based on data for calendar years 1988 and 1989 (as calculated according to the most recent interpretation methodology issued prior to November 15, 1990, by the United States Environmental Protection Agency), excluding those carbon monoxide nonattainment areas in which mobile sources do not contribute significantly to carbon monoxide exceedances.

**(3) Plan revisions for reclassified areas**

In the case of ozone nonattainment areas reclassified as Serious, Severe, or Extreme under part D of subchapter I with a 1980 population of 250,000 or more, the State shall submit a plan revision meeting the requirements of this subsection within 1 year after reclassification. Such plan revision shall implement the requirements applicable under this subsection at the time of reclassification and thereafter, except that the Administrator may adjust for a limited period the deadlines for compliance where compliance with such deadlines would be infeasible.

**(4) Consultation; consideration of factors**

Each State required to submit an implementation plan revision under this subsection shall develop such revision in consultation with fleet operators, vehicle manufacturers, fuel producers and distributors, motor vehicle fuel, and other interested parties, taking into consideration operational range, specialty uses, vehicle and fuel availability, costs, safety, resale values of vehicles and equipment and other relevant factors.

**(b) Phase-in of requirements**

The plan revision required under this section shall contain provisions requiring that at least a specified percentage of all new covered fleet vehicles in model year 1998 and thereafter purchased by each covered fleet operator in each covered area shall be clean-fuel vehicles and shall use clean alternative fuels when operating in the covered area. For the applicable model years (MY) specified in the following table and thereafter, the specified percentage shall be as provided in the table for the vehicle types set forth in the table:

CLEAN FUEL VEHICLE PHASE-IN REQUIREMENTS FOR FLEETS

Vehicle Type	MY1998	MY1999	MY2000
Light-duty trucks up to 6,000 lbs. GVWR and light-duty vehicles .....	30%	50%	70%
Heavy-duty trucks above 8,500 lbs. GVWR .....	50%	50%	50%

The term MY refers to model year.

**(c) Accelerated standard for light-duty trucks up to 6,000 lbs. GVWR and light-duty vehicles**

Notwithstanding the model years for which clean-fuel vehicle standards are applicable as provided in section 7583 of this title, for purposes of this section, light duty<sup>1</sup> trucks of up to 6,000 lbs. GVWR and light-duty vehicles manufactured in model years 1998 through model year 2000 shall be treated as clean-fuel vehicles only if such vehicles comply with the standards applicable under section 7583 of this title for vehicles in the same class for the model year 2001. The requirements of subsection (b) shall take effect on the earlier of the following:

- (1) The first model year after model year 1997 in which new light-duty trucks up to 6,000 lbs. GVWR and light-duty vehicles which comply with the model year 2001 standards under section 7583 of this title are offered for sale in California.
- (2) Model year 2001.

Whenever the effective date of subsection (b) is delayed pursuant to paragraph (1) of this subsection, the phase-in schedule under subsection (b) shall be modified to commence with the model year referred to in paragraph (1) in lieu of model year 1998.

**(d) Choice of vehicles and fuel**

The plan revision under this subsection shall provide that the choice of clean-fuel vehicles and clean alternative fuels shall be made by the covered fleet operator subject to the requirements of this subsection.

**(e) Availability of clean alternative fuel**

The plan revision shall require fuel providers to make clean alternative fuel available to covered fleet operators at locations at which covered fleet vehicles are centrally fueled.

**(f) Credits**

**(1) Issuance of credits**

The State plan revision required under this section shall provide for the issuance by the State of appropriate credits to a fleet operator for any of the following (or any combination thereof):

- (A) The purchase of more clean-fuel vehicles than required under this section.
- (B) The purchase of clean fuel<sup>2</sup> vehicles which meet more stringent standards established by the Administrator pursuant to paragraph (4).
- (C) The purchase of vehicles in categories which are not covered by this section but which meet standards established for such vehicles under paragraph (4).

<sup>1</sup> So in original. Probably should be “light-duty”.

<sup>2</sup> So in original. Probably should be “clean-fuel”.

**(2) Use of credits; limitations based on weight classes**

**(A) Use of credits**

Credits under this subsection may be used by the person holding such credits to demonstrate compliance with this section or may be traded or sold for use by any other person to demonstrate compliance with other requirements applicable under this section in the same nonattainment area. Credits obtained at any time may be held or banked for use at any later time, and when so used, such credits shall maintain the same value as if used at an earlier date.

**(B) Limitations based on weight classes**

Credits issued with respect to the purchase of vehicles of up to 8,500 lbs. GVWR may not be used to demonstrate compliance by any person with the requirements applicable under this subsection to vehicles of more than 8,500 lbs. GVWR. Credits issued with respect to the purchase of vehicles of more than 8,500 lbs. GVWR may not be used to demonstrate compliance by any person with the requirements applicable under this subsection to vehicles weighing up to 8,500 lbs. GVWR.

**(C) Weighting**

Credits issued for purchase of a clean fuel<sup>2</sup> vehicle under this subsection shall be adjusted with appropriate weighting to reflect the level of emission reduction achieved by the vehicle.

**(3) Regulations and administration**

Within 12 months after November 15, 1990, the Administrator shall promulgate regulations for such credit program. The State shall administer the credit program established under this subsection.

**(4) Standards for issuing credits for cleaner vehicles**

Solely for purposes of issuing credits under paragraph (1)(B), the Administrator shall establish under this paragraph standards for Ultra-Low Emission Vehicles ("ULEV"s) and Zero Emissions Vehicles ("ZEV"s) which shall be more stringent than those otherwise applicable to clean-fuel vehicles under this part. The Administrator shall certify clean fuel<sup>2</sup> vehicles as complying with such more stringent standards, and administer and enforce such more stringent standards, in the same manner as in the case of the otherwise applicable clean-fuel vehicle standards established under this section. The standards established by the Administrator under this paragraph for vehicles under 8,500 lbs. GVWR or greater shall conform as closely as possible to standards which are established by the State of California for ULEV and ZEV vehicles in the same class. For vehicles of 8,500 lbs. GVWR or more, the Administrator shall promulgate comparable standards for purposes of this subsection.

**(5) Early fleet credits**

The State plan revision shall provide credits under this subsection to fleet operators that

purchase vehicles certified to meet clean-fuel vehicle standards under this part during any period after approval of the plan revision and prior to the effective date of the fleet program under this section.

**(g) Availability to public**

At any facility owned or operated by a department, agency, or instrumentality of the United States where vehicles subject to this subsection are supplied with clean alternative fuel, such fuel shall be offered for sale to the public for use in other vehicles during reasonable business times and subject to national security concerns, unless such fuel is commercially available for vehicles in the vicinity of such Federal facilities.

**(h) Transportation control measures**

The Administrator shall by rule, within 1 year after November 15, 1990, ensure that certain transportation control measures including time-of-day or day-of-week restrictions, and other similar measures that restrict vehicle usage, do not apply to any clean-fuel vehicle that meets the requirements of this section. This subsection shall apply notwithstanding subchapter I.

(July 14, 1955, ch. 360, title II, §246, as added Pub. L. 101-549, title II, §229(a), Nov. 15, 1990, 104 Stat. 2520.)

**§ 7587. Vehicle conversions**

**(a) Conversion of existing and new conventional vehicles to clean-fuel vehicles**

The requirements of section 7586 of this title may be met through the conversion of existing or new gasoline or diesel-powered vehicles to clean-fuel vehicles which comply with the applicable requirements of that section. For purposes of such provisions the conversion of a vehicle to clean fuel<sup>1</sup> vehicle shall be treated as the purchase of a clean fuel<sup>1</sup> vehicle. Nothing in this part shall be construed to provide that any covered fleet operator subject to fleet vehicle purchase requirements under section 7586 of this title shall be required to convert existing or new gasoline or diesel-powered vehicles to clean-fuel vehicles or to purchase converted vehicles.

**(b) Regulations**

The Administrator shall, within 24 months after November 15, 1990, consistent with the requirements of this subchapter applicable to new vehicles, promulgate regulations governing conversions of conventional vehicles to clean-fuel vehicles. Such regulations shall establish criteria for such conversions which will ensure that a converted vehicle will comply with the standards applicable under this part to clean-fuel vehicles. Such regulations shall provide for the application to such conversions of the same provisions of this subchapter (including provisions relating to administration enforcement) as are applicable to standards under section<sup>2</sup> 7582, 7583, 7584, and 7585 of this title, except that in the case of conversions the Administrator may modify the applicable regulations implementing

<sup>1</sup> So in original. Probably should be "clean-fuel".

<sup>2</sup> So in original. Probably should be "sections".



keting or price practices, policies, or strategies for, vehicles subject to this part. Nothing in this part shall be construed to give the Administrator authority to mandate marketing or pricing practices, policies, or strategies for fuels.

**(c) Tank and fuel system safety**

The Secretary of Transportation shall, in accordance with chapter 301 of title 49, promulgate applicable regulations regarding the safety and use of fuel storage cylinders and fuel systems, including appropriate testing and retesting, in conversions of motor vehicles.

**(d) Consultation with Department of Energy and Department of Transportation**

The Administrator shall coordinate with the Secretaries of the Department of Energy and the Department of Transportation in carrying out the Administrator's duties under this part.

(July 14, 1955, ch. 360, title II, § 250, as added Pub. L. 101-549, title II, § 229(a), Nov. 15, 1990, 104 Stat. 2528.)

CODIFICATION

In subsec. (c), "chapter 301 of title 49" substituted for "the National Motor Vehicle Traffic Safety Act of 1966 [15 U.S.C. 1381 et seq.]", meaning "the National Traffic and Motor Vehicle Safety Act of 1966 [15 U.S.C. 1381 et seq.]", 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.

SUBCHAPTER III—GENERAL PROVISIONS

**§ 7601. Administration**

**(a) Regulations; delegation of powers and duties; regional officers and employees**

(1) The Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this chapter. The Administrator may delegate to any officer or employee of the Environmental Protection Agency such of his powers and duties under this chapter, except the making of regulations subject to section 7607(d) of this title, as he may deem necessary or expedient.

(2) Not later than one year after August 7, 1977, the Administrator shall promulgate regulations establishing general applicable procedures and policies for regional officers and employees (including the Regional Administrator) to follow in carrying out a delegation under paragraph (1), if any. Such regulations shall be designed—

(A) to assure fairness and uniformity in the criteria, procedures, and policies applied by the various regions in implementing and enforcing the chapter;

(B) to assure at least an adequate quality audit of each State's performance and adherence to the requirements of this chapter in implementing and enforcing the chapter, particularly in the review of new sources and in enforcement of the chapter; and

(C) to provide a mechanism for identifying and standardizing inconsistent or varying criteria, procedures, and policies being employed by such officers and employees in implementing and enforcing the chapter.

**(b) Detail of Environmental Protection Agency personnel to air pollution control agencies**

Upon the request of an air pollution control agency, personnel of the Environmental Protec-

tion Agency may be detailed to such agency for the purpose of carrying out the provisions of this chapter.

**(c) Payments under grants; installments; advances or reimbursements**

Payments under grants made under this chapter may be made in installments, and in advance or by way of reimbursement, as may be determined by the Administrator.

**(d) Tribal authority**

(1) Subject to the provisions of paragraph (2), the Administrator—

(A) is authorized to treat Indian tribes as States under this chapter, except for purposes of the requirement that makes available for application by each State no less than one-half of 1 percent of annual appropriations under section 7405 of this title; and

(B) may provide any such Indian tribe grant and contract assistance to carry out functions provided by this chapter.

(2) The Administrator shall promulgate regulations within 18 months after November 15, 1990, specifying those provisions of this chapter for which it is appropriate to treat Indian tribes as States. Such treatment shall be authorized only if—

(A) the Indian tribe has a governing body carrying out substantial governmental duties and powers;

(B) the functions to be exercised by the Indian tribe pertain to the management and protection of air resources within the exterior boundaries of the reservation or other areas within the tribe's jurisdiction; and

(C) the Indian tribe is reasonably expected to be capable, in the judgment of the Administrator, of carrying out the functions to be exercised in a manner consistent with the terms and purposes of this chapter and all applicable regulations.

(3) The Administrator may promulgate regulations which establish the elements of tribal implementation plans and procedures for approval or disapproval of tribal implementation plans and portions thereof.

(4) In any case in which the Administrator determines that the treatment of Indian tribes as identical to States is inappropriate or administratively infeasible, the Administrator may provide, by regulation, other means by which the Administrator will directly administer such provisions so as to achieve the appropriate purpose.

(5) Until such time as the Administrator promulgates regulations pursuant to this subsection, the Administrator may continue to provide financial assistance to eligible Indian tribes under section 7405 of this title.

(July 14, 1955, ch. 360, title III, § 301, formerly § 8, as added Pub. L. 88-206, § 1, Dec. 17, 1963, 77 Stat. 400, renumbered Pub. L. 89-272, title I, § 101(4), Oct. 20, 1965, 79 Stat. 992; amended Pub. L. 90-148, § 2, Nov. 21, 1967, 81 Stat. 504; Pub. L. 91-604, §§ 3(b)(2), 15(c)(2), Dec. 31, 1970, 84 Stat. 1677, 1713; Pub. L. 95-95, title III, § 305(e), Aug. 7, 1977, 91 Stat. 776; Pub. L. 101-549, title I, §§ 107(d), 108(i), Nov. 15, 1990, 104 Stat. 2464, 2467.)

CODIFICATION

Section was formerly classified to section 1857g of this title.

AMENDMENTS

1990—Subsec. (a)(1). Pub. L. 101-549, §108(i), inserted “subject to section 7607(d) of this title” after “regulations”.

Subsec. (d). Pub. L. 101-549, §107(d), added subsec. (d).  
1977—Subsec. (a). Pub. L. 95-95 designated existing provisions as par. (1) and added par. (2).

1970—Subsec. (a). Pub. L. 91-604, §15(c)(2), substituted “Administrator” for “Secretary” and “Environmental Protection Agency” for “Department of Health, Education, and Welfare”.

Subsec. (b). Pub. L. 91-604, §3(b)(2), substituted “Environmental Protection Agency” for “Public Health Service” and struck out provisions covering the payment of salaries and allowances.

Subsec. (c). Pub. L. 91-604, §15(c)(2), substituted “Administrator” for “Secretary”.

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.

DISADVANTAGED BUSINESS CONCERNS; USE OF QUOTAS PROHIBITED

Pub. L. 101-549, title X, Nov. 15, 1990, 104 Stat. 2708, provided that:

“SEC. 1001. DISADVANTAGED BUSINESS CONCERNS.

“(a) IN GENERAL.—In providing for any research relating to the requirements of the amendments made by the Clean Air Act Amendments of 1990 [Pub. L. 101-549, see Tables for classification] which uses funds of the Environmental Protection Agency, the Administrator of the Environmental Protection Agency shall, to the extent practicable, require that not less than 10 percent of total Federal funding for such research will be made available to disadvantaged business concerns.

“(b) DEFINITION.—

“(1)(A) For purposes of subsection (a), the term ‘disadvantaged business concern’ means a concern—

“(i) which is at least 51 percent owned by one or more socially and economically disadvantaged individuals or, in the case of a publicly traded company, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and

“(ii) the management and daily business operations of which are controlled by such individuals.

“(B)(i) A for-profit business concern is presumed to be a disadvantaged business concern for purposes of subsection (a) if it is at least 51 percent owned by, or in the case of a concern which is a publicly traded company at least 51 percent of the stock of the company is owned by, one or more individuals who are members of the following groups:

- “(I) Black Americans.
- “(II) Hispanic Americans.
- “(III) Native Americans.
- “(IV) Asian Americans.
- “(V) Women.
- “(VI) Disabled Americans.

“(ii) The presumption established by clause (i) may be rebutted with respect to a particular business concern if it is reasonably established that the individual or individuals referred to in that clause with respect to that business concern are not experiencing impediments to establishing or developing such concern as a result of the individual’s identification as a member of a group specified in that clause.

“(C) The following institutions are presumed to be disadvantaged business concerns for purposes of subsection (a):

“(i) Historically black colleges and universities, and colleges and universities having a student body in which 40 percent of the students are Hispanic.

“(ii) Minority institutions (as that term is defined by the Secretary of Education pursuant to the General Education Provision Act (20 U.S.C. 1221 et seq.)).

“(iii) Private and voluntary organizations controlled by individuals who are socially and economically disadvantaged.

“(D) A joint venture may be considered to be a disadvantaged business concern under subsection (a), notwithstanding the size of such joint venture, if—

“(i) a party to the joint venture is a disadvantaged business concern; and

“(ii) that party owns at least 51 percent of the joint venture.

A person who is not an economically disadvantaged individual or a disadvantaged business concern, as a party to a joint venture, may not be a party to more than 2 awarded contracts in a fiscal year solely by reason of this subparagraph.

“(E) Nothing in this paragraph shall prohibit any member of a racial or ethnic group that is not listed in subparagraph (B)(i) from establishing that they have been impeded in establishing or developing a business concern as a result of racial or ethnic discrimination.

“SEC. 1002. USE OF QUOTAS PROHIBITED.—Nothing in this title shall permit or require the use of quotas or a requirement that has the effect of a quota in determining eligibility under section 1001.”

§ 7602. Definitions

When used in this chapter—

(a) The term “Administrator” means the Administrator of the Environmental Protection Agency.

(b) The term “air pollution control agency” means any of the following:

(1) A single State agency designated by the Governor of that State as the official State air pollution control agency for purposes of this chapter.

(2) An agency established by two or more States and having substantial powers or duties pertaining to the prevention and control of air pollution.

(3) A city, county, or other local government health authority, or, in the case of any city, county, or other local government in which there is an agency other than the health authority charged with responsibility for enforcing ordinances or laws relating to the prevention and control of air pollution, such other agency.

(4) An agency of two or more municipalities located in the same State or in different States and having substantial powers or duties

CODIFICATION

In pars. (6)(A) and (8)(A), “section 32901(a)(7) of title 49” substituted for “section 513(h)(1)(C) of the Motor Vehicle Information and Cost Savings Act” and “section 32901(a)(8) of title 49” substituted for “section 513(h)(1)(D) of the Motor Vehicle Information and Cost Savings 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.

AMENDMENTS

2008—Par. (3). Pub. L. 110-181 designated existing provisions as subpar. (A), inserted par. and subpar. headings, substituted “The term” for “the term”, and added subpar. (B).

2005—Par. (9)(E). Pub. L. 109-58 inserted “, including vehicles directly used in the emergency repair of transmission lines and in the restoration of electricity service following power outages, as determined by the Secretary” before semicolon at end.

2000—Par. (2). Pub. L. 106-554 inserted “, including liquid fuels domestically produced from natural gas” after “natural gas”.

**§ 13212. Minimum Federal fleet requirement**

**(a) General requirements**

(1) The Federal Government shall acquire at least—

(A) 5,000 light duty alternative fueled vehicles in fiscal year 1993;

(B) 7,500 light duty alternative fueled vehicles in fiscal year 1994; and

(C) 10,000 light duty alternative fueled vehicles in fiscal year 1995.

(2) The Secretary shall allocate the acquisitions necessary to meet the requirements under paragraph (1).

**(b) Percentage requirements**

(1) Of the total number of vehicles acquired by a Federal fleet, at least—

(A) 25 percent in fiscal year 1996;

(B) 33 percent in fiscal year 1997;

(C) 50 percent in fiscal year 1998; and

(D) 75 percent in fiscal year 1999 and thereafter,

shall be alternative fueled vehicles.

(2) The Secretary, in consultation with the Administrator of General Services where appropriate, may permit a Federal fleet to acquire a smaller percentage than is required in paragraph (1), so long as the aggregate percentage acquired by all Federal fleets is at least equal to the required percentage.

(3) For purposes of this subsection, the term “Federal fleet” means 20 or more light duty motor vehicles, located in a metropolitan statistical area or consolidated metropolitan statistical area, as established by the Bureau of the Census, with a 1980 population of more than 250,000, that are centrally fueled or capable of being centrally fueled and are owned, operated, leased, or otherwise controlled by or assigned to any Federal executive department, military department, Government corporation, independent establishment, or executive agency, the United States Postal Service, the Congress, the courts of the United States, or the Executive Office of the President. Such term does not include—

(A) motor vehicles held for lease or rental to the general public;

(B) motor vehicles used for motor vehicle manufacturer product evaluations or tests;

(C) law enforcement vehicles;

(D) emergency vehicles;

(E) motor vehicles acquired and used for military purposes that the Secretary of Defense has certified to the Secretary must be exempt for national security reasons; or

(F) nonroad vehicles, including farm and construction vehicles.

**(c) Allocation of incremental costs**

The General Services Administration and any other Federal agency that procures motor vehicles for distribution to other Federal agencies shall allocate the incremental cost of alternative fueled vehicles over the cost of comparable gasoline vehicles across the entire fleet of motor vehicles distributed by such agency.

**(d) Application of requirements**

The provisions of section 6374 of this title relating to the Federal acquisition of alternative fueled vehicles shall apply to the acquisition of vehicles pursuant to this section.

**(e) Resale**

The Administrator of General Services shall take all feasible steps to ensure that all alternative fueled vehicles sold by the Federal Government shall remain alternative fueled vehicles at time of sale.

**(f) Vehicle emission requirements**

**(1) Definitions**

In this subsection:

**(A) Federal agency**

The term “Federal agency” does not include any office of the legislative branch, except that it does include the House of Representatives with respect to an acquisition described in paragraph (2)(C).

**(B) Medium duty passenger vehicle**

The term “medium duty passenger vehicle” has the meaning given that term<sup>1</sup> section 523.2 of title 49 of the Code of Federal Regulations, as in effect on December 19, 2007.

**(C) Member’s Representational Allowance**

The term “Member’s Representational Allowance” means the allowance described in section 5341(a) of title 2.

**(2) Prohibition**

**(A) In general**

Except as provided in subparagraph (B), no Federal agency shall acquire a light duty motor vehicle or medium duty passenger vehicle that is not a low greenhouse gas emitting vehicle.

**(B) Exception**

The prohibition in subparagraph (A) shall not apply to acquisition of a vehicle if the head of the agency certifies in writing, in a separate certification for each individual vehicle purchased, either—

<sup>1</sup>So in original. The word “in” probably should appear after “term”.

(i) that no low greenhouse gas emitting vehicle is available to meet the functional needs of the agency and details in writing the functional needs that could not be met with a low greenhouse gas emitting vehicle; or

(ii) that the agency has taken specific alternative more cost-effective measures to reduce petroleum consumption that—

(I) have reduced a measured and verified quantity of greenhouse gas emissions equal to or greater than the quantity of greenhouse gas reductions that would have been achieved through acquisition of a low greenhouse gas emitting vehicle over the lifetime of the vehicle; or

(II) will reduce each year a measured and verified quantity of greenhouse gas emissions equal to or greater than the quantity of greenhouse gas reductions that would have been achieved each year through acquisition of a low greenhouse gas emitting vehicle.

**(C) Special rule for vehicles provided by funds contained in Members' Representational Allowance**

This paragraph shall apply to the acquisition of a light duty motor vehicle or medium duty passenger vehicle using any portion of a Member's Representational Allowance, including an acquisition under a long-term lease.

**(3) Guidance**

**(A) In general**

Each year, the Administrator of the Environmental Protection Agency shall issue guidance identifying the makes and model numbers of vehicles that are low greenhouse gas emitting vehicles.

**(B) Consideration**

In identifying vehicles under subparagraph (A), the Administrator shall take into account the most stringent standards for vehicle greenhouse gas emissions applicable to and enforceable against motor vehicle manufacturers for vehicles sold anywhere in the United States.

**(C) Requirement**

The Administrator shall not identify any vehicle as a low greenhouse gas emitting vehicle if the vehicle emits greenhouse gases at a higher rate than such standards allow for the manufacturer's fleet average grams per mile of carbon dioxide-equivalent emissions for that class of vehicle, taking into account any emissions allowances and adjustment factors such standards provide.

**(g) Authorization of appropriations**

There are authorized to be appropriated for carrying out this section, such sums as may be necessary for fiscal years 1993 through 1998, to remain available until expended.

(Pub. L. 102-486, title III, §303, Oct. 24, 1992, 106 Stat. 2871; Pub. L. 109-58, title VII, §702, Aug. 8, 2005, 119 Stat. 815; Pub. L. 110-140, title I, §141, Dec. 19, 2007, 121 Stat. 1517.)

AMENDMENTS

2007—Subsecs. (f), (g). Pub. L. 110-140 added subsec. (f) and redesignated former subsec. (f) as (g).

2005—Subsec. (c). Pub. L. 109-58 substituted "shall" for "may".

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.

EXECUTIVE ORDER NO. 12844

Ex. Ord. No. 12844, Apr. 21, 1993, 58 F.R. 21885, as amended by Ex. Ord. No. 12974, §3(b), Sept. 29, 1995, 60 F.R. 51876, which required the Federal Government to institute a Federal fleet vehicle acquisition program and established the Federal Fleet Conversion Task Force to advise on implementation of the program, was revoked by Ex. Ord. No. 13031, §9, Dec. 13, 1996, 61 F.R. 66531, formerly set out below.

EXECUTIVE ORDER NO. 13031

Ex. Ord. No. 13031, Dec. 13, 1996, 61 F.R. 66529, which provided that the Federal Government exercise leadership in the use of alternative fueled vehicles, was revoked by Ex. Ord. No. 13149, §501, Apr. 21, 2000, 65 F.R. 24610, formerly set out below.

EXECUTIVE ORDER NO. 13149

Ex. Ord. No. 13149, Apr. 21, 2000, 65 F.R. 24607, which directed the Federal Government to exercise leadership in the reduction of petroleum consumption through improvements in fleet fuel efficiency and the use of alternative fuel vehicles and alternative fuels, was revoked by Ex. Ord. No. 13423, §11(a)(v), Jan. 24, 2007, 72 F.R. 3923, formerly set out in a note under section 4321 of this title.

**§ 13213. Refueling**

**(a) In general**

Federal agencies shall, to the maximum extent practicable, arrange for the fueling of alternative fueled vehicles acquired under section 13212 of this title at commercial fueling facilities that offer alternative fuels for sale to the public. If publicly available fueling facilities are not convenient or accessible to the location of Federal alternative fueled vehicles purchased under section 13212 of this title, Federal agencies are authorized to enter into commercial arrangements for the purposes of fueling Federal alternative fueled vehicles, including, as appropriate, purchase, lease, contract, construction, or other arrangements in which the Federal Government is a participant.

**(b) Authorization of appropriations**

There are authorized to be appropriated to the Secretary for carrying out this section such sums as may be necessary for fiscal years 1993 through 1998, to remain available until expended.

(Pub. L. 102-486, title III, §304, Oct. 24, 1992, 106 Stat. 2872.)

**§ 13214. Federal agency promotion, education, and coordination**

**(a) Promotion and education**

The Secretary, in cooperation with the Administrator of General Services, shall promote programs and educate officials and employees of

Sec.	
17382.	Smart grid system report.
17383.	Smart Grid Advisory Committee and Smart Grid Task Force.
17384.	Smart grid technology research, development, and demonstration.
17385.	Smart grid interoperability framework.
17386.	Federal matching fund for smart grid investment costs.

### § 17001. Definitions

In this Act:

#### (1) Department

The term “Department” means the Department of Energy.

#### (2) Institution of higher education

The term “institution of higher education” has the meaning given the term in section 1001(a) of title 20.

#### (3) Secretary

The term “Secretary” means the Secretary of Energy.

(Pub. L. 110–140, § 2, Dec. 19, 2007, 121 Stat. 1498.)

#### REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1492, known as the Energy Independence and Security Act of 2007, which enacted this chapter and enacted and amended numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title note below and Tables.

#### EFFECTIVE DATE

Section effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as a note under section 1824 of Title 2, The Congress.

#### SHORT TITLE OF 2015 AMENDMENT

Pub. L. 114–11, §1(a), Apr. 30, 2015, 129 Stat. 182, provided that: “This Act [enacting sections 17062, 17063, 17084, and 17085 of this title, amending sections 6295, 6302 to 6304, and 17091 of this title, and enacting provisions set out as a note under this section] may be cited as the ‘Energy Efficiency Improvement Act of 2015.’”

Pub. L. 114–11, title I, §101, Apr. 30, 2015, 129 Stat. 182, provided that: “This title [enacting sections 17062, 17084, and 17085 of this title] may be cited as the ‘Better Buildings Act of 2015.’”

#### SHORT TITLE

Pub. L. 110–140, §1(a), Dec. 19, 2007, 121 Stat. 1492, provided that: “This Act [see Tables for classification] may be cited as the ‘Energy Independence and Security Act of 2007.’”

Pub. L. 110–140, title VI, § 601, Dec. 19, 2007, 121 Stat. 1674, provided that: “This subtitle [subtitle A (§§ 601–607) of title VI of Pub. L. 110–140, enacting part A (§17171 et seq.) of subchapter V of this chapter] may be cited as the ‘Solar Energy Research and Advancement Act of 2007.’”

Pub. L. 110–140, title VI, § 611, Dec. 19, 2007, 121 Stat. 1678, provided that: “This subtitle [subtitle B (§§ 611–625) of title VI of Pub. L. 110–140, enacting part B (§17191 et seq.) of subchapter V of this chapter] may be cited as the ‘Advanced Geothermal Energy Research and Development Act of 2007.’”

Pub. L. 110–140, title VI, § 631, Dec. 19, 2007, 121 Stat. 1686, provided that: “This subtitle [subtitle C (§§ 631–636) of title VI of Pub. L. 110–140, enacting part C (§17211 et seq.) of subchapter V of this chapter] may be cited as the ‘Marine and Hydrokinetic Renewable Energy Research and Development Act.’”

Pub. L. 110–140, title VII, §701, Dec. 19, 2007, 121 Stat. 1704, provided that: “This subtitle [subtitle A

(§§ 701–708) of title VII of Pub. L. 110–140, enacting part A (§17251 et seq.) of subchapter VI of this chapter and amending section 16293 of this title] may be cited as the ‘Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007.’”

### § 17002. Relationship to other law

Except to the extent expressly provided in this Act or an amendment made by this Act, nothing in this Act or an amendment made by this Act supersedes, limits the authority provided or responsibility conferred by, or authorizes any violation of any provision of law (including a regulation), including any energy or environmental law or regulation.

(Pub. L. 110–140, § 3, Dec. 19, 2007, 121 Stat. 1498.)

#### REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1492, known as the Energy Independence and Security Act of 2007, which enacted this chapter and enacted and amended numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title note set out under section 17001 of this title and Tables.

#### EFFECTIVE DATE

Section effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as a note under section 1824 of Title 2, The Congress.

### SUBCHAPTER I—IMPROVED VEHICLE TECHNOLOGY

### § 17011. Transportation electrification

#### (a) Definitions

In this section:

##### (1) Administrator

The term “Administrator” means the Administrator of the Environmental Protection Agency.

##### (2) Battery

The term “battery” means an electrochemical energy storage system powered directly by electrical current.

##### (3) Electric transportation technology

The term “electric transportation technology” means—

(A) technology used in vehicles that use an electric motor for all or part of the motive power of the vehicles, including battery electric, hybrid electric, plug-in hybrid electric, fuel cell, and plug-in fuel cell vehicles, or rail transportation; or

(B) equipment relating to transportation or mobile sources of air pollution that use an electric motor to replace an internal combustion engine for all or part of the work of the equipment, including—

(i) corded electric equipment linked to transportation or mobile sources of air pollution; and

(ii) electrification technologies at airports, ports, truck stops, and material-handling facilities.

##### (4) Nonroad vehicle

The term “nonroad vehicle” means a vehicle—

Pub. L. 103-272 substituted “section 40102(a) of this title” for “section 101(2), (4), and (8) of the Federal Aviation Act of 1958 (49 App. U.S.C. 1301(2), (4), (8))”.

1984—Pub. L. 98-216 substituted “49 App. U.S.C.” for “49 U.S.C.”.

#### EFFECTIVE DATE OF 1994 AMENDMENT

Pub. L. 103-429, § 9, Oct. 31, 1994, 108 Stat. 4391, provided that: “The amendments made by sections 6(2)–(15), (19)–(35), (37)–(39), (41), (44)–(52), (54)–(62), (65), (66)(B), (70), (73)–(76), and (78)–(81) of this Act [enacting section 41312 of this title and amending this section and sections 5103, 5104, 5115, 5125, 5307, 5318, 5320, 5323, 5326, 5327, 5331, 5337, 5565, 20136, 22108, 24501, 24904, 30141, 30165, 30166, 30308, 31501, 32101, 32304, 32309, 32505, 32703, 32705, 32706, 32908 to 32910, 32913, 33101, 33106, 40102, 40104, 40110, 41103, 41110, 41734, 44502, 44701, 44711, 44937, 45105, 45302, 46301, 46310, 46502, 47101, 47113, 47114, 47128, 47531, 47532, 60109, and 60112 of this title] shall take effect on July 5, 1994.”

#### § 322. General powers

(a) The Secretary of Transportation may prescribe regulations to carry out the duties and powers of the Secretary. An officer of the Department of Transportation may prescribe regulations to carry out the duties and powers of the officer.

(b) The Secretary may delegate, and authorize successive delegations of, duties and powers of the Secretary to an officer or employee of the Department. An officer of the Department may delegate, and authorize successive delegations of, duties and powers of the officer to another officer or employee of the Department. However, the duties and powers specified in sections 103(c)(1),<sup>1</sup> 104(c)(1), and 106(g)(1) of this title may not be delegated to an officer or employee outside the Administration concerned.

(c) On a reimbursable basis when appropriate, the Secretary may, in carrying out aviation duties and powers—

(1) use the available services, equipment, personnel, and facilities of other civilian or military departments, agencies, and instrumentalities of the United States Government, with their consent;

(2) cooperate with those departments, agencies, and instrumentalities in establishing and using aviation services, equipment, and facilities of the Department; and

(3) confer and cooperate with, and use the services, records, and facilities of, State, territorial, municipal, and other agencies.

(d) The Secretary may make expenditures to carry out aviation duties and powers, including expenditures for—

(1) rent and personal services;

(2) travel expenses;

(3) office furniture, equipment, supplies, lawbooks, newspapers, periodicals, and reference books, including exchanges;

(4) printing and binding;

(5) membership in and cooperation with domestic or foreign organizations related to, or a part of, the civil aeronautics industry or the art of aeronautics;

(6) payment of allowances and other benefits to employees stationed in foreign countries to the same extent authorized for members of the Foreign Service of comparable grade;

(7) investigations and studies about aeronautics; and

(8) acquiring, exchanging, operating, and maintaining passenger-carrying aircraft and automobiles and other property.

(e) The Secretary may negotiate, without advertising, the purchase of technical or special property related to air navigation when the Secretary decides that—

(1) making the property would require a substantial initial investment or an extended period of preparation; and

(2) procurement by advertising would likely result in additional cost to the Government by duplication of investment or would result in duplication of necessary preparation that would unreasonably delay procuring the property.

(Pub. L. 97-449, §1(b), Jan. 12, 1983, 96 Stat. 2422.)

#### HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
322(a) .....	49:1657(e)(1) (last 19 words), (2) (last 19 words), (f), (g).	Oct. 15, 1966, Pub. L. 89-670, §9(e)–(g), 80 Stat. 944.
322(b) .....	49:1344(d) (less words after semicolon).  49:1657(e)(1) (less last 19 words), (2) (less last 19 words), (3). 5 App. U.S.C.	Aug. 23, 1958, Pub. L. 85-726, §§302(k), 303(a), (d) (less words after semicolon), 80 Stat. 747, 749.  Reorg. Plan No. 2 of 1968, eff. July 1, 1968, §2, 82 Stat. 1369.
322(c) .....	49:1343(i).	
322(d) .....	49:1344(a).	
322(e) .....	49:1344(e).	Aug. 23, 1958, Pub. L. 85-726, 72 Stat. 731, §303(e); added May 21, 1970, Pub. L. 91-258, §51(a)(1), 84 Stat. 234; July 12, 1976, Pub. L. 94-353, §16, 90 Stat. 882; Oct. 19, 1980, Pub. L. 96-470, §112(e), 94 Stat. 2240.

In the chapter, the words “Secretary of Transportation” and “Secretary” are substituted for “Administrator” in the provisions of the Federal Aviation Act of 1958 (Pub. L. 85-726, 72 Stat. 731) restated in the revised chapter because of the transfer of aviation functions to the Secretary under 49:1655(c)(1).

In subsection (a), the words “may prescribe regulations to carry out the duties and powers” are substituted for “may make such rules and regulations as may be necessary to carry out . . . functions, powers, and duties” for consistency and to eliminate unnecessary words. The text of 49:1657(f) and (g) is omitted as executed because the transfer of personnel, assets, and liabilities, etc., has been accomplished.

In subsection (b), the words “Except where this chapter vests in any administration, agency or board, specific functions, powers, and duties” before “the Secretary may” in 49:1657(e)(1) are omitted because of the specific wording of sections 103, 104, and 106 of the revised title. The words “in addition to the authority to delegate and redelegate contained in any other Act in the exercise of the functions transferred to or vested in the Secretary in this chapter” before “delegate” in 49:1657(e)(1) are omitted because the authority of the Secretary to delegate is consolidated in the subsection. The words “the duties and powers of the Secretary” are substituted for “any of his residual functions, powers, and duties” in 49:1657(e)(1) and “any of the functions transferred to him by this reorganization plan” in section 2 of Reorganization Plan No. 2 of 1968 (eff. July 1, 1968, 82 Stat. 1369), for clarity and consistency. The words “as he may designate” and “of such functions, powers, and duties as he may deem desirable” are omit-

<sup>1</sup> See References in Text note below.

ted as surplus each place they appear in 49:1657(e)(1) and (2). The text of section 322(b) (1st sentence) of the revised title is substituted for 49:1344(d) (less words after semicolon) for clarity and because of the transfer of aviation functions to the Secretary of Transportation under 49:1655(c)(1). The text of 49:1657(e)(2) (words before 2d comma) is omitted as unnecessary because the authority of an officer to delegate is consolidated in the subsection. The words “the duties and powers of the officer” are substituted for “such functions, powers, and duties” in 49:1657(e)(2) for clarity and consistency. The words “the duties and powers specified in sections 103(c)(1), 104(c)(1), and 106(g)(1) of this title” are substituted for “any of the statutory duties and responsibilities specifically assigned to them by this chapter” in 49:1657(e)(3) for clarity. The words “may not be delegated to an officer or employee outside the Administration concerned” are substituted for “The Administrators established by section 1652(e) of this title . . . may not delegate . . . outside of their respective administrations” in 49:1657(e)(3) for clarity and because of the restatement of the section.

In subsection (c), before clause (1), the words “aviation duties and powers” are added because the source provisions being restated only applies to carrying out duties and powers related to the Federal Aviation Administration. In clause (2), the words “those departments, agencies, and instrumentalities” are substituted for “such other agencies and instrumentalities” in 49:1343(i) for clarity and consistency. The words “aviation . . . Department” are substituted for “Administration” in 49:1343(i) because of the transfer of aviation functions to the Secretary under 49:1655(c)(1).

In subsection (d), before clause (1), the words “aviation duties and powers” are substituted for “for the exercise and performance of the powers and duties vested in and imposed upon him by law” in 49:1344(a) because the source provisions being restated only applies to carrying out duties and powers related to the Federal Aviation Administration. The words “at the seat of government and elsewhere as may be necessary” after “expenditures” and “and as from time to time may be appropriated for by Congress” are omitted as surplus. In clause (8), the words “passenger-carrying aircraft and automobiles” are substituted for “passenger-carrying automobiles and aircraft” in 49:1344(a) for clarity. The words “such . . . as is necessary in the exercise and performance of the powers and duties of the Secretary” after “aircraft” in 49:1344(a) are omitted as unnecessary because of the restatement of the section. The text of 49:1344(a) (proviso) is omitted as unnecessary.

In subsection (e), before clause (1), the words “or in support of” are omitted as surplus. In clause (1), the words “making the property” are substituted for “for manufacture” for clarity. In clause (2), the word “formal” is omitted as unnecessary. The word “unreasonably” is substituted for “unduly” for consistency.

REFERENCES IN TEXT

Section 103(c)(1) of this title, referred to in subsec. (b), was struck out by Pub. L. 110-432, div. A, title I, §101, Oct. 16, 2008, 122 Stat. 4851. Provisions similar to those contained in former subsec. (c)(1) of section 103 are now contained in subsec. (g)(1) of section 103.

ELECTRONIC SIGNATURES

Pub. L. 115-271, title VIII, §8108(c), Oct. 24, 2018, 132 Stat. 4107, provided that: “Not later than 18 months after the date of the deadline under subsection (a)(2) [section 8108(a)(2) of Pub. L. 115-271, set out in a note under section 7301 of Title 5, Government Organization and Employees], the Secretary of Transportation shall issue a final rule revising part 40 of title 49, Code of Federal Regulations, to authorize, to the extent practicable, the use of electronic signatures or digital signatures executed to electronic forms instead of traditional handwritten signatures executed on paper forms.”

AVAILABILITY OF RECEIPTS FROM FITNESS CENTERS FOR OPERATION AND MAINTENANCE OF FACILITIES

Pub. L. 106-69, title III, §329, Oct. 9, 1999, 113 Stat. 1021, provided that: “Hereafter, notwithstanding any other provision of law, receipts, in amounts determined by the Secretary, collected from users of fitness centers operated by or for the Department of Transportation shall be available to support the operation and maintenance of those facilities.”

Similar provisions were contained in the following prior appropriation acts:

Pub. L. 105-277, div. A, §101(g) [title III, §332], Oct. 21, 1998, 112 Stat. 2681-439, 2681-471.

Pub. L. 105-66, title III, §332, Oct. 27, 1997, 111 Stat. 1447.

Pub. L. 104-205, title III, §344, Sept. 30, 1996, 110 Stat. 2976.

EXECUTIVE ORDER NO. 11382

Ex. Ord. No. 11382, Nov. 28, 1967, 32 F.R. 16247, as amended by Ex. Ord. No. 11428, Sept. 5, 1968, 32 F.R. 12719, upon establishment of Department of Transportation amended and revoked certain executive orders relating to transportation, and, in addition to any other authority, authorized Secretary of Transportation and Federal Aviation Administrator to redelegate and authorize successive redelegations of any authority conferred in the order or the orders amended by it.

§ 323. Personnel

(a) The Secretary of Transportation may appoint and fix the pay of officers and employees of the Department of Transportation and may prescribe their duties and powers.

(b) The Secretary may procure services under section 3109 of title 5. However, an individual may be paid not more than \$100 a day for services.

(Pub. L. 97-449, §1(b), Jan. 12, 1983, 96 Stat. 2423.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
323(a) .....	49:1343(d).	Aug. 23, 1958, Pub. L. 85-726, §302(f), 72 Stat. 746; Oct. 4, 1961, Pub. L. 87-367, §205(b), 75 Stat. 791; Oct. 11, 1962, Pub. L. 87-793, §1001(h), 76 Stat. 864.
	49:1343(f).	Aug. 23, 1958, Pub. L. 85-726, §302(h), 72 Stat. 746; Oct. 4, 1961, Pub. L. 87-367, §205(a), 75 Stat. 791.
	49:1657(a).	Oct. 15, 1966, Pub. L. 89-670, §9(a), (b), 80 Stat. 944; Mar. 27, 1978, Pub. L. 95-251, §2(a)(12), 92 Stat. 183.
323(b) .....	49:1343(g) (1st sentence 33d-43d words).	Aug. 23, 1958, Pub. L. 85-726, §302(i) (1st sentence 31st-41st words), 72 Stat. 747.
	49:1657(b).	

In the section, the word “pay” is substituted for “compensation” for consistency with title 5.

In subsection (a), the words “In addition to the authority contained in any other Act which is transferred to and vested in the Secretary, the National Transportation Safety Board, or any other officer in the Department” before “the Secretary” and “subject to the civil service and classification laws” before “to select” in 49:1657(a) are omitted as unnecessary because of title 5, especially sections 3301, 5101, and 5331. The word “appoint” is substituted for “select, employ, appoint” because it is inclusive. The words “attorneys, and agents” after “employees” in 49:1343(d) and “including investigators, attorneys, and administrative law judges” after “employees” in 49:1657(a) are omitted as included in “officers and employees”. The words “of

this chapter” are substituted for “requirement imposed under this subchapter” for consistency. The words “civil action” are substituted for “any action” for consistency with rule 2 of the Federal Rules of Civil Procedure (28 App. U.S.C.).

In subsection (d)(2), the words “without regard to the amount in controversy” are omitted because jurisdiction is now allowed under 28:1331 without regard to the amount in controversy. The words “United States district court” are substituted for “district court of the United States” for consistency with the definition in section 32101 of the revised title and with other provisions of the chapter.

AMENDMENTS

2012—Subsec. (a)(1). Pub. L. 112-141 substituted “\$10,000” for “\$2,000” and “\$1,000,000” for “\$100,000”.

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.

§ 32710. Civil actions by private persons

(a) VIOLATION AND AMOUNT OF DAMAGES.—A person that violates this chapter or a regulation prescribed or order issued under this chapter, with intent to defraud, is liable for 3 times the actual damages or \$10,000, whichever is greater.

(b) CIVIL ACTIONS.—A person may bring a civil action to enforce a claim under this section in an appropriate United States district court or in another court of competent jurisdiction. The action must be brought not later than 2 years after the claim accrues. The court shall award costs and a reasonable attorney’s fee to the person when a judgment is entered for that person.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1055; Pub. L. 112-141, div. C, title I, §31206(2), July 6, 2012, 126 Stat. 761.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32710(a) .....	15:1989(a)(1).	Oct. 20, 1972, Pub. L. 92-513, § 409, 86 Stat. 963.
32710(b) .....	15:1989(a)(2), (b).	

In subsection (a), the words “this chapter or a regulation prescribed or order issued under this chapter” are substituted for “requirement imposed under this subchapter” for consistency.

In subsection (b), the words “A person may bring a civil action to enforce a claim” are substituted for “An action to enforce any liability created . . . may be brought” for consistency with rule 2 of the Federal Rules of Civil Procedure (28 App. U.S.C.). The word “appropriate” is added for clarity. The words “without regard to the amount in controversy” are omitted because jurisdiction is now allowed under 28:1331 without regard to the amount in controversy. The words “after the claim accrues” are substituted for “from the date on which the liability arises” to eliminate unnecessary words. The words “The court shall award . . . to the person when a judgment is entered for that person” are substituted for “in the case of any successful action to enforce the foregoing liability . . . as determined by the court” for clarity.

AMENDMENTS

2012—Subsec. (a). Pub. L. 112-141 substituted “\$10,000” for “\$1,500”.

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.

and Termination Dates of 2012 Amendment note under section 101 of Title 23, Highways.

§ 32711. Relationship to State law

Except to the extent that State law is inconsistent with this chapter, this chapter does not—

(1) affect a State law on disconnecting, altering, or tampering with an odometer with intent to defraud; or

(2) exempt a person from complying with that law.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1056.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32711 .....	15:1991.	Oct. 20, 1972, Pub. L. 92-513, § 418, 86 Stat. 963; July 14, 1976, Pub. L. 94-364, § 408(1), 90 Stat. 984.

In this section, before clause (1), the words “and then only to the extent of the inconsistency” are omitted as surplus. In clause (1), the word “affect” is substituted for “annul, alter, or affect” to eliminate unnecessary words. In clause (2), the words “subject to the provisions of this subchapter” are omitted as surplus.

CHAPTER 329—AUTOMOBILE FUEL ECONOMY

Sec.

- 32901. Definitions.
- 32902. Average fuel economy standards.
- 32903. Credits for exceeding average fuel economy standards.
- 32904. Calculation of average fuel economy.
- 32905. Manufacturing incentives for alternative fuel automobiles.
- 32906. Maximum fuel economy increase for alternative fuel automobiles.
- 32907. Reports and tests of manufacturers.
- 32908. Fuel economy information.
- 32909. Judicial review of regulations.
- 32910. Administrative.
- 32911. Compliance.
- 32912. Civil penalties.
- 32913. Compromising and remitting civil penalties.
- 32914. Collecting civil penalties.
- 32915. Appealing civil penalties.
- 32916. Reports to Congress.
- 32917. Standards for executive agency automobiles.
- 32918. Retrofit devices.
- 32919. Preemption.

AMENDMENTS

1994—Pub. L. 103-429, §6(43)(C), Oct. 31, 1994, 108 Stat. 4383, added items 32918 and 32919 and struck out former item 32918 “Preemption”.

§ 32901. Definitions

- (a) GENERAL.—In this chapter—
- (1) “alternative fuel” means—
    - (A) methanol;
    - (B) denatured ethanol;
    - (C) other alcohols;
    - (D) except as provided in subsection (b) of this section, a mixture containing at least 85 percent of methanol, denatured ethanol, and other alcohols by volume with gasoline or other fuels;
    - (E) natural gas;
    - (F) liquefied petroleum gas;



- (G) hydrogen;
- (H) coal derived liquid fuels;
- (I) fuels (except alcohol) derived from biological materials;
- (J) electricity (including electricity from solar energy); and
- (K) any other fuel the Secretary of Transportation prescribes by regulation that is not substantially petroleum and that would yield substantial energy security and environmental benefits.

(2) “alternative fueled automobile” means an automobile that is a—

- (A) dedicated automobile; or
- (B) dual fueled automobile.

(3) except as provided in section 32908 of this title, “automobile” means a 4-wheeled vehicle that is propelled by fuel, or by alternative fuel, manufactured primarily for use on public streets, roads, and highways and rated at less than 10,000 pounds gross vehicle weight, except—

- (A) a vehicle operated only on a rail line;
- (B) a vehicle manufactured in different stages by 2 or more manufacturers, if no intermediate or final-stage manufacturer of that vehicle manufactures more than 10,000 multi-stage vehicles per year; or
- (C) a work truck.

(4) “automobile manufactured by a manufacturer” includes every automobile manufactured by a person that controls, is controlled by, or is under common control with the manufacturer, but does not include an automobile manufactured by the person that is exported not later than 30 days after the end of the model year in which the automobile is manufactured.

(5) “average fuel economy” means average fuel economy determined under section 32904 of this title.

(6) “average fuel economy standard” means a performance standard specifying a minimum level of average fuel economy applicable to a manufacturer in a model year.

(7) “commercial medium- and heavy-duty on-highway vehicle” means an on-highway vehicle with a gross vehicle weight rating of 10,000 pounds or more.

(8) “dedicated automobile” means an automobile that operates only on alternative fuel.

(9) “dual fueled automobile” means an automobile that—

- (A) is capable of operating on alternative fuel or a mixture of biodiesel and diesel fuel meeting the standard established by the American Society for Testing and Materials or under section 211(u) of the Clean Air Act (42 U.S.C. 7545(u)) for fuel containing 20 percent biodiesel (commonly known as “B20”) and on gasoline or diesel fuel;

- (B) provides equal or superior energy efficiency, as calculated for the applicable model year during fuel economy testing for the United States Government, when operating on alternative fuel as when operating on gasoline or diesel fuel;

- (C) for model years 1993–1995 for an automobile capable of operating on a mixture of an alternative fuel and gasoline or diesel

fuel and if the Administrator of the Environmental Protection Agency decides to extend the application of this subclause, for an additional period ending not later than the end of the last model year to which section 32905(b) and (d) of this title applies, provides equal or superior energy efficiency, as calculated for the applicable model year during fuel economy testing for the Government, when operating on a mixture of alternative fuel and gasoline or diesel fuel containing exactly 50 percent gasoline or diesel fuel as when operating on gasoline or diesel fuel; and

(D) for a passenger automobile, meets or exceeds the minimum driving range prescribed under subsection (c) of this section.

(10) “fuel” means—

- (A) gasoline;
- (B) diesel oil; or

(C) other liquid or gaseous fuel that the Secretary decides by regulation to include in this definition as consistent with the need of the United States to conserve energy.

(11) “fuel economy” means the average number of miles traveled by an automobile for each gallon of gasoline (or equivalent amount of other fuel) used, as determined by the Administrator under section 32904(c) of this title.

(12) “import” means to import into the customs territory of the United States.

(13) “manufacture” (except under section 32902(d) of this title) means to produce or assemble in the customs territory of the United States or to import.

(14) “manufacturer” means—

(A) a person engaged in the business of manufacturing automobiles, including a predecessor or successor of the person to the extent provided under regulations prescribed by the Secretary; and

(B) if more than one person is the manufacturer of an automobile, the person specified under regulations prescribed by the Secretary.

(15) “model” means a class of automobiles as decided by regulation by the Administrator after consulting and coordinating with the Secretary.

(16) “model year”, when referring to a specific calendar year, means—

(A) the annual production period of a manufacturer, as decided by the Administrator, that includes January 1 of that calendar year; or

(B) that calendar year if the manufacturer does not have an annual production period.

(17) “non-passenger automobile” means an automobile that is not a passenger automobile or a work truck.

(18) “passenger automobile” means an automobile that the Secretary decides by regulation is manufactured primarily for transporting not more than 10 individuals, but does not include an automobile capable of off-highway operation that the Secretary decides by regulation—

- (A) has a significant feature (except 4-wheel drive) designed for off-highway operation; and

(B) is a 4-wheel drive automobile or is rated at more than 6,000 pounds gross vehicle weight.

(19) “work truck” means a vehicle that—

(A) is rated at between 8,500 and 10,000 pounds gross vehicle weight; and

(B) is not a medium-duty passenger vehicle (as defined in section 86.1803–01 of title 40, Code of Federal Regulations, as in effect on the date of the enactment of the Ten-in-Ten Fuel Economy Act).

(b) **AUTHORITY TO CHANGE PERCENTAGE.**—The Secretary may prescribe regulations changing the percentage referred to in subsection (a)(1)(D) of this section to not less than 70 percent because of requirements relating to cold start, safety, or vehicle functions.

(c) **MINIMUM DRIVING RANGES FOR DUAL FUELED PASSENGER AUTOMOBILES.**—(1) The Secretary shall prescribe by regulation the minimum driving range that dual fueled automobiles that are passenger automobiles must meet when operating on alternative fuel to be dual fueled automobiles under sections 32905 and 32906 of this title. A determination whether a dual fueled automobile meets the minimum driving range requirement under this paragraph shall be based on the combined Agency city/highway fuel economy as determined for average fuel economy purposes for those automobiles.

(2)(A) The Secretary may prescribe a lower range for a specific model than that prescribed under paragraph (1) of this subsection. A manufacturer may petition for a lower range than that prescribed under paragraph (1) for a specific model.

(B) The minimum driving range prescribed for dual fueled automobiles (except electric automobiles) under subparagraph (A) of this paragraph or paragraph (1) of this subsection must be at least 200 miles, except that beginning with model year 2016, alternative fueled automobiles that use a fuel described in subparagraph (E) of subsection (a)(1) shall have a minimum driving range of 150 miles.

(C) If the Secretary prescribes a minimum driving range of 200 miles for dual fueled automobiles (except electric automobiles) under paragraph (1) of this subsection, subparagraph (A) of this paragraph does not apply to dual fueled automobiles (except electric automobiles). Beginning with model year 2016, if the Secretary prescribes a minimum driving range of 150 miles for alternative fueled automobiles that use a fuel described in subparagraph (E) of subsection (a)(1), subparagraph (A) shall not apply to dual fueled automobiles (except electric automobiles).

(3) In prescribing a minimum driving range under paragraph (1) of this subsection and in taking an action under paragraph (2) of this subsection, the Secretary shall consider the purpose set forth in section 3 of the Alternative Motor Fuels Act of 1988 (Public Law 100–494, 102 Stat. 2442), consumer acceptability, economic practicability, technology, environmental impact, safety, drivability, performance, and other factors the Secretary considers relevant.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1056; Pub. L. 110–140, title I, §103(a), Dec. 19, 2007, 121

Stat. 1501; Pub. L. 113–291, div. A, title III, §318(b), Dec. 19, 2014, 128 Stat. 3341.)

HISTORICAL AND REVISION NOTES

<i>Revised Section</i>	<i>Source (U.S. Code)</i>	<i>Source (Statutes at Large)</i>
32901(a)(1) ...	15:2013(h)(1)(A) (less words in 1st parentheses).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §513(h); added Oct. 14, 1988, Pub. L. 100–494, §6(a), 102 Stat. 2450; Oct. 24, 1992, Pub. L. 102–486, §403(5)(H), (I), 106 Stat. 2878.
32901(a)(2) ...	15:2013(h)(1)(B).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §501(1); added Dec. 22, 1975, Pub. L. 94–163, §301, 89 Stat. 901; Oct. 14, 1988, Pub. L. 100–494, §6(b), 102 Stat. 2452; Oct. 24, 1992, Pub. L. 102–486, §403(1), 106 Stat. 2876.
32901(a)(3) ...	15:2001(1).	
	15:2001(13), (14).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §§501(2)–(7), (10)–(14), 503(c); added Dec. 22, 1975, Pub. L. 94–163, §301, 89 Stat. 901, 902, 907.
32901(a)(4) ...	15:2003(c).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §501(8), (9); added Dec. 22, 1975, Pub. L. 94–163, §301, 89 Stat. 902; Oct. 10, 1980, Pub. L. 96–425, §§4(c)(1), 8(b), 94 Stat. 1824, 1828.
32901(a)(5) ...	15:2001(4).	
32901(a)(6) ...	15:2001(7).	
32901(a)(7) ...	15:2013(h)(1)(C).	
32901(a)(8) ...	15:2001(h)(1)(D).	
32901(a)(9) ...	15:2001(5).	
32901(a)(10) ...	15:2001(6).	
32901(a)(11) ...	15:2001(10).	
32901(a)(12) ...	15:2001(9).	
32901(a)(13) ..	15:2001(8).	
32901(a)(14) ..	15:2001(11).	
32901(a)(15) ..	15:2001(12).	
32901(a)(16) ..	15:2001(2), (3).	
32901(b) .....	15:2013(h)(1)(A) (words in 1st parentheses).	
32901(c)(1) ...	15:2013(h)(2)(A).	
32901(c)(2) ...	15:2013(h)(2)(B), (C).	
32901(c)(3) ...	15:2013(h)(2)(D).	

In this chapter, the word “model” is substituted for “model type” for consistency in this part.

In subsection (a)(3), before clause (A), the words “except as provided in section 32908 of this title” are added for clarity. The word “line” is added for consistency in the revised title and with other titles of the United States Code. The words “or rails” are omitted because of 1:1. The text of 15:2001(1) (last sentence) is omitted because of 49:322(a). The text of 15:2001(13) and (14) is omitted as surplus because the complete names of the Secretary of Transportation and Administrator of the Environmental Protection Agency are used the first time the terms appear in a section. The text of 15:2001 (related to 15:2011) is omitted because 15:2011 is outside the scope of the restatement. See section 4(c) of the bill.

In subsection (a)(4), the words “‘automobile manufactured by a manufacturer’ includes” are substituted for “Any reference in this subchapter to automobiles manufactured by a manufacturer shall be deemed—(1) to include” to eliminate unnecessary words. The word “every” is substituted for “all” because of the restatement. The words “but does not include” are substituted for “to exclude” for consistency. The words “manufactured by the person” are substituted for “manufactured (within the meaning of paragraph (1))” to eliminate unnecessary words.

In subsection (a)(10), the words “in accordance with procedures established” are omitted as surplus.

In subsection (a)(14), the word “particular” is omitted as surplus.

Subsection (a)(15)(B) is substituted for “If a manufacturer has no annual production period, the term ‘model year’ means the calendar year” to eliminate unnecessary words.

In subsection (a)(16), before clause (A), the words “but does not include an automobile capable of off-

highway operation that” are substituted for “(other than an automobile capable of off-highway operation)” and “The term ‘automobile capable of off-highway operation’ means any automobile which” to eliminate unnecessary words.

In subsection (b), the words “The Secretary may prescribe regulations changing the percentage . . . to not less than 70 percent because of” are substituted for “but not less than 70 percent, as determined by the Secretary, by rule, to provide for” for clarity and because of the restatement.

In subsection (c)(1), the words “For purposes of the definitions in paragraph (1)(D)” are omitted as unnecessary because of the restatement. The words “within 18 months after October 14, 1988” are omitted as obsolete. The words “prescribe by regulation” are substituted for “establish by rule of general applicability” for clarity and consistency in the revised title and with other titles of the United States Code and because “rule” is synonymous with “regulation”. The words “that are passenger automobiles” are substituted for “The rule issued under this subparagraph shall apply only to dual fueled automobiles that are passenger automobiles” to eliminate unnecessary words.

#### REFERENCES IN TEXT

The date of the enactment of the Ten-in-Ten Fuel Economy Act, referred to in subsec. (a)(19)(B), is the date of enactment of subtitle A (§§101–113) of title I of Pub. L. 110–140, which was approved Dec. 19, 2007.

Section 3 of the Alternative Motor Fuels Act of 1988, referred to in subsec. (c)(3), is section 3 of Pub. L. 100–494, which is set out as a note under section 6374 of Title 42, The Public Health and Welfare.

#### AMENDMENTS

2014—Subsec. (c)(2)(B). Pub. L. 113–291, §318(b)(1), inserted “, except that beginning with model year 2016, alternative fueled automobiles that use a fuel described in subparagraph (E) of subsection (a)(1) shall have a minimum driving range of 150 miles” after “at least 200 miles”.

Subsec. (c)(2)(C). Pub. L. 113–291, §318(b)(2), inserted at end “Beginning with model year 2016, if the Secretary prescribes a minimum driving range of 150 miles for alternative fueled automobiles that use a fuel described in subparagraph (E) of subsection (a)(1), subparagraph (A) shall not apply to dual fueled automobiles (except electric automobiles).”

2007—Subsec. (a)(3). Pub. L. 110–140, §103(a)(1), added par. (3) and struck out former par. (3) which read as follows: “except as provided in section 32908 of this title, ‘automobile’ means a 4-wheeled vehicle that is propelled by fuel, or by alternative fuel, manufactured primarily for use on public streets, roads, and highways (except a vehicle operated only on a rail line), and rated at—

“(A) not more than 6,000 pounds gross vehicle weight; or

“(B) more than 6,000, but less than 10,000, pounds gross vehicle weight, if the Secretary decides by regulation that—

“(i) an average fuel economy standard under this chapter for the vehicle is feasible; and

“(ii) an average fuel economy standard under this chapter for the vehicle will result in significant energy conservation or the vehicle is substantially used for the same purposes as a vehicle rated at not more than 6,000 pounds gross vehicle weight.”

Subsec. (a)(7), (8). Pub. L. 110–140, §103(a)(2), (3), added par. (7) and redesignated former par. (7) as (8). Former par. (8) redesignated (9).

Subsec. (a)(9). Pub. L. 110–140, §103(a)(2), redesignated par. (8) as (9). Former par. (9) redesignated (10).

Subsec. (a)(9)(A). Pub. L. 110–140, §103(a)(4), inserted “or a mixture of biodiesel and diesel fuel meeting the standard established by the American Society for Testing and Materials or under section 211(u) of the Clean Air Act (42 U.S.C. 7545(u)) for fuel containing 20 percent

biodiesel (commonly known as ‘B20’)” after “alternative fuel”.

Subsec. (a)(10) to (16). Pub. L. 110–140, §103(a)(2), redesignated pars. (9) to (15) as (10) to (16), respectively. Former par. (16) redesignated (17).

Subsec. (a)(17). Pub. L. 110–140, §103(a)(6), added par. (17). Former par. (17) redesignated (18).

Pub. L. 110–140, §103(a)(2), redesignated par. (16) as (17).

Subsec. (a)(18). Pub. L. 110–140, §103(a)(5), redesignated par. (17) as (18).

Subsec. (a)(19). Pub. L. 110–140, §103(a)(7), added par. (19).

#### 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.

#### CONSUMER ASSISTANCE TO RECYCLE AND SAVE

Pub. L. 111–32, title XIII, June 24, 2009, 123 Stat. 1909, as amended by Pub. L. 111–47, Aug. 7, 2009, 123 Stat. 1972, provided that:

“SEC. 1301. SHORT TITLE.—This title may be cited as the ‘Consumer Assistance to Recycle and Save Act of 2009’.

“SEC. 1302. CONSUMER ASSISTANCE TO RECYCLE AND SAVE PROGRAM.—(a) ESTABLISHMENT.—There is established in the National Highway Traffic Safety Administration a voluntary program to be known as the ‘Consumer Assistance to Recycle and Save Program’ through which the Secretary, in accordance with this section and the regulations promulgated under subsection (d), shall—

“(1) authorize the issuance of an electronic voucher, subject to the specifications set forth in subsection (c), to offset the purchase price or lease price for a qualifying lease of a new fuel efficient automobile upon the surrender of an eligible trade-in vehicle to a dealer participating in the Program;

“(2) register dealers for participation in the Program and require that all registered dealers—

“(A) accept vouchers as provided in this section as partial payment or down payment for the purchase or qualifying lease of any new fuel efficient automobile offered for sale or lease by that dealer; and

“(B) in accordance with subsection (c)(2), to transfer each eligible trade-in vehicle surrendered to the dealer under the Program to an entity for disposal;

“(3) in consultation with the Secretary of the Treasury, make electronic payments to dealers for eligible transactions by such dealers, in accordance with the regulations issued under subsection (d); and

“(4) in consultation with the Secretary of the Treasury and the Inspector General of the Department of Transportation, establish and provide for the enforcement of measures to prevent and penalize fraud under the program.

“(b) QUALIFICATIONS FOR AND VALUE OF VOUCHERS.—A voucher issued under the Program shall have a value that may be applied to offset the purchase price or lease price for a qualifying lease of a new fuel efficient automobile as follows:

“(1) \$3,500 VALUE.—The voucher may be used to offset the purchase price or lease price of the new fuel efficient automobile by \$3,500 if—

“(A) the new fuel efficient automobile is a passenger automobile and the combined fuel economy value of such automobile is at least 4 miles per gallon higher than the combined fuel economy value of the eligible trade-in vehicle;

“(B) the new fuel efficient automobile is a category 1 truck and the combined fuel economy value of such truck is at least 2 miles per gallon higher than the combined fuel economy value of the eligible trade-in vehicle;

“(C) the new fuel efficient automobile is a category 2 truck that has a combined fuel economy value of at least 15 miles per gallon and—

“(i) the eligible trade-in vehicle is a category 2 truck and the combined fuel economy value of the new fuel efficient automobile is at least 1 mile per gallon higher than the combined fuel economy value of the eligible trade-in vehicle; or

“(ii) the eligible trade-in vehicle is a category 3 truck of model year 2001 or earlier; or

“(D) the new fuel efficient automobile is a category 3 truck and the eligible trade-in vehicle is a category 3 truck of model year of 2001 or earlier and is of similar size or larger than the new fuel efficient automobile as determined in a manner prescribed by the Secretary.

“(2) \$4,500 VALUE.—The voucher may be used to offset the purchase price or lease price of the new fuel efficient automobile by \$4,500 if—

“(A) the new fuel efficient automobile is a passenger automobile and the combined fuel economy value of such automobile is at least 10 miles per gallon higher than the combined fuel economy value of the eligible trade-in vehicle;

“(B) the new fuel efficient automobile is a category 1 truck and the combined fuel economy value of such truck is at least 5 miles per gallon higher than the combined fuel economy value of the eligible trade-in vehicle; or

“(C) the new fuel efficient automobile is a category 2 truck that has a combined fuel economy value of at least 15 miles per gallon and the combined fuel economy value of such truck is at least 2 miles per gallon higher than the combined fuel economy value of the eligible trade-in vehicle and the eligible trade-in vehicle is a category 2 truck.

“(c) PROGRAM SPECIFICATIONS.—

“(1) LIMITATIONS.—

“(A) GENERAL PERIOD OF ELIGIBILITY.—A voucher issued under the Program shall be used only in connection with the purchase or qualifying lease of new fuel efficient automobiles that occur between July 1, 2009 and November 1, 2009.

“(B) NUMBER OF VOUCHERS PER PERSON AND PER TRADE-IN VEHICLE.—Not more than 1 voucher may be issued for a single person and not more than 1 voucher may be issued for the joint registered owners of a single eligible trade-in vehicle.

“(C) NO COMBINATION OF VOUCHERS.—Only 1 voucher issued under the Program may be applied toward the purchase or qualifying lease of a single new fuel efficient automobile.

“(D) CAP ON FUNDS FOR CATEGORY 3 TRUCKS.—Not more than 7.5 percent of the total funds made available for the Program shall be used for vouchers for the purchase or qualifying lease of category 3 trucks.

“(E) COMBINATION WITH OTHER INCENTIVES PERMITTED.—The availability or use of a Federal, State, or local incentive or a State-issued voucher for the purchase or lease of a new fuel efficient automobile shall not limit the value or issuance of a voucher under the Program to any person otherwise eligible to receive such a voucher.

“(F) NO ADDITIONAL FEES.—A dealer participating in the program may not charge a person purchasing or leasing a new fuel efficient automobile any additional fees associated with the use of a voucher under the Program.

“(G) NUMBER AND AMOUNT.—The total number and value of vouchers issued under the Program may not exceed the amounts appropriated for such purpose.

“(2) DISPOSITION OF ELIGIBLE TRADE-IN VEHICLES.—

“(A) IN GENERAL.—For each eligible trade-in vehicle surrendered to a dealer under the Program, the dealer shall certify to the Secretary, in such manner as the Secretary shall prescribe by rule, that the dealer—

“(i) has not and will not sell, lease, exchange, or otherwise dispose of the vehicle for use as an

automobile in the United States or in any other country; and

“(ii) will transfer the vehicle (including the engine block), in such manner as the Secretary prescribes, to an entity that will ensure that the vehicle—

“(I) will be crushed or shredded within such period and in such manner as the Secretary prescribes; and

“(II) has not been, and will not be, sold, leased, exchanged, or otherwise disposed of for use as an automobile in the United States or in any other country.

“(B) SAVINGS PROVISION.—Nothing in subparagraph (A) may be construed to preclude a person who is responsible for ensuring that the vehicle is crushed or shredded from—

“(i) selling any parts of the disposed vehicle other than the engine block and drive train (unless with respect to the drive train, the transmission, drive shaft, or rear end are sold as separate parts); or

“(ii) retaining the proceeds from such sale.

“(C) COORDINATION.—The Secretary shall coordinate with the Attorney General to ensure that the National Motor Vehicle Title Information System and other publicly accessible systems are appropriately updated on a timely basis to reflect the crushing or shredding of vehicles under this section and appropriate reclassification of the vehicles' titles. The commercial market shall also have electronic and commercial access to the vehicle identification numbers of vehicles that have been disposed of on a timely basis.

“(d) REGULATIONS.—Notwithstanding the requirements of section 553 of title 5, United States Code, the Secretary shall promulgate final regulations to implement the Program not later than 30 days after the date of the enactment of this Act [June 24, 2009]. Such regulations shall—

“(1) provide for a means of registering dealers for participation in the Program;

“(2) establish procedures for the reimbursement of dealers participating in the Program to be made through electronic transfer of funds for the amount of the vouchers as soon as practicable but no longer than 10 days after the submission of information supporting the eligible transaction, as deemed appropriate by the Secretary;

“(3) require the dealer to use the voucher in addition to any other rebate or discount advertised by the dealer or offered by the manufacturer for the new fuel efficient automobile and prohibit the dealer from using the voucher to offset any such other rebate or discount;

“(4) require dealers to disclose to the person trading in an eligible trade-in vehicle the best estimate of the scrappage value of such vehicle and to permit the dealer to retain \$50 of any amounts paid to the dealer for scrappage of the automobile as payment for any administrative costs to the dealer associated with participation in the Program;

“(5) consistent with subsection (c)(2), establish requirements and procedures for the disposal of eligible trade-in vehicles and provide such information as may be necessary to entities engaged in such disposal to ensure that such vehicles are disposed of in accordance with such requirements and procedures, including—

“(A) requirements for the removal and appropriate disposition of refrigerants, antifreeze, lead products, mercury switches, and such other toxic or hazardous vehicle components prior to the crushing or shredding of an eligible trade-in vehicle, in accordance with rules established by the Secretary in consultation with the Administrator of the Environmental Protection Agency, and in accordance with other applicable Federal or State requirements;

“(B) a mechanism for dealers to certify to the Secretary that each eligible trade-in vehicle will be

transferred to an entity that will ensure that the vehicle is disposed of, in accordance with such requirements and procedures, and to submit the vehicle identification numbers of the vehicles disposed of and the new fuel efficient automobile purchased with each voucher;

“(C) a mechanism for obtaining such other certifications as deemed necessary by the Secretary from entities engaged in vehicle disposal; and

“(D) a list of entities to which dealers may transfer eligible trade-in vehicles for disposal; and

“(6) provide for the enforcement of the penalties described in subsection (e).

“(e) ANTI-FRAUD PROVISIONS.—

“(1) VIOLATION.—It shall be unlawful for any person to violate any provision under this section or any regulations issued pursuant to subsection (d) (other than by making a clerical error).

“(2) PENALTIES.—Any person who commits a violation described in paragraph (1) shall be liable to the United States Government for a civil penalty of not more than \$15,000 for each violation. The Secretary shall have the authority to assess and compromise such penalties, and shall have the authority to require from any entity the records and inspections necessary to enforce this program. In determining the amount of the civil penalty, the severity of the violation and the intent and history of the person committing the violation shall be taken into account.

“(f) INFORMATION TO CONSUMERS AND DEALERS.—Not later than 30 days after the date of the enactment of this Act [June 24, 2009], and promptly upon the update of any relevant information, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall make available on an Internet website and through other means determined by the Secretary information about the Program, including—

“(1) how to determine if a vehicle is an eligible trade-in vehicle;

“(2) how to participate in the Program, including how to determine participating dealers; and

“(3) a comprehensive list, by make and model, of new fuel efficient automobiles meeting the requirements of the Program.

Once such information is available, the Secretary shall conduct a public awareness campaign to inform consumers about the Program and where to obtain additional information.

“(g) RECORD KEEPING AND REPORT.—

“(1) DATABASE.—The Secretary shall maintain a database of the vehicle identification numbers of all new fuel efficient vehicles purchased or leased and all eligible trade-in vehicles disposed of under the Program.

“(2) REPORT ON EFFICACY OF THE PROGRAM.—Not later than 60 days after the termination date described in subsection (c)(1)(A), the Secretary shall submit a report to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate describing the efficacy of the Program, including—

“(A) a description of Program results, including—

“(i) the total number and amount of vouchers issued for purchase or lease of new fuel efficient automobiles by manufacturer (including aggregate information concerning the make, model, model year) and category of automobile;

“(ii) aggregate information regarding the make, model, model year, and manufacturing location of vehicles traded in under the Program; and

“(iii) the location of sale or lease;

“(B) an estimate of the overall increase in fuel efficiency in terms of miles per gallon, total annual oil savings, and total annual greenhouse gas reductions, as a result of the Program; and

“(C) an estimate of the overall economic and employment effects of the Program.

“(3) REVIEW OF ADMINISTRATION OF THE PROGRAM BY GOVERNMENT ACCOUNTABILITY OFFICE AND INSPECTOR

GENERAL.—Not later than 180 days after the termination date described in subsection (c)(1)(A), the Government Accountability Office and the Inspector General of the Department of Transportation shall submit reports to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate reviewing the administration of the program.

“(h) EXCLUSION OF VOUCHERS FROM INCOME.—

“(1) FOR PURPOSES OF ALL FEDERAL AND STATE PROGRAMS.—A voucher issued under this program or any payment made for such a voucher pursuant to subsection (a)(3) shall not be regarded as income and shall not be regarded as a resource for the month of receipt of the voucher and the following 12 months, for purposes of determining the eligibility of the recipient of the voucher (or the recipient’s spouse or other family or household members) for benefits or assistance, or the amount or extent of benefits or assistance, under any Federal or State program.

“(2) FOR PURPOSES OF TAXATION.—A voucher issued under the program or any payment made for such a voucher pursuant to subsection (a)(3) shall not be considered as gross income of the purchaser of a vehicle for purposes of the Internal Revenue Code of 1986 [26 U.S.C. 1 et seq.].

“(i) DEFINITIONS.—As used in this section—

“(1) the term ‘passenger automobile’ means a passenger automobile, as defined in section 32901(a)(18) of title 49, United States Code, that has a combined fuel economy value of at least 22 miles per gallon;

“(2) the term ‘category 1 truck’ means a nonpassenger automobile, as defined in section 32901(a)(17) of title 49, United States Code, that has a combined fuel economy value of at least 18 miles per gallon, except that such term does not include a category 2 truck;

“(3) the term ‘category 2 truck’ means a large van or a large pickup, as categorized by the Secretary using the method used by the Environmental Protection Agency and described in the report entitled ‘Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2008’;

“(4) the term ‘category 3 truck’ means a work truck, as defined in section 32901(a)(19) of title 49, United States Code;

“(5) the term ‘combined fuel economy value’ means—

“(A) with respect to a new fuel efficient automobile, the number, expressed in miles per gallon, centered below the words ‘Combined Fuel Economy’ on the label required to be affixed or caused to be affixed on a new automobile pursuant to subpart D of part 600 of title 40, Code of Federal Regulations;

“(B) with respect to an eligible trade-in vehicle, the equivalent of the number described in subparagraph (A), and posted under the words ‘Estimated New EPA MPG’ and above the word ‘Combined’ for vehicles of model year 1984 through 2007, or posted under the words ‘New EPA MPG’ and above the word ‘Combined’ for vehicles of model year 2008 or later on the fueleconomy.gov website of the Environmental Protection Agency for the make, model, and year of such vehicle; or

“(C) with respect to an eligible trade-in vehicle manufactured between model years 1978 through 1985, the equivalent of the number described in subparagraph (A) as determined by the Secretary (and posted on the website of the National Highway Traffic Safety Administration) using data maintained by the Environmental Protection Agency for the make, model, and year of such vehicle.

“(6) the term ‘dealer’ means a person licensed by a State who engages in the sale of new automobiles to ultimate purchasers;

“(7) the term ‘eligible trade-in vehicle’ means an automobile or a work truck (as such terms are defined in section 32901(a) of title 49, United States Code) that, at the time it is presented for trade-in under this section—

“(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-

“(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)<sup>1</sup> 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.—

<sup>1</sup> So in original. Probably should be followed by a comma.

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)<sup>1</sup> 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.—

<sup>1</sup> 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.

**§ 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.



(5)(A) A manufacturer may submit to the Secretary of Transportation for approval a plan, including supporting material, stating the actions and the deadlines for taking the actions, that will ensure that the model or models referred to in subparagraph (B) of this paragraph will be manufactured domestically before the end of the 4th model year covered by the plan. The Secretary promptly shall consider and act on the plan. The Secretary shall approve the plan unless—

(i) the Secretary finds that the plan is inadequate to meet the requirements of this paragraph; or

(ii) the manufacturer previously has submitted a plan approved by the Secretary under this paragraph.

(B) If the plan is approved, the Administrator shall include under paragraph (1)(A)(i) and exclude under paragraph (1)(A)(ii) of this subsection, for each of the 4 model years covered by the plan, not more than 150,000 passenger automobiles manufactured by that manufacturer but not qualifying as domestically manufactured if—

(i) the model or models involved previously have not been manufactured domestically;

(ii) at least 50 percent of the cost to the manufacturer of each of the automobiles is attributable to value added in the United States or Canada;

(iii) the automobiles, if their assembly was completed in Canada, are imported into the United States not later than 30 days after the end of the model year; and

(iv) the model or models are manufactured domestically before the end of the 4th model year covered by the plan.

(c) TESTING AND CALCULATION PROCEDURES.—The Administrator shall measure fuel economy for each model and calculate average fuel economy for a manufacturer under testing and calculation procedures prescribed by the Administrator. However, except under section 32908 of this title, the Administrator shall use the same procedures for passenger automobiles the Administrator used for model year 1975 (weighted 55 percent urban cycle and 45 percent highway cycle), or procedures that give comparable results. A measurement of fuel economy or a calculation of average fuel economy (except under section 32908) shall be rounded off to the nearest .1 of a mile a gallon. The Administrator shall decide on the quantity of other fuel that is equivalent to one gallon of gasoline. To the extent practicable, fuel economy tests shall be carried out with emissions tests under section 206 of the Clean Air Act (42 U.S.C. 7525).

(d) EFFECTIVE DATE OF PROCEDURE OR AMENDMENT.—The Administrator shall prescribe a procedure under this section, or an amendment (except a technical or clerical amendment) in a procedure, at least 12 months before the beginning of the model year to which the procedure or amendment applies.

(e) REPORTS AND CONSULTATION.—The Administrator shall report measurements and calculations under this section to the Secretary of Transportation and shall consult and coordinate with the Secretary in carrying out this section.

(Pub. L. 103–272, § 1(e), July 5, 1994, 108 Stat. 1062; Pub. L. 103–429, § 6(36), Oct. 31, 1994, 108 Stat. 4380; Pub. L. 104–287, § 5(63), Oct. 11, 1996, 110 Stat. 3395; Pub. L. 110–140, title I, §§ 104(b)(2), 113(a), Dec. 19, 2007, 121 Stat. 1503, 1508.)

## HISTORICAL AND REVISION NOTES

PUB. L. 103–272

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32904(a)(1) ..	15:2003(a)(1), (2).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(a)(1), (2), (d)–(f); added Dec. 22, 1975, Pub. L. 94–163, § 301, 89 Stat. 906, 907.
32904(a)(2) ..	15:2003(a)(3).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(a)(3); added Jan. 7, 1980, Pub. L. 96–185, § 18 (related to § 503(a)(3) of Motor Vehicle Information and Cost Savings Act), 93 Stat. 1336.
32904(b)(1) ..	15:2003(b)(2).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(b)(1), (2); added Dec. 22, 1975, Pub. L. 94–163, § 301, 89 Stat. 906; Oct. 10, 1980, Pub. L. 96–425, § 4(c)(2), (3), 8(e), 94 Stat. 1824, 1829.
32904(b)(2) ..	15:2003(b)(1).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(b)(4); added Oct. 10, 1980, Pub. L. 96–425, § 4(b), 94 Stat. 1824.
32904(b)(3) ..	15:2003(b)(4).	
32904(b)(4)–(6).	15:2003(b)(3).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(b)(3); added Oct. 10, 1980, Pub. L. 96–425, § 4(a)(1), 94 Stat. 1822; Nov. 8, 1984, Pub. L. 98–620, § 402(18), 98 Stat. 3358.
32904(c) .....	15:2003(d)(1) (1st–3d sentences), (2), (e).	
32904(d) .....	15:2003(d)(3).	
32904(e) .....	15:2003(d)(1) (last sentence), (f).	

In subsection (a)(1), before clause (A), the words “of a manufacturer subject to” are substituted for “for the purposes of” for clarity. In clause (B)(ii), the words “the sum of the fractions obtained by” are substituted for “a sum of terms, each term of which is a fraction created by” to eliminate unnecessary words.

Subsection (a)(2)(A) is substituted for “as defined in section 2012(b)(2) of this title” for clarity.

In subsection (a)(2)(B), before clause (i), the words “the Administrator shall include in the calculation of average fuel economy” are substituted for “the average fuel economy will be calculated . . . to include” for clarity. The text of 15:2003(a)(3)(B) is omitted as executed. The words “determine and propose” are substituted for “propose” for clarity and consistency with the authority of the Secretary under the source provisions. The words “based on the following factors” are substituted for “Determination of these fuel economy values will take into account the following parameters” for clarity and to eliminate unnecessary words. The factors in clauses (i)–(iv) are applied to revisions in fuel economy values for clarity and consistency with the authority of the Secretary under the source provisions. In clause (iv), the words “patterns of use” are substituted for “driving patterns” for clarity.

In subsection (b)(1), before clause (A), the text of 15:2003(b)(2)(A)–(D) is omitted as executed. In clause (A), the words “is imported . . . more than 30 days after” are substituted for “is not imported . . . prior to the expiration of 30 days following” for clarity and for consistency in the revised chapter. The words “The EPA Administrator may prescribe rules for purposes of carrying out this subparagraph” are omitted as surplus because of the authority of the Administrator to prescribe regulations under section 32910(d) of the revised title. The term “regulations” is used in section 32910(d) instead of “rules” for consistency in the revised title and because the terms are synonymous. In clause (B), the words “which is imported by a manufacturer in

model year 1978 or any subsequent year, as the case may be, and” are omitted as surplus.

In subsection (b)(2)(A), before clause (i), the words “Except as provided in paragraphs (4) and (5) of this subsection” are added for clarity. The words “the Administrator shall make separate calculations” are substituted for “In calculating average fuel economy . . . the EPA Administrator shall separate the total number of passenger automobiles manufactured by a manufacturer into the following two categories” and “The EPA Administrator shall calculate the average fuel economy of each such separate category” to eliminate unnecessary words. In clauses (i) and (ii), the reference in the parenthetical to paragraph (3) is substituted for the reference in the source to paragraph (3), which apparently should have been a reference to paragraph (4). The text of 15:2003(b)(1)(A) (words in parentheses) and (B) (words in parentheses) is omitted as executed.

Subsection (b)(2)(B) is substituted for 15:2003(b)(1) (words after last comma) because of the restatement.

In subsection (b)(3)(A), before clause (i), the word “deadlines” is substituted for “dates” for clarity. The text of 15:2003(b)(4)(C) is omitted as executed.

In subsection (b)(4)(A), before clause (i), the words “A manufacturer may file with the Secretary of Transportation a petition for an exemption from the requirement of separate calculations under paragraph (2)(A) of this subsection” are substituted for “petition . . . for an exemption from the provisions of paragraph (1) filed by a manufacturer, the Secretary” for clarity.

In subsection (b)(5)(B), the words “judgment of the court under this subparagraph may be reviewed” are substituted for “judgment of the court affirming, remanding, or setting aside, in whole or in part, any such decision shall be final, subject to review” to eliminate unnecessary words.

In subsection (b)(5)(C), the words “Notwithstanding any other provision of law” are omitted as surplus. The words “a petition for” are added for consistency.

In subsection (c), the words “of a model type” and “of a manufacturer” are omitted as surplus. The words “by rule” are omitted as surplus because of the authority of the Administrator to prescribe regulations under section 32910(d) of the revised title. The term “regulations” is used in section 32910(d) instead of “rules” for consistency in the revised title and because the terms are synonymous. The words “However . . . the Administrator shall use the same procedures for passenger automobiles the Administrator used” are substituted for “Procedures so established with respect to passenger automobiles . . . shall be the procedures utilized by the EPA Administrator” for clarity. The words “(in accordance with rules of the EPA Administrator)” are omitted as surplus. The words “fuel economy tests shall be carried out with” are substituted for “Procedures under this subsection . . . shall require that fuel economy tests be conducted in conjunction with” to eliminate unnecessary words.

In subsection (d), the words “The Administrator shall prescribe a procedure under this section, or an amendment . . . at least” are substituted for “Testing and calculation procedures applicable to a model year and any amendment to such procedures . . . shall be promulgated not less than” to eliminate unnecessary words.

In subsection (e), the words “his duties under” are omitted as surplus.

PUB. L. 103-429, §6(36)(A)

This makes conforming amendments necessary because of the restatement of 15:2003(b)(2)(G) as 49:32904(b)(3) by section 6(36)(B) of the bill.

PUB. L. 103-429, §6(36)(B)

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32904(b) .....	15:2003(b)(2)(E), (G).	Oct. 20, 1972, Public Law 92-513, §503(b)(2)(E), (G), as amended Dec. 8, 1993, Pub. L. 103-182, §371, 107 Stat. 2127.

The text of 49:32904(b)(1) is the text of 49:32904(b)(2), as enacted by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 1063), with conforming changes made in the cited cross-references.

The text of subsection (b)(2) is the text of 49:32904(b)(1)(A), as enacted by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 1063), with the amendments of the underlying source provisions of 49:32904(b)(1)(A) made by section 371(b)(1) of the North American Free Trade Implementation Act (Public Law 103-182, 107 Stat. 2128). The words “(except as provided in paragraph (3))” are substituted for “Except as provided in subparagraph (G)” because of the restatement of 15:2003(b)(2)(G) as 49:32904(b)(3).

In subsection (b)(3)(A), the words “is imported . . . more than 30 days after” are substituted for “is not imported . . . prior to the expiration of 30 days following” for clarity and consistency with title 49, United States Code.

In subsection (b)(3)(C), the words “and the EPA Administrator may prescribe rules for purposes of carrying out this subparagraph” are omitted as surplus because of the authority of the Administrator to prescribe regulations under 49:32910(d). The amendment made by section 371(b)(2) of the North American Free Trade Implementation Act (Public Law 103-182, 107 Stat. 2128) is not given effect because the last sentence of section 503(b)(2)(E) of the Motor Vehicle and Cost Savings Act (Public Law 92-513, 86 Stat. 947) was omitted in the restatement of title 49 because of the authority of the Administrator to prescribe regulations under 49:32910(d).

The text of subsection (b)(4) is the text of 49:32904(b)(1)(B), as enacted by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 1063).

PUB. L. 103-429, §6(36)(C), (D)

This makes conforming amendments necessary because of the restatement of 15:2003(b)(2)(G) as 49:32904(b)(3) by section 6(36)(B) of the bill.

AMENDMENTS

2007—Subsec. (b)(1)(B). Pub. L. 110-140, §104(b)(2), inserted “, except for the purposes of section 32903” before period at end.

Subsec. (b)(6) to (8). Pub. L. 110-140, §113(a), struck out pars. (6) to (8) which related to exemption from separate calculations requirement, judicial review of denial of petition, and unavailability of section 32903(a) and (b)(2) credits during model year when exemption is effective, respectively.

1996—Subsec. (b)(6)(C). Pub. L. 104-287 substituted “Committee on Commerce” for “Committee on Energy and Commerce”.

1994—Subsec. (b)(1). Pub. L. 103-429, §6(36)(B), added par. (1) and struck out former par. (1) which read as follows: “In this subsection—

“(A) 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 assembly 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; and

“(B) 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.”

Subsec. (b)(2). Pub. L. 103-429, §6(36)(B), added par. (2) and struck out former par. (2) which read as follows:

“(2)(A) Except as provided in paragraphs (4) and (5) 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 (3) of this subsection); and

“(ii) passenger automobiles not manufactured domestically by that manufacturer (or excluded from this category under paragraph (3) 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.”

Subsec. (b)(3), (4). Pub. L. 103-429, §6(36)(B), added pars. (3) and (4). Former pars. (3) and (4) redesignated (5) and (6), respectively.

Subsec. (b)(5). Pub. L. 103-429, §6(36)(A), redesignated par. (3) as (5). Former par. (5) redesignated (7).

Subsec. (b)(5)(B). Pub. L. 103-429, §6(36)(C), substituted “paragraph (1)(A)(i) and exclude under paragraph (1)(A)(ii)” for “paragraph (2)(A)(i) and exclude under paragraph (2)(A)(ii)” in introductory provisions.

Subsec. (b)(6). Pub. L. 103-429, §6(36)(A), redesignated par. (4) as (6). Former par. (6) redesignated (8).

Subsec. (b)(6)(A). Pub. L. 103-429, §6(36)(D), substituted “paragraph (1)(A)” for “paragraph (2)(A)” in introductory provisions.

Subsec. (b)(7), (8). Pub. L. 103-429, §6(36)(A), redesignated pars. (5) and (6) as (7) and (8), respectively.

#### 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.

#### EFFECT OF REPEAL ON EXISTING EXEMPTIONS

Pub. L. 110-140, title I, §113(b), (c), Dec. 19, 2007, 121 Stat. 1508, provided that:

“(b) EFFECT OF REPEAL ON EXISTING EXEMPTIONS.—Any exemption granted under section 32904(b)(6) of title 49, United States Code, prior to the date of the enactment of this Act [Dec. 19, 2007] shall remain in effect subject to its terms through model year 2013.

“(c) ACCRUAL AND USE OF CREDITS.—Any manufacturer holding an exemption under section 32904(b)(6) of title 49, United States Code, prior to the date of the enactment of this Act may accrue and use credits under sections 32903 and 32905 of such title beginning with model year 2011.”

#### § 32905. Manufacturing incentives for alternative fuel automobiles

(a) DEDICATED AUTOMOBILES.—Except as provided in subsection (c) of this section or section 32904(a)(2) of this title, for any model of dedicated automobile manufactured by a manufacturer after model year 1992, the fuel economy measured for that model shall be based on the fuel content of the alternative fuel used to operate the automobile. A gallon of a liquid alternative fuel used to operate a dedicated automobile is deemed to contain .15 gallon of fuel.

(b) DUAL FUELED AUTOMOBILES.—Except as provided in subsection (d) of this section or section 32904(a)(2) of this title, for any model of dual fueled automobile manufactured by a manufacturer in model years 1993 through 2019, the Administrator of the Environmental Protection Agency shall measure the fuel economy for that model by dividing 1.0 by the sum of—

(1) .5 divided by the fuel economy measured under section 32904(c) of this title when operating the model on gasoline or diesel fuel; and

(2) .5 divided by the fuel economy—

(A) measured under subsection (a) when operating the model on alternative fuel; or

(B) measured based on the fuel content of B20 when operating the model on B20, which is deemed to contain 0.15 gallon of fuel.

(c) GASEOUS FUEL DEDICATED AUTOMOBILES.—For any model of gaseous fuel dedicated auto-

mobile manufactured by a manufacturer after model year 1992, the Administrator shall measure the fuel economy for that model based on the fuel content of the gaseous fuel used to operate the automobile. One hundred cubic feet of natural gas is deemed to contain .823 gallon equivalent of natural gas. The Secretary of Transportation shall determine the appropriate gallon equivalent of other gaseous fuels. A gallon equivalent of gaseous fuel is deemed to have a fuel content of .15 gallon of fuel.

(d) GASEOUS FUEL DUAL FUELED AUTOMOBILES.—For any model of gaseous fuel dual fueled automobile manufactured by a manufacturer in model years 1993 through 2019, the Administrator shall measure the fuel economy for that model by dividing 1.0 by the sum of—

(1) .5 divided by the fuel economy measured under section 32904(c) of this title when operating the model on gasoline or diesel fuel; and

(2) .5 divided by the fuel economy measured under subsection (c) of this section when operating the model on gaseous fuel.

(e) ELECTRIC DUAL FUELED AUTOMOBILES.—

(1) IN GENERAL.—At the request of the manufacturer, the Administrator may measure the fuel economy for any model of dual fueled automobile manufactured after model year 2015 that is capable of operating on electricity in addition to gasoline or diesel fuel, obtains its electricity from a source external to the vehicle, and meets the minimum driving range requirements established by the Secretary for dual fueled electric automobiles, by dividing 1.0 by the sum of—

(A) the percentage utilization of the model on gasoline or diesel fuel, as determined by a formula based on the model's alternative fuel range, divided by the fuel economy measured under section 32904(c); and

(B) the percentage utilization of the model on electricity, as determined by a formula based on the model's alternative fuel range, divided by the fuel economy measured under section 32904(a)(2).

(2) ALTERNATIVE CALCULATION.—If the manufacturer does not request that the Administrator calculate the manufacturing incentive for its electric dual fueled automobiles in accordance with paragraph (1), the Administrator shall calculate such incentive for such automobiles manufactured by such manufacturer after model year 2015 in accordance with subsection (b).

(f) FUEL ECONOMY CALCULATIONS.—The Administrator shall calculate the manufacturer's average fuel economy under section 32904(a)(1) of this title for each model described under subsections (a)–(d) of this section by using as the denominator the fuel economy measured for each model under subsections (a)–(d).

(g) FUEL ECONOMY INCENTIVE REQUIREMENTS.—In order for any model of dual fueled automobile to be eligible to receive the fuel economy incentives included in section 32906(a) and (b), a label shall be attached to the fuel compartment of each dual fueled automobile of that model, notifying that the vehicle can be operated on an alternative fuel and on gasoline or diesel, with the form of alternative fuel stated on the notice.

“(ii) passenger automobiles not manufactured domestically by that manufacturer (or excluded from this category under paragraph (3) 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.”

Subsec. (b)(3), (4). Pub. L. 103-429, §6(36)(B), added pars. (3) and (4). Former pars. (3) and (4) redesignated (5) and (6), respectively.

Subsec. (b)(5). Pub. L. 103-429, §6(36)(A), redesignated par. (3) as (5). Former par. (5) redesignated (7).

Subsec. (b)(5)(B). Pub. L. 103-429, §6(36)(C), substituted “paragraph (1)(A)(i) and exclude under paragraph (1)(A)(ii)” for “paragraph (2)(A)(i) and exclude under paragraph (2)(A)(ii)” in introductory provisions.

Subsec. (b)(6). Pub. L. 103-429, §6(36)(A), redesignated par. (4) as (6). Former par. (6) redesignated (8).

Subsec. (b)(6)(A). Pub. L. 103-429, §6(36)(D), substituted “paragraph (1)(A)” for “paragraph (2)(A)” in introductory provisions.

Subsec. (b)(7), (8). Pub. L. 103-429, §6(36)(A), redesignated pars. (5) and (6) as (7) and (8), respectively.

#### 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.

#### EFFECT OF REPEAL ON EXISTING EXEMPTIONS

Pub. L. 110-140, title I, §113(b), (c), Dec. 19, 2007, 121 Stat. 1508, provided that:

“(b) EFFECT OF REPEAL ON EXISTING EXEMPTIONS.—Any exemption granted under section 32904(b)(6) of title 49, United States Code, prior to the date of the enactment of this Act [Dec. 19, 2007] shall remain in effect subject to its terms through model year 2013.

“(c) ACCRUAL AND USE OF CREDITS.—Any manufacturer holding an exemption under section 32904(b)(6) of title 49, United States Code, prior to the date of the enactment of this Act may accrue and use credits under sections 32903 and 32905 of such title beginning with model year 2011.”

#### § 32905. Manufacturing incentives for alternative fuel automobiles

(a) DEDICATED AUTOMOBILES.—Except as provided in subsection (c) of this section or section 32904(a)(2) of this title, for any model of dedicated automobile manufactured by a manufacturer after model year 1992, the fuel economy measured for that model shall be based on the fuel content of the alternative fuel used to operate the automobile. A gallon of a liquid alternative fuel used to operate a dedicated automobile is deemed to contain .15 gallon of fuel.

(b) DUAL FUELED AUTOMOBILES.—Except as provided in subsection (d) of this section or section 32904(a)(2) of this title, for any model of dual fueled automobile manufactured by a manufacturer in model years 1993 through 2019, the Administrator of the Environmental Protection Agency shall measure the fuel economy for that model by dividing 1.0 by the sum of—

(1) .5 divided by the fuel economy measured under section 32904(c) of this title when operating the model on gasoline or diesel fuel; and

(2) .5 divided by the fuel economy—

(A) measured under subsection (a) when operating the model on alternative fuel; or

(B) measured based on the fuel content of B20 when operating the model on B20, which is deemed to contain 0.15 gallon of fuel.

(c) GASEOUS FUEL DEDICATED AUTOMOBILES.—For any model of gaseous fuel dedicated auto-

mobile manufactured by a manufacturer after model year 1992, the Administrator shall measure the fuel economy for that model based on the fuel content of the gaseous fuel used to operate the automobile. One hundred cubic feet of natural gas is deemed to contain .823 gallon equivalent of natural gas. The Secretary of Transportation shall determine the appropriate gallon equivalent of other gaseous fuels. A gallon equivalent of gaseous fuel is deemed to have a fuel content of .15 gallon of fuel.

(d) GASEOUS FUEL DUAL FUELED AUTOMOBILES.—For any model of gaseous fuel dual fueled automobile manufactured by a manufacturer in model years 1993 through 2019, the Administrator shall measure the fuel economy for that model by dividing 1.0 by the sum of—

(1) .5 divided by the fuel economy measured under section 32904(c) of this title when operating the model on gasoline or diesel fuel; and

(2) .5 divided by the fuel economy measured under subsection (c) of this section when operating the model on gaseous fuel.

(e) ELECTRIC DUAL FUELED AUTOMOBILES.—

(1) IN GENERAL.—At the request of the manufacturer, the Administrator may measure the fuel economy for any model of dual fueled automobile manufactured after model year 2015 that is capable of operating on electricity in addition to gasoline or diesel fuel, obtains its electricity from a source external to the vehicle, and meets the minimum driving range requirements established by the Secretary for dual fueled electric automobiles, by dividing 1.0 by the sum of—

(A) the percentage utilization of the model on gasoline or diesel fuel, as determined by a formula based on the model's alternative fuel range, divided by the fuel economy measured under section 32904(c); and

(B) the percentage utilization of the model on electricity, as determined by a formula based on the model's alternative fuel range, divided by the fuel economy measured under section 32904(a)(2).

(2) ALTERNATIVE CALCULATION.—If the manufacturer does not request that the Administrator calculate the manufacturing incentive for its electric dual fueled automobiles in accordance with paragraph (1), the Administrator shall calculate such incentive for such automobiles manufactured by such manufacturer after model year 2015 in accordance with subsection (b).

(f) FUEL ECONOMY CALCULATIONS.—The Administrator shall calculate the manufacturer's average fuel economy under section 32904(a)(1) of this title for each model described under subsections (a)–(d) of this section by using as the denominator the fuel economy measured for each model under subsections (a)–(d).

(g) FUEL ECONOMY INCENTIVE REQUIREMENTS.—In order for any model of dual fueled automobile to be eligible to receive the fuel economy incentives included in section 32906(a) and (b), a label shall be attached to the fuel compartment of each dual fueled automobile of that model, notifying that the vehicle can be operated on an alternative fuel and on gasoline or diesel, with the form of alternative fuel stated on the notice.

This requirement applies to dual fueled automobiles manufactured on or after September 1, 2006.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1065; Pub. L. 104–287, §5(63), Oct. 11, 1996, 110 Stat. 3395; Pub. L. 109–58, title VII, §§759, 772(a), Aug. 8, 2005, 119 Stat. 833, 834; Pub. L. 110–140, title I, §109(b), (c), Dec. 19, 2007, 121 Stat. 1506; Pub. L. 113–291, div. A, title III, §318(c), Dec. 19, 2014, 128 Stat. 3341.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32905(a) .....	15:2013(a), (f)(1).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §513(a)–(f); added Oct. 14, 1988, Pub. L. 100–494, §6(a), 102 Stat. 2448; Oct. 24, 1992, Pub. L. 102–486, §403(5)(A)–(F), 106 Stat. 2876.
32905(b) .....	15:2013(b), (f)(1).	
32905(c) .....	15:2013(c), (f)(1).	
32905(d) .....	15:2013(d), (f)(1).	
32905(e) .....	15:2013(e).	
32905(f) .....	15:2013(f)(2)(B).	
32905(g) .....	15:2013(f)(2)(A).	

In subsections (a) and (c), the words “after model year 1992” are substituted for “Subsections (a) and (c) shall apply only to automobiles manufactured after model year 1992” because of the restatement.

In subsections (b) and (d), before each clause (1), the words “in model years 1993–2004” are substituted for “Except as otherwise provided in this subsection, subsections (b) and (d) shall apply only to automobiles manufactured in model year 1993 through model year 2004” to eliminate unnecessary words and because of the restatement.

In subsection (c), the words “For purposes of this section” and “than natural gas” are omitted as unnecessary because of the restatement. The words “a gallon equivalent of natural gas” are omitted as being included in “A gallon equivalent of any gaseous fuel”.

In subsection (e), the words “subject to the provisions of this section” are omitted as unnecessary because of the restatement. The words “for each model described under subsections (a)–(d) of this section” are substituted for “for each model type of dedicated automobile or dual fueled automobile” to eliminate unnecessary words. The words “by using as the denominator” are substituted for “by including as the denominator of the term” for clarity.

AMENDMENTS

2014—Subsecs. (e) to (g). Pub. L. 113–291 added subsec. (e) and redesignated former subsecs. (e) and (f) as (f) and (g), respectively.

2007—Subsec. (b). Pub. L. 110–140, §109(b)(1), substituted “1993 through 2019” for “1993–2010” in introductory provisions.

Subsec. (b)(2). Pub. L. 110–140, §109(c), amended par. (2) generally. Prior to amendment, par. (2) read as follows: “.5 divided by the fuel economy measured under subsection (a) of this section when operating the model on alternative fuel.”

Subsec. (d). Pub. L. 110–140, §109(b)(2), substituted “1993 through 2019” for “1993–2010” in introductory provisions.

Subsecs. (f) to (h). Pub. L. 110–140, §109(b)(3), (4), redesignated subsec. (h) as (f) and struck out former subsecs. (f) and (g) which related to temporary extension of application of subsecs. (b) and (d) and study and report on success of the policy of subsecs. (b) and (d), respectively.

2005—Subsecs. (b), (d). Pub. L. 109–58, §772(a)(1), substituted “1993–2010” for “1993–2004” in introductory provisions.

Subsec. (f). Pub. L. 109–58, §772(a)(2), substituted “2007” for “2001” in introductory provisions.

Subsec. (f)(1). Pub. L. 109–58, §772(a)(3), substituted “2010” for “2004”.

Subsec. (h). Pub. L. 109–58, §759, added subsec. (h).  
1996—Subsec. (g). Pub. L. 104–287 substituted “Committee on Commerce” for “Committee on Energy and Commerce”.

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.

§ 32906. Maximum fuel economy increase for alternative fuel automobiles

(a) IN GENERAL.—For each of model years 1993 through 2019 for each category of automobile (except an electric automobile or, beginning with model year 2016, an alternative fueled automobile that uses a fuel described in subparagraph (E) of section 32901(a)(1)), the maximum increase in average fuel economy for a manufacturer attributable to dual fueled automobiles is—

- (1) 1.2 miles a gallon for each of model years 1993 through 2014;
  - (2) 1.0 miles per gallon for model year 2015;
  - (3) 0.8 miles per gallon for model year 2016;
  - (4) 0.6 miles per gallon for model year 2017;
  - (5) 0.4 miles per gallon for model year 2018;
  - (6) 0.2 miles per gallon for model year 2019;
- and
- (7) 0 miles per gallon for model years after 2019.

(b) CALCULATION.—In applying subsection (a), the Administrator of the Environmental Protection Agency shall determine the increase in a manufacturer’s average fuel economy attributable to dual fueled automobiles by subtracting from the manufacturer’s average fuel economy calculated under section 32905(f) the number equal to what the manufacturer’s average fuel economy would be if it were calculated by the formula under section 32904(a)(1) by including as the denominator for each model of dual fueled automobiles the fuel economy when the automobiles are operated on gasoline or diesel fuel.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1067; Pub. L. 109–58, title VII, §772(b), Aug. 8, 2005, 119 Stat. 834; Pub. L. 110–140, title I, §109(a), Dec. 19, 2007, 121 Stat. 1505; Pub. L. 113–291, div. A, title III, §318(a), (d), Dec. 19, 2014, 128 Stat. 3341, 3342.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32906(a) .....	15:2013(g)(1).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §513(g)(1), (2)(A); added Oct. 14, 1988, Pub. L. 100–494, §6(a), 102 Stat. 2449; Oct. 24, 1992, Pub. L. 102–486, §403(5)(G)(i), (ii)(I), 106 Stat. 2877.
32906(b) .....	15:2013(g)(2)(A).	

AMENDMENTS

2014—Subsec. (a). Pub. L. 113–291, §318(a), substituted “(except an electric automobile or, beginning with model year 2016, an alternative fueled automobile that uses a fuel described in subparagraph (E) of section 32901(a)(1))” for “(except an electric automobile)” in introductory provisions.

Subsec. (b). Pub. L. 113–291, §318(d), substituted “section 32905(f)” for “section 32905(e)”.

2007—Pub. L. 110-140 amended section generally, substituting provisions relating to maximum increase in average fuel economy for each of model years 1993 through 2019 and calculation of each such increase for provisions relating to maximum increase for each of model years 1993 through 2010 and authorizing offsets if the Secretary of Transportation reduced the average fuel economy standard for passenger automobiles for any model year below 27.5 miles per gallon.

2005—Subsec. (a)(1)(A). Pub. L. 109-58, § 772(b)(1), substituted “model years 1993-2010” for “the model years 1993-2004”.

Subsec. (a)(1)(B). Pub. L. 109-58, § 772(b)(2), substituted “model years 2011-2014” for “the model years 2005-2008”.

#### 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.

### § 32907. Reports and tests of manufacturers

(a) MANUFACTURER REPORTS.—(1) A manufacturer shall report to the Secretary of Transportation on—

(A) whether the manufacturer will comply with an applicable average fuel economy standard under section 32902 of this title for the model year for which the report is made;

(B) the actions the manufacturer has taken or intends to take to comply with the standard; and

(C) other information the Secretary requires by regulation.

(2) A manufacturer shall submit a report under paragraph (1) of this subsection during the 30 days—

(A) before the beginning of each model year; and

(B) beginning on the 180th day of the model year.

(3) When a manufacturer decides that actions reported under paragraph (1)(B) of this subsection are not sufficient to ensure compliance with that standard, the manufacturer shall report to the Secretary additional actions the manufacturer intends to take to comply with the standard and include a statement about whether those actions are sufficient to ensure compliance.

(4) This subsection does not apply to a manufacturer for a model year for which the manufacturer is subject to an alternative average fuel economy standard under section 32902(d) of this title.

(b) RECORDS, REPORTS, TESTS, INFORMATION, AND INSPECTION.—(1) Under regulations prescribed by the Secretary or the Administrator of the Environmental Protection Agency to carry out this chapter, a manufacturer shall keep records, make reports, conduct tests, and provide items and information. On request and display of proper credentials, an officer or employee designated by the Secretary or Administrator may inspect automobiles and records of the manufacturer. An inspection shall be made at a reasonable time and in a reasonable way.

(2) The district courts of the United States may—

(A) issue an order enforcing a requirement or request under paragraph (1) of this subsection; and

(B) punish a failure to obey the order as a contempt of court.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1067.)

#### HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32907(a) .....	15:2005(a)(1)-(3).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §505(a)(1)-(3), (c); added Dec. 22, 1975, Pub. L. 94-163, §301, 89 Stat. 908, 909.
	15:2005(a)(4).	Oct. 20, 1972, Pub. L. 92-513, 86 Stat. 947, §505(a)(4); added Oct. 10, 1980, Pub. L. 96-425, §3(b), 94 Stat. 1822.
32907(b) .....	15:2005(c).	

In subsection (a)(1), before clause (A), the words “shall report to the Secretary of Transportation on” are substituted for “shall submit a report to the Secretary . . . Each such report shall contain (A) a statement as to” to eliminate unnecessary words. In clause (B), the words “the actions” are substituted for “a plan which describes the steps” to eliminate unnecessary words.

In subsection (a)(2)(A), the words “after model year 1977” are omitted as obsolete.

In subsection (a)(3), the words “actions reported . . . are not sufficient to ensure compliance with that standard” are substituted for “a plan submitted . . . which he stated was sufficient to insure compliance with applicable average fuel economy standards is not sufficient to insure such compliance” to eliminate unnecessary words and for consistency in the section. The words “additional actions” are substituted for “a revised plan which specifies any additional measures” for consistency in the section. The text of 15:2005(a)(3) is omitted as surplus because of 49:322(a).

In subsection (b)(1), the words “Under regulations prescribed by the Secretary or the Administrator of the Environmental Protection Agency to carry out this chapter” are substituted for “as the Secretary or the EPA Administrator may, by rule, reasonably require to enable the Secretary or the EPA Administrator to carry out their duties under this subchapter and under any rules prescribed pursuant to this subchapter” to eliminate unnecessary words, for consistency in the revised title, and because “rules” and “regulations” are synonymous. The words “establish and” are omitted as surplus. The 2d sentence is substituted for 15:2005(c) (2d sentence) to eliminate unnecessary words and for consistency. The text of 15:2005(c)(1) (last sentence) is omitted as surplus because of section 32910(d) of the revised title and 49:322(a).

Subsection (b)(2)(A) is substituted for “if a manufacturer refuses to accede to any rule or reasonable request made under paragraph (1), issue an order requiring compliance with such requirement or request” to eliminate unnecessary words.

Subsection (b)(2)(B) is substituted for 15:2005(c) (last sentence) to eliminate unnecessary words.

### § 32908. Fuel economy information

(a) DEFINITIONS.—In this section—

(1) “automobile” includes an automobile rated at not more than 8,500 pounds gross vehicle weight regardless of whether the Secretary of Transportation has applied this chapter to the automobile under section 32901(a)(3)(B) of this title.

(2) “dealer” means a person residing or located in a State, the District of Columbia, or a territory or possession of the United States, and engaged in the sale or distribution of new automobiles to the first person (except a dealer buying as a dealer) that buys the automobile in good faith other than for resale.

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



In subsection (b)(1), before clause (A), the words “within 120 days after December 22, 1975” and “which begins after December 22, 1975” are omitted as executed. The words “(determined under paragraph (2) of this subsection)” are added for clarity.

In subsection (b)(2), before clause (A), the words “As used in this section: (1) The term” are omitted as surplus. In clause (A), the words “to which this section applies” and “for the Armed Forces” are omitted as surplus. In clause (B), the words “the sum of the fractions obtained” are substituted for “a sum of terms, each term of which is a fraction created” to eliminate unnecessary words.

### § 32918. Retrofit devices

(a) DEFINITION.—In this section, the term “retrofit device” means any component, equipment, or other device—

(1) that is designed to be installed in or on an automobile (as an addition to, as a replacement for, or through alteration or modification of, any original component, equipment, or other device); and

(2) that any manufacturer, dealer, or distributor of the device represents will provide higher fuel economy than would have resulted with the automobile as originally equipped,

as determined under regulations of the Administrator of the Environmental Protection Agency. The term also includes a fuel additive for use in an automobile.

(b) EXAMINATION OF FUEL ECONOMY REPRESENTATIONS.—The Federal Trade Commission shall establish a program for systematically examining fuel economy representations made with respect to retrofit devices. Whenever the Commission has reason to believe that any representation may be inaccurate, the Commission shall request the Administrator to evaluate, in accordance with subsection (c) of this section, the retrofit device with respect to which the representation was made.

(c) EVALUATION OF RETROFIT DEVICES.—(1) On application of any manufacturer of a retrofit device (or prototype of a retrofit device), on request of the Commission under subsection (b) of this section, or on the motion of the Administrator, the Administrator shall evaluate, in accordance with regulations prescribed under subsection (e) of this section, any retrofit device to determine whether the retrofit device increases fuel economy and to determine whether the representations, if any, made with respect to the retrofit device are accurate.

(2) If under paragraph (1) of this subsection, the Administrator tests, or causes to be tested, any retrofit device on the application of a manufacturer of the device, the manufacturer shall supply, at the manufacturer's expense, one or more samples of the device to the Administrator and shall be liable for the costs of testing incurred by the Administrator. The procedures for testing retrofit devices so supplied may include a requirement for preliminary testing by a qualified independent testing laboratory, at the expense of the manufacturer of the device.

(d) RESULTS OF TESTS AND PUBLICATION IN FEDERAL REGISTER.—(1) The Administrator shall publish in the Federal Register a summary of the results of all tests conducted under this section, together with the Administrator's conclusions as to—

(A) the effect of any retrofit device on fuel economy;

(B) the effect of the device on emissions of air pollutants; and

(C) any other information the Administrator determines to be relevant in evaluating the device.

(2) The summary and conclusions shall also be submitted to the Secretary of Transportation and the Commission.

(e) REGULATIONS ESTABLISHING TESTS AND PROCEDURES FOR EVALUATION OF RETROFIT DEVICES.—The Administrator shall prescribe regulations establishing—

(1) testing and other procedures for evaluating the extent to which retrofit devices affect fuel economy and emissions of air pollutants; and

(2) criteria for evaluating the accuracy of fuel economy representations made with respect to retrofit devices.

(Pub. L. 103-429, §6(43)(B), Oct. 31, 1994, 108 Stat. 4382.)

#### HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32918 .....	15:2011.	Oct. 20, 1972, Pub. L. 92-513, §511, as added Dec. 22, 1975, Pub. L. 94-163, §301, 89 Stat. 915, and amended July 5, 1994, Pub. L. 103-272, §4(c), 108 Stat. 1361.

This restates 15:2011 to include 15:2011 in the scope of the codification enacted by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 745).

In subsection (a), the words “Administrator of the Environmental Protection Agency” are substituted for “Administrator” for clarity and to conform to the style of the codification which is to state the complete title the first time a descriptive title is used, and thereafter, to use a shorter title unless the context requires the complete title to be used.

In subsections (c) and (e), the word “regulations” is substituted for “rules” and “by rule” for consistency with the restatement of title 49.

In subsection (e)(1), the words “The Administrator shall prescribe regulations establishing” are substituted for “Within 180 days after December 22, 1975, the Administrator shall, by rule, establish” to eliminate executed words.

#### PRIOR PROVISIONS

A prior section 32918 was renumbered section 32919 of this title.

### § 32919. Preemption

(a) GENERAL.—When an average fuel economy standard prescribed under this chapter is in effect, a State or a political subdivision of a State may not adopt or enforce a law or regulation related to fuel economy standards or average fuel economy standards for automobiles covered by an average fuel economy standard under this chapter.

(b) REQUIREMENTS MUST BE IDENTICAL.—When a requirement under section 32908 of this title is in effect, a State or a political subdivision of a State may adopt or enforce a law or regulation on disclosure of fuel economy or fuel operating costs for an automobile covered by section 32908 only if the law or regulation is identical to that requirement.

(c) STATE AND POLITICAL SUBDIVISION AUTOMOBILES.—A State or a political subdivision of a State may prescribe requirements for fuel economy for automobiles obtained for its own use.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1075, §32918; renumbered §32919, Pub. L. 103–429, §6(43)(A), Oct. 31, 1994, 108 Stat. 4382.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32918 .....	15:2009.	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §509; added Dec. 22, 1975, Pub. L. 94–163, §301, 89 Stat. 914.

In subsection (a), the word “prescribed” is substituted for “established” for consistency.

AMENDMENTS

1994—Pub. L. 103–429 renumbered section 32918 of this title as this section.

CHAPTER 331—THEFT PREVENTION

- Sec.
- 33101. Definitions.
- 33102. Theft prevention standard for high theft lines.
- 33103. Theft prevention standard for other lines.
- 33104. Designation of high theft vehicle lines and parts.
- 33105. Cost limitations.
- 33106. Exemption for passenger motor vehicles equipped with anti-theft devices.
- 33107. Voluntary vehicle identification standards.
- 33108. Monitoring compliance of manufacturers.
- 33109. National Stolen Passenger Motor Vehicle Information System.
- 33110. Verifications involving junk and salvage motor vehicles.
- 33111. Verifications involving motor vehicle major parts.
- [33112. Repealed.]
- 33113. Theft reports.
- 33114. Prohibited acts.
- 33115. Civil penalties and enforcement.
- 33116. Confidentiality of information.
- 33117. Judicial review.
- 33118. Preemption of State and local law.

AMENDMENTS

2012—Pub. L. 112–141, div. C, title I, §31313(1), July 6, 2012, 126 Stat. 772, struck out item 33112 “Insurance reports and information”.

§ 33101. Definitions

In this chapter—

(1) “chop shop” means a building, lot, facility, or other structure or premise at which at least one person engages in receiving, concealing, destroying, disassembling, dismantling, reassembling, or storing a passenger motor vehicle or passenger motor vehicle part that has been unlawfully obtained—

(A) to alter, counterfeit, deface, destroy, disguise, falsify, forge, obliterate, or remove the identity of the vehicle or part, including the vehicle identification number or a derivative of that number; and

(B) to distribute, sell, or dispose of the vehicle or part in interstate or foreign commerce.

(2) “covered major part” means a major part selected under section 33104 of this title for

coverage by the vehicle theft prevention standard prescribed under section 33102 or 33103 of this title.

(3) “existing line” means a line introduced into commerce before January 1, 1990.

(4) “first purchaser” means the person making the first purchase other than for resale.

(5) “line” means a name that a manufacturer of motor vehicles applies to a group of motor vehicle models of the same make that have the same body or chassis, or otherwise are similar in construction or design.

(6) “major part” means—

(A) the engine;

(B) the transmission;

(C) each door to the passenger compartment;

(D) the hood;

(E) the grille;

(F) each bumper;

(G) each front fender;

(H) the deck lid, tailgate, or hatchback;

(I) each rear quarter panel;

(J) the trunk floor pan;

(K) the frame or, for a unitized body, the supporting structure serving as the frame; and

(L) any other part of a passenger motor vehicle that the Secretary of Transportation by regulation specifies as comparable in design or function to any of the parts listed in subclauses (A)–(K) of this clause.

(7) “major replacement part” means a major part that is—

(A) an original major part in or on a completed motor vehicle and customized or modified after manufacture of the vehicle but before the time of its delivery to the first purchaser; or

(B) not installed in or on a motor vehicle at the time of its delivery to the first purchaser and the equitable or legal title to the vehicle has not been transferred to a first purchaser.

(8) “model year” has the same meaning given that term in section 32901(a) of this title.

(9) “new line” means a line introduced into commerce after December 31, 1989.

(10) “passenger motor vehicle” includes a multipurpose passenger vehicle or light duty truck when that vehicle or truck is rated at not more than 6,000 pounds gross vehicle weight.

(11) “vehicle theft prevention standard” means a minimum performance standard for identifying major parts of new motor vehicles and major replacement parts by inscribing or affixing numbers or symbols on those parts.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1076; Pub. L. 103–429, §6(44), Oct. 31, 1994, 108 Stat. 4383; Pub. L. 104–287, §6(d)(1)(B), Oct. 11, 1996, 110 Stat. 3399.)

HISTORICAL AND REVISION NOTES  
PUB. L. 103–272

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
33101(1) .....	15:2021(11).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, §601(11); added Oct. 25, 1992, Pub. L. 102–519, §301(b), 106 Stat. 3394.

such inspections. For the purposes of this section, the term "probable cause" means a valid public interest in the effective enforcement of this subchapter or regulations issued thereunder sufficient to justify administrative inspections of the area, factory, warehouse, establishment, premises, or motor vehicle, or contents thereof, in the circumstances specified in the application for the warrant.

(2) A warrant shall be issued only upon an affidavit of an officer or employee having knowledge of the facts alleged, sworn to before the judge or magistrate and establishing the grounds for issuing the warrant. If the judge or magistrate is satisfied that grounds for the application exist or that there is a reasonable basis for believing they exist, he shall issue a warrant identifying the area, factory, warehouse, establishment, premises, or motor vehicle to be inspected, the purpose of such inspection, and, where appropriate, the type of property to be inspected, if any. The warrant shall—

(A) identify the items or type of property to be impounded, if any;

(B) be directed to a person authorized under section 1990d of this title to execute it;

(C) state the grounds for its issuance and the name of the person or persons whose affidavit has been taken in support thereof;

(D) command the person to whom it is directed to inspect the area, factory, warehouse, establishment, premises, or motor vehicle identified for the purpose specified, and, where appropriate, shall direct the impoundment of the property specified;

(E) direct that it be served during the hours specified in it; and

(F) designate the judge or magistrate to whom it shall be returned.

(3) A warrant issued pursuant to this section must be executed and returned within 10 days of its date unless, upon a showing by the Secretary of a need therefor, the judge or magistrate allows additional time in the warrant. If property is impounded pursuant to a warrant, the person executing the warrant shall give the person from whom or from whose premises the property was taken a copy of the warrant and a receipt for the property taken or shall leave the copy and receipt at the place from which the property was taken. The return of the warrant shall be made promptly and shall be accompanied by a written inventory of any property taken. The inventory shall be made in the presence of the person executing the warrant and of the person from whose possession or premises the property was taken, if they are present, or in the presence of at least one credible person other than the person making such inventory, and shall be verified by the person executing the warrant. The judge or magistrate, upon request, shall deliver a copy of the inventory to the person from whom or from whose premises the property was taken and to the applicant for the warrant.

(4) The judge or magistrate who has issued a warrant under this section shall attach to the warrant a copy of the return and all papers filed in connection therewith and shall

file them with the clerk of the district court of the United States for the judicial district in which the inspection was made.

(Pub. L. 92-513, title IV, § 415, as added Pub. L. 94-364, title IV, § 408(2), July 14, 1976, 90 Stat. 987.)

#### § 1990f. Compliance with inspection and investigation requirements

No person shall fail to comply with the requirements of section 1990d of this title to maintain records, make reports, provide information, permit access to or copying of records, permit entry or inspection, or permit impounding.

(Pub. L. 92-513, title IV, § 416, as added Pub. L. 94-364, title IV, § 408(2), July 14, 1976, 90 Stat. 988.)

#### § 1990g. Authorization of appropriations

There are authorized to be appropriated to carry out this subchapter \$450,000 for the fiscal year ending June 30, 1976; \$100,000 for the period beginning July 1, 1976, and ending September 30, 1976; \$650,000 for the fiscal year ending September 30, 1977; and \$562,000 for the fiscal year ending September 30, 1978.

(Pub. L. 92-513, title IV, § 417, as added Pub. L. 94-364, title IV, § 408(2), July 14, 1976, 90 Stat. 989.)

#### § 1991. State odometer requirements

This subchapter does not—

(1) annul, alter, or affect the laws of any State with respect to the disconnecting, altering, or tampering with odometers with the intent to defraud, or

(2) exempt any person subject to the provisions of this subchapter from complying with such laws,

except to the extent that those laws are inconsistent with any provision of this subchapter, and then only to the extent of the inconsistency.

(Pub. L. 92-513, title IV, § 418, formerly § 411, Oct. 20, 1972, 86 Stat. 963, renumbered Pub. L. 94-364, title IV, § 408(1), July 14, 1976, 90 Stat. 984.)

## SUBCHAPTER V—IMPROVING AUTOMOTIVE EFFICIENCY

### PART A<sup>1</sup>—AUTOMOTIVE FUEL ECONOMY

#### PART REFERRED TO IN OTHER SECTIONS

This part is referred to in section 1901 of this title.

#### § 2001. Definitions

For purposes of this part:

(1) The term "automobile" means any 4-wheeled vehicle propelled by fuel which is manufactured primarily for use on public streets, roads, and highways (except any vehicle operated exclusively on a rail or rails), and

(A) which is rated at 6,000 lbs. gross vehicle weight or less, or

<sup>1</sup> So in original. There are no other parts in this subchapter.

(B) which—

(i) is rated at more than 6,000 lbs. gross vehicle weight but less than 10,000 lbs. gross vehicle weight,

(ii) is a type of vehicle for which the Secretary determines, by rule, average fuel economy standards under this part are feasible, and

(iii) is a type of vehicle for which the Secretary determines, by rule, average fuel economy standards will result in significant energy conservation, or is a type of vehicle which the Secretary determines is substantially used for the same purposes as vehicles described in subparagraph (A) of this paragraph.

The Secretary may prescribe such rules as may be necessary to implement this paragraph.

(2) The term "passenger automobile" means any automobile (other than an automobile capable of off-highway operation) which the Secretary determines by rule is manufactured primarily for use in the transportation of not more than 10 individuals.

(3) The term "automobile capable of off-highway operation" means any automobile which the Secretary determines by rule—

(A) has a significant feature (other than 4-wheel drive) which is designed to equip such automobile for off-highway operation, and

(B) either—

(i) is a 4-wheel drive automobile, or

(ii) is rated at more than 6,000 pounds gross vehicle weight.

(4) The term "average fuel economy" means average fuel economy, as determined under section 2003 of this title.

(5) The term "fuel" means gasoline and diesel oil. The Secretary may, by rule, include any other liquid fuel or any gaseous 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 2002(d) of this title.

(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 2002(c) of this title) 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.

(Pub. L. 92-513, title V, § 501, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 901.)

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 2004, 2006, 2012 of this title; title 42 section 6291.

§ 2002. Average fuel economy standards

(a) Standards for passenger vehicles manufactured after 1977; review of standards; report to Congress; standards for passenger automobiles manufactured from 1981 through 1984; amendment of standards

(1) Except as otherwise provided in paragraph (4) or in subsection (c) or (d) of this section, 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:

<i>Model year:</i>	<i>Average fuel economy standard (in miles per gallon)</i>
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 Federal Register, a review of average fuel economy standards under this part. The review required to be transmitted not later than January 15, 1979, shall include a comprehensive analysis of the program required by this part. Such analysis shall include an assessment of the ability of manufacturers to meet the average fuel economy standard for model year 1985 as specified in paragraph (1) of this subsection, and any legislative recommendations the Secretary

or the EPA Administrator may have for improving the program required by this part.

(3) Not later than July 1, 1977, the Secretary shall prescribe, by rule, average fuel economy standards for passenger automobiles manufactured in each of the model years 1981 through 1984. Any such standard shall apply to each manufacturer (except as provided in subsection (c) of this section), and shall be set for each such model year at a level which the Secretary determines (A) is the maximum feasible average fuel economy level, and (B) will result in steady progress toward meeting the average fuel economy standard established by or pursuant to this subsection for model year 1985.

(4) The Secretary may, by rule, amend the average fuel economy standard specified in paragraph (1) for model year 1985, or for any subsequent model year, to a level which he determines is the maximum feasible average fuel economy level for such model year, except that any amendment which has the effect of increasing an average fuel economy standard to a level in excess of 27.5 miles per gallon, or of decreasing any such standard to a level below 26.0 miles per gallon, shall be submitted to the Congress in accordance with section 551 of the Energy Policy and Conservation Act [42 U.S.C. 6421], and shall not take effect if either House of the Congress disapproves such amendment in accordance with the procedures specified in such section.

(5) For purposes of considering any modification which is submitted to the Congress under paragraph (4), the 5 calendar days specified in section 551(f)(4)(A) of the Energy Policy and Conservation Act [42 U.S.C. 6421(f)(4)(A)] shall be lengthened to 20 calendar days, and the 15 calendar days specified in section 551(c) and (d) of such Act [42 U.S.C. 6421(c) and (d)] shall be lengthened to 60 calendar days.

(b) Standards for other than passenger automobiles

The Secretary shall, by rule, prescribe average fuel economy standards for automobiles which are not passenger automobiles and which are manufactured by any manufacturer in each model year which begins more than 30 months after December 22, 1975. Such rules may provide for separate standards for different classes of such automobiles (as determined by the Secretary), and shall<sup>1</sup> be set at a level which the Secretary determines is the maximum feasible average fuel economy level which such manufacturers are able to achieve in each model year to which this subsection applies. Any standard applicable to a model year under this subsection shall be prescribed at least 18 months prior to the beginning of such model year.

(c) Exemptions for manufacturers of limited number of cars

On application of a manufacturer who manufactured (whether or not in the United States) fewer than 10,000 passenger automobiles in the second model year preceding the model year for which the application is made, the Secretary may, by rule, exempt such manufacturer from subsection (a) of this section. An application for such an exemption shall be submitted to the Secretary, and shall contain such information

<sup>1</sup> So in original. Probably should be "such standards shall".

as the Secretary may require by rule. Such exemption may only be granted if the Secretary determines that the average fuel economy standard otherwise applicable under subsection (a) of this section is more stringent than the maximum feasible average fuel economy level which such manufacturer can attain. The Secretary may not issue exemptions with respect to a model year unless he establishes, by rule, alternative average fuel economy standards for passenger automobiles manufactured by manufacturers which receive exemptions under this subsection. Such standards may be established for an individual manufacturer, for all automobiles to which this subsection applies, or for such classes of such automobiles as the Secretary may define by rule. Each such standard shall be set at a level which the Secretary determines is the maximum feasible average fuel economy level for the manufacturers to which the standard applies. An exemption under this subsection shall apply to a model year only if the manufacturer manufactures (whether or not in the United States) fewer than 10,000 passenger automobiles in such model year.

(d) Application for modification of standards

(1) Any manufacturer may apply to the Secretary for modification of an average fuel economy standard applicable under subsection (a) of this section to such manufacturer for model year 1978, 1979, or 1980. Such application shall contain such information as the Secretary may require by rule, and shall be submitted to the Secretary within 24 months before the beginning of the model year for which such modification is requested.

(2)(A) If a manufacturer demonstrates and the Secretary finds that—

(i) a Federal standards fuel economy reduction is likely to exist for such manufacturer for the model year to which the application relates, and

(ii) such manufacturer applied a reasonably selected technology,

the Secretary shall, by rule, reduce the average fuel economy standard applicable under subsection (a) of this section to such manufacturer by the amount of such manufacturer's Federal standards fuel economy reduction, rounded off to the nearest one-tenth mile per gallon (in accordance with rules of the Secretary). To the maximum extent practicable, prior to making a finding under this paragraph with respect to an application, the Secretary shall request, and the EPA Administrator shall supply, test results collected pursuant to section 2003(d) of this title for all automobiles covered by such application.

(B)(i) If the Secretary does not find that a Federal standards fuel economy reduction is likely to exist for a manufacturer who filed an application under paragraph (1), he shall deny the application of such manufacturer.

(ii) If the Secretary—

(I) finds that a Federal standards fuel economy reduction is likely to exist for a manufacturer who filed an application under paragraph (1), and

(II) does not find that such manufacturer applied a reasonably selected technology,

the average fuel economy standard applicable under subsection (a) of this section to such manufacturer shall, by rule, be reduced by an amount equal to the Federal standards fuel economy reduction which the Secretary finds would have resulted from the application of a reasonably selected technology.

(3) For purposes of this subsection:

(A) The term "reasonably selected technology" means a technology which the Secretary determines it was reasonable for a manufacturer to select, considering (i) the Nation's need to improve the fuel economy of its automobiles, and (ii) the energy savings, economic costs, and lead-time requirements associated with alternative technologies practicably available to such manufacturer.

(B) The term "Federal standards fuel economy reduction" means the sum of the applicable fuel economy reductions determined under subparagraph (C).

(C) The term "applicable fuel economy reduction" means a number of miles per gallon equal to—

(i) the reduction in a manufacturer's average fuel economy in a model year which results from the application of a category of Federal standards applicable to such model year, and which would not have occurred had Federal standards of such category applicable to model year 1975 remained the only standards of such category in effect, minus

(ii) 0.5 mile per gallon.

(D) Each of the following is a category of Federal standards;

(i) Emissions standards under section 202 of the Clean Air Act [42 U.S.C. 1857f-1] and emissions standards applicable by reason of section 209(b) of such Act [42 U.S.C. 1857f-6a(b)].

(ii) Motor vehicle safety standards under the National Traffic and Motor Vehicle Safety Act of 1966 [15 U.S.C. 1381 et seq.].

(iii) Noise emission standards under section 6 of the Noise Control Act of 1972 [42 U.S.C. 4905].

(iv) Property loss reduction standards under subchapter I of this chapter.

(E) In making the determination under this subparagraph, the Secretary (in accordance with such methods as he shall prescribe by rule) shall assume a production mix for such manufacturer which would have achieved the average fuel economy standard for such model year had standards described in subparagraph (D) applicable to model year 1975 remained the only standards in effect.

(4) The Secretary may, for the purposes of conducting a proceeding under this subsection, consolidate one or more applications filed under this subsection.

(e) Determination of maximum feasible average fuel economy

For purposes of this section, in determining maximum feasible average fuel economy, the Secretary shall consider—

- (1) technological feasibility;
- (2) economic practicability;

(3) the effect of other Federal motor vehicle standards on fuel economy; and

(4) the need of the Nation to conserve energy.

(f) Amendment of average fuel economy standards

(1) The Secretary may, by rule, from time to time, amend any average fuel economy standard prescribed under subsection (a)(3), (b), or (c) of this section, so long as such standard, as amended, meets the requirements of subsection (a)(3), (b), or (c) of this section, as the case may be.

(2) Any amendment prescribed under this section which has the effect of making any average fuel economy standard more stringent shall be—

(A) promulgated, and

(B) if required by paragraph (4) of subsection (a) of this section, submitted to the Congress,

at least 18 months prior to the beginning of the model year to which such amendment will apply.

(g) Application of other laws

Proceedings under subsection (a)(4) or (d) of this section shall be conducted in accordance with section 553 of title 5 except that interested persons shall be entitled to make oral as well as written presentations. A transcript shall be taken of any oral presentations.

(Pub. L. 92-513, title V, § 502, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 902.)

#### REFERENCES IN TEXT

The National Traffic and Motor Vehicle Safety Act of 1966, referred to in subsec. (d)(3)(D)(ii), is Pub. L. 89-563, Sept. 9, 1966, 80 Stat. 718, which is classified to chapter 38 (§ 1381 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1381 of this title and Tables volume.

#### SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 2001, 2003, 2004, 2005, 2007, 2008, 2010 of this title.

§ 2003. Calculation of average fuel economy

(a) Method of calculation

(1) Average fuel economy for purposes of section 2002(a) and (c) of this title shall be calculated by the EPA Administrator by dividing—

(A) the total number of passenger automobiles manufactured in a given model year by a manufacturer, by

(B) a sum of terms, each term of which is a fraction created by dividing—

(i) the number of passenger automobiles of a given model type manufactured by such manufacturer in such model year, by

(ii) the fuel economy measured for such model type.

(2) Average fuel economy for purposes of section 2002(b) of this title shall be calculated in accordance with rules of the EPA Administrator.

(b) Automobile categories

(1) In calculating average fuel economy under subsection (a)(1) of this section, the EPA Administrator shall separate the total number of

<sup>1</sup> So in original, probably should be "subsection."

passenger automobiles manufactured by a manufacturer into the following two categories:

(A) Passenger automobiles which are domestically manufactured by such manufacturer (plus, in the case of model year 1978 and model year 1979, passenger automobiles which are within the includable base import volume of such manufacturer).

(B) Passenger automobiles which are not domestically manufactured by such manufacturer (and which, in the case of model year 1978 and model year 1979, are not within the includable base import volume of such manufacturer).

The EPA Administrator shall calculate the average fuel economy of each such separate category, and each such category shall be treated as if manufactured by a separate manufacturer for purposes of this part.

(2) For purposes of this subsection:

(A) The term "includable base import volume", with respect to any manufacturer in model year 1978 or 1979, as the case may be, is a number of passenger automobiles which is the lesser of—

(i) the manufacturer's base import volume, or

(ii) the number of passenger automobiles calculated by multiplying—

(I) the quotient obtained by dividing such manufacturer's base import volume by such manufacturer's base production volume, times

(II) the total number of passenger automobiles manufactured by such manufacturer during such model year.

(B) The term "base import volume" means one-half the sum of—

(i) the total number of passenger automobiles which were not domestically manufactured by such manufacturer during model year 1974 and which were imported by such manufacturer during such model year, plus

(ii) 133 percent of the total number of passenger automobiles which were not domestically manufactured by such manufacturer during the first 9 months of model year 1975 and which were imported by such manufacturer during such 9-month period.

(C) The term "base production volume" means one-half the sum of—

(i) the total number of passenger automobiles manufactured by such manufacturer during model year 1974, plus

(ii) 133 percent of the total number of passenger automobiles manufactured by such manufacturer during the first 9 months of model year 1975.

(D) For purposes of subparagraphs (B) and (C) of this paragraph any passenger automobile imported during model year 1976, but prior to July 1, 1975, shall be deemed to have been manufactured (and imported) during the first 9 months of model year 1975.

(E) An automobile shall be considered domestically manufactured in any model year if at least 75 percent of the cost to the manufacturer of such automobile is attributable to value added in the United States or Canada,

unless the assembly of such automobile is completed in Canada and such automobile is not imported into the United States prior to the expiration of 30 days following the end of such model year. The EPA Administrator may prescribe rules for purposes of carrying out this subparagraph.

(F) The fuel economy of each passenger automobile which is imported by a manufacturer in model year 1978 or 1979, as the case may be, and which is not domestically manufactured by such manufacturer, shall be deemed to be equal to the average fuel economy of all such passenger automobiles.

(c) Definition of "automobiles manufactured"

Any reference in this part to automobiles manufactured by a manufacturer shall be deemed—

(1) to include all automobiles manufactured by persons who control, are controlled by, or are under common control with, such manufacturer; and

(2) to exclude all automobiles manufactured (within the meaning of paragraph (1)) during a model year by such manufacturer which are exported prior to the expiration of 30 days following the end of such model year.

(d) Testing and calculation procedures

(1) Fuel economy for any model type shall be measured, and average fuel economy of a manufacturer shall be calculated, in accordance with testing and calculation procedures established by the EPA Administrator, by rule. Procedures so established with respect to passenger automobiles (other than for purposes of section 2006 of this title) shall be the procedures utilized by the EPA Administrator for model year 1975 (weighted 55 percent urban cycle, and 45 percent highway cycle), or procedures which yield comparable results. Procedures under this subsection, to the extent practicable, shall require that fuel economy tests be conducted in conjunction with emissions tests conducted under section 206 of the Clean Air Act [42 U.S.C. 1857f-5]. The EPA Administrator shall report any measurements of fuel economy and any calculations of average fuel economy to the Secretary.

(2) The EPA Administrator shall, by rule, determine that quantity of any other fuel which is the equivalent of one gallon of gasoline.

(3) Testing and calculation procedures applicable to a model year, and any amendment to such procedures (other than a technical or clerical amendment), shall be promulgated not less than 12 months prior to the model year to which such procedures apply.

(e) Rounding off of measurements of fuel economy

For purposes of this part (other than section 2006 of this title), any measurement of fuel economy of a model type, and any calculation of average fuel economy of a manufacturer, shall be rounded off to the nearest one-tenth mile per gallon (in accordance with rules of the EPA Administrator).

(f) Consultation and coordination by Administrator with Secretary

The EPA Administrator shall consult and coordinate with the Secretary in carrying out his duties under this section.

<sup>1</sup> So in original.

(Pub. L. 92-513, title V, § 503, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 906.)

#### SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 2001, 2002, 2004, 2005, 2008 of this title.

#### § 2004. Judicial review

##### (a) Review of rules in courts of appeals

Any person who may be adversely affected by any rule prescribed under section 2001, 2002, 2003, or 2006 of this title may, at any time prior to 60 days after such rule is prescribed (or in the case of an amendment submitted to each House of the Congress under section 2002(a)(4) of this title, at any time prior to 60 days after the expiration of the 60-day period specified in section 2002(a)(5) of this title), file a petition in the United States Court of Appeals for the District of Columbia, or for any circuit wherein such person resides or has his principal place of business, for judicial review of such rule. A copy of the petition shall be forthwith transmitted by the clerk of such court to the officer who prescribed the rule. Such officer shall thereupon cause to be filed in such court the written submissions and other materials in the proceeding upon which such rule was based. Upon the filing of such petition, the court shall have jurisdiction to review the rule in accordance with chapter 7 of title 5 and to grant appropriate relief as provided in such chapter. Findings of the Secretary under section 2002(d) of this title shall be set aside by the court on review unless such findings are supported by substantial evidence.

##### (b) Additional submissions

If the petitioner applies to the court in a proceeding under subsection (a) of this section for leave to make additional submissions, and shows to the satisfaction of the court that such additional submissions are material and that there were reasonable grounds for the failure to make such submissions in the administrative proceeding, the court may order the Secretary or the EPA Administrator, as the case may be to provide additional opportunity to make such submissions. The Secretary or the EPA Administrator, as the case may be, may modify or set aside the rule involved or prescribe a new rule by reason of the additional submissions, and shall file any such modified or new rule in the court, together with such additional submissions. The court shall thereafter review such new or modified rule.

##### (c) Finality of determination; review by United States Supreme Court

The judgment of the court affirming or setting aside, in whole or in part, any such rule shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in section 1254 of title 28.

##### (d) Remedy in addition to other remedies provided by law

The remedies provided for in this section shall be in addition to, and not in lieu of, any other remedies provided by law.

(Pub. L. 92-513, title V, § 504, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 908.)

#### § 2005. Information and reports

##### (a) Reports by manufacturers; time; contents

(1) Each manufacturer shall submit a report to the Secretary during the 30-day period preceding the beginning of each model year after model year 1977, and during the 30-day period beginning on the 180th day of each such model year. Each such report shall contain (A) a statement as to whether such manufacturer will comply with average fuel economy standards under section 2002 of this title applicable to the model year for which such report is made; (B) a plan which describes the steps the manufacturer has taken or intends to take in order to comply with such standards; and (C) such other information as the Secretary may require.

(2) Whenever a manufacturer determines that a plan submitted under paragraph (1) which he stated was sufficient to insure compliance with applicable average fuel economy standards is not sufficient to insure such compliance, he shall submit a report to the Secretary containing a revised plan which specifies any additional measures which such manufacturer intends to take in order to comply with such standards, and a statement as to whether such revised plan is sufficient to insure such compliance.

(3) The Secretary shall prescribe rules setting forth the form and content of the reports required under paragraphs (1) and (2).

##### (b) Hearings; evidence

(1) For the purpose of carrying out the provisions of this part, the Secretary or the EPA Administrator, or their duly designated agents, may hold such hearings, take such testimony, sit and act at such times and places, administer such oaths, and require, by subpoena, the attendance and testimony of such witnesses and the production of such books, papers, correspondence, memorandums, contracts, agreements, or other records as the Secretary, the EPA Administrator, or such agents deem advisable. The Secretary or the EPA Administrator may require, by general or special orders that any person—

(A) file, in such form as the Secretary or EPA Administrator may prescribe, reports or answers in writing to specific questions relating to any function of the Secretary or the EPA Administrator under this part, and

(B) provide the Secretary, the EPA Administrator, or their duly designated agents, access to (and for the purpose of examination, the right to copy) any documentary evidence of such person which is relevant to any function of the Secretary or the EPA Administrator under this part.

Such reports and answers shall be made under oath or otherwise, and shall be filed with the Secretary or the EPA Administrator within such reasonable period as either may prescribe.

(2) The district courts of the United States for a judicial district in the jurisdiction of which an inquiry is carried on may, in the case of contumacy or refusal to obey a duly authorized subpoena or order of the Secretary, the



EPA Administrator, or a duly designated agent of either, issued under paragraph (1), issue an order requiring compliance with such subpoena or order. Any failure to obey such an order of the court may be treated by such court as a contempt thereof.

(3) Witnesses summoned pursuant to this subsection shall be paid the same fees and mileage that are paid witnesses in the courts of the United States.

(c) Tests, reports, etc., which may be required of manufacturers

(1) Every manufacturer shall establish and maintain such records, make such reports, conduct such tests, and provide such items and information as the Secretary or the EPA Administrator may, by rule, reasonably require to enable the Secretary or the EPA Administrator to carry out their duties under this part and under any rules prescribed pursuant to this part. Such manufacturer shall, upon request of a duly designated agent of the Secretary or the EPA Administrator who presents appropriate credentials, permit such agent, at reasonable times and in a reasonable manner, to enter the premises of such manufacturer to inspect automobiles and appropriate books, papers, records, and documents. Such manufacturer shall make available all of such items and information in accordance with such reasonable rules as the Secretary or the EPA Administrator may prescribe.

(2) The district courts of the United States may, if a manufacturer refuses to accede to any rule or reasonable request made under paragraph (1), issue an order requiring compliance with such requirement or request. Any failure to obey such an order of the court may be treated by such court as a contempt thereof.

(d) Disclosure of information to public

(1) The Secretary and the EPA Administrator shall each disclose any information obtained under this part (other than section 2003(d) of this title) to the public in accordance with section 552 of title 5, except that information may be withheld from disclosure under subsection (b)(4) of such section only if the Secretary or the EPA Administrator, as the case may be, determines that such information, if disclosed, would result in significant competitive damage. Any matter described in section 552(b)(4) [of title 5] relevant to any administrative or judicial proceeding under this part may be disclosed in such proceeding.

(2) Measurements and calculations under section 2003(d) of this title shall be made available to the public in accordance with section 552 of title 5 without regard to subsection (b) of such section.

(Pub. L. 92-513, title V, § 505, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 908.)

#### § 2006. Labeling

(a) Label required on automobile; contents

(1) Except as otherwise provided in paragraph (2), each manufacturer shall cause to be affixed, and each dealer shall cause to be maintained, on each automobile manufactured in any model year after model year 1976, in a prominent place, a label—

(A) indicating—

(i) the fuel economy of such automobile,

(ii) the estimated annual fuel cost associated with the operation of such automobile, and

(iii) the range of fuel economy of comparable automobiles (whether or not manufactured by such manufacturer),

as determined in accordance with rules of the EPA Administrator,

(B) containing a statement that written information (as described in subsection (b)(1) of this section) with respect to the fuel economy of other automobiles manufactured in such model year (whether or not manufactured by such manufacturer) is available from the dealer in order to facilitate comparison among the various model types, and

(C) containing any other information authorized or required by the EPA Administrator which relates to information described in subparagraph (A) or (B).

(2) With respect to automobiles—

(A) for which procedures established in the EPA and FEA Voluntary Fuel Labeling Program for Automobiles exist on December 22, 1975, and

(B) which are manufactured in model year 1976 and at least 90 days after December 22, 1975,

each manufacturer shall cause to be affixed, and each dealer shall cause to be maintained, in a prominent place, a label indicating the fuel economy of such automobile, in accordance with such procedures.

(3) The form and content of the labels required under paragraphs (1) and (2), and the manner in which such labels shall be affixed, shall be prescribed by the EPA Administrator by rule. The EPA Administrator may permit a manufacturer to comply with this paragraph by permitting such manufacturer to disclose the information required under this subsection on the label required by section 3 of the Automobile Information Disclosure Act (15 U.S.C. 1232).

(h) Booklet containing fuel economy data; distribution by administrator

(1) The EPA Administrator shall compile and prepare a simple and readily understandable booklet containing data on fuel economy of automobiles manufactured in each model year. Such booklet shall also contain information with respect to estimated annual fuel costs, and may contain information with respect to geographical or other differences in estimated annual fuel costs. The Administrator of the Federal Energy Administration shall publish and distribute such booklets.

(2) The EPA Administrator, not later than July 31, 1976, shall prescribe rules requiring dealers to make available to prospective purchasers information compiled by the EPA Administrator under paragraph (1).

(c) Violations

(1) A violation of subsection (a) shall be treated as a violation of section 3 of the Automobile Information Disclosure Act (15 U.S.C. 1232). For purposes of the Federal Trade Commission Act [15 U.S.C. 41 et seq.] (other than sections

5(m) and (18) [15 U.S.C. 45(m) and 57a], a violation of subsection (a) shall be treated as an unfair or deceptive act or practice in or affecting commerce.

(2) As used in this section, the term "dealer" has the same meaning as such term has in section 2(e) of the Automobile Information Disclosure Act (15 U.S.C. 1231(e)) except that in applying such term to this section, the term "automobile" has the same meaning as such term has in section 2001(1) of this title.

**(d) Creation of warranties**

Any disclosure with respect to fuel economy or estimated annual fuel cost which is required to be made under the provisions of this section shall not create an express or implied warranty under State or Federal law that such fuel economy will be achieved, or that such cost will not be exceeded, under conditions of actual use.

**(e) Consultation by Administrator with other agency personnel**

In carrying out his duties under this section, the EPA Administrator shall consult with the Federal Trade Commission, the Secretary, and the Federal Energy Administrator.

(Pub. L. 92-513, title V, § 506, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 910.)

**REFERENCES IN TEXT**

The Federal Trade Commission Act, referred to in subsec. (c)(1), is act Sept. 26, 1914, ch. 311, 38 Stat. 717, which is classified generally to subchapter I (§ 41 et seq.) of chapter 2 of this title. For complete classification of this Act to the Code, see section 58 of this title and Tables volume.

**SECTION REFERRED TO IN OTHER SECTIONS**

This section is referred to in sections 2003, 2004, 2007, 2009 of this title.

**§ 2007. Unlawful conduct**

The following conduct is unlawful:

(1) the failure of any manufacturer to comply with any average fuel economy standard applicable to such manufacturer under section 2002 of this title (other than section 2002(b) of this title),

(2) the failure of any manufacturer to comply with any average fuel economy standard applicable to such manufacturer under section 2002(b) of this title, or

(3) the failure of any person (A) to comply with any provision of this part applicable to such person (other than section 2002, 2006(a), 2010, or 2011 of this title), or (B) to comply with any standard, rule, or order applicable to such person which is issued pursuant to such a provision.

(Pub. L. 92-513, title V, § 507, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 911.)

**SECTION REFERRED TO IN OTHER SECTIONS**

This section is referred to in section 2008 of this title.

**§ 2008. Civil penalty**

**(a) Penalty for violations; credit against penalty**

(1) If average fuel economy calculations reported under section 2003(d) of this title indi-

cate that any manufacturer has violated section 2007(1) or (2) of this title, then (unless further measurements of fuel economy, further calculations of average fuel economy, or other information indicates there is no violation of section 2007(1) or (2) of this title) the Secretary shall commence a proceeding under paragraph (2) of this subsection. The results of such further measurements, further calculations, and any such other information, shall be published in the Federal Register.

(2) If, on the record after opportunity for agency hearing, the Secretary determines that such manufacturer has violated section 2007(1) or (2) of this title, or that any person has violated section 2007(3) of this title, the Secretary shall assess the penalties provided for under subsection (b) of this section. Any interested person may participate in any proceeding under this paragraph.

(3)(A)(i) Whenever the average fuel economy of the passenger automobiles manufactured by a manufacturer in a particular model year exceeds an applicable average fuel economy standard established under section 2002(a) or (c) of this title (determined without regard to any adjustment under section 2002(d) of this title), such manufacturer shall be entitled to a credit, calculated under clause (ii), which shall be—

(I) deducted from the amount of any civil penalty which has been or may be assessed against such manufacturer for a violation of section 2007(1) of this title occurring in the model year immediately prior to the model year in which such manufacturer exceeds such applicable average fuel economy standard, and

(II) to the extent that such credit is not deducted pursuant to subclause (I), deducted from the amount of any civil penalty assessed against such manufacturer for a violation of section 2007(1) of this title occurring in the model year immediately following the model year in which such manufacturer exceeds such applicable average fuel economy standard.

(ii) The amount of credit to which a manufacturer is entitled under clause (i) shall be equal to—

(I) \$5 for each tenth of a mile per gallon by which the average fuel economy of the passenger automobiles manufactured by such manufacturer in the model year in which the credit is earned pursuant to clause (i) exceeds the applicable average fuel economy standard established under section 2002(a) or (c) of this title, multiplied by

(II) the total number of passenger automobiles manufactured by such manufacturer during such model year.

(B)(i) Whenever the average fuel economy of a class of automobiles which are not passenger automobiles and which are manufactured by a manufacturer in a particular model year exceeds an average fuel economy standard applicable to automobiles of such class under section 2002(b) of this title, such manufacturer shall be entitled to a credit, calculated under clause (ii), which shall be—

(I) deducted from the amount of any civil penalty which has been or may be assessed

against such manufacturer for a violation of section 2007(2) of this title, occurring in the model year immediately prior to the model year in which such manufacturer exceeds such applicable average fuel economy standard, and

(I) to the extent that such credit is not deducted pursuant to subclause (I), deducted from the amount of any such civil penalty assessed against such manufacturer for a violation of section 2007(2) of this title occurring in the model year immediately following the model year in which such manufacturer exceeds such applicable average fuel economy standard.

(ii) The amount of credit to which a manufacturer is entitled under clause (i) shall be equal to—

(I) \$5 for each tenth of a mile per gallon by which the average fuel economy of the automobiles of such class manufactured by such manufacturer in the model year in which the credit is earned pursuant to clause (i) exceeds the applicable average fuel economy standard established under section 2002(b) of this title, multiplied by

(II) the total number of automobiles of such class manufactured by such manufacturer during such model year.

(C) Whenever a civil penalty has been assessed and collected under this section from a manufacturer who is entitled to a credit under this paragraph with respect to such civil penalty, the Secretary of the Treasury shall refund to such manufacturer the amount of credit to which such manufacturer is so entitled, except that the amount of such refund shall not exceed the amount of the civil penalty so collected.

(D) The Secretary may prescribe rules for purposes of carrying out the provisions of this paragraph.

(b) Amount of penalty; compromise or modification

(1)(A) Any manufacturer whom the Secretary determines under subsection (a) of this section to have violated a provision of section 2007(1) of this title,<sup>1</sup> shall be liable to the United States for a civil penalty equal to (i) \$5 for each tenth of a mile per gallon by which the average fuel economy of the passenger automobiles manufactured by such manufacturer during such model year is exceeded by the applicable average fuel economy standard established under section 2002(a) and (c) of this title, multiplied by (ii) the total number of passenger automobiles manufactured by such manufacturer during such model year.

(B) Any manufacturer whom the Secretary determines under subsection (a) of this section to have violated section 2007(2) of this title shall be liable to the United States for a civil penalty equal to (i) \$5 for each tenth of a mile per gallon by which the applicable average fuel economy standard exceeds the average fuel economy of automobiles to which such standard applies, and which are manufactured by such manufacturer during the model year in which the violation occurs, multiplied by (ii) the total number of automobiles to which such

<sup>1</sup> The words "in a model year" probably should appear immediately preceding the comma.

standard applies and which are manufactured by such manufacturer during such model year.

(2) Any person whom the Secretary determines under subsection (a) of this section to have violated a provision of section 2007(3) of this title shall be liable to the United States for a civil penalty of not more than \$10,000 for each violation. Each day of a continuing violation shall constitute a separate violation for purposes of this paragraph.

(3) The amount of such civil penalty shall be assessed by the Secretary by written notice. The Secretary shall have the discretion to compromise, modify, or remit, with and without conditions, any civil penalty assessed under this subsection against any person, except that any civil penalty assessed for a violation of section 2007(1) or (2) of this title may be so compromised, modified, or emitted only to the extent—

(A) necessary to prevent the insolvency or bankruptcy of such manufacturer,

(B) such manufacturer shows that the violation of section 2007(1) or (2) of this title resulted from an act of God, a strike, or a fire, or

(C) the Federal Trade Commission has certified that modification of such penalty is necessary to prevent a substantial lessening of competition, as determined under paragraph (4).

The Attorney General shall collect any civil penalty for which a manufacturer is liable under this subsection in a civil action under subsection (c)(2) of this section (unless the manufacturer pays such penalty to the Secretary).

(4) Not later than 30 days after a determination by the Secretary under subsection (a)(2) of this section that a manufacturer has violated section 2007(1) or (2) of this title, such manufacturer may apply to the Federal Trade Commission for a certification under this paragraph. If the manufacturer shows and the Federal Trade Commission determines that modification of the civil penalty for which such manufacturer is otherwise liable is necessary to prevent a substantial lessening of competition in that segment of the automobile industry subject to the standard with respect to which such penalty was assessed, the Commission shall so certify. The certification shall specify the maximum amount that such penalty may be reduced. To the maximum extent practicable, the Commission shall render a decision with respect to an application under this paragraph not later than 90 days after the application is filed with the Commission. A proceeding under this paragraph shall not have the effect of delaying the manufacturer's liability under this section for a civil penalty for more than 90 days after such application is filed, but any payment made before a decision of the Commission under this paragraph becomes final shall be paid to the court in which the penalty is collected, and shall (except as otherwise provided in paragraph (5)), be held by such court, until 90 days after such decision becomes final (at which time it shall be paid into the general fund of the Treasury).

(5) Whenever a civil penalty has been assessed and collected from a manufacturer under this section, and is being held by a court

in accordance with paragraph (4), and the Secretary subsequently determines to modify such civil penalty pursuant to paragraph (3)(C) the Secretary shall direct the court to remit the appropriate amount of such penalty to such manufacturer.

(6) A claim of the United States for a civil penalty assessed against a manufacturer under subsection (b)(1) of this section shall, in the case of the bankruptcy or insolvency of such manufacturer, be subordinate to any claim of a creditor of such manufacturer which arises from an extension of credit before the date on which the judgment in any collection action under this section becomes final (without regard to paragraph (4)).

(c) Review of penalty by interested person

(1) Any interested person may obtain review of a determination (A) of the Secretary pursuant to which a civil penalty has been assessed under subsection (b) of this section, or (B) of the Federal Trade Commission under subsection (b)(4) of this section, in the United States Court of Appeals for the District of Columbia, or for any circuit wherein such person resides or has his principal place of business. Such review may be obtained by filing a notice of appeal in such court within 30 days after the date of such determination, and by simultaneously sending a copy of such notice by certified mail to the Secretary or the Federal Trade Commission, as the case may be. The Secretary or the Commission, as the case may be, shall promptly file in such court a certified copy of the record upon which such determination was made. Any such determination shall be reviewed in accordance with chapter 7 of title 5.

(2) If any person fails to pay an assessment of a civil penalty after it has become a final and unappealable order, or after the appropriate court of appeals has entered final judgment in favor of the Secretary, the Attorney General shall recover the amount for which the manufacturer is liable in any appropriate district court of the United States. In such action, the validity and appropriateness of the final order imposing the civil penalty shall not be subject to review.

(Pub. L. 92-513, title V, § 508, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 911.)

§ 2009. State laws

(a) Fuel economy standards

Whenever an average fuel economy standard established under this part is in effect, no State or political subdivision of a State shall have authority to adopt or enforce any law or regulation relating to fuel economy standards or average fuel economy standards applicable to automobiles covered by such Federal standard.

(b) Fuel economy disclosures

Whenever any requirement under section 2006 of this title is in effect with respect to any automobile, no State or political subdivision of a State shall have authority to adopt or enforce any law or regulation with respect to the disclosure of fuel economy of such automobile, or of fuel cost associated with the operation of such

automobile, if such law or regulation is not identical with such requirement.

(c) State or political subdivision automobiles

Nothing in this section shall be construed to prevent any State or political subdivision thereof from establishing requirements with respect to fuel economy of automobiles procured for its own use.

(Pub. L. 92-513, title V, § 509, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 914.)

§ 2010. Use of fuel efficient passenger automobiles by Federal Government

(a) The President shall, within 120 days after December 22, 1975, promulgate rules which shall require that all passenger automobiles acquired by all executive agencies in each fiscal year which begins after December 22, 1975, achieve a fleet average fuel economy for such year not less than—

(1) 18 miles per gallon, or

(2) the average fuel economy standard applicable under section 2002(a) of this title for the model year which includes January 1 of such fiscal year,

whichever is greater.

(b) As used in this section:

(1) The term "fleet average fuel economy" means (A) the total number of passenger automobiles acquired in a fiscal year to which this section applies by all executive agencies (excluding passenger automobiles designed to perform combat related missions for the Armed Forces or designed to be used in law enforcement work or emergency rescue work), divided by (B) a sum of terms, each term of which is a fraction created by dividing—

(i) the number of passenger automobiles so acquired of a given model type, by

(ii) the fuel economy of such model type.

(2) The term "executive agency" has the same meaning as such term has for purposes of section 105 of title 5.

(3) The term "acquired" means leased for a period of 60 continuous days or more, or purchased.

(Pub. L. 92-513, title V, § 510, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 915.)

DELEGATION OF FUNCTIONS

Functions of the President under this section delegated to the Administrator of General Services, see Section 1(a) of Ex. Grd. No. 11912, Apr. 13, 1976, 41 F.R. 15825, set out as a note under section 6201 of Title 42, The Public Health and Welfare.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 2007 of this title.

§ 2011. Retrofit devices

(a) Examination of fuel economy representations

The Federal Trade Commission shall establish a program for systematically examining fuel economy representations made with respect to retrofit devices. Whenever the Commission has reason to believe that any such representation may be inaccurate, it shall request

the EPA Administrator to evaluate, in accordance with subsection (b) of this section, the retrofit device with respect to which such representation was made.

**(b) Evaluation of retrofit devices**

(1) Upon application of any manufacturer of a retrofit device (or prototype thereof), upon the request of the Federal Trade Commission pursuant to subsection (a) of this section, or upon his own motion, the EPA Administrator shall evaluate, in accordance with rules prescribed under subsection (d) of this section, any retrofit device to determine whether the retrofit device increases fuel economy and to determine whether the representations (if any) made with respect to such retrofit device are accurate.

(2) If under paragraph (1) the EPA Administrator tests, or causes to be tested, any retrofit device upon the application of a manufacturer of such device, such manufacturer shall supply, at his own expense, one or more samples of such device to the Administrator and shall be liable for the costs of testing which are incurred by the Administrator. The procedures for testing retrofit devices so supplied may include a requirement for preliminary testing by a qualified independent testing laboratory, at the expense of the manufacturer of such device.

**(c) Results of tests; publication in Federal Register**

The EPA Administrator shall publish in the Federal Register a summary of the results of all tests conducted under this section, together with the EPA Administrator's conclusions as to—

(1) the effect of any retrofit device on fuel economy;

(2) the effect of any such device on emissions of air pollutants; and

(3) any other information which the Administrator determines to be relevant in evaluating such device.

Such summary and conclusions shall also be submitted to the Secretary and the Federal Trade Commission.

**(d) Rules establishing tests and procedures for evaluation of retrofit devices**

Within 180 days after December 22, 1975, the EPA Administrator shall, by rule, establish—

(1) testing and other procedures for evaluating the extent to which retrofit devices affect fuel economy and emissions of air pollutants, and

(2) criteria for evaluating the accuracy of fuel economy representations made with respect to retrofit devices.

**(e) Definitions**

For purposes of this section the term "retrofit device" means any component, equipment, or other device—

(1) which is designed to be installed in or on an automobile (as an addition to, as a replacement for, or through alteration or modification of, any original component, equipment, or other device); and

(2) which any manufacturer, dealer, or distributor of such device represents will provide higher fuel economy than would have result-

ed with the automobile as originally equipped,

as determined under rules of the Administrator. Such term also includes a fuel additive for use in an automobile.

(Pub. L. 92-513, title V, § 511, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 915.)

**SECTION REFERRED TO IN OTHER SECTIONS**

This section is referred to in section 2007 of this title.

**§ 2012. Reports to Congress**

(a) Within 180 days after December 22, 1975, the Secretary shall prepare and submit to the Congress and the President a comprehensive report setting forth findings and containing conclusions and recommendations with respect to (1) a requirement that each new automobile be equipped with a fuel flow instrument reading directly in miles per gallon, and (2) the most feasible means of equipping used automobiles with such instruments. Such report shall include an examination of the effectiveness of such instruments in promoting voluntary reductions in fuel consumption, the cost of such instruments, means of encouraging automobile purchasers to voluntarily purchase automobiles equipped with such instruments, and any other factor bearing on the cost and effectiveness of such instruments and their use.

(b)(1) Within 180 days after December 22, 1975, the Secretary shall prepare and submit to the Congress and the President a comprehensive report setting forth findings and containing conclusions and recommendations with respect to whether or not electric vehicles and other vehicles not consuming fuel (as defined in the first sentence of section 2001(5) of this title) should be covered by this part. Such report shall include an examination of the extent to which any such vehicle should be included under the provisions of this part, the manner in which energy requirements of such vehicles may be compared with energy requirements of fuel-consuming vehicles, the extent to which inclusion of such vehicles would stimulate their production and introduction into commerce, and any recommendations for legislative action.

(2) As used in this subsection, the term "electric vehicle" means a vehicle powered primarily by an electric motor drawing current from rechargeable batteries, fuel cells, or other portable sources of electrical current.

(Pub. L. 92-513, title V, § 512, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 916.)

**CHAPTER 47—CONSUMER PRODUCT SAFETY**

**Sec.**

2051. Congressional findings and declaration of purpose.

2052. Definitions.

2053. Consumer Product Safety Commission.

(a) Establishment; Chairman.

(b) Term; vacancies.

(c) Restrictions on Commissioner's outside activities.

for any model year shall not thereafter be available for any other model year. Prior to taking any credit into account, the Secretary shall provide the manufacturer involved with written notice and reasonable opportunity to comment thereon.

(2) Credits for manufacturers of automobiles which are not passenger automobiles shall be earned and be available to be taken into account for model years in which the average fuel economy of such class of automobiles is below the applicable average fuel economy standard established under subsection (b) of this section to the same extent and in the same manner as provided for under paragraph (1). Not later than 60 days after October 10, 1980, the Secretary shall prescribe regulations to carry out the provisions of this paragraph.

(3) Whenever a civil penalty has been assessed and collected under section 2008 of this title from a manufacturer who is entitled to a credit under this subsection, the Secretary of the Treasury shall refund to such manufacturer the amount of the civil penalty so collected to the extent that penalty is attributable to credits available under this subsection.

(4) The Secretary may prescribe rules for purposes of carrying out the provisions of this subsection.

(Pub. L. 92-513, title V, § 502, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 902, and amended Pub. L. 95-91, title III, § 305, Aug. 4, 1977, 91 Stat. 580; Pub. L. 96-425, §§ 3(a)(1), 5, 6(b), 7, 8(c), (d), Oct. 10, 1980, 94 Stat. 1821, 1825, 1826, 1828.)

#### REFERENCES IN TEXT

The National Traffic and Motor Vehicle Safety Act of 1966, referred to in subsec. (d)(3)(D)(ii), is Pub. L. 89-563, Sept. 9, 1966, 80 Stat. 718, as amended, which is classified to chapter 38 (§ 1381 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1381 of this title and Tables.

The Automobile Fuel Efficiency Act of 1980, referred to in subsec. (k)(2), is Pub. L. 96-425, Oct. 10, 1980, 94 Stat. 1821, which amended sections 1901, 2001 to 2003, 2005, 2007, 2008, and 2012 of this title, and enacted provisions set out as notes under sections 1901, 2001, and 2002 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1901 of this title and Tables.

#### CODIFICATION

"This subchapter", referred to in subssecs. (a)(2) and (l)(1)(A), was in the original "this part", meaning former part A, "Automotive Fuel Economy", of this subchapter, which designation, the only part designation appearing in the subchapter, was struck out by section 8(a)(3) of Pub. L. 96-425.

#### AMENDMENTS

1980—Subsec. (b), Pub. L. 96-425, § 8(c), substituted "and such standards shall be set" for "and shall be set".

Subsec. (c), Pub. L. 96-425, § 3(a)(1), designated existing provisions as par. (1) and added par. (2).

Subsec. (d)(3)(E), Pub. L. 96-425, § 8(d), substituted "under this subsection" for "under this subparagraph".

Subsecs. (g) to (j), Pub. L. 96-425, § 7, added subsec. (g) and redesignated former subssecs. (g) to (i) as (h) to (j), respectively.

Subsec. (k), Pub. L. 96-425, § 5, added subsec. (k).

Subsec. (l), Pub. L. 96-425, § 6(b), added subsec. (l). 1977—Subsecs. (h), (i), Pub. L. 95-91 added subssecs. (h) and (i).

#### EFFECTIVE DATE OF 1980 AMENDMENT

Section 6(d) of Pub. L. 96-425 provided that: "Under such regulations as the Secretary of Transportation shall prescribe, the amendments made by this section [enacting subsec. (l) of this section and amending sections 2007 and 2008 of this title] shall apply to the 3 model years preceding the model year during which this Act is enacted."

Amendment by sections 3(a)(1), 5, 7, 8(c), (d) of Pub. L. 96-425 effective Oct. 10, 1980, see section 9 of Pub. L. 96-425, set out as an Effective Date of 1980 Amendment note under section 2001 of this title.

#### AMENDMENT OF CERTAIN APPLICATIONS FILED FOR MODEL YEAR 1981

Section 3(a)(2) of Pub. L. 96-425 provided that: "Any application filed for model year 1981 under section 502(c) of such Act [subsec. (c) of this section] before the effective date of this Act [Oct. 10, 1980] may be amended by the applicant to make the election allowed under the amendment made by paragraph (1) [amending subsec. (c) of this section] and have such application apply for the model years covered by the election. Additional information shall not be required in connection with such application for the years covered by such election except information which the Secretary of Transportation may specifically request."

#### REVIEW BY SECRETARY OF EXEMPTION REQUIREMENTS AND PROCEDURES; NOTIFICATION OF CONGRESS

Section 3(a)(3) of Pub. L. 96-425 provided that: "(A) The Secretary of Transportation shall review the requirements and procedures established pursuant to section 502(c)(1) of such Act (as redesignated by this subsection) [15 U.S.C. 2002(c)(1)] as soon as practicable after the date of the enactment of this Act [Oct. 10, 1980] and modify such requirements and procedures to the maximum extent practicable in order to further reduce administrative burdens on such applicants and the Secretary, and expedite determinations regarding such applications.

"(B) The Secretary shall notify the Congress of the review and actions taken or to be taken under this paragraph in the first annual report to the Congress which is made under section 512 of such Act [15 U.S.C. 2012] after the completion of such review."

#### SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 2001, 2003, 2004, 2005, 2007, 2008, 2010 of this title; title 26 section 8427.

#### § 2003. Calculation of average fuel economy

##### (a) Method of calculation

(1) Average fuel economy for purposes of section 2002(a) and (c) of this title shall be calculated by the EPA Administrator by dividing—

(A) the total number of passenger automobiles manufactured in a given model year by a manufacturer, by

(B) a sum of terms, each term of which is a fraction, created by dividing—

(i) the number of passenger automobiles of a given model type manufactured by such manufacturer in such model year, by

(ii) the fuel economy measured for such model type.

(2) Average fuel economy for purposes of section 2002(b) of this title shall be calculated in

accordance with rules of the EPA Administrator.

(3) In the event that a manufacturer manufactures electric vehicles, as defined in section 2012(b)(2) of this title, the average fuel economy will be calculated under subsections (a)(1) and (2) of this section to include equivalent petroleum based fuel economy values for various classes of electric vehicles in the following manner:

(A) The Secretary of Energy will determine equivalent petroleum based fuel economy values for various classes of electric vehicles. Determination of these fuel economy values will take into account the following parameters:

(i) the approximate electrical energy efficiency of the vehicles considering the vehicle type, mission, and weight;

(ii) the national average electricity generation and transmission efficiencies;

(iii) the need of the Nation to conserve all forms of energy, and the relative scarcity and value to the Nation of all fuel used to generate electricity;

(iv) the specific driving patterns of electric vehicles as compared with those of petroleum fueled vehicles.

(B) The Secretary of Energy will propose equivalent petroleum based fuel economy values within four months of enactment of the Act. Final promulgation of the values is required no later than six months after the proposal of the values.

(C) The Secretary of Energy will review these values on an annual basis and will propose revisions, if necessary.

**(b) Automobile categories**

(1) In calculating average fuel economy under subsection (a)(1) of this section, the EPA Administrator shall separate the total number of passenger automobiles manufactured by a manufacturer into the following two categories:

(A) Passenger automobiles which are domestically manufactured by such manufacturer and passenger automobiles which are included within this category pursuant to paragraph (3) (plus, in the case of model year 1978 and model year 1979, passenger automobiles which are within the includable base import volume of such manufacturer).

(B) Passenger automobiles which are not domestically manufactured by such manufacturer and which are not included in the domestic category pursuant to paragraph (3) (and which, in the case of model year 1978 and model year 1979, are not within the includable base import volume of such manufacturer).

The EPA Administrator shall calculate the average fuel economy of each such separate category, and each such category shall be treated as if manufactured by a separate manufacturer for purposes of the subchapter.

(2) For purposes of this subsection:

(A) The term "includable base import volume", with respect to any manufacturer in model year 1978 or 1979, as the case may be, is a number of passenger automobiles which is the lesser of—

(i) the manufacturer's base import volume, or

(ii) the number of passenger automobiles calculated by multiplying—

(I) the quotient obtained by dividing such manufacturer's base import volume by such manufacturer's base production volume, times

(II) the total number of passenger automobiles manufactured by such manufacturer during such model year.

(B) The term "base import volume" means one-half the sum of—

(i) the total number of passenger automobiles which were not domestically manufactured by such manufacturer during model year 1974 and which were imported by such manufacturer during such model year, plus

(ii) 133 percent of the total number of passenger automobiles which were not domestically manufactured by such manufacturer during the first 9 months of model year 1975 and which were imported by such manufacturer during such 9-month period.

(C) The term "base production volume" means one-half the sum of—

(i) the total number of passenger automobiles manufactured by such manufacturer during model year 1974, plus

(ii) 133 percent of the total number of passenger automobiles manufactured by such manufacturer during the first 9 months of model year 1975.

(D) For purposes of subparagraphs (B) and (C) of this paragraph any passenger automobile imported during model year 1976, but prior to July 1, 1975, shall be deemed to have been manufactured (and imported) during the first 9 months of model year 1975.

(E) An automobile shall be considered domestically manufactured in any model year if at least 75 percent of the cost to the manufacturer of such automobile is attributable to value added in the United States or Canada, unless the assembly of such automobile is completed in Canada and such automobile is not imported into the United States prior to the expiration of 30 days following the end of such model year. The EPA Administrator may prescribe rules for purposes of carrying out this subparagraph.

(F) The fuel economy of each passenger automobile which is imported by a manufacturer in model year 1978 or any subsequent model year, as the case may be, and which is not domestically manufactured by such manufacturer, shall be deemed to be equal to the average fuel economy of all such passenger automobiles.

(3)(A) After consideration of a petition (and comments thereon) for an exemption from the provisions of paragraph (I) filed by a manufacturer, the Secretary shall, by order, grant an exemption from such provisions for passenger automobiles manufactured by that manufacturer during the period provided for in such order, unless the Secretary finds, after notice and rea-

sonable opportunity for written or oral comment, that the proposed exemption would, for such period, result in reduced employment in the United States related to motor vehicle manufacturing.

(B) Any exemption granted under subparagraph (A) shall be effective for a period of 5 model years or, at the request of the manufacturer, such longer period as the Secretary may provide, as specified in the order.

(C) An exemption granted under subparagraph (A) for any manufacturer shall not be effective unless the manufacturer—

(i) began automobile production or assembly in the United States after December 22, 1975, and before May 1, 1980; or

(ii) began automobile production or assembly in the United States on or after May 1, 1980, and has engaged in such production or assembly in the United States for at least one model year ending on or before December 31, 1985.

(D)(i) Any decision by the Secretary to grant or deny an exemption under subparagraph (A) shall be made, and notice thereof published in the Federal Register, not later than 90 days after the date of the petition for that exemption. The Secretary may extend such period to a specified date if the Secretary publishes notice thereof in the Federal Register, together with the reasons for such extension. In no event may such period be extended beyond the 150th day after the date of the petition for such exemption.

(ii) The period for written or oral comment provided in subparagraph (A) for any petition shall end not later than 60 days after the filing of the petition, except that such period may be extended by the Secretary for not to exceed an additional 30 days. If the Secretary fails to make a decision pursuant to this paragraph within the period for a decision in clause (i)—

(I) the petition shall be deemed to have been granted; and

(II) the Secretary, within 30 days after the end of such decision period, shall submit a written statement to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives setting forth the reasons for failing to decide within such decision period.

(E)(i) Any person adversely affected by a decision of the Secretary denying or granting an exemption pursuant to this paragraph may, not later than 30 days after publication of the notice of such decision, file a petition of review of such decision in the United States Court of Appeals for the District of Columbia. Such court shall have exclusive jurisdiction to review such decision, in accordance with section 706(2)(A) through (D) of title 5, and to affirm, remand, or set aside the decision of the Secretary.

(ii) Any such proceeding shall be assigned for a hearing and completed at the earliest possible date and shall be expedited in every possible way by such court. The court shall render its decision in any such proceeding within 60 days after the date of filing the petition for review

unless the court determines that a longer period of time is necessary to satisfy the requirements of the Constitution of the United States.

(iii) The judgment of the court affirming, remanding, or setting aside, in whole or in part, any such decision shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in section 1254 of title 28. Application therefor shall be made within 30 days after entry of such judgment.

(iv) Notwithstanding any other provision of law, a decision of the Secretary on an exemption pursuant to this paragraph shall not be subject to judicial or administrative review except as provided in this paragraph.

(F) Notwithstanding section 2002(l) of this title, in the case of any model year for which an exemption under this subsection is effective for any manufacturer—

(i) no credit may be earned under section 2002(l)(1)(B) of this title by the manufacturer; and

(ii) no credit may be made available under section 2002(l)(1)(C) of this title for the manufacturer.

(4)(A) If a plan has been submitted by a manufacturer and approved by the Secretary under subparagraph (B), the EPA Administrator shall for each of the four model years covered by such plan include under paragraph (1)(A) (and exclude under paragraph (1)(B)) with respect to that manufacturer not more than 150,000 passenger automobiles which are manufactured by that manufacturer but which do not qualify as domestically manufactured if—

(i) the model type or types involved have not previously been domestically manufactured;

(ii) at least 50 percent of the cost to the manufacturer of each such automobile is attributable to value added in the United States or Canada;

(iii) in the case of any such automobile the assembly of which is completed in Canada, that automobile is imported into the United States not later than 30 days following the end of the model year involved; and

(iv) such automobile model type or types are domestically manufactured before the close of the fourth model year covered by such plan.

(B)(i) A manufacturer may submit to the Secretary for approval a plan, including supporting material, which shall set forth the actions, and the dates by which such actions are to be taken, which will assure that the automobile model type or types referred to in subparagraph (A) will be domestically manufactured before the end of the fourth model year covered by such plan.

(ii) The Secretary shall promptly consider and act upon any plan submitted under this subparagraph. The Secretary shall approve any such plan unless—

(I) the Secretary finds that the plan is inadequate to meet the requirements of this paragraph, or



(II) the manufacturer has previously submitted a plan which has been approved by the Secretary under this paragraph.

(C) This paragraph shall only apply with respect to model years beginning after model year 1980.

(c) Definition of "automobiles manufactured"

Any reference in this subchapter to automobiles manufactured by a manufacturer shall be deemed—

(1) to include all automobiles manufactured by persons who control, are controlled by, or are under common control with, such manufacturer; and

(2) to exclude all automobiles manufactured (within the meaning of paragraph (1)) during a model year by such manufacturer which are exported prior to the expiration of 30 days following the end of such model year.

(d) Testing and calculation procedures

(1) Fuel economy for any model type shall be measured, and average fuel economy of a manufacturer shall be calculated, in accordance with testing and calculation procedures established by the EPA Administrator, by rule. Procedures so established with respect to passenger automobiles (other than for purposes of section 2006 of this title) shall be the procedures utilized by the EPA Administrator for model year 1975 (weighed 55 percent urban cycle, and 45 percent highway cycle), or procedures which yield comparable results. Procedures under this subsection, to the extent practicable, shall require that fuel economy tests be conducted in conjunction with emissions tests conducted under section 206 of the Clean Air Act [42 U.S.C. 7525]. The EPA Administrator shall report any measurements of fuel economy and any calculations of average fuel economy to the Secretary.

(2) The EPA Administrator shall, by rule, determine that quantity of any other fuel which is the equivalent of one gallon of gasoline.

(3) Testing and calculation procedures applicable to a model year, and any amendment to such procedures (other than a technical or clerical amendment), shall be promulgated not less than 12 months prior to the model year to which such procedures apply.

(e) Rounding off of measurements of fuel economy

For purposes of this subchapter (other than section 2006 of this title), any measurement of fuel economy of a model type, and any calculation of average fuel economy of a manufacturer, shall be rounded off to the nearest one-tenth mile per gallon (in accordance with rules of the EPA Administrator).

(f) Consultation and coordination by Administrator with Secretary

The EPA Administrator shall consult and coordinate with the Secretary in carrying out his duties under this section.

(Pub. L. 92-513, title V, § 503, as added Pub. L. 94-163, title III, § 301, Dec. 22, 1975, 89 Stat. 906, and amended Pub. L. 96-185, § 18, Jan. 7, 1980, 93 Stat. 1336; H. Res. 549, Mar. 25, 1980; Pub. L. 96-425, §§ 4(a)(1), (b), (c)(2), (3), 8(e), Oct. 10, 1980, 94 Stat. 1822, 1824, 1825, 1829.)

REFERENCES IN TEXT

Enactment of the Act, referred to in subsec. (a)(3)(B), probably means the enactment of Pub. L. 96-185, which added subsec. (a)(3), and which was approved January 7, 1980.

CODIFICATION

The addition of subsec. (a)(3) of this section by section 18 of Pub. L. 96-185 was not accomplished through the conventional device of a direct amendment of section 503 of the Motor Vehicle Information and Cost Savings Act [this section] by section 18 of Pub. L. 96-185. Rather, section 18 of Pub. L. 96-185 enacted a new par. (2) of section 13(c) of the Electric and Hybrid Vehicle Research, Development, and Demonstration Act of 1976 [Pub. L. 94-413], and part of that newly enacted par. (2) of section 13(c) of Pub. L. 94-413, in turn, added subsec. (a)(3) of this section.

"This subchapter", referred to in subsections (b)(1), (c), and (e), was in the original "this part", meaning former part A, "Automotive Fuel Economy", of this subchapter, which designation, the only part designation appearing in the subchapter, was struck out by section 8(a)(3) of Pub. L. 96-425.

AMENDMENTS

1980—Subsec. (a)(3). Pub. L. 96-185 added par. (3).

Subsec. (b)(1). Pub. L. 96-425, § 4(c)(2), inserted "and passenger automobiles which are included within this category pursuant to paragraph (3)" in subpar. (A) and "and which are not included in the domestic category pursuant to paragraph (3)" in subpar. (B).

Subsec. (b)(2). Pub. L. 96-425, §§ 4(c)(3), 8(e), substituted "base production" for "base base production" in subpar. (A)(i)(I) and "or any subsequent model year" for "or 1979" in subpar. (F).

Subsec. (b)(3), (4). Pub. L. 96-425, § 4(a)(1), (b), added pars. (3) and (4).

CHANGE OF NAME

The name of the Committee on Interstate and Foreign Commerce of the House of Representatives was changed to Committee on Energy and Commerce immediately prior to noon on Jan. 3, 1981, by House Resolution 549, Ninety-sixth Congress, Mar. 25, 1980.

EFFECTIVE DATE OF 1980 AMENDMENT

Amendment by Pub. L. 96-425 effective Oct. 10, 1980, see section 9 of Pub. L. 96-425, set out as an Effective Date of 1980 Amendment note under section 2001 of this title.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 2001, 2002, 2004, 2005, 2008, 2012, 2512 of this title.

§ 2001. Judicial review

(a) Review of rules in courts of appeals

Any person who may be adversely affected by any rule prescribed under section 2001, 2002, 2003, or 2006 of this title may, at any time prior to 60 days after such rule is prescribed (or in the case of an amendment submitted to each House of the Congress under section 2002(a)(4) of this title, at any time prior to 60 days after the expiration of the 60-day period specified in section 2002(a)(5) of this title), file a petition in the United States Court of Appeals for the District of Columbia, or for any circuit wherein such person resides or has his principal place of business, for judicial review of such rule. A copy of the petition shall be forthwith transmitted by the clerk of such court to the officer who prescribed the rule. Such officer shall

(A) in paragraph (D)(ii), insert "App." immediately after "(46" wherever it appears; and

(B) in paragraph (E), strike "(46 U.S.C. 801 et seq.)" and "(46 U.S.C. 843-848)" and substitute "(46 App. U.S.C. 801 et seq.)" and "(46 App. U.S.C. 843 et seq.)", respectively.

(22) In section 10721(a)(1), strike "Section 5 of title 41" and substitute "Section 3709 of the Revised Statutes (41 U.S.C. 5)".

(23) In section 10735(b)(1), strike "under this title" and substitute "under this subtitle".

(24) In section 10903(b)(2), strike "section 11347 of this title and section 405(b) of the Rail Passenger Service Act (45 U.S.C. 565(b))" and substitute "sections 11347 and 24706(c) of this title".

(25) In section 10922—

(A) in subsection (c)(1)(E), strike "provisions of section 12(f) of the Urban Mass Transportation Act of 1964" and substitute "section 10531 of this title";

(B) in subsection (c)(2)(D), strike "subtitle" wherever it appears and substitute "title";

(C) in subsection (c)(4)(C) and (j)(1), strike "subchapter" wherever it appears and substitute "title"; and

(D) in subsection (j)(2)(C), strike "subtitle" and substitute "title".

(26) In section 10927(a)(1), insert "section" before "10923".

(27) In section 10935(a) and (e)(3), strike "subchapter" and substitute "title".

(28) In section 11125(b)(2)(A), strike "the Federal Railroad Safety Act of 1970 (45 U.S.C. 431 et seq.)" and substitute "chapter 201 of this title".

(29) In section 11126(a), strike "11501(c)" and substitute "11501(f)".

(30) In section 11303(a), strike "the Ship Mortgage Act, 1920" wherever it appears and substitute "chapter 313 of title 46".

(31) In section 11347, strike "section 405 of the Rail Passenger Service Act (45 U.S.C. 565)" and substitute "sections 24307(c), 24312, and 24706(c) of this title".

(32) In section 11348(a), strike "section 504(f)," and substitute "sections 504(f) and".

(33) In section 11504(b)(2), strike "section 204 of the Motor Carrier Safety Act of 1984 (49 App. U.S.C. 2503)" and substitute "section 31132 of this title".

(34) In section 11701(a), strike "section 10530 of this subtitle" and substitute "section 10530 of this title".

LEGISLATIVE PURPOSE AND CONSTRUCTION

49 USC prec. 101 note.

SEC. 6. (a) Sections 1-4 of this Act restate, without substantive change, laws enacted before July 1, 1993, that were replaced by those sections. Those sections may not be construed as making a substantive change in the laws replaced. Laws enacted after June 30, 1993, that are inconsistent with this Act supersede this Act to the extent of the inconsistency.

(b) A reference to a law replaced by sections 1-4 of this Act, including a reference in a regulation, order, or other law, is deemed to refer to the corresponding provision enacted by this Act.

(c) An order, rule, or regulation in effect under a law replaced by sections 1-4 of this Act continues in effect under the corresponding provision enacted by this Act until repealed, amended, or superseded.

(d) An action taken or an offense committed under a law replaced by sections 1-4 of this Act is deemed to have been taken or committed under the corresponding provision enacted by this Act.

(e) An inference of legislative construction is not to be drawn by reason of the location in the United States Code of a provision enacted by this Act or by reason of a caption or catch line of the provision.

(f) If a provision enacted by this Act is held invalid, all valid provisions that are severable from the invalid provision remain in effect. If a provision enacted by this Act is held invalid in any of its applications, the provision remains valid for all valid applications that are severable from any of the invalid applications.

REPEALS

SEC. 7. (a) The repeal of a law by this Act may not be construed as a legislative implication that the provision was or was not in effect before its repeal. 49 USC prec. 101 note.

(b) The laws specified in the following schedule are repealed, except for rights and duties that matured, penalties that were incurred, and proceedings that were begun before the date of enactment of this Act: 49 USC prec. 101 note.

Schedule of Laws Repealed  
Statutes at Large

Date	Chapter or Public Law	Section	Statutes at Large		U.S. Code	
			Volume	Page	Title	Section
1864 July 2	216 .....	15 .....	13	362 .....	45	83
1873 Mar. 3	226 .....	2(words after 2d semi-colon).	17	508 .....	.....	.....
1874 June 20	331 .....	.....	18	111 .....	45	83
June 22	414 .....	.....	18	200 .....	45	89
1879 Mar. 3	183 .....	1(4th par. on p. 420) .....	20	420 .....	45	90
1887 Feb. 4	104 .....	25 .....	24	379 .....	49	26
Mar. 3	345 .....	.....	24	488 .....	App. 45	94, 95
1893 Mar. 2	196 .....	.....	27	531 .....	45	1-7
1896 Apr. 1	87 .....	.....	29	85 .....	45	6
1897 Mar. 3	386 .....	(proviso under heading "Transportation and Recruiting, Marine Corps").	29	663 .....	45	91

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repeat any of the discussion in the assessment but may incorporate it by reference.

**§ 1508.14 Human environment.**

*Human environment* shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of "effects" (§1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

**§ 1508.15 Jurisdiction by law.**

*Jurisdiction by law* means agency authority to approve, veto, or finance all or part of the proposal.

**§ 1508.16 Lead agency.**

*Lead agency* means the agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement.

**§ 1508.17 Legislation.**

*Legislation* includes a bill or legislative proposal to Congress developed by or with the significant cooperation and support of a Federal agency, but does not include requests for appropriations. The test for significant cooperation is whether the proposal is in fact predominantly that of the agency rather than another source. Drafting does not by itself constitute significant cooperation. Proposals for legislation include requests for ratification of treaties. Only the agency which has primary responsibility for the subject matter involved will prepare a legislative environmental impact statement.

**§ 1508.18 Major Federal action.**

*Major Federal action* includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly (§1508.27). Actions include the circumstance

where the responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under the Administrative Procedure Act or other applicable law as agency action.

(a) Actions include new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals (§§1506.8, 1508.17). Actions do not include funding assistance solely in the form of general revenue sharing funds, distributed under the State and Local Fiscal Assistance Act of 1972, 31 U.S.C. 1221 *et seq.*, with no Federal agency control over the subsequent use of such funds. Actions do not include bringing judicial or administrative civil or criminal enforcement actions.

(b) Federal actions tend to fall within one of the following categories:

(1) Adoption of official policy, such as rules, regulations, and interpretations adopted pursuant to the Administrative Procedure Act, 5 U.S.C. 551 *et seq.*; treaties and international conventions or agreements; formal documents establishing an agency's policies which will result in or substantially alter agency programs.

(2) Adoption of formal plans, such as official documents prepared or approved by federal agencies which guide or prescribe alternative uses of Federal resources, upon which future agency actions will be based.

(3) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.

(4) Approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities.

**§ 1508.19 Matter.**

*Matter* includes for purposes of part 1504:

**Office of the Secretary of Transportation****§ 1.95****§ 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

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Clean Air Act, Public Law 90-148, as amended [42 U.S.C. 7544(2)].

(i) Carry out the functions and exercise the authority vested in the Secretary by the following sections of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, Public Law 109-59:

(1) Section 1906 [23 U.S.C. 402 note], relating to the grant program to prohibit racial profiling;

(2) Section 2010 [23 U.S.C. 402 note], relating to motorcyclist safety;

(3) Section 2011 [23 U.S.C. 405 note], relating to child safety and child booster seat incentive grants;

(4) Section 10202 [42 U.S.C. 300d-4], relating to emergency medical services, as amended by section 31108 of the Moving Ahead for Progress in the 21st Century Act, Public Law 112-141;

(5) Section 10305(b) [49 U.S.C. 30101 note], relating to the publication of non-traffic incident data collection; and

(6) Section 10309(a), relating to the testing of 15-passenger van safety.

(j) Carry out the following functions and exercise the authority vested in the Secretary under the Energy Independence and Security Act of 2007 (Pub. L. 110-140):

(1) Section 106 [49 U.S.C. 32902 note], relating to the continued applicability of existing standards;

(2) Section 107 [49 U.S.C. 32902 note], relating to the National Academy of Sciences studies;

(3) Section 108, relating to the National Academy of Sciences study of medium-duty and heavy-duty truck fuel economy;

(4) Section 110 [49 U.S.C. 32908 note], relating to the periodic review of accuracy of fuel economy labeling;

(5) Section 113 [49 U.S.C. 32904 note], relating to the exemption from separate calculation requirement;

(6) Section 131(b)(2) and (c)(1) [42 U.S.C. 17011(b)(2), (c)(1)], relating to the Plug-in Electric Drive Vehicle Program;

(7) Section 225(a), relating to the study of optimization of flexible fueled vehicles to use E-85 fuel;

(8) Section 227(a), relating to the study of optimization of biogas used in natural gas vehicles;

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(9) Section 242 [42 U.S.C. 17051], relating to renewable fuel dispenser requirements; and

(10) Section 248(a) [42 U.S.C. 17054(a)], relating to biofuels distribution and advanced biofuels infrastructure.

(k) Carry out the functions and exercise the motor vehicle safety authority vested in the Secretary under section 7103 of the Transportation Equity Act for the 21st Century, Public Law 105-178.

(l) Carry out the functions and exercise the motor vehicle safety authority vested in the Secretary under sections 3(d), 10, 11 and 13 through 17 [uncodified provisions] of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Public Law 106-414.

(m) Carry out the functions and exercise the motor vehicle safety authority vested in the Secretary under Anton's Law, Public Law 107-318.

(n) Carry out the functions and exercise the motor vehicle safety authority vested in the Secretary under the Cameron Gulbransen Kids Transportation Safety Act of 2007 or the K.T. Safety Act of 2007, Public Law 110-189.

(o) Carry out the functions and exercise the motor vehicle safety authority vested in the Secretary under the Pedestrian Safety Enhancement Act of 2010, Public Law 111-373.

(p) Carry out the functions and exercise the authority vested in the Secretary by the following sections of the Moving Ahead for Progress in the 21st Century Act, Public Law 112-141:

(1) Sections 31101(d) and (f) (23 U.S.C. 402 note), Authorization of Appropriations;

(2) Sections 31203(b), Civil Penalty Criteria Rule, 31301, Public Availability of Recall Information, 31302, NHTSA Outreach to Manufacturer, Dealer, and Mechanic Personnel, 31309(a), Study of Crash Data Collection, 31401, NHTSA Electronics, Software, and Engineering Expertise, 31402, Electronics Systems Performance, 31501, Child Safety Seats, 31502, Child Restraint Anchorage Systems, 31503, Rear Seat Belt Reminders, 31504, Unattended Passenger Reminders, 31505, New Deadline, and 31601, Rulemaking on Visibility of Agricultural Equipment;

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(3) Section 32201, Crashworthiness Standards; and

(4) Sections 32703, Regulations for Improved Occupant Protection, Passenger Evacuation, and Crash Avoidance, 32704, Fire Prevention and Mitigation, 32705, Occupant Protection, Collision Avoidance, Fire Causation, and Fire Extinguisher Research and Testing, and 32706, Concurrence of Research and Rulemaking.

(q) Carry out the functions and exercise the authority vested in the Secretary to implement section 3(g)–(h) of the Automobile Information Disclosure Act (Pub. L. 85–506, 72 Stat. 325), as amended (15 U.S.C. 1232(g)–(h)).

**§ 1.96 The Pipeline and Hazardous Materials Safety Administration.**

Is responsible for:

(a) *Pipelines*. (1) Administering a national program of safety in natural gas and hazardous liquid pipeline transportation including identifying pipeline safety concerns, developing uniform safety standards, and promulgating and enforcing safety regulations;

(2) Increasing the gas and liquid pipeline industry's focus on safety beyond compliance with minimum standards, with particular attention to developing strong safety cultures in regulated entities;

(3) Enhancing information awareness systems at the State and local levels to reduce pipeline damage from excavation and providing grants to support these systems; and

(4) Encouraging the timely replacement of aging and deteriorating pipelines in distribution systems, especially in areas with high potential negative consequences to public safety and the environment.

(b) *Hazardous materials*. (1) Administering a national program of safety, including security, in multi-modal hazardous materials transportation including identifying hazardous materials safety concerns, developing uniform safety standards, and promulgating and enforcing safety and security regulations; and

(2) Conducting outreach and provide available grants assistance to increase awareness and emergency preparedness.

**§ 1.97 Delegations to the Pipeline and Hazardous Materials Safety Administrator.**

The Pipeline and Hazardous Materials Safety Administrator is delegated responsibility to:

(a) *Pipelines*. (1) Exercise the authority vested in the Secretary under chapter 601 of title 49, U.S.C.

(2) Exercise the authority vested in the Secretary under section 28 of the Mineral Leasing Act, as amended (30 U.S.C. 185(a) and 30 U.S.C. 185(w)(3)).

(3) Exercise the authority vested in the Secretary under section 21 of the Deepwater Port Act of 1974, as amended (33 U.S.C. 1520) relating to the establishment, enforcement and review of regulations concerning the safe construction, operation or maintenance of oil or natural gas pipelines on Federal lands and the Outer Continental Shelf.

(4) Carry out the functions vested in the Secretary by section 5 (as it relates to pipelines not over navigable waterways) and section 8(a) (as it relates to pipelines) of the International Bridge Act of 1972 (Pub. L. 92–434, 86 Stat. 731) (33 U.S.C. 535c and 535e(a)).

(5) Exercise the authority vested in the Secretary under the Outer Continental Shelf Lands Act, as amended (43 U.S.C. 1331 *et seq.*) with respect to the establishment, enforcement and review of regulations concerning pipeline safety.

(6) Carry out the functions vested in the Secretary by section 7 of Executive Order 12580 (delegating sections 108 and 109, respectively, of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended (49 U.S.C. 9615 *et seq.*), insofar as they relate to pipelines.

(7) Exercise the authority vested in the Secretary by 49 U.S.C. 60301 as it relates to pipeline safety user fees.

(8) Exercise the authority vested in the Secretary by 49 U.S.C. 6101 *et seq.* as it relates to pipeline damage prevention One Call programs.

(9) Exercise the authority vested in the Secretary by the Pipeline Safety Improvement Act of 2002 (Pub. L. 107–355, 116 Stat. 2985).

(10) Exercise the authority vested in the Secretary by the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (Pub. L. 112–90).

**§ 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:



**§ 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.

**§ 520.21**

(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

before a magistrate at a place and time designated by the arresting officer; provided, that when an arrest is made of a licensee or employee of a licensee the arresting officer shall release such licensee or employee without taking such licensee or employee before a magistrate upon such licensee or employee signing an agreement to appear in court or before a magistrate at a place and time designated by an arresting officer.

## CHAPTER 200

*An act to add Section 426.5 to the Health and Safety Code, relating to air pollution, declaring the urgency thereof, to take effect immediately.*

[Approved by Governor April 28, 1959 Filed with  
Secretary of State April 28, 1959 ]

In effect  
immediately

*The people of the State of California do enact as follows:*

SECTION 1. Section 426.5 is added to the Health and Safety Code, to read:

426.5. It shall be the duty of the State Director of Public Health to determine by February 1, 1960, the maximum allowable standards of emissions of exhaust contaminants from motor vehicles which are compatible with the preservation of the public health including the prevention of irritation to the senses.

The standards shall be developed after the department has held public hearings and afforded an opportunity for all interested persons to appear and file statements or be heard. The department shall publish such notice of the hearings as it determines to be reasonably necessary.

The department after notice and hearing may revise the standards, and shall publish the revised standards, from time to time.

SEC 2. This act is an urgency measure necessary for the immediate preservation of the public peace, health or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting such necessity are:

The pollution of the air by the discharge of air pollutants from the exhausts of motor vehicles constitutes one of the most serious threats to the health of the people of this State. It is imperative that standards for the discharge of such pollutants be developed without delay. It is, therefore, necessary that this act take effect immediately.

SEC. 3. This act shall be known and may be cited as the Rees-Richards Act.

any action which the district may take. If such area is not within an air pollution control district which is functioning and exercising its powers, the board shall also have the authority to take any action which Chapter 2 (commencing with Section 24198) of Division 20 authorizes a district which is functioning and exercising its powers under that chapter to take. Every person who violates any standard, rule or regulation adopted by the board pursuant to this part in any area in which such standards, rules, and regulations are being enforced by the board is guilty of a misdemeanor. Every day during any portion of which such violation occurs constitutes a separate offense.

SEC. 6. Section 39065 of the Health and Safety Code is amended to read:

39065. All present standards and rules and regulations for the purposes of air pollution control established by the State Department of Public Health and the Motor Vehicle Pollution Control Board shall remain in effect until the State Air Resources Board incorporates them into its rules and regulations or standards or adopts rules and regulations or standards.

SEC. 7. Chapter 4 (commencing with Section 39080) of Part 1 of Division 26 of the Health and Safety Code is repealed.

SEC. 8. Chapter 4 (commencing with Section 39080) is added to Part 1 of Division 26 of the Health and Safety Code to read:

#### CHAPTER 4. MOTOR VEHICLE POLLUTION CONTROL

##### Article 1. Application and Definitions

39080. This chapter may be cited as the "Pure Air Act of 1968."

39081. The Legislature finds and declares:

(a) That the emission of pollutants from motor vehicles is the primary cause of air pollution in many portions of the state.

(b) That the control and elimination of such pollutants is of prime importance for the protection and preservation of the public health and well-being, and for the prevention of irritation to the senses, interference with visibility, and damage to vegetation and property.

(c) That the state has a responsibility to establish uniform procedures for compliance with standards which control or eliminate such pollutants.

(d) That the California goal for pure air quality is the achievement of an atmosphere with no significant detectable adverse effect from motor vehicle air pollution on health, welfare and the quality of life and property by 1975.

(e) That vehicle emission standards applied to new motor vehicles and to used motor vehicles equipped with emission control devices are standards with which all such vehicles shall

comply subject to the approval, accreditation, and certification provisions of this part.

39082. The provisions of this chapter shall not apply to any racing vehicle, as defined in Section 39090.5.

39083. The provisions of this chapter shall not apply to any limited production motor vehicle, as defined in Section 39090.

39083.5. The provisions of this chapter shall not apply to any motorcycle as defined in Section 39084.

39084. As used in this chapter the following terms shall be construed as defined in the Vehicle Code:

- (a) Commercial vehicle
- (b) Implement of husbandry
- (c) Motor vehicle
- (d) Motorcycle
- (e) Used vehicle
- (f) Passenger vehicle
- (g) New vehicle
- (h) Truck
- (i) Truck tractor
- (j) Bus

39085. As used in this chapter, "approval" means the findings of the board that the device for new vehicles has satisfied the tests and procedures established by the board to determine whether the various makes and models of new motor vehicles for each model year may be sold and registered in this state. Approval shall be determined on the basis of motor vehicle emissions and such other related factors as the board may in regulations indicate.

39086. As used in this chapter, "crankcase emissions" means substances emitted directly to the atmosphere from any opening leading to the crankcase of a motor vehicle engine. Crankcase gases which are conducted to the engine intake or exhaust systems are not included in the definition of crankcase emissions, but are defined as exhaust emissions.

39087. As used in this chapter, "exhaust emissions" means substances emitted to the atmosphere from any opening downstream from the exhaust port of a motor vehicle engine.

39088. As used in this chapter, "fuel evaporative loss emissions" means vaporized fuel emitted into the atmosphere from the fuel system of a motor vehicle.

39089. As used in this chapter, "fuel system" means the combination of fuel tank, fuel lines and carburetor, or fuel injector, and includes all vents and fuel evaporative emission control systems or devices.

39090. As used in this chapter, "limited production vehicle" means a make of motor vehicle manufactured in quantities of less than 2,000 units for any given model year.

39090.5. As used in this chapter, "racing vehicle" means a competition vehicle not used on public roads or highways.

39091. As used in this chapter, "model year" means the time of actual manufacture either (1) within the annual pro-

duction period of such vehicles as designated by the calendar year in which such period ends, or (2) if the manufacturer does not so designate the annual production period of such vehicles manufactured by him, within the 12-month period beginning November 1 of the preceding year. In the case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

39092. As used in this chapter, "accreditation" means a finding by the board, pursuant to the procedures established in Article 5 (commencing with Section 39175) of this chapter, that a used motor vehicle emission control device has satisfied the tests and procedures established by the board pursuant to Sections 39107 and 39108.

39093. As used in this chapter, "motor vehicle pollution control device" means equipment designed for installation on a motor vehicle for the purpose of reducing the pollutants emitted from the vehicle, or a system or engine modification on a motor vehicle which causes a reduction of pollutants emitted from the vehicle.

39094. As used in this chapter, "certified device" means a motor vehicle pollution control device required to be installed on various motor vehicles under regulations adopted by the former Motor Vehicle Pollution Control Board prior to November 8, 1967, or under regulations adopted by the board prior to the effective date of the applicable standards provided in this part.

39095. As used in this chapter other than in Section 39094, "Motor Vehicle Pollution Control Board" means, and is applicable to, the board.

39096. As used in this chapter, the terms hydrocarbons, carbon monoxide, and oxides of nitrogen, shall be construed as defined in the regulations of the board, such definitions to be developed in accordance with the purpose of this chapter.

## Article 2. Motor Vehicle Emission Standards

39100. Approval of new motor vehicles for sale and registration and accreditation of devices for used motor vehicles shall be contingent upon compliance with the standards established in this part or pursuant thereto, under the test procedures established by the board pursuant to Section 39052. Motor vehicles which do not so comply with the applicable standards shall not be sold and registered in California.

39100.1. Every manufacturer of motor vehicles sold in the State of California during the calendar year 1968 shall file with the board, not later than 60 days after the effective date of this section, a report describing such manufacturer's research and development activities, including test data, during the preceding 12 months relating to the control of oxides of nitrogen emitted from its vehicles. Where proprietary or competitive requirements necessitate, such reports shall refer to

vehicles, technical innovations, and devices by code name or number. Additional progress reports shall be filed with the board by such manufacturers at three-month intervals from 60 days after the effective date of this section until July 1, 1970. Failure to submit such reports shall be considered as constituting failure of compliance under Section 39154.

39100.5. The standards in this article have been found to be technologically feasible and capable of implementation with reasonable economic cost by a technical advisory panel of nine California engineers, scientists, and air pollution experts.

39101. The exhaust emissions from a new 1970 model year gasoline-powered motor vehicle under 6,001 pounds, manufacturer's maximum gross vehicle weight rating having an engine displacement of 50 cubic inches or greater, subject to registration and first sold and registered in this state, shall not exceed:

- (a) 2.2 grams per mile hydrocarbons.
- (b) 23 grams per mile carbon monoxide.

39101.5. The exhaust emissions from a new 1971 model year gasoline-powered motor vehicle under 6,001 pounds, manufacturer's maximum gross vehicle weight rating having an engine displacement of 50 cubic inches or greater, subject to registration and first sold and registered in this state, shall not exceed:

- (a) 2.2 grams per mile hydrocarbons.
- (b) 23 grams per mile carbon monoxide.
- (c) 4.0 grams per mile oxides of nitrogen.

39102. The exhaust emissions from a new 1972 or later model year gasoline-powered motor vehicle under 6,001 pounds, manufacturer's maximum gross vehicle weight rating having an engine displacement of 50 cubic inches or greater, subject to registration and first sold and registered in this state, shall not exceed:

- (a) 1.5 grams per mile hydrocarbons.
- (b) 23 grams per mile carbon monoxide.
- (c) 3.0 grams per mile oxides of nitrogen.

39102.5. Notwithstanding the provisions of subdivision (c) of Section 39102, the oxides of nitrogen exhaust emissions from a new 1974 or later model year gasoline-powered motor vehicles under 6,001 pounds, manufacturer's maximum gross vehicle weight rating having an engine displacement of 50 cubic inches or greater, subject to registration and first sold and registered in this state, shall not exceed 1.3 grams per mile oxides of nitrogen.

39104. The exhaust emissions from a new 1970 or 1971 model year gasoline-powered truck, truck tractor or bus, except those which are diesel-powered, over 6,001 pounds, manufacturer's maximum gross vehicle weight rating, subject to registration and first sold and registered in this state, shall not exceed:

- (a) 275 parts per million hydrocarbons.
- (b) 1.5 percent carbon monoxide.



West's Annotated California Codes

Code of Civil Procedure (Refs & Annos)

Part 3. Of Special Proceedings of a Civil Nature (Refs & Annos)

Title 1. Of Writs of Review, Mandate, and Prohibition (Refs & Annos)

Chapter 2. Writ of Mandate (Refs & Annos)

West's Ann.Cal.C.C.P. § 1085

§ 1085. Courts which may issue writ; parties to whom issued; purpose of writ

Effective: January 1, 2011

[Currentness](#)

(a) A writ of mandate may be issued by any court to any inferior tribunal, corporation, board, or person, to compel the performance of an act which the law specially enjoins, as a duty resulting from an office, trust, or station, or to compel the admission of a party to the use and enjoyment of a right or office to which the party is entitled, and from which the party is unlawfully precluded by that inferior tribunal, corporation, board, or person.

(b) The appellate division of the superior court may grant a writ of mandate directed to the superior court in a limited civil case or in a misdemeanor or infraction case. Where the appellate division grants a writ of mandate directed to the superior court, the superior court is an inferior tribunal for purposes of this chapter.

**Credits**

(Enacted in 1872. Amended by Stats.1935, c. 52, p. 386, § 2; Stats.1951, c. 1737, p. 4138, § 148, operative Jan. 1, 1952; Stats.1998, c. 931 (S.B.2139), § 112, eff. Sept. 28, 1998; Stats.1999, c. 344 (S.B.210), § 17, eff. Sept. 7, 1999; Stats.2002, c. 784 (S.B.1316), § 75; Stats.2010, c. 212 (A.B.2767), § 2.)

West's Ann. Cal. C.C.P. § 1085, CA CIV PRO § 1085

Current with urgency legislation through Ch. 4 of 2020 Reg.Sess

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West's Annotated California Codes  
Government Code (Refs & Annos)  
Title 2. Government of the State of California  
Division 3. Executive Department (Refs & Annos)  
Part 1. State Departments and Agencies (Refs & Annos)  
Chapter 3.5. Administrative Regulations and Rulemaking (Refs & Annos)  
Article 1. General (Refs & Annos)

West's Ann.Cal.Gov.Code § 11340.6

§ 11340.6. Petition for adoption or repeal; contents

Currentness

Except where the right to petition for adoption of a regulation is restricted by statute to a designated group or where the form of procedure for such a petition is otherwise prescribed by statute, any interested person may petition a state agency requesting the adoption, amendment, or repeal of a regulation as provided in Article 5 (commencing with [Section 11346](#)). This petition shall state the following clearly and concisely:

- (a) The substance or nature of the regulation, amendment, or repeal requested.
- (b) The reason for the request.
- (c) Reference to the authority of the state agency to take the action requested.

**Credits**

(Added by [Stats.1994, c. 1039 \(A.B.2531\)](#), § 5.)

West's Ann. Cal. Gov. Code § 11340.6, CA GOVT § 11340.6  
Current with urgency legislation through Ch. 4 of 2020 Reg.Sess

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**1955.1. Exhaust Emission Standards and Test Procedures—1975 and Subsequent Model-Year Passenger Cars.** The exhaust emissions from new 1975 and subsequent model-year passenger cars having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

**Exhaust Emission Standards**

*(grams per mile)*

<i>Model-Year</i>	<i>Hydrocarbons</i>	<i>Carbon Monoxide</i>	<i>Oxides of Nitrogen (NO<sub>2</sub>)</i>
(a) 1975	0.9*	9.0	2.0
(b) 1976	0.9	9.0	2.0
(c) 1977	0.41	9.0	1.5

\* Hydrocarbon emissions from limited-production passenger cars shall not exceed 1.5 grams per mile.

“Limited-production” vehicle means a new 1975 model-year motor vehicle having a manufacturer’s gross vehicle weight rating of under 6,001 pounds that is manufactured or sold in this state in quantities of less than 210 units annually.

The test procedures for determining compliance with these standards are set forth in “California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model Gasoline-Powered Passenger Cars and Light Duty Trucks”, adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975.

These standards and test procedures shall apply only to passenger cars or passenger car derivatives capable of seating twelve passengers or less.

NOTE: Authority cited: Sections 39051 (c) and 39150 (a), Health and Safety Code. Reference: Sections 39052 (k), 39083.3, 39090, and 39151, Health and Safety Code.

*History:* 1. New section filed 3-21-75; effective thirtieth day thereafter (Register 75, No. 12).

"Limited-production" vehicle means a new 1975 model-year motor vehicle having a manufacturer's gross vehicle weight rating of under 6,001 pounds that is manufactured or sold in this state in quantities of less than 210 units annually.

The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model Gasoline-Powered Passenger Cars and Light Duty Trucks", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975.

These standards and test procedures shall apply only to passenger cars or passenger car derivatives capable of seating twelve passengers or less.

NOTE: Authority cited: Sections 39051(c) and 39150(a), Health and Safety Code. Reference: Sections 39052(k), 39083.3, 39090, and 39151, Health and Safety Code.

History: 1. New section filed 3-21-75; effective thirtieth day thereafter (Register 75, No. 12).

**1955.5. Exhaust Emission Standards and Test Procedures—1976 and Subsequent Model-Year Light-Duty Trucks.** The exhaust emissions from new 1975 and subsequent model-year gasoline-powered light-duty trucks having an engine displacement of 50 cubic inches or greater, subject to registration and sold registered in this state, shall not exceed:

**Exhaust Emission Standards**  
*(grams per mile)*

<i>Model-Year</i>	<i>Hydrocarbons</i>	<i>Carbon Monoxide</i>	<i>Oxides of Nitrogen (NO<sub>x</sub>)</i>
(a) 1975	2.0	20	2.0
(b) 1976	0.9	17	2.0
(c) 1977	0.9	17	2.0

Standards shown in subdivision (a) above shall apply to "limited-production" light-duty trucks. Definition of "limited-production" shall be the same as in Section 1955.1.

The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model Gasoline-Powered Passenger Cars and Light-Duty Trucks," adopted by the Air Resources Board, February 19, 1975 as amended March 17, 1975.

"Light-duty truck" means any motor vehicle, rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

NOTE: Authority cited: Sections 39051(c) and 39150(a), Health and Safety Code. Reference: Sections 39052(k), 39052(o) and 39052.5, Health and Safety Code.

- History: 1. Amendment filed 12-20-74; effective thirtieth day thereafter (Register 74, No. 51). For prior history, see Register 74, No. 39.  
 2. Amendment filed 3-4-75; effective thirtieth day thereafter (Register 75, No. 10).  
 3. Amendment filed 3-21-75; effective thirtieth day thereafter (Register 75, No. 12).

**FINAL REGULATION ORDER**  
(Low-Emission Vehicle Elements of the Rulemaking)

Amend the following sections of Title 13, California Code of Regulations, to read as set forth on the following pages:

- Section 1960.1 - Exhaust Emission Standards and Test Procedures - 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles
- Section 1956.8 - Exhaust Emission Standards and Test Procedures - 1985 and Subsequent Model Heavy-Duty Engines and Vehicles
- Section 1900 - Definitions
- Section 1904 - Applicability to Vehicles Powered by Fuels Other Than Gasoline or Diesel
- Section 1960.1.5 - Optional NOx Standards for 1983 and Later Model Passenger Cars, and Light-Duty Trucks and Medium-Duty Vehicles Less than 4000 lbs Equivalent Inertia Weight (EIW) or 3751 lbs. Loaded Vehicle Weight (LVW)
- Section 1960.5 - Certification of 1983 and Subsequent Model-Year Federally Certified Light-Duty Motor Vehicles for Sale in California
- Section 1965 - Emission Control Labels - 1979 and Subsequent Model-Year Motor Vehicles
- Section 2061 - Assembly-Line Test Procedures - 1983 and Subsequent Model Years
- Section 2111 - Applicability
- Section 2112 - Definitions
- Section 2125 - Ordered Recall Plan
- Section 2139 - Testing

Note: The regulatory amendments adopted in this rulemaking are shown in underline to indicate additions to the text and ~~strikeout~~ to indicate deletions. (In cases where a hyphen, period, or comma is deleted, the deletion is shown {**boldface in braces**}).

On December 26, 1990, amendments to various sections in the California Code of Regulations to establish new regulations for medium-duty vehicles were adopted. These amendments have not yet been formally approved by the Office of Administrative Law. The additions to the text made by the medium-duty vehicle rulemaking are identified herein by *italics*, with deletions shown in [~~italicized strikeouts in brackets~~]. The amendments pertaining to the medium-duty vehicle rulemaking are not a part of the present rulemaking made available at this time; however, some of the amendments in this rulemaking modify or otherwise affect the language from the medium-duty vehicle rulemaking. Deletions to the medium-duty vehicle rulemaking, made in this rulemaking, are shown in ~~italicized strikeouts~~.

## SECTION 1960.1, TITLE 13, CCR

Amend Title 13, California Code of Regulations, section 1960.1 to read as follows:

1960.1. Exhaust Emission Standards and Test Procedures - 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

(a), (b), (c), and (d) [No change]

(e)(1) The exhaust emissions from (A) new 1989 through 1992 model passenger cars and light-duty trucks, except those produced by a small volume manufacturer, (B) new 1991 through 1994 model passenger cars and light-duty trucks produced by a small volume manufacturer, (C) new 1989 through 1994 [~~and subsequent~~] model medium-duty vehicles, except those produced by a small volume manufacturer, and (D) new 1991 through 1994 [~~and subsequent~~] model medium-duty vehicles produced by a small volume manufacturer, shall not exceed:

1989 THROUGH 1994 [~~AND SUBSEQUENT~~] MODEL-YEAR EXHAUST EMISSION STANDARDS (5)  
(grams per mile)

Vehicle Type(1)	<del>[Equivalent Inertia]</del> Loaded Vehicle Weight (lbs.)	Durability Vehicle Basis (mi)	Non-Methane Hydrocarbons(2)	Carbon Monoxide	Oxides of Nitrogen (3)(4)
PC	All	50,000	0.39(0.41)	7.0	0.4
PC(6)	All	50,000	0.39(0.41)	7.0	0.7
Diesel PC (Option 2)	All	100,000(8)	0.46	8.3	1.0
LDT,MDV	0-3750	50,000	0.39(0.41)	9.0	0.4
LDT,MDV(6)	0-3750	50,000	0.39(0.41)	9.0	0.7(7)
Diesel LDT, MDV (Option 2)	0-3750	100,000(8)	0.46	10.6	1.0
LDT,MDV	3751-5750	50,000	0.50(0.50)	9.0	1.0
LDT,MDV (Option 1)	3751-5750	100,000(8)	0.50(0.50)	9.0	1.5
MDV	5751 & larger	50,000	0.60(0.60)	9.0	1.5
MDV (Option 1)	5751 & larger	100,000(8)	0.60(0.60)	9.0	2.0

(1) "PC" means passenger cars.

"LDT" means light-duty trucks.

"MDV" means medium-duty vehicles.

(2) Hydrocarbon standards in parentheses apply to total hydrocarbons. For 1993 through 1994 and ~~subsequent~~ model methanol-fueled vehicles certifying to these standards, including flexible-fueled vehicles[.], "Non-Methane Hydrocarbons" shall mean "Organic Material Hydrocarbon Equivalent" (or "OMHCE").

- (3) The maximum projected emissions of oxides of nitrogen measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600, Subpart B) shall be not greater than 1.33 times the applicable passenger car standards and 2.00 times the applicable light-duty truck and medium-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 gm/mi before being compared.
- (4) The standard for in-use compliance for passenger cars, light-duty trucks and medium-duty vehicles certifying to the 0.4 gm/mi NO<sub>x</sub> standard shall be 0.55 gm/mi NO<sub>x</sub> for 50,000 miles. If the in-use compliance level is above 0.4 gm/mi NO<sub>x</sub> but does not exceed 0.55 gm/mi NO<sub>x</sub>, and based on a review of information derived from a statistically valid and representative sample of vehicles, the Executive Officer determines that a substantial percentage of any class or category of such vehicles exhibits, prior to 50,000 miles or 5 years, whichever occurs first, an identifiable, systematic defect in a component listed in section 1960.1.5(c)(2) which causes a significant increase in emissions above those exhibited by vehicles free of such defects and of the same class or category and having the same period of use and mileage, then the Executive Officer may invoke the enforcement authority under subchapter 2.5, Title 13, California Code of Regulations, commencing with section 2111, to require remedial action by the vehicle manufacturer. Such remedial action shall be limited to owner notification and repair or replacement of the defective component. As used in this section, the term "defect" shall not include failures which are the result of abuse, neglect, or improper maintenance. This provision is applicable for the 1989 through 1992 model years only. For small volume manufacturers, this provision is applicable for the 1991 through 1994 model years only.
- (5) Diesel passenger cars, light-duty trucks, and medium-duty vehicles certifying to these standards are subject to a particulate exhaust emission standard of 0.08 gm/mi for the 1989 and subsequent model years. The particulate compliance shall be determined on a 50,000 mile durability vehicle basis.
- (6) This set of standards is optional. A manufacturer may choose to certify to these standards pursuant to the conditions set forth in section 1960.1.5.
- (7) Pursuant to section 1960.1.5(a)(1)(B), the optional standard for 1989 model-year light-duty trucks and medium-duty vehicles only is 1.0 gm/mi NO<sub>x</sub>.
- (8) The optional 100,000 mile certification standards and provisions are not applicable to methanol vehicles.

(e)(2) The exhaust emissions from new 1993 and subsequent model methanol-fueled vehicles, including fuel-flexible vehicles, shall meet all the requirements in (e)(1), (f)(1) and (f)(2) with the following modifications and additions:

## 1993 AND SUBSEQUENT METHANOL-SPECIFIC EXHAUST EMISSION STANDARDS

Vehicle Type(1)	Loaded Vehicle Weight (lbs.)(3)	Durability Vehicle Basis (mi)	Formaldehyde (mg/mi)	
			Certification	In-Use Compliance (2)
PC	All	50,000	15	23 (1993-1995) 15 (1996 and later)
LDT,MDV	0-3750	50,000	15	23 (1993-1995) 15 (1996 and later)
LDT,MDV	3751-5750	50,000	18	27 (1993-1995) 18 (1996 and later)
MDV	5751-8500 [& larger]	50,000	22	33 (1993-1995) 22 (1996 and later)
MDV	8501-10,000	50,000	28	36 (1995) 28 (1996 and later)
MDV	10,000-14,000	50,000	36	45 (1995) 36 (1996 and later)

- (1) "PC" means passenger cars.  
 "LDT" means light-duty trucks.  
 "MDV" means medium-duty vehicles.
- (2) If the formaldehyde in-use compliance level is above the respective certification level but does not exceed the in-use compliance level, and based on a review of information derived from statistically valid and representative sample of vehicles, the Executive Officer determines that a substantial percentage of any class or category of such vehicle exhibits, prior to 50,000 miles or 5 years, whichever occurs first, an identifiable, systematic defect in a component listed in section 1960.1.5(c)(2), Title 13, California Code of Regulations, which causes a significant increase in emissions above those exhibited by vehicles free of such defects and of the same class or category and having the same period of use and mileage, the Executive Officer may invoke the enforcement authority under subchapter 2.5, California Code of Regulations, commencing with section 2111, to require remedial action by the vehicle manufacturer. Such remedial action shall be limited to owner notification and repair or replacement of the defective component. As used in this section, the term "defect" shall not include failures which are the result of abuse, neglect, or improper maintenance.
- (3) For 1995 and subsequent model-year medium-duty vehicles certifying to the standards specified in §section 1960.1 (h)(1)(g), "Loaded Vehicle Weight" shall mean "Test Weight", which is the average of the vehicle's curb weight and gross vehicle weight.



(e)(3) The exhaust emissions from 1992 and subsequent model-year transitional low-emission vehicles, low-emission vehicles, and ultra-low-emission vehicles, including fuel-flexible and dual-fuel vehicles, shall meet all the requirements of (g)(1) and (h)(2) with the following additions:

EXHAUST EMISSION STANDARDS FOR  
TRANSITIONAL LOW-EMISSION VEHICLES, LOW-EMISSION VEHICLES,  
AND ULTRA-LOW-EMISSION VEHICLES IN THE  
LIGHT-DUTY AND MEDIUM-DUTY VEHICLE WEIGHT CLASSES (5)(6)(7)  
["milligrams per mile" (or "mg/mi")]

<u>Vehicle Type (1)</u>	<u>Vehicle Weight (lbs.) (2)</u>	<u>Durability Vehicle Basis (mi)</u>	<u>Vehicle Emission Category (3)</u>	<u>Formaldehyde (mg/mi) (4)(5)</u>
PC and LDI	All 0-3750	50,000	TLEV	15 (23)
			LEV	15 (15)
			ULEV	8 (12)
		100,000	TLEV	18
			LEV	18
			ULEV	11
LDI	3751-5750	50,000	TLEV	18 (27)
			LEV	18 (18)
			ULEV	9 (14)
		100,000	TLEV	23
			LEV	23
			ULEV	13
MDV	0-3750	50,000	LEV	15 (15)
			ULEV	8 (12)
			120,000	LEV
		120,000	ULEV	12
			LEV	27
			ULEV	13
MDV	3751-5750	50,000	LEV	18 (18)
			ULEV	9 (14)
			120,000	LEV
		120,000	ULEV	13
			LEV	32
			ULEV	16
MDV	5751-8500	50,000	LEV	22 (22)
			ULEV	11 (17)
			120,000	LEV
		120,000	ULEV	21
			LEV	28 (28)
			ULEV	14 (21)
MDV	8501-10,000	50,000	LEV	28 (28)
			ULEV	14 (21)
			120,000	LEV
		120,000	ULEV	21
			LEV	36 (36)
			ULEV	18 (27)
MDV	10,001-14,000	50,000	LEV	36 (36)
			ULEV	18 (27)
		120,000	LEV	52
			ULEV	26

- (1) "PC" means passenger cars.  
"LDT" means light-duty trucks.  
"MDV" means medium-duty vehicles.
- (2) For light-duty or medium-duty vehicles, Vehicle Weight shall mean "Loaded Vehicle Weight" (or "LVW") or "Test Weight" (or "TW"), respectively.
- (3) "TLEV" means transitional low-emission vehicle.  
"LEV" means low-emission vehicle.  
"ULEV" means ultra-low-emission vehicle.
- (4) Formaldehyde exhaust emission standards apply to vehicles designed to operate on any available fuel, including fuel-flexible and dual-fuel vehicles.
- (5) The standards in parentheses are intermediate compliance standards for 50,000 miles.
  - a. For PCs and LDTs from 0-5750 lbs. LVW, including fuel-flexible and dual-fuel vehicles, intermediate compliance standards shall apply to TLEVs through the 1995 model year, LEVs and ULEVs through the 1998 model year. Compliance with standards beyond 50,000 miles shall be waived through 1995 for TLEVs, and through 1998 for LEVs and ULEVs.
  - b. For MDVs from 0-14,000 lbs. TW, including fuel-flexible and dual-fuel vehicles, intermediate compliance standards shall apply to LEVs and ULEVs through the 1999 model year. Compliance with standards beyond 50,000 miles shall be waived through the 1999 model year for LEVs and ULEVs.
- (6) Manufacturers shall demonstrate compliance with the above standards for formaldehyde at 50 degrees F according to the procedures specified in section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as adopted May 20, 1987 and last amended July 12, 1991.
- (7) In-use compliance testing shall be limited to PCs and LDTs with fewer than 75,000 miles and MDVs with fewer than 90,000 miles.

(f)(1) The exhaust emissions from new 1993 and 1994 model passenger cars and light-duty trucks, except those produced by a small volume manufacturer, shall not exceed:

1993 AND 1994 MODEL-YEAR PASSENGER CAR AND  
LIGHT-DUTY TRUCK EXHAUST EMISSIONS STANDARDS (5)(8)(9)  
(grams per mile)

Vehicle Type(1)	Loaded Vehicle Weight (lbs.)	Durability Vehicle Basis (mi)	Non-Methane Hydrocarbons (2)(7)	Carbon Monoxide (7)	Oxides of Nitrogen (1)(3)(4)
PC	All	50,000	0.39 (0.25)	7.0 (3.4)	0.4
PC(6)	All	50,000	0.39 (0.25)	7.0 (3.4)	0.7
PC	All	100,000	(0.31)	(4.2)	n/a
Diesel PC (Option 2)	All	100,000	0.46 (0.31)	8.3 (4.2)	1.0
LDT	0-3750	50,000	0.39 (0.25)	9.0 (3.4)	0.4
LDT (6)	0-3750	50,000	0.39 (0.25)	9.0 (3.4)	0.7
LDT	0-3750	100,000	(0.31)	(4.2)	n/a
Diesel LDT (Option 2)	0-3750	100,000	0.46 (0.31)	10.6 (4.2)	1.0
LDT	3751-5750	50,000	0.50 (0.32)	9.0 (4.4)	1.0
LDT	3751-5750	100,000	(0.40)	(5.5)	n/a
Diesel LDT (Option 1)	3751-5750	100,000	0.50 (0.40)	9.0 (5.5)	1.5

- (1) "PC" means passenger cars.  
"LDT" means light-duty trucks.  
"n/a" means not applicable.
- (2) For methanol-fueled vehicles certifying to these standards, including flexible-fueled vehicles, "Non-Methane Hydrocarbons" shall mean "Organic Material Hydrocarbon Equivalent" (or "OMHCE").
- (3) The maximum projected emissions of oxides of nitrogen measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall be not greater than 1.33 times the applicable passenger car standards and 2.00 times the applicable light-duty truck and medium-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 gm/mi before being compared.
- (4) The standard for in-use compliance for passenger cars and light-duty trucks certifying to the 0.4 g/mi NO<sub>x</sub> standard shall be 0.55 g/mi NO<sub>x</sub> for 50,000 miles. If the in-use compliance level is above 0.4 g/mi NO<sub>x</sub> but does not exceed 0.55 g/mi NO<sub>x</sub>, and based on a review of information derived from a statistically valid and representative sample of vehicles, the Executive Officer determines that a substantial percentage of any class or category of such vehicles exhibits, prior to 50,000 miles or 5 years, whichever occurs first, an identifiable, systematic defect in a component listed in section 1960.1.5(c)(2), Title 13, California Code of Regulations, which causes a significant increase in emissions above those exhibited by vehicles free of such defects and of the same class or category and having the same period of use and mileage, then the Executive Officer may invoke the

enforcement authority under subchapter 2.5, Title 13, California Code of Regulations, commencing with section 2111, to require remedial action by the vehicle manufacturer. Such remedial action shall be limited to owner notification and repair or replacement of the defective component. As used in this section, the term "defect" shall not include failures which are the result of abuse, neglect, or improper maintenance. This provision is applicable for the 1993 model year only.

- (5) Diesel passenger cars and light-duty trucks certifying to these standards are subject to a particulate exhaust emission standard of 0.08 g/mi, determined on a 50,000 mile durability vehicle basis.
- (6) This set of standards is optional. A manufacturer may choose to certify to these standards pursuant to the conditions set forth in section 1960.1.5.
- (7) The emission standards in parenthesis are phase-in standards. For the 1993 model{-}year, each manufacturer must certify a minimum of 40% of their vehicles to the phase-in standards or the more stringent standards in section 1960.1. (g)(1). For the 1994 model{-}year, each manufacturer must certify a minimum of 80% of their vehicles to the phase-in standards or the more stringent standards in section 1960.1. (g)(1). The percentages shall be applied to the manufacturers' total projected sales of California-certified passenger cars and light-duty trucks for the model year.
- (8) The following conditions shall apply to the in-use compliance standards for 1993 and 1994 model-year passenger cars and light-duty trucks only.
  - a. The in-use compliance standards for those passenger cars and light-duty trucks certifying to the 0.25 g/mi non-methane hydrocarbon and 3.4 g/mi carbon monoxide standards shall be 0.32 g/mi non-methane hydrocarbon and 5.2 g/mi carbon monoxide for 50,000 miles.
  - b. The in-use compliance standards for those light-duty trucks certifying to the 0.32 g/mi non-methane hydrocarbon and 4.4 g/mi carbon monoxide standards shall be 0.41 g/mi non-methane hydrocarbon and 6.7 g/mi carbon monoxide for 50,000 miles.
  - c. In-use compliance standards shall be waived beyond 50,000 miles.
- (9) All passenger cars and light-duty trucks, except those diesel vehicles certifying to optional 100,000 mile standards, are subject to non-methane hydrocarbon, carbon monoxide, and oxides of nitrogen standards determined on a 50,000 mile durability basis and non-methane hydrocarbon and carbon monoxide standards determined on a 100,000 mile basis.

(f)(2) The exhaust emissions from new 1995 and subsequent model passenger cars and light-duty trucks shall not exceed:

1995 AND SUBSEQUENT MODEL-YEAR PASSENGER CAR AND  
LIGHT-DUTY TRUCK EXHAUST EMISSIONS STANDARDS (5)(6)(8)  
(grams per mile)

Vehicle Type(1)	Loaded Vehicle Weight (lbs.)	Durability Vehicle Basis (mi)	Non-Methane Hydrocarbons (2)(7)	Carbon Monoxide (7)	Oxides of Nitrogen (1)(3)
PC	All	50,000	0.25	3.4	0.4(4)
PC	All	100,000	0.31	4.2	n/a
Diesel PC (Option 2)	All	100,000	0.31	4.2	1.0
LDT	0-3750	50,000	0.25	3.4	0.4(4)
LDT	0-3750	100,000	0.31	4.2	n/a
Diesel LDT (Option 2)	0-3750	100,000	0.31	4.2	1.0
LDT	3751-5750	50,000	0.32	4.4	0.7[1-θ]
LDT	3751-5750	100,000	0.40	5.5	n/a
Diesel LDT (Option 1)	3751-5750	100,000	0.40	5.5	1.5

- (1) "PC" means passenger cars.  
"LDT" means light-duty trucks.  
"n/a" means not applicable.
- (2) For methanol-fueled vehicles certifying to these standards, including flexible-fueled vehicles, "Non-Methane Hydrocarbons" shall mean "Organic Material Hydrocarbon Equivalent" (or "OMHCE").
- (3) The maximum projected emissions of oxides of nitrogen measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall be not greater than 1.33 times the applicable passenger car standards and 2.00 times the applicable light-duty truck [~~and medium-duty vehicle~~] standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 gm/mi before being compared.
- (4) Small volume manufacturers may choose to certify to an optional 0.7 g/mi NOx standard for the 1995 model{-}year only, pursuant to the conditions set forth in sections 1960.1 (f)(1) and 1960.1.5.
- (5) Diesel passenger cars and light-duty trucks certifying to these standards are subject to a particulate exhaust emission standard of 0.08 g/mi, determined on a 50,000 mile durability vehicle basis.
- (6) For all vehicles, except those certifying to optional diesel standards, in-use compliance with the exhaust emission standards shall be limited to vehicles with less than 75,000 miles.

- (7) For the 1995 and 1996 model years, all manufacturers, except those certifying to optional diesel standards, are permitted alternative in-use compliance. Alternative in-use compliance is permitted for 60% of a manufacturer's vehicles in the 1995 model year and 20% of a manufacturer's vehicles in the 1996 model year. For the 1995 and 1996 model years, small volume manufacturers only are permitted alternative in-use compliance for 100% of the fleet. The percentages shall be applied to the manufacturers' total projected sales of California-certified passenger cars and light-duty trucks for the model year. "Alternative in-use compliance" shall consist of the following:
- a. For all passenger cars and those light-duty trucks from 0-3750 lbs., loaded vehicle weight, except those diesel vehicles certifying to optional 100,000 mile standards, in-use compliance standards shall be 0.32 g/mi non-methane hydrocarbon and 5.2 g/mi carbon monoxide for 50,000 miles.
  - b. For light-duty trucks from 3751-5750 lbs., loaded vehicle weight, except those diesel light-duty trucks certifying to optional 100,000 mile standards, in-use compliance standards shall be 0.41 g/mi non-methane hydrocarbon and 6.7 g/mi carbon monoxide for 50,000 miles.
  - c. In-use compliance standards shall be waived beyond 50,000 miles.
- (8) All passenger cars and light-duty trucks, except those diesel vehicles certifying to optional standards, are subject to non-methane hydrocarbon, carbon monoxide, and oxides of nitrogen standards determined on a 50,000 mile durability basis and non-methane hydrocarbon and carbon monoxide standards determined on a 100,000 mile durability basis.

(g)(1) The exhaust emissions from new 1992 and subsequent model-year light-duty transitional low-emission vehicles, low-emission vehicles, and ultra-low-emission vehicles shall not exceed:

EXHAUST EMISSION STANDARDS  
FOR TRANSITIONAL LOW-EMISSION VEHICLES, LOW-EMISSION VEHICLES  
AND ULTRA-LOW-EMISSION VEHICLES IN PASSENGER CAR  
AND LIGHT-DUTY TRUCK VEHICLE CLASSES (6)(7)(8)(9).  
[grams per mile (or "g/mi")]

<u>Vehicle Type</u> <u>(1)</u>	<u>Loaded Vehicle Weight</u> <u>(lbs.)</u>	<u>Durability Vehicle Basis</u> <u>(mi)</u>	<u>Vehicle Emission Category</u> <u>(2)</u>	<u>Non-Methane Organic Gases</u> <u>(3)(4)</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen</u> <u>(5)</u>
PC and LDT	All 0-3750	50,000	TLEV	0.125 (0.188)	3.4 (3.4)	0.4 (0.4)
			LEV	0.075 (0.100)	3.4 (3.4)	0.2 (0.3)
			ULEV	0.040 (0.058)	1.7 (2.6)	0.2 (0.3)
		100,000	TLEV	0.156	4.2	0.6
			LEV	0.090	4.2	0.3
			ULEV	0.055	2.1	0.3
LDT	3751-5750	50,000	TLEV	0.160 (0.238)	4.4 (4.4)	0.7 (0.7)
			LEV	0.100 (0.128)	4.4 (4.4)	0.4 (0.5)
			ULEV	0.050 (0.075)	2.2 (3.3)	0.4 (0.5)
		100,000	TLEV	0.200	5.5	0.9
			LEV	0.130	5.5	0.5
			ULEV	0.070	2.8	0.5

- (1) "PC" means passenger cars.
- "LDT" means light-duty trucks.
- (2) "TLEV" means transitional low-emission vehicle.
- "LEV" means low-emission vehicle.
- "ULEV" means ultra-low-emission vehicle.
- (3) "Non-Methane Organic Gases" (or "NMOG") shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions. To demonstrate compliance with an NMOG standard, NMOG emissions shall be measured in accordance with the "California Non-Methane Organic Gas Test Procedures." For TLEVs, LEVs, and ULEVs designed to operate exclusively on any fuel other than conventional gasoline, manufacturers shall multiply the measured NMOG mass emissions at 50,000 and 100,000 miles by the reactivity adjustment factor established for the particular vehicle emission category and fuel combination in the application for certification. The Executive Officer shall determine the reactivity adjustment factor according to the procedure described in Appendix VIII of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Car, Light-Duty Trucks, and Medium-Duty Vehicles" as adopted May 20, 1987 and last amended July 12, 1991.

- a. Each manufacturer shall certify PCs or LDIs to meet the exhaust mass emission standards for TLEVs, LEVs, ULEVs, or the exhaust emission standards of sections 1960.1 (e)(1), 1960.1 (f)(1), or 1960.1 (f)(2), Title 13, California Code of Regulations, or as Zero-Emission Vehicles such that the manufacturer's fleet average NMOG values for California-certified PCs and LDIs from 0-3750 lbs. "Loaded Vehicle Weight" (or "LVW"), and LDIs from 3751-5750 lbs. LVW sold in California are less than or equal to the requirement for the corresponding Model Year, Vehicle Type, and LVW Class in section 1960.1 (g)(2), Title 13, California Code of Regulations.
- (4) Fuel-flexible and dual-fuel PCs and LDIs from 0-5750 lbs. LVW shall be certified to exhaust mass emission standards for NMOG established for the operation of the vehicle on any available fuel other than conventional gasoline, and conventional gasoline.
- a. For TLEVs, LEVs, and ULEVs, when certifying for operation on a fuel other than conventional gasoline, manufacturers shall multiply the measured NMOG emissions by the applicable reactivity adjustment factor in the application for certification at 50,000 and 100,000 miles.
- b. For PCs and LDIs from 0-3750 lbs. LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
- (i) For TLEVs, 0.25 g/mi and 0.31 g/mi for 50,000 and 100,000 miles, respectively.
- (ii) For LEVs, 0.125 g/mi and 0.156 g/mi for 50,000 and 100,000 miles, respectively.
- (iii) For ULEVs, 0.075 g/mi and 0.090 g/mi for 50,000 and 100,000 miles, respectively.
- c. For LDIs from 3751-5750 lbs. LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
- (i) For TLEVs, 0.32 g/mi and 0.40 g/mi for 50,000 and 100,000 miles, respectively.
- (ii) For LEVs, 0.160 g/mi and 0.200 g/mi for 50,000 and 100,000 miles, respectively.
- (iii) For ULEVs, 0.100 g/mi and 0.130 g/mi for 50,000 and 100,000 miles, respectively.
- (5) The maximum projected emissions of "Oxides of Nitrogen" (or "NOx") measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B) shall be not greater than 1.33 times the applicable light-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.



- (6) The standards in parentheses are intermediate compliance standards for 50,000 miles. For PCs and LDTs from 0-5750 lbs. LVW, including those operating on any available fuel other than conventional gasoline, intermediate compliance standards shall apply to TLEVs through the 1995 model year, and LEVs and ULEVs through the 1998 model year. Compliance with standards beyond 50,000 miles shall be waived through the 1995 model year for TLEVs, and through the 1998 model year for LEVs and ULEVs.
- a. For TLEVs, LEVs, and ULEVs designed to operate on any fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operating on any fuel other than conventional gasoline, measured NMOG emissions shall be multiplied by the reactivity adjustment factor to determine compliance with intermediate compliance standards for NMOG.
- b. For fuel-flexible and dual-fuel PCs and LDTs from 0-3750 lbs. LVW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.32 g/mi, 0.188 g/mi, and 0.100 g/mi for TLEVs, LEVs, and ULEVs, respectively.
- c. For fuel-flexible and dual-fuel PCs and LDTs from 3751-5750 lbs. LVW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.41 g/mi, 0.238 g/mi, and 0.128 g/mi for TLEVs, LEVs, and ULEVs, respectively.
- (7) Manufacturers of diesel vehicles shall also certify to particulate standards at 100,000 miles. For all PCs and LDTs from 0-5750 lbs LVW, the particulate standard is 0.08 g/mi, 0.08 g/mi, and 0.04 g/mi for TLEVs, LEVs and ULEVs, respectively.
- (8) Manufacturers shall demonstrate compliance with the above standards for NMOG, CO, and NOx at 50 degrees F according to the procedure specified in section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as adopted May 20, 1987 and last amended July 12, 1991. For diesel vehicles, compliance with the particulate standard shall also be demonstrated.
- (9) In-use compliance testing shall be limited to vehicles with fewer than 75 000 miles.

(g)(2) The fleet average non-methane organic gas exhaust emission values from a manufacturer's sales of passenger cars and light-duty trucks shall not exceed:

FLEET AVERAGE NON-METHANE ORGANIC GAS EXHAUST EMISSION REQUIREMENTS  
FOR LIGHT-DUTY VEHICLE WEIGHT CLASSES (7)(8)(9)  
[grams per mile (or "g/mi")]

<u>Vehicle Type</u> (1)	<u>Loaded Vehicle Weight</u> (lbs.)	<u>Durability Vehicle Basis</u> (mi)(7)	<u>Model Year</u>	<u>Fleet Average Non-Methane Organic Gases</u> (2)(3)(4)(5)(6)
<u>PC and LDT</u>	<u>All 0-3750</u>	<u>50,000</u>	<u>1994</u>	<u>0.250</u>
			<u>1995</u>	<u>0.231</u>
			<u>1996</u>	<u>0.225</u>
			<u>1997</u>	<u>0.202</u>
			<u>1998</u>	<u>0.157</u>
			<u>1999</u>	<u>0.113</u>
			<u>2000</u>	<u>0.073</u>
			<u>2001</u>	<u>0.070</u>
			<u>2002</u>	<u>0.068</u>
			<u>2003 &amp; subsequent</u>	<u>0.062</u>
<u>LDT</u>	<u>3751-5750</u>	<u>50,000</u>	<u>1994</u>	<u>0.320</u>
			<u>1995</u>	<u>0.295</u>
			<u>1996</u>	<u>0.287</u>
			<u>1997</u>	<u>0.260</u>
			<u>1998</u>	<u>0.205</u>
			<u>1999</u>	<u>0.150</u>
			<u>2000</u>	<u>0.099</u>
			<u>2001</u>	<u>0.098</u>
			<u>2002</u>	<u>0.095</u>
<u>2003 &amp; subsequent</u>	<u>0.093</u>			

- (1) "PC" means passenger cars.  
"LDT" means light-duty trucks.
- (2) "Non-Methane Organic Gases" (or "NMOG") shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions.
- (3) For the purpose of calculating fleet average NMOG values, a manufacturer may adjust the certification levels of hybrid electric vehicles (or "HEVs") based on the range of the HEV without the use of the engine. For the purpose of calculating the adjusted NMOG emissions, the following definitions shall apply:  
  - "Type A HEV" shall mean an HEV which achieves a minimum range of 60 miles as defined by the "Federal Highway Fuel Economy Test Procedure" (HWFET; 40 CFR 600 Subpart B) without the use of the engine. Use of vehicle accessories cannot lower the battery-only range below 60 miles. This definition shall also apply to vehicles which have no tailpipe emissions, but use fuel fired heaters, regardless of the operating range of the vehicle.
  - "Type B HEV" shall mean an HEV which achieves a range of 40 - 59 miles as defined by the "Federal Highway Fuel Economy Test Procedure" (HWFET; 40 CFR 600 Subpart B) without the use of the engine. Use of vehicle accessories cannot lower the battery-only range below 40 miles.

"Type C HEV" shall mean an HEV which achieves a range of 0 - 39 miles as defined by the "Federal Highway Fuel Economy Test Procedure" (HWFET; 40 CFR 600 Subpart B) without the use of the engine, an HEV which enables the vehicle operators to control the engine time and modes of operation either directly or indirectly, an HEV which can be operated solely through the use of the engine, and all other HEVs excluding "Type A" and "Type B" HEVs.

- (4) Each manufacturer's fleet average NMOG value for the total number of PCs and LDVs from 0-3750 lbs. "Loaded Vehicle Weight" (or "LVW") sold in California shall be calculated in units of g/mi NMOG as:  $\frac{\{[(\text{No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (e)(1) and Sold} \times (0.39))] + [(\text{No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (f)(2) and Sold} \times (0.25))] + [(\text{No. of Transitional Low-Emission Vehicles (or "TLEVs") excluding HEVs and Sold} \times (0.125))] + [(\text{No. of Low-Emission Vehicles (or "LEVs") excluding HEVs and Sold} \times (0.075))] + [(\text{No. of Ultra-Low-Emission Vehicles (or "ULEVs") excluding HEVs and Sold} \times (0.040))] + (\text{HEV contribution factor})\}}{(\text{Total No. of Vehicles Sold, Including Zero-Emission Vehicles and HEVs})}$ .
- a. "HEV contribution factor" shall mean the NMOG emission contribution of HEVs to the fleet average NMOG value. The HEV contribution factor shall be calculated in units of g/mi as follows:
- $$\text{HEV contribution factor} = \frac{\{[\text{No. of "Type A HEV" TLEVs Sold}] \times (0.100) + [\text{No. of "Type B HEV" TLEVs Sold}] \times (0.113) + [\text{No. of "Type C HEV" TLEVs Sold}] \times (0.125)\} + \{[\text{No. of "Type A HEV" LEVs Sold}] \times (0.057) + [\text{No. of "Type B HEV" LEVs Sold}] \times (0.066) + [\text{No. of "Type C HEV" LEVs Sold}] \times (0.075)\} + \{[\text{No. of "Type A HEV" ULEVs Sold}] \times (0.020) + [\text{No. of "Type B HEV" ULEVs Sold}] \times (0.030) + [\text{No. of "Type C HEV" ULEVs Sold}] \times (0.040)\}}$$
- b. "Zero-Emission Vehicles" (or "ZEVs") classified as medium-duty vehicles by weight may be designated as light-duty vehicles for the purpose of calculating fleet average NMOG values.
- (5) Manufacturers that certify LDVs from 3751-5750 lbs. LVW, shall calculate a fleet average NMOG value in units of g/mi NMOG as:
- $$\frac{\{[(\text{No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (e)(1), and Sold} \times (0.50))] + [(\text{No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (f)(2), and Sold} \times (0.32))] + [(\text{No. of TLEVs Sold excluding HEVs}) \times (0.160)] + [(\text{No. of LEVs Sold excluding HEVs}) \times (0.100)] + [(\text{No. of ULEVs Sold excluding HEVs}) \times (0.050)] + (\text{HEV contribution factor})\}}{(\text{Total No. of Vehicles Sold, Including ZEVs and HEVs})}$$
- a. "HEV contribution factor" shall mean the NMOG emission contribution of HEVs to the fleet average NMOG. The HEV contribution factor shall be calculated in units of g/mi as follows:

HEV contribution factor = {[No. of "Type A HEV" TLEVs Sold] x (0.130) + [No. of "Type B HEV" TLEVs Sold] x (0.145) + [No. of "Type C HEV" TLEVs Sold] x (0.160)} + {[No. of "Type A HEV" LEVs Sold] x (0.075) + [No. of "Type B HEV" LEVs Sold] x (0.087) + [No. of "Type C HEV" LEVs Sold] x (0.100)} + {[No. of "Type A HEV" ULEVs Sold] x (0.025) + [No. of "Type B HEV" ULEVs Sold] x (0.037) + [No. of "Type C HEV" ULEVs Sold] x (0.050)}

- (6) As used in this subsection, the term "small volume manufacturer" shall mean any vehicle manufacturer with California sales less than or equal to 3000 new LDVs and MDVs per model year based on the average number of vehicles sold by the manufacturer each model year from 1989 to 1991. For manufacturers certifying for the first time in California, model-year sales shall be based on projected California sales. In 2000 and subsequent model years, small volume manufacturers shall comply with fleet average NMOG requirements.
- a. Prior to the model year 2000, compliance with the specified fleet average NMOG requirements shall be waived.
  - b. In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.075 g/mi for PCs and LDVs from 0-3750 lbs. LVW for 50,000 miles.
  - c. In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.100 g/mi for LDVs from 3751-5750 lbs. LVW for 50,000 miles.
- (7) In 1994 and subsequent model years, manufacturers that achieve fleet average NMOG values lower than the fleet average requirement for the corresponding model year shall receive credits in units of g/mi NMOG determined as: {[Fleet Average NMOG Requirement) - (Manufacturer's Fleet Average NMOG Value)] x (Total No. of Vehicles Sold, Including ZEVs and HEVs)}
- a. Manufacturers with fleet average NMOG values greater than the fleet average requirement for the corresponding model year shall receive debits in units of g/mi NMOG equal to the amount of negative credits determined by the aforementioned equation.
  - b. For the 1994 through 1997 model years, manufacturers shall equalize emission debits within three model years and prior to the end of the 1998 model year by earning g/mi NMOG emission credits in an amount equal to their g/mi NMOG debits, or by submitting a commensurate amount of g/mi NMOG credits to the Executive Officer that were earned previously or acquired from another manufacturer. For 1998 and subsequent model years, manufacturers shall equalize emission debits by the end of the following model year.
  - c. The g/mi NMOG emission credits earned in any given model year shall retain full value through the subsequent model year.

- d. The g/mi NMOG value of any credits not used to equalize the previous model-year's debit, shall be discounted by 50% at the beginning of the second model year after being earned, discounted to 25% of its original value if not used by the beginning of the third model year after being earned, and will have no value if not used by the beginning of the fourth model year after being earned.
  - e. Any g/mi NMOG emission credits earned by a manufacturer may be applied toward either the fleet average requirement for passenger cars and light-duty trucks from 0-3750 lbs. LVW, or the fleet average requirement for light-duty trucks from 3751-5750 lbs. LVW, at the manufacturer's discretion.
- (8) Manufacturers that sell vehicles certified to the exhaust emission standards in sections 1960.1 (f)(2) or 1960.1 (g)(1) or ZEVs, in the 1992 and 1993 model years, shall receive emission credits for the sale of these vehicles as determined by the equations in footnotes (4) or (5), depending upon Vehicle Weight Class, and footnote (7).
- a. For PCs and LDTs from 0-3750 lbs. LVW, the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.390 and 0.334 g/mi NMOG for vehicles — certified for the 1992 and 1993 model years, respectively.
  - b. For LDTs from 3751-5750 lbs. LVW, the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.500 and 0.428 g/mi NMOG for vehicles certified for the 1992 and 1993 model years, respectively.
  - c. Emission credits earned prior to the 1994 model year shall be considered as earned in the 1994 model year and discounted in accordance with the schedule specified in footnote (7).
- (9) While meeting the fleet average requirements, each manufacturer's sales fleet of passenger cars and light-duty trucks from 0-3750 lbs. LVW shall be composed of at least 2% ZEVs each model year from 1998 through 2000, 5% ZEVs in 2001 and 2002, and 10% ZEVs in 2003 and subsequent model years.
- a. A manufacturer may meet the ZEV requirements by submitting to the Executive Officer a commensurate amount of g/mi NMOG emission credits earned exclusively from the sale of ZEVs. These credits may be earned previously by the manufacturer or acquired from another manufacturer.
  - b. Manufacturers which sell fewer ZEVs than required in a given model year shall make up the deficit by the end of the next model year by selling an additional number of ZEVs equal to their deficit or by submitting to the Executive Officer a commensurate amount of g/mi NMOG credits earned exclusively from the sale of ZEVs.
  - c. Small volume manufacturers shall not be required to meet the percentage ZEV requirements. However, small volume manufacturers may earn and market credits for ZEVs they produce and sell.
  - d. Intermediate volume manufacturers as defined in section 1960.1 (o) shall not be required to meet the percentage ZEV requirements before the 2003 model year.

~~(b)(1)(g)~~ The exhaust emissions from new 1995 and subsequent model medium-duty vehicles shall not exceed:

1995 AND SUBSEQUENT MODEL-YEAR  
MEDIUM-DUTY VEHICLE EXHAUST EMISSIONS STANDARDS (1)(2)(3)(7)(8)  
(grams per mile)

Test Weight(lbs.)	Durability Vehicle Basis(mi)	Non-Methane Hydrocarbons(4)	Carbon Monoxide	Oxides of Nitrogen(5)	Particulates (6)
0-3,750	50,000	0.25	3.4	0.4	n/a
0-3,750	120,000	0.36	5.0	0.55	0.08
3,751-5,750	50,000	0.32	4.4	0.7	n/a
3,751-5,750	120,000	0.46	6.4	0.98	0.10
5,751-8,500	50,000	0.39	5.0	1.1	n/a
5,751-8,500	120,000	0.56	7.3	1.53	0.12
8,501-10,000	50,000	0.46	5.5	1.3	n/a
8,501-10,000	120,000	0.66	8.1	1.81	0.12[0-15]
10,001-14,000	50,000	0.60	7.0	2.0	n/a
10,001-14,000	120,000	0.86	10.3	2.77	0.12[0-18]

- (1) "n/a" means not applicable.  
"Test Weight" shall mean the average of the vehicle's curb weight and gross vehicle weight.
- (2) Manufacturers have the option of certifying engines used in incomplete and diesel medium-duty vehicles from 8501-14,000 pounds, gross vehicle weight to the heavy-duty engine standards and test procedures set forth in §section 1956.8(e), Title 13, California Code of Regulations. Manufacturers certifying incomplete or diesel medium-duty vehicles to the heavy-duty engine standards and test procedures shall specify, in the application for certification, an in-use compliance test procedure, as provided in §section 2139(c), Title 13, California Code of Regulations.
- (3) For the 1995 model[-]year only, manufacturers of medium-duty vehicles may certify a maximum of 50 percent of their vehicles to the applicable 1994 model-year standards and test procedures. The percentage shall be based upon each manufacturer's projected sales of California-certified medium-duty vehicles.
- (4) For methanol-fueled vehicles certifying to these standards, including flexible-fueled vehicles, "Non-Methane Hydrocarbons" shall mean "Organic Material Hydrocarbon Equivalent" (or "OMHCE").

- (5) *The maximum projected emissions of oxides of nitrogen measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall be not greater than 2.00 times the applicable medium-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.*
- (6) *Particulate standards are only applicable for diesel vehicles and shall be determined on a 120,000 mile basis.*
- (7) *In-use compliance testing shall be limited to vehicles with less than 90,000 miles. For the 1995 through 1997 models, alternative in-use compliance is available for medium-duty vehicle manufacturers. A manufacturer may use alternative in-use compliance for up to 100 percent of its fleet in the 1995 and 1996 model years and up to 50 percent of its fleet in the 1997 model year. The percentages shall be determined from the manufacturers' projected California sales of medium-duty vehicles. For vehicles certified to the standards and test procedures of this subsection, "alternative in-use compliance" shall consist of an in-use allowance of 25 percent over the applicable 1995 model-year non-methane hydrocarbon, carbon monoxide, and oxides of nitrogen 50,000 mile emission standards and a waiver of the emission standards beyond 50,000 miles.*
- (8) *All medium-duty vehicles, except diesel-fueled vehicles and those incomplete and diesel vehicles certifying to heavy-duty engine test procedures, are subject to 50,000 mile and 120,000 mile non-methane hydrocarbon, carbon monoxide, and oxides of nitrogen standards. Diesel-fueled vehicles shall be subject to 120,000 mile non-methane hydrocarbon, carbon monoxide, oxides of nitrogen, and particulate standards only.*

~~(h)(2) The exhaust emissions from new 1992 and subsequent model-year medium-duty low-emission vehicles, and ultra-low-emission vehicles shall not exceed:~~

EXHAUST EMISSION STANDARDS FOR LOW-EMISSION VEHICLES,  
AND ULTRA-LOW-EMISSION VEHICLES IN THE  
MEDIUM-DUTY VEHICLE WEIGHT CLASS (8)(9)(10)(11)(12)(13)(14).  
[grams per mile (or "g/mi")]

<u>Test Weight lbs.) (1)</u>	<u>Durability Vehicle Basis (mi) (2)</u>	<u>Vehicle Emission Category (2)</u>	<u>Non-Methane Organic Gases (3)(4)</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (5)</u>	<u>Particulates (6)(7)</u>
0-3750	50,000	LEV	0.125 (0.188)	3.4 (3.4)	0.4 (0.4)	n/a
		ULEV	0.075 (0.100)	1.7 (2.6)	0.2 (0.3)	n/a
	120,000	LEV	0.180	5.0	0.6	0.08
		ULEV	0.107	2.5	0.3	0.04
3751-5750	50,000	LEV	0.160 (0.238)	4.4 (4.4)	0.7 (0.7)	n/a
		ULEV	0.100 (0.128)	2.2 (3.3)	0.4 (0.5)	n/a
	120,000	LEV	0.230	6.4	1.0	0.10
		ULEV	0.143	3.2	0.5	0.05
5751-8500	50,000	LEV	0.195 (0.293)	5.0 (5.0)	1.1 (1.1)	n/a
		ULEV	0.117 (0.156)	2.5 (3.8)	0.6 (0.8)	n/a
	120,000	LEV	0.280	7.3	1.5	0.12
		ULEV	0.167	3.7	0.8	0.06
8501-10000	50,000	LEV	0.230 (0.345)	5.5 (5.5)	1.3 (1.3)	n/a
		ULEV	0.138 (0.184)	2.8 (4.2)	0.7 (1.0)	n/a
	120,000	LEV	0.330	8.1	1.8	0.12
		ULEV	0.197	4.1	0.9	0.06
10,001-14000	50,000	LEV	0.300 (0.450)	7.0 (7.0)	2.0 (2.0)	n/a
		ULEV	0.180 (0.240)	3.5 (5.3)	1.0 (1.5)	n/a
	120,000	LEV	0.430	10.3	2.8	0.12
		ULEV	0.257	5.2	1.4	0.06

- (1) "Test Weight" (or "TW") shall mean the average of the vehicle's curb weight and gross vehicle weight.
- (2) "LEV" means low-emission vehicle.  
"ULEV" means ultra-low-emission vehicle.
- (3) "Non-Methane Organic Gases" (or "NMOG") shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions. To determine compliance with an NMOG standard, NMOG emissions shall be measured in accordance with "California Non-Methane Organic Gas Test Procedures."
  - a. For LEVs and ULEVs designed to operate on any available fuel other than conventional gasoline, including fuel-flexible or dual-fuel vehicles, manufacturers shall multiply measured NMOG emissions at 50,000 and 120,000 miles by the reactivity adjustment factor appropriate to the vehicle emission category and fuel combination in the application for certification. The reactivity adjustment factor shall be determined by the Executive Officer according to the procedure described in Appendix VIII of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and



- Medium-Duty Vehicles" as adopted May 20, 1987 and last amended July 12, 1991.
- (4) Fuel-flexible and dual-fuel medium-duty vehicles (or "MDVs") from 0-14,000 lbs. TW shall be certified to exhaust mass emission standards for NMOG established for the operation of the vehicle on any fuel other than conventional gasoline, and conventional gasoline.
- a. For LEVs and ULEVs, manufacturers shall multiply measured NMOG emissions at 50,000 and 120,000 miles by the appropriate reactivity adjustment factor in the application for certification.
- b. For MDVs from 0-3750 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
- (i) For LEVs, 0.25 g/mi and 0.36 g/mi for 50,000 and 120,000 miles, respectively.
- (ii) For ULEVs, 0.125 g/mi and 0.190 g/mi for 50,000 and 120,000 miles, respectively.
- c. For MDVs from 3751-5750 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
- (i) For LEVs, 0.32 g/mi and 0.46 g/mi for 50,000 and 120,000 miles, respectively.
- (ii) For ULEVs, 0.160 g/mi and 0.230 g/mi for 50,000 and 120,000 miles, respectively.
- d. For MDVs from 5751-8500 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
- (i) For LEVs, 0.39 g/mi and 0.56 g/mi for 50,000 and 120,000 miles, respectively.
- (ii) For ULEVs, 0.195 g/mi and 0.280 g/mi for 50,000 and 120,000 miles, respectively.
- e. For MDVs from 8501-10,000 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
- (i) For LEVs, 0.46 g/mi and 0.66 g/mi for 50,000 and 120,000 miles, respectively.
- (ii) For ULEVs, 0.230 g/mi and 0.330 g/mi for 50,000 and 120,000 miles, respectively.
- f. For MDVs from 10,001-14,000 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
- (i) For LEVs, 0.60 g/mi and 0.86 g/mi for 50,000 and 120,000 miles, respectively.
- (ii) For ULEVs, 0.300 g/mi and 0.430 g/mi for 50,000 and 120,000 miles, respectively.
- (5) The maximum projected emissions of "Oxides of Nitrogen" (or "NOx") measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall not be greater than 2.00 times the applicable MDV standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.

- (6) Particulate standards are only applicable for diesel vehicles and shall be determined on a 120,000 mile basis.
- (7) "n/a" means not applicable.
- (8) Manufacturers have the option of certifying engines used in incomplete and diesel MDVs to the heavy-duty engine standards and test procedures set forth in section 1956.8(f), Title 13, California Code of Regulations. Manufacturers certifying incomplete or diesel MDVs to the heavy-duty engine standards and test procedures shall specify in the application for certification an in-use compliance procedure as provided in section 2139(c), Title 13, California Code of Regulations.
- (9) The standards in parenthesis are intermediate compliance standards for 50,000 miles. For MDVs from 0-14,000 lbs. TW, including fuel-flexible and dual-fuel vehicles when operating on any available fuel other than conventional gasoline, intermediate compliance standards shall apply to LEVs and ULEVs through the 1999 model year. Compliance with standards beyond 50,000 miles shall be waived through the 1999 model year for LEVs and ULEVs.
- a. For LEVs and ULEVs designed to operate on any available fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operating on any available fuel other than conventional gasoline, measured NMOG emissions shall be multiplied by the appropriate reactivity adjustment factor.
- b. For fuel-flexible and dual-fuel MDVs from 0-3750 lbs. TW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.32 g/mi and 0.188 g/mi for LEVs and ULEVs, respectively.
- c. For fuel-flexible and dual-fuel MDVs from 3751-5750 lbs. TW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.41 g/mi and 0.238 g/mi for LEVs and ULEVs, respectively.
- d. For fuel-flexible and dual-fuel MDVs from 5751-8500 lbs. TW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.49 g/mi and 0.293 g/mi for LEVs and ULEVs, respectively.
- e. For fuel-flexible and dual-fuel MDVs from 8501-10,000 lbs. TW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.58 g/mi and 0.345 g/mi for LEVs and ULEVs, respectively.
- f. For fuel-flexible and dual-fuel MDVs from 10,001-14,000 lbs. TW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.75 g/mi and 0.450 g/mi for LEVs and ULEVs, respectively.
- (10) Each manufacturer's MDV fleet shall be defined as the total number of MDVs from 0-14,000 lbs. TW certified and sold in California.

- a. Manufacturers of MDVs shall certify an equivalent of 25% of their MDV fleet to LEV standards in the 1998 model year, 50% of their MDV fleet to LEV standards in the 1999 model year, 75% of their MDV fleet to LEV standards in the 2000 model year, 95% of their MDV fleet to LEV standards in the 2001 model year, 90% of their MDV fleet to LEV standards in the 2002 model year, and 85% of their MDV fleet to LEV standards in the 2003 and subsequent model years.
- b. Manufacturers of MDVs shall certify an equivalent of 2% of their MDV fleet to ULEV standards in each model year from 1998 through 2000, 5% of their MDV fleet to ULEV standards in the 2001 model year, 10% of their MDV fleet to ULEV standards in the 2002 model year, and 15% of their MDV fleet to ULEV standards in the 2003 and subsequent model years.
- (11) For the purpose of calculating "Vehicle Equivalent Credits" (or "VECs"), the contribution of hybrid electric vehicles (or "HEVs") will be calculated based on the range of the HEV without the use of the engine. For the purpose of calculating the contribution of HEVs to the VECs, the following definitions shall apply:
- "Type A HEV" shall mean an HEV which achieves a minimum range of 60 miles over the Dynamometer Driving Cycle as defined by the "Federal Highway Fuel Economy Test Procedure" (HWFET; 40 CFR Part 600 Subpart B) without the use of the engine. Use of vehicle accessories cannot lower the battery-only range below 60 miles. This definition shall also apply to vehicles which have no tailpipe emissions, but use fuel fired heaters, regardless of the operating range of the vehicle.
- "Type B HEV" shall mean an HEV which achieves a range of 40 - 59 miles over the Dynamometer Driving Cycle as defined by the "Federal Highway Fuel Economy Test Procedure" (HWFET; 40 CFR Part 600 Subpart B) without the use of the engine. Use of vehicle accessories cannot lower the battery-only range below 40 miles.
- "Type C HEV" shall mean an HEV which achieves a range of 0 - 39 miles over the Dynamometer Driving Cycle as defined by the "Federal Highway Fuel Economy Test Procedure" (HWFET; 40 CFR Part 600 Subpart B) without the use of the engine, an HEV which enables the vehicle operators to control the engine time and modes of operation either directly or indirectly, an HEV which can be operated solely through the use of the engine, and all other HEVs excluding "Type A" and "Type B" HEVs.
- (12) In 1992 and subsequent model years, manufacturers that sell MDVs in excess of the equivalent requirements for LEVs and/or ULEVs shall receive VECs calculated as:  $\{[(\text{No. of LEVs Sold excluding HEVs}) + (\text{No. of "Type C HEV" LEVs Sold})] + [(\text{No. of "Type B HEV" LEVs Sold}) \times (1.1)] + [(\text{No. of "Type A HEV" LEVs Sold}) \times (1.2)] - (\text{Equivalent No. of LEVs Required to be Sold})\} + \{[(\text{No. of ULEVs Sold excluding HEVs}) \times (1.4)] + [(\text{No. of "Type C HEV" ULEVs Sold}) \times (1.4)] + [(\text{No. of "Type B HEV" ULEVs Sold}) \times (1.5)] + [(\text{No. of "Type A HEV" ULEVs Sold}) \times (1.7)] - (\text{Equivalent No. of ULEVs Required to be Sold})\} + [(\text{No. of ZEVs Sold as MDVs}) \times (2.0)]$ .

- a. Manufacturers that fail to sell the equivalent quantity of MDVs certified to LEV and/or ULEV exhaust emission standards, shall receive "Vehicle-Equivalent Debits" (or "VEDs") equal to the amount of negative VECs determined by the aforementioned equation.
  - b. Manufacturers shall equalize emission debits within one model year by earning VECs in an amount equal to their previous model-year's total of VEDs, or by submitting a commensurate amount of VECs to the Executive Officer that were earned previously or acquired from another manufacturer.
  - c. The VECs earned in any given model year shall retain full value through the subsequent model year.
  - d. The value of any VECs not used to equalize the previous model-year's debit, shall be discounted by 50% at the beginning of second model year after being earned, discounted to 25% of its original value if not depleted by the beginning of the third model year after being earned, and will have no value if not depleted by the beginning of the fourth model year after being earned.
  - e. Only ZEVs certified as MDVs shall be included in the calculation of VECs.
- (13) Manufacturers shall demonstrate compliance with the above standards for NMOG, carbon monoxide, and oxides of nitrogen at 50 degrees F according to the procedure specified in section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as adopted May 20, 1987 and last amended July 12, 1991. For diesel vehicles, compliance with the particulate standard shall also be demonstrated.
- (14) In-use compliance testing shall be limited to vehicles with fewer than 90,000 miles.

~~(i)(h)(g)~~ The exhaust emissions from new 1981 and subsequent model passenger cars, light-duty trucks, and medium-duty vehicles certified to special standards authorized by sections 1960.2, 1960.3, and 1960.4, Ssubchapter 1, Chapter 3, Title 13, California Code of Regulations, shall not exceed (1):

SPECIAL EXHAUST (10)  
EMISSION STANDARDS  
(grams per mile)

Year	Vehicle Type(2[1])	Equivalent Inertia Weight (lbs.)(3)	Durability Vehicle Basis (mi)	Non-Methane Hydrocarbons (4)	Carbon Monoxide	Oxides of Nitrogen (5)
1981	PC(6)	A11	50,000	0.39(0.41)	7.0	1.5
	LDT,MDV(7)	0-3999	50,000	0.39(0.41)	9.0	1.5
1982(8)	PC	A11	50,000	0.39(0.41)	7.0	1.0
1983(8)	PC	A11	50,000	0.39(0.41)	7.0	0.7(9)
	LDT,MDV	0-3999	50,000	0.39(0.41)	9.0	1.0
1984(8)	PC	A11	50,000	0.39(0.41)	7.0	0.7
	LDT,MDV	0-3999	50,000	0.39(0.41)	9.0	0.7(9)
1985(8)	LDT,MDV	0-3999	50,000	0.39(0.41)	9.0	— 0.7

- (1) Subsection (i)(h)[(g)] shall remain in effect until December 31, 1990, and as of that date is repealed unless a later regulation deletes or extends that date. Notwithstanding the repeal or expiration of this regulation on December 31, 1990, the provisions of the regulation as they existed prior to such repeal or expiration shall continue to be operative and effective for those events occurring prior to the repeal or expiration.
- (2) "PC" means passenger cars.  
"LDT" means light-duty trucks.  
"MDV" means medium-duty vehicles.
- (3) Equivalent inertia weights are determined under subparagraph 40 CFR 86.129-79(a).
- (4) Hydrocarbon standards in parentheses apply to total hydrocarbons.
- (5) The maximum projected emissions of oxides of nitrogen measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600, Subpart B) shall be no greater than 1.33 times the applicable passenger car standards and 2.0 times the applicable light-duty truck and medium-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded to the nearest 0.1 gm/mi before being compared.
- (6) For vehicles certified to special standards authorized by section 1960.2, Article 2, Subchapter 1, Chapter 3, Title 13, [California Administrative Code] California Code of Regulations.
- (7) For vehicles certified to special standards authorized by section 1960.3, Article 2, Subchapter 1, Chapter 3, Title 13, [California Administrative Code] California Code of Regulations.
- (8) For vehicles certified to special standards authorized by section 1960.4, Article 2, Subchapter 1, Chapter 3, Title 13, [California Administrative Code] California Code of Regulations. Special standards revert to "1983 and subsequent" standards for 1985 and subsequent passenger cars and 1986 and subsequent LDTs and MDVs.

- (9) The Executive Officer may grant limited relief from the 1983 passenger car and 1984 LDT and MDV special NOx standard to a manufacturer who exceeds the standard because of unforeseen technical problems.
- (10) Diesel passenger cars, light-duty trucks, and medium-duty vehicles are subject to the following particulate exhaust emission standards: 0.4 gm/mi for the 1985 model year, 0.2 gm/mi for the 1986 through 1988 model years, and 0.08 gm/mi for the 1989 and subsequent model years. The particulate compliance shall be determined on a 50,000 mile durability vehicle basis.

~~(j)(i)(h)~~ [No Change]

~~(k)(j)(i)~~ The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1981 through 1987 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the State Board on November 23, 1976, as last amended May 20, 1987, and in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the state board on May 20, 1987, as last amended ~~December 20, 1989 and January 22, 1990~~ December 26, 1990 July 12, 1991.

~~(l)(k)(j)~~ [No Change]

~~(m)(i)(k)~~ [No Change]

~~(n)(m)(i)~~ [No Change]

(o) For the purposes of this section, an "intermediate volume manufacturer" is any vehicle manufacturer with California sales between 3,001 and 35,000 new light- and medium-duty vehicles per model year based on the average number of vehicles sold by the manufacturer each model year from 1989 to 1993; however, for manufacturers certifying for the first time in California, model-year sales shall be based on projected California sales.

NOTE: Authority cited: Sections 39600, 39601, 43013, ~~43018~~, 43101 and 43104, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43013, ~~43018~~, 43100, 43101, 43101.5, 43102, ~~43103~~, 43104, 43106 and 43204, Health and Safety Code.

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 Title 13. Motor Vehicles  
 Division 3. Air Resources Board  
 Chapter 1. Motor Vehicle Pollution Control Devices  
 Article 2. Approval of Motor Vehicle Pollution Control Devices (New Vehicles) (Refs & Annos)

13 CCR § 1961.1

§ 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 NOx 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 CLASSES<sup>1</sup>*

*(4,000 mile Durability Vehicle Basis)*

*Fleet Average Greenhouse Gas Emissions*

*(grams per mile CO<sub>2</sub>-equivalent)*

	<i>All PCs;</i>	<i>LDTs</i>
	<i>LDTs 0-3750 lbs.</i>	<i>3751 lbs. LVW - 8500 lbs.</i>
<i>Model Year</i>	<i>LVW</i>	<i>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

<sup>1</sup> 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 as 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 CO<sub>2</sub>-equivalent value for each GHG vehicle test group and a “highway” grams per mile average CO<sub>2</sub>-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” CO<sub>2</sub>-equivalent value calculation shall be measured using the “FTP” test cycle (40 CFR, Part 86, Subpart B). Greenhouse Gas emissions used for the “highway” CO<sub>2</sub>-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 N<sub>2</sub>O = 0.006 grams per mile in lieu of measuring N<sub>2</sub>O exhaust emissions. A manufacturer that elects to use CAFE data to demonstrate compliance with the greenhouse requirements may substitute the term 1.9 CO<sub>2</sub>-equivalent grams per mile for the terms “296 x N<sub>2</sub>O + 23 x CH<sub>4</sub>” 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 CO<sub>2</sub>- 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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, CO<sub>2</sub> 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 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.

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 CO<sub>2</sub>-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 CO<sub>2</sub>-equivalent grams per mile if the system has one evaporator and up to a maximum allowance of 11.0 CO<sub>2</sub> -equivalent grams per mile if the system has two evaporators:

A. 5.0 CO<sub>2</sub>-equivalent grams per mile per 100 cc of maximum compressor displacement for a system that does not use CO<sub>2</sub> as the refrigerant

B. 27.5 CO<sub>2</sub>-equivalent grams per mile per 100 cc of maximum compressor displacement for a system that uses CO<sub>2</sub> 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 CO<sub>2</sub>-equivalent grams per mile:

A. 0.2 CO<sub>2</sub>-equivalent grams per mile per 100cc of maximum compressor displacement for a system that does not use CO<sub>2</sub> as the refrigerant and

B. 1.1 CO<sub>2</sub>-equivalent grams per mile per 100cc of maximum compressor displacement for a system that uses CO<sub>2</sub> as the refrigerant.

iv. A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse 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 CO<sub>2</sub>-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 CO<sub>2</sub> -equivalent grams per mile for a system that has one evaporator and a maximum value of 21.0 CO<sub>2</sub>-equivalent grams per mile for a system that has two evaporators.

A = 9.6 CO<sub>2</sub>-equivalent grams per mile per 100cc of maximum compressor displacement for an A/C system that does not use CO<sub>2</sub> as the refrigerant or

A = 52.8 CO<sub>2</sub>-equivalent grams per mile per 100cc of maximum compressor displacement for an A/C system that uses CO<sub>2</sub> 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 CO<sub>2</sub>-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:

<i>Fuel</i>	<i>Fuel Adjustment Factor</i>
Natural Gas	1.03
LPG	0.89
E85	0.74

e. Calculation of CO<sub>2</sub>-Equivalent Emissions for Hydrogen Internal Combustion Engine Vehicles and for Electric and Hydrogen ZEVs. The grams per mile average CO<sub>2</sub>-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:

A/C Direct Emissions + Upstream Emissions Factor

where: A/C Direct Emissions = 9 CO<sub>2</sub>-equivalent grams per mile - A/C Direct Emissions Allowance as calculated per section 1961.1(a)(1)(B)1.b.

The Upstream Emissions Factors are:

<i>Vehicle Type</i>	<i>Upstream Emissions Factor</i> <sup>1</sup> (CO <sub>2</sub> -equivalent g/mi)
Electric ZEV	130
Hydrogen Internal Combustion Engine Vehicle	290
Hydrogen ZEV	210

<sup>1</sup> The 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 =  $[(\text{Total Number of Vehicles in a Test Group} - \Sigma \text{ Number of Vehicles in Optional GHG Test Vehicle Configurations}) \times \text{“worst-case” calculated CO}_2\text{-equivalent value} + \Sigma (\text{Number of vehicles in Optional GHG Test Vehicle Configurations} \times \text{applicable calculated CO}_2\text{-equivalent value})]$  measured using the FTP test cycle; and

Highway Test Group Greenhouse Gas Value =  $[(\text{Total Number of Vehicles in a Test Group} - \Sigma (\text{Number of Vehicles in Optional GHG Test Vehicle Configurations}) \times \text{“worst-case” calculated CO}_2\text{-equivalent value} + \Sigma (\text{Number of vehicles in Optional GHG Test Vehicle Configurations} \times \text{applicable calculated CO}_2\text{-equivalent value})]$  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 =  $[(\text{Total Number of Vehicles in a Test Group} - \Sigma \text{ Number of Vehicles in Optional GHG Test Vehicle Configurations}) \times \text{“worst-case” calculated CO}_2\text{-equivalent value} + \Sigma (\text{Number of vehicles in Optional GHG Test Vehicle Configurations} \times \text{applicable calculated CO}_2\text{-equivalent value})]$  measured using the FTP test cycle; and

Highway Test Group Greenhouse Gas Value =  $[(\text{Total Number of Vehicles in a Test Group} - \Sigma \text{ Number of Vehicles in Optional GHG Test Vehicle Configurations}) \times \text{“worst-case” calculated CO}_2\text{-equivalent value} + \Sigma (\text{Number of vehicles in Optional GHG Test Vehicle Configurations} \times \text{applicable calculated CO}_2\text{-equivalent value})]$  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:
  - a. 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
  - b. 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 a 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 a 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 1962.1.

“cc” mean cubic centimeters.

“CH<sub>4</sub>” means methane.

“CO<sub>2</sub>” 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.

“N<sub>2</sub>O” 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 CO<sub>2</sub> 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 CO<sub>2</sub>-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.](#)

## HISTORY

1. New section filed 9-15-2005; operative 1-1-2006 (Register 2005, No. 37).
2. New subsections (a)(1)(A)1.-(a)(1)(A)1.d., amendment of subsection (a)(1)(B)1.a., new subsections (a)(1)(B)1.b.iv. and (a)(1)(B)1.c.iv. and amendment of subsection (b)(3)(A) filed 4-1-2010; operative 4-1-2010 pursuant to [Government Code section 11343.4](#) (Register 2010, No. 14).
3. Amendment designating former subsection (a)(1)(A) as subsection (a)(1)(A)(i), new subsections (a)(1)(A)(ii)-(a)(1)(A)(ii)3., new subsection (e)(7) and subsection renumbering filed 4-1-2010; operative 4-1-2010 pursuant to [Government Code section 11343.4](#) (Register 2010, No. 14).
4. Amendment of section heading and section filed 8-7-2012; operative 8-7-2012 pursuant to [Government Code section 11343.4](#) (Register 2012, No. 32).

This database is current through 6/5/20 Register 2020, No. 23

13 CCR § 1961.1, 13 CA ADC § 1961.1

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End of Document

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Barclays Official California Code of Regulations Currentness  
Title 13. Motor Vehicles  
Division 3. Air Resources Board  
Chapter 1. Motor Vehicle Pollution Control Devices  
Article 2. Approval of Motor Vehicle Pollution Control Devices (New Vehicles) (Refs & Annos)

13 CCR § 1961.3

§ 1961.3. Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2017 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles.

Introduction. This section 1961.3 sets the greenhouse gas emission levels from new 2017 and subsequent model year passenger cars, light-duty trucks, and medium-duty passenger vehicles. Light-duty trucks from 3751 lbs. LVW - 8500 lbs. GVW that are certified to the Option 1 LEV II NOx 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.

Emergency vehicles may be excluded from these greenhouse gas emission requirements. The manufacturer must notify the Executive Officer that they are making such an election, in writing, prior to the start of the applicable model year or must comply with this section 1961.3.

(a) Greenhouse Gas Emission Requirements.

(1) Fleet Average Carbon Dioxide Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles. For the purpose of determining compliance with this subsection (a)(1), the applicable fleet average CO<sub>2</sub> mass emission standards for each model year is the sales-weighted average of the calculated CO<sub>2</sub> exhaust mass emission target values for each manufacturer. For each model year, the sales-weighted fleet average CO<sub>2</sub> mass emissions value shall not exceed the sales-weighted average of the calculated CO<sub>2</sub> exhaust mass emission target values for that manufacturer.

(A) Fleet Average Carbon Dioxide Target Values for Passenger Cars. The fleet average CO<sub>2</sub> exhaust mass emission target values for passenger cars that are produced and delivered for sale in California each model year shall be determined as follows:

1. For passenger cars with a footprint of less than or equal to 41 square feet, the gram per mile CO<sub>2</sub> target value shall be selected for the appropriate model year from the following table:

<i>Model Year</i>	<i>CO<sub>2</sub> Target Value</i> <i>(grams/mile)</i>
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 subsequent	131.0

2. For passenger cars with a footprint of greater than 56 square feet, the gram per mile CO<sub>2</sub> target value shall be selected for the appropriate model year from the following table:

<i>Model Year</i>	<i>CO<sub>2</sub> Target Value (grams/mile)</i>
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 subsequent	179.0

3. For passenger cars with a footprint that is greater than 41 square feet and less than or equal to 56 square feet, the gram per mile CO<sub>2</sub> target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile:

$$\text{Target gCO}_2 / \text{mile} = [a \times f] + b$$

Where: *f* is the vehicle footprint and coefficients *a* and *b* are selected from the following table for the applicable model year.

<i>Model year</i>	<i>a</i>	<i>b</i>
2017	4.53	8.9



2018	4.35	6.5
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 subsequent	3.26	-3.2

(B) Fleet Average Carbon Dioxide Target Values for Light-Duty Trucks and Medium-Duty Passenger Vehicles. The fleet average CO<sub>2</sub> exhaust mass emission target values for light-duty trucks and medium-duty passenger vehicles that are produced and delivered for sale in California each model year shall be determined as follows:

1. For light-duty trucks and medium-duty passenger vehicles with a footprint of less than or equal to 41 square feet, the gram per mile CO<sub>2</sub> target value shall be selected from the following table:

<i>Model Year</i>	<i>CO<sub>2</sub> Target Value (grams/mile)</i>
2017	238.0
2018	227.0
2019	220.0
2020	212.0
2021	195.0
2022	186.0
2023	176.0
2025	168.0
2025 and subsequent	159.0

2. For light-duty trucks and medium-duty passenger vehicles with a footprint of 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 CO<sub>2</sub> target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile:

$$\text{Target gCO}_2 / \text{mile} = [a x f] + b$$

Where:  $f$  is the vehicle footprint and coefficients  $a$  and  $b$  are selected from the following table for the applicable model year.

<i>Model year</i>	<i>Maximum</i>		
	<i>Footprint</i>	<i>a</i>	<i>b</i>
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 subsequent	74.0	3.58	12.5

3. For light-duty trucks and medium-duty passenger vehicles 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 CO<sub>2</sub> target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile:

$$\text{Target gCO}_2 / \text{mile} = [a \times f] + b$$

Where:  $f$  is the vehicle footprint and coefficients  $a$  and  $b$  are selected from the following table for the applicable model year.

<i>Model year</i>	<i>Minimum</i>		<i>Maximum</i>	
	<i>Footprint</i>	<i>Footprint</i>	<i>a</i>	<i>b</i>
2017	50.7	66.0	4.04	80.5
2018	60.2	66.0	4.04	75.0

4. For light-duty trucks and medium-duty passenger vehicles with a footprint that is greater than the minimum value specified in the table below for each model year, the gram/mile CO<sub>2</sub> target value shall be selected for the applicable model year from the following table:

<i>Model year</i>	<i>Minimum</i>	<i>CO<sub>2</sub> target value</i>
	<i>Footprint</i>	<i>(grams/mile)</i>
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 subsequent	74.0	277.0

(C) Calculation of Manufacturer-Specific Carbon Dioxide Fleet Average Standards. For each model year, each manufacturer must comply with fleet average CO<sub>2</sub> standards for passenger cars and for light-duty trucks plus medium-duty passenger vehicles, as applicable, calculated for that model year as follows. For each model year, a manufacturer must calculate separate fleet average CO<sub>2</sub> values for its passenger car fleet and for its combined light-duty truck plus medium-duty passenger vehicle fleet using the CO<sub>2</sub> target values in subsection (a)(A). These calculated CO<sub>2</sub> values are the manufacturer-specific fleet average CO<sub>2</sub> standards for passenger cars and for light-duty trucks plus medium-duty passenger vehicles, as applicable, which apply for that model year.

1. A CO<sub>2</sub> target value shall be calculated in accordance with subparagraph (a)(1)(A) or (a)(1)(B), as applicable, for each unique combination of model type and footprint value.
2. Each CO<sub>2</sub> 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 applicable model year.
3. The resulting products shall be summed, and that sum shall be divided by the total production of passenger cars or total combined production of light-duty trucks and medium-duty passenger vehicles, as applicable, in that model year. The result shall be rounded to the nearest whole gram per mile. This result shall be the applicable fleet average CO<sub>2</sub> standard for the manufacturer's passenger car fleet or its combined light-duty truck and medium-duty passenger vehicle fleet, as applicable.

(2) Nitrous Oxide (N<sub>2</sub>O) and Methane (CH<sub>4</sub>) Exhaust Emission Standards for Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles. Each manufacturer's fleet of combined passenger automobile, light-duty trucks, and medium-duty passenger vehicles must comply with N<sub>2</sub>O and CH<sub>4</sub> standards using either the provisions of subsection (a)(2)(A), subsection (a)(2)(B), or subsection (a)(2)(C). Except with prior approval of the Executive Officer, a manufacturer may not use the provisions of both subsection (a)(2)(A) and subsection (a)(2)(B) in the same model year. For example, a manufacturer may not use the provisions of subsection (a)(2)(A) for their passenger automobile fleet and the provisions of subsection (a)(2)(B) for their light-duty truck and medium-duty passenger vehicle fleet in the same model year. The manufacturer may use the provisions of both subsections (a)(2)(A) and (a)(2)(C) in the same model year. For example, a manufacturer may meet the N<sub>2</sub>O standard in subsection (a)(2)(A)1 and an alternative CH<sub>4</sub> standard determined under subsection (a)(2)(C).

(A) Standards Applicable to Each Test Group.

1. Exhaust emissions of N<sub>2</sub>O shall not exceed 0.010 grams per mile at full useful life, as measured on the FTP (40 CFR, Part 86, Subpart B), as amended by the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles.” Manufacturers may optionally determine an alternative N<sub>2</sub>O standard under subsection (a)(2)(C).

2. Exhaust emissions of CH<sub>4</sub> shall not exceed 0.030 grams per mile at full useful life, as measured on the FTP (40 CFR, Part 86, Subpart B), as amended by the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.” Manufacturers may optionally determine an alternative CH<sub>4</sub> standard under subsection (a)(2)(C).

(B) Including N<sub>2</sub>O and CH<sub>4</sub> in Fleet Averaging Program. Manufacturers may elect to not meet the emission standards in subsection (a)(2)(A). Manufacturers making this election shall measure N<sub>2</sub>O and CH<sub>4</sub> emissions for each unique combination of model type and footprint value on both the FTP test cycle and the Highway Fuel Economy test cycle at full useful life, multiply the measured N<sub>2</sub>O emissions value by 298 and the measured CH<sub>4</sub> emissions value by 25, and include both of these adjusted N<sub>2</sub>O and CH<sub>4</sub> full useful life values in the fleet average calculations for passenger automobiles and light-duty trucks plus medium-duty passenger vehicles, as calculated in accordance with subsection (a)(2)(A)(D).

(C) Optional Use of Alternative N<sub>2</sub>O and/or CH<sub>4</sub> Standards. Manufacturers may select an alternative standard applicable to a test group, for either N<sub>2</sub>O or CH<sub>4</sub>, or both. For example, a manufacturer may choose to meet the N<sub>2</sub>O standard in subsection (a)(2)(A)1 and an alternative CH<sub>4</sub> standard in lieu of the standard in subsection (a)(2)(A)2. The alternative standard for each pollutant must be less stringent than the applicable exhaust emission standard specified in subsection (a)(2)(A). Alternative N<sub>2</sub>O and CH<sub>4</sub> standards apply to emissions as measured on the FTP (40 CFR, Part 86, Subpart B), as amended by the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” 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 N<sub>2</sub>O and/or CH<sub>4</sub> must calculate emission debits according to the provisions of subsection (a)(2)(D) 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 subsection (b)(1)(B). Flexible fuel vehicles (or other vehicles certified for multiple fuels) must meet these alternative standards when tested on all applicable test fuel type.

(D) CO<sub>2</sub>-Equivalent Debits. CO<sub>2</sub>-equivalent debits for test groups using an alternative N<sub>2</sub>O and/or CH<sub>4</sub> standard as determined under (a)(2)(C) shall be calculated according to the following equation and rounded to the nearest whole gram per mile:

$$\text{Debits} = \text{GWP} \times (\text{Production}) \times (\text{AltStd} - \text{Std})$$

Where:

Debits = N<sub>2</sub>O or CH<sub>4</sub> CO<sub>2</sub>-equivalent debits for a test group using an alternative N<sub>2</sub>O or CH<sub>4</sub> standard;

GWP = 25 if calculating CH<sub>4</sub> debits and 298 if calculating N<sub>2</sub>O debits;

Production = The number of vehicles of that test group produced and delivered for sale in California;

AltStd = The alternative standard (N<sub>2</sub>O or CH<sub>4</sub>) selected by the manufacturer under (a)(2)(C); and

Std = The exhaust emission standard for N<sub>2</sub>O or CH<sub>4</sub> specified in (a)(2)(A).

(3) Alternative Fleet Average Standards for Manufacturers with Limited U.S. Sales. Manufacturers meeting the criteria in this subsection (a)(3) may request that the Executive Officer establish alternative fleet average CO<sub>2</sub> standards that would apply instead of the standards in subsection (a)(1).

(A) Eligibility for Alternative Standards. Eligibility as determined in this subsection (a)(3) shall be based on the total sales of combined passenger cars, light-duty trucks, and medium-duty passenger vehicles. The terms “sales” and “sold” as used in this subsection (a)(3) shall mean vehicles produced and delivered for sale (or sold) in the states and territories of the United States. For the purpose of determining eligibility the sales of related companies shall be aggregated according to the provisions of section 1900. To be eligible for alternative standards established under this subsection (a)(3), 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 4,999, the manufacturer will no longer be eligible for exemption and must meet applicable emission standards as follows.

1. If a manufacturer's average sales for three consecutive model years exceeds 4,999, 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 subsections (a)(1) and (a)(2), as applicable, beginning with the first model year after the last year of the three consecutive model years.
2. If a manufacturer's average sales for three consecutive model years exceeds 4,999 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 subsections (a)(1) and (a)(2), as applicable, beginning with the second model year after the last year of the three consecutive model years.

(B) 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 [40 CFR §86.1801-12\(k\)](#)) greenhouse gas emission standards in [40 CFR §86.1818-12](#) or greenhouse gas standards in section 1961.1. In addition to the eligibility requirements stated in subsection (a)(3)(A), new entrants must meet the following requirements:

1. In addition to the information required under subsection (a)(3)(D), new entrants must provide documentation that shows a clear intent 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 Executive Officer.

2. Sales of vehicles in the U.S. by new entrants must remain below 5,000 vehicles for the first two model years in the U.S. market and the average sales for any three consecutive years within the first five years of entering the U.S. market must remain below 5,000 vehicles. Vehicles sold in violation of these limits 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.

3. 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 subsection (a) (3). However, such a manufacturer will be considered a new entrant and subject to the provisions regarding new entrants in this subsection (a)(3), except that the requirement to demonstrate an intent to enter the U.S. market in subsection (a)(3)(B)(1) shall not apply.

(C) 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.

1. To request alternative standards starting with the 2017 model year, eligible manufacturers must submit a completed application no later than July 30, 2013.

2. To request alternative standards starting with a model after 2017, eligible manufacturers must submit a completed application no later than 36 months prior to the start of the first model year to which the alternative standards would apply.

3. The application must contain all the information required in subsection (a)(3)(D), and must be signed by a chief officer of the company. If the Executive Officer 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. A manufacturer may elect to petition for alternative standards under this subsection (a)(3)(C) by submitting to ARB a copy of the data and information submitted to EPA as required under 40 CFR §86.1818-12(g), incorporated by reference in and amended by the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” and the EPA approval of the manufacturer's request for alternative fleet average standards for the 2017 through 2025 MY National Greenhouse Gas Program.

(D) Data and Information Submittal Requirements. Eligible manufacturers requesting alternative standards under subsection (a)(3) must submit the following information to the California Air Resources Board. The Executive Officer may request additional information as s/he deems appropriate. The completed request must be sent to the California Air

Resources Board at the following address: Chief, Mobile Source Operations Division, California Air Resources Board, 9480 Telstar Avenue, Suite 4, El Monte, California 91731.

1. 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, and expected pricing.
- d. The expected production cycle for each model, including new model introductions and redesign or refresh cycles.

2. Technology Evaluation Information.

- a. The CO<sub>2</sub> reduction technologies employed by the manufacturer on each vehicle model, including information regarding the cost and reduction technologies employed by the manufacturer on each vehicle model, including information regarding the cost and CO<sub>2</sub>-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 FTP and the HWFET.
- b. An evaluation of comparable models from other manufacturers, including CO<sub>2</sub> 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 CO<sub>2</sub>-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 CO<sub>2</sub> reductions for vehicles in the U.S. market.
- d. An evaluation, at a minimum, of the technologies projected by the California Air Resources Board in the “Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider the “LEV III” Amendments to The California Greenhouse Gas and Criteria Pollutant Exhaust and Evaporative Emission Standards and Test Procedures and to the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and to the Evaporative Emission Requirements for Heavy-Duty Vehicles” and the appendices to this report, released on December 7, 2011,

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, the manufacturer must explain why this is the case.

3. 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 40 CFR §86.1838-01(b)(3) and section 1900 regarding the aggregation of sales of related companies.

(E) Alternative Standards. Upon receiving a complete application, the Executive Officer will review the application and determine whether an alternative standard is warranted. If the Executive Officer judges that an alternative standard is warranted, the following standards shall apply. For the purposes of this subsection (a)(3)(E), an “ultra-small volume manufacturer” shall mean a manufacturer that meets the requirements of subsection (a)(3).

1. At the beginning of the model year that is three model years prior to the model year for which an alternative standard is requested, each ultra-small volume manufacturer shall identify all vehicle models from the model year that is four model years prior to the model year for which an alternative standard is requested, certified by a large volume manufacturer that are comparable to that small volume manufacturer's vehicle models for the model year for which an alternative standard is requested, based on model type and footprint value. The ultra-small 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 ultra-small volume manufacturer the target grams CO<sub>2</sub> per mile for each vehicle model type and footprint value that is approved. The ultra-small volume manufacturer shall calculate its fleet average CO<sub>2</sub> standard in accordance with subsection (a)(1)(C) based on these target grams CO<sub>2</sub> per mile values provided by the Executive Officer.

2. In the 2017 and subsequent model years, an ultra-small volume manufacturer shall either:

a. not exceed its fleet average CO<sub>2</sub> standard calculated in accordance with subsection (a)(1)(C) based on the target grams CO<sub>2</sub> per mile values provided by the Executive Officer; or

b. upon approval of the Executive Officer, if an ultra-small volume manufacturer demonstrates a vehicle model uses an engine, transmission, and emission control system and has a footprint value that are identical to a configuration certified for sale in California by a large volume manufacturer, those ultra-small volume manufacturer vehicle models are exempt from meeting the requirements in paragraph 2.a of this subsection.

(F) Restrictions on Credit Trading. Manufacturers subject to alternative standards approved by the Executive Officer under this subsection (a)(3) may not trade credits to another manufacturer. Transfers of credits between a manufacturer's car and truck fleets are allowed.



(4) Greenhouse Gas Emissions Values for Electric Vehicles, “Plug-In” Hybrid Electric Vehicles, and Fuel Cell Vehicles.

(A) Electric Vehicle Calculations.

1. For each unique combination of model type and footprint value, a manufacturer shall calculate the City CO<sub>2</sub> Value using the following formula: Value using the following formula:

$$\text{City CO}_2 \text{ Value} = (270 \text{ gCO}_2\text{e/kWh}) * E_{EV} - 0.25 * \text{CO}_{2\text{target}}$$

Where  $E_{EV}$  is measured directly from each cycle for each test vehicle of battery electric vehicle technology in units of kilowatt-hours per mile (per SAE J1634, incorporated herein by reference). is measured directly from each cycle for each test vehicle of battery electric vehicle technology in units of kilowatt-hours per mile (per SAE J1634, incorporated herein by reference).

2. For each unique combination of model type and footprint value, a manufacturer shall calculate the Highway CO<sub>2</sub> Value using the following formula:

$$\text{Highway CO}_2 \text{ Value} = (270 \text{ gCO}_2\text{e/kWh}) * E_{EV} - 0.25 * \text{CO}_{2\text{target}}$$

Where  $E_{EV}$  is measured directly from each cycle for each test vehicle of battery electric vehicle technology in units of kilowatt-hours per mile (per SAE J1634, incorporated herein by reference).

(B) “Plug-In” Hybrid Electric Vehicle Calculations. For each unique combination of model type and footprint value, a manufacturer shall calculate the City CO<sub>2</sub> Value and the Highway CO<sub>2</sub> Value using the following formulas:

$$\text{City CO}_2 \text{ Value} = \text{GHG}_{\text{urban}}$$

and

$$\text{Highway CO}_2 \text{ Value} = \text{GHG}_{\text{highway}}$$

Where  $\text{GHG}_{\text{urban}}$  and  $\text{GHG}_{\text{highway}}$  are measured in accordance with section G.12 of 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” or the “California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes,” as applicable.

(C) Fuel Cell Vehicle Calculations. For each unique combination of model type and footprint value, a manufacturer shall calculate the City CO<sub>2</sub> Value and the Highway CO<sub>2</sub> Value using the following formulas:

$$\text{City CO}_2 = \text{GHG}_{\text{FCV}} = (9132 \text{ gCO}_2\text{e/kg H}_2) * H_{\text{FCV}} - G_{\text{upstream}}$$

and

$$\text{Highway CO}_2 = \text{GHG}_{\text{FCV}} = (9132 \text{ gCO}_2\text{e/kg H}_2) * \text{H}_{\text{FCV}} - \text{G}_{\text{upstream}}$$

Where  $\text{H}_{\text{FCV}}$  means hydrogen consumption in kilograms of hydrogen per mile, measured for the applicable test cycle, in accordance with SAE J2572 (published October 2008), incorporated herein by reference.  $\text{G}_{\text{upstream}}$  means hydrogen consumption in kilograms of hydrogen per mile, measured for the applicable test cycle, in accordance with SAE J2572 (published October 2008), incorporated herein by reference.

(5) Calculation of Fleet Average Carbon Dioxide Value.

(A) For each unique combination of model type and footprint value, a manufacturer shall calculate a combined city/highway  $\text{CO}_2$  exhaust emission value as follows: exhaust emission value as follows:

$$0.55 \times \text{City CO}_2 \text{ Value} + 0.45 \times \text{Highway CO}_2 \text{ Value}$$

“City”  $\text{CO}_2$  exhaust emissions shall be measured using the FTP test cycle (40 CFR, Part 86, Subpart B), as amended by the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles.” “Highway”  $\text{CO}_2$  exhaust emission shall be measured using the using the Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B).

(B) Each combined city/highway  $\text{CO}_2$  exhaust emission, 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 applicable model year.

(C) The resulting products shall be summed, and that sum shall be divided by the total production of passenger cars or total combined production of light-duty trucks and medium-duty passenger vehicles, as applicable, in that model year. The result shall be rounded to the nearest whole gram per mile. This result shall be the manufacturer's actual sales-weighted fleet average  $\text{CO}_2$  value for the manufacturer's passenger car fleet or its combined light-duty truck and medium-duty passenger vehicle fleet, as applicable.

(D) For each model year, a manufacturer must demonstrate compliance with the fleet average requirements in section (a) (1) 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 section 1961.3, 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 1961.3, 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).

1. 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. Once a manufacturer has selected compliance Option 2, that selection applies unless the manufacturer selects Option 1 and notifies the Executive Officer of that selection in writing before the start of the applicable model year.

2. When a manufacturer is demonstrating compliance using Option 2 for a given model year, the term “in California” as used in section 1961.3 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).

3. A manufacturer that selects compliance Option 2 must provide to the Executive Officer separate values for the number of vehicles in each model type and footprint value produced and delivered for sale in the District of Columbia and for each individual state within the average and the City CO<sub>2</sub> Value and Highway CO<sub>2</sub> exhaust emission values that apply to each model type and footprint value.

(6) Credits for Reduction of Air Conditioning Direct Emissions. Manufacturers may generate A/C Direct Emissions Credits by implementing specific air conditioning system technologies designed to reduce air conditioning direct emissions over the useful life of their vehicles. A manufacturer may only use an A/C Direct Emissions Credit for vehicles within a model type upon approval of the A/C Direct Emissions Credit for that model type by the Executive Officer. The conditions and requirements for obtaining approval of an A/C Direct Emissions Credit are described in (A) through (F), below.

(A) Applications for approval of an A/C Direct Emissions Credit must be organized by model type. The applications must also include:

- vehicle make and
- number of vehicles within the model type that will be equipped with the air conditioning system to which the leakage credit shall apply.

Separate applications must be submitted for any two configurations of an A/C system with differences other than dimensional variation.

(B) To obtain approval of the A/C Direct Emissions Credit, the manufacturer must demonstrate through an engineering evaluation that the A/C system under consideration reduces A/C direct emissions. The demonstration must include all of the following elements:

- the amount of A/C Direct Emissions Credit requested, in grams of CO<sub>2</sub>-equivalent per mile (gCO<sub>2</sub>e/mi);
- the calculations identified in section (a)(6)(C) justifying that credit amount;
- schematic of the A/C system;
- specifications of the system components with sufficient detail to allow reproduction of the calculation; and
- an explanation describing what efforts have been made to minimize the number of fittings and joints and to optimize the components in order to minimize leakage.

Calculated values must be carried to at least three significant figures throughout the calculations, and the final credit value must be rounded to one tenth of a gram of CO<sub>2</sub>-equivalent per mile (gCO<sub>2</sub>e/mi).

(C) The calculation of A/C Direct Emissions Credit depends on the refrigerant or type of system, and is specified in paragraphs 1, 2, and 3 of this subsection.

1. HFC-134a vapor compression systems

For A/C systems that use HFC-134a refrigerant, the A/C Direct Emissions Credit is calculated using the following formula:

$$\text{A/C Direct Credit} = \text{Direct Credit Baseline} \times \left( 1 - \frac{\text{LR}}{\text{Avg LR}} \right)$$

Where:

Direct Credit Baseline = 12.6 gCO<sub>2</sub>e/mi for passenger cars;

Direct Credit Baseline = 15.6 gCO<sub>2</sub>e/mi for light-duty trucks and medium-duty passenger vehicles;

Avg LR = 16.6 grams/year for passenger cars;

Avg LR = 20.7 grams/year for light-duty trucks and medium-duty passenger vehicles;

LR = the larger of SAE LR or Min LR;

Where:

SAE LR = initial leak rate evaluated using SAE International's Surface Vehicle Standard SAE J2727 (Revised February 2012), incorporated by reference, herein;

Min LR = 8.3 grams/year for passenger car A/C systems with belt-driven compressors;

Min LR = 10.4 grams/year for light-duty truck and medium-duty passenger vehicle A/C systems with belt-driven compressors;

Min LR = 4.1 grams/year for passenger car A/C systems with electric compressors;

Min LR = 5.2 grams/year for light-duty truck and medium-duty passenger vehicle A/C systems with electric compressors.

Note: Initial leak rate is the rate of refrigerant leakage from a newly manufactured A/C system in grams of refrigerant per year. The Executive Officer may allow a manufacturer to use an updated version of SAE J2727 or an alternate method if s/he determines that the updated SAE J2727 or the alternate method provides more accurate estimates of the initial leak rate of A/C systems than the February 2012 version of SAE J2727 does.

2. Low-GWP vapor compression systems

For A/C systems that use a refrigerant having a GWP of 150 or less, the A/C Direct Emissions Credit shall be calculated using the following formula:

$$\text{A/C Direct Credit} = \text{Low GWP Credit} - \text{High Leak Penalty}$$

Where:

$$\text{Low GWP Credit} = \text{Max Low GWP Credit} \times \left(1 - \frac{\text{GWP}}{1,430}\right),$$

and

*High Leak Penalty*

$$= \begin{cases} \text{Max High Leak Penalty,} & \text{if SAE LR} > \text{Avg LR;} \\ \text{Max High Leak Penalty} \times \frac{\text{SAE LR} - \text{Min LR}}{\text{Avg LR} - \text{Min LR}}, & \text{if Min LR} < \text{SAE LR} \leq \text{Avg LR;} \\ 0, & \text{if SAE LR} \leq \text{Min LR.} \end{cases}$$

Where:

Max Low GWP Credit = 13.8 gCO<sub>2</sub>e/mi for passenger cars;

Max Low GWP Credit = 17.2 gCO<sub>2</sub>e/mi for light-duty trucks and medium-duty passenger vehicles;

GWP = the global warming potential of the refrigerant over a 100-year horizon, as specified in section (a)(6)(F);

Max High Leak Penalty = 1.8 gCO<sub>2</sub>e/mi for passenger cars;

Max High Leak Penalty = 2.1 gCO<sub>2</sub>e/mi for light-duty trucks and medium-duty passenger vehicles;

Avg LR = 13.1 g/yr for passenger cars;

Avg LR = 16.6 g/yr for light-duty trucks and medium-duty passenger vehicles;

and where:

SAE LR = initial leak rate evaluated using SAE International's Surface Vehicle Standard SAE J2727 (Revised February 2012);

Min LR = 8.3 g/yr for passenger cars;

Min LR = 10.4 g/yr for light-duty trucks and medium-duty passenger vehicles.

Note: Initial leak rate is the rate of refrigerant leakage from a newly manufactured A/C system in grams of refrigerant per year. The Executive Officer may allow a manufacturer to use an updated version of SAE J2727 or an alternate applicable test method if s/he finds the update or the alternate method provides more accurate estimates of the initial leak rate of A/C systems than the February 2012 version of SAE J2727 does.

3. Other A/C systems

For an A/C system that uses a technology other than vapor compression cycles, an A/C Direct Emissions Credit may be approved by the Executive Officer. The amount of credit requested must be based on demonstration of the reduction of A/C direct emissions of the technology using an engineering evaluation that includes verifiable laboratory test data, and cannot exceed 13.8 gCO<sub>2</sub>e/mi for passenger cars and 17.2 gCO<sub>2</sub>e/mi for light-duty trucks and medium-duty passenger vehicles.

(D) The total leakage reduction credits generated by the air conditioning system shall be calculated separately for passenger cars, and for light-duty trucks and medium-duty passenger vehicles, according to the following formula:

$$\text{Total Credits (g/mi)} = \text{A/C Direct Credit} \times \text{Production}$$

Where:

A/C Direct Credit is calculated as specified in subsection (a)(6)(C).

Production = The total number of passenger cars or light-duty trucks plus medium-duty passenger vehicles, whichever is applicable, produced and delivered for sale in California, with the air conditioning system to which the A/D Direct Credit value from subsection (a)(6)(C) applies.

(E) The results of subsection (a)(6)(D), rounded to the nearest whole gram per mile, shall be included in the manufacturer's credit/debit totals calculated in subsection (b)(1)(B).

(F) The following values for refrigerant global warming potential (GWP), or alternative values as determined by the Executive Officer, shall be used in the calculations of this subsection (a)(6). The Executive Officer shall determine values for refrigerants not included in this subsection (a)(6)(F) upon request by a manufacturer, based on findings by the Intergovernmental Panel on Climate Change (IPCC) or from other applicable research studies.

<i>Refrigerant</i>	<i>GWP</i>
HFC-134a	1,430
HFC-152a	124
HFO-1234yf	4
CO <sub>2</sub>	1

(7) Credits for Improving Air Conditioning System Efficiency. Manufacturers may generate CO<sub>2</sub> credits by implementing specific air conditioning system technologies designed to reduce air conditioning-related CO<sub>2</sub> emissions over the useful life of their passenger cars, light-duty trucks, and/or medium-duty passenger vehicles. Credits shall be calculated according to this subsection (a)(7) for each air conditioning system that the manufacturer is using to generate CO<sub>2</sub> credits. The eligibility requirements specified in subsection (a)(7)(E) must be met before an air conditioning system is allowed to generate credits.

(A) Air conditioning efficiency credits are available for the following technologies in the gram per mile amounts indicated for each vehicle category in the following table:

<i>Air Conditioning Technology</i>	<i>Passenger Cars</i>	<i>Light-Duty Trucks and Medium-Duty Passenger Vehicles</i>
	<i>(g/mi)</i>	<i>(g/mi)</i>
Reduced reheat, with externally-controlled, variable-displacement compressor (e.g.a compressor that controls displacement based on temperature setpoint and/or cooling demand of the air conditioning system control settings inside the passenger compartment).	1.5	2.2
Reduced reheat, with externally-controlled, fixed-displacement or pneumatic variable displacement compressor (e.g.a compressor that controls displacement based on conditions within, or internal to, the air conditioning system, such as head pressure, suction pressure, or evaporator outlet temperature).	1.0	1.4
Default to recirculated air with closed-loop control of the air supply (sensor feedback to control interior air quality) whenever the ambient temperature is 75 <sup>o</sup> F or higher: Air conditioning systems that operated with closed-loop control of the air supply at different temperatures may receive credits by submitting an engineering analysis to the Administrator for approval.	1.5	2.2
Default to recirculated air with open-loop control air supply (no sensor feedback) whenever the ambient	1.0	1.4

temperature is 75 °F or higher. Air conditioning systems that operate with open-loop control of the air

supply at different temperatures may receive credits by submitting an engineering analysis to the

Administrator for approval.

Blower motor controls which limit wasted electrical energy (e.g.pulse width modulated power controller).	0.8	1.1
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Internal heat exchanger (e.g.a device that transfers heat from the high-pressure, liquid-phase refrigerant	1.0	1.4
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entering the evaporator to the low-pressure, gas-phase refrigerant exiting the evaporator).

Improved condensers and/or evaporators with system analysis on the component(s) indicating a coefficient	1.0	1.4
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of performance improvement for the system of greater than 10% when compared to previous industry standard

designs).

Oil separator. The manufacturer must submit an engineering analysis demonstrating the increased improvement	0.5	0.7
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of the system relative to the baseline design, where the baseline component for comparison is the version which

a manufacturer most recently had in production on the same vehicle design or in a similar or related vehicle

model. The characteristics of the baseline component shall be compared to the new component to demonstrate the

improvement.

(B) Air conditioning efficiency credits are determined on an air conditioning system basis. For each air conditioning system that is eligible for a credit based on the use of one or more of the items listed in subsection (a)(7)(A), the total credit value is the sum of the gram per mile values listed in subsection (a)(7)(A) for each item that applies to the air conditioning system. However, the total credit value for an air conditioning system may not be greater than 5.0 grams per mile for any passenger car or 7.2 grams per mile for any light-duty truck or medium-duty passenger vehicle.



(C) The total efficiency credits generated by an air conditioning system shall be calculated separately for passenger cars and for light-duty trucks plus medium-duty passenger vehicles according to the following formula:

$$\text{Total Credits (g/mi)} = \text{Credit} \times \text{Production}$$

Where:

Credit = the CO<sub>2</sub> efficiency credit value in grams per mile determined in subsection (a)(7)(B) or (a)(7)(E), whichever is applicable. efficiency credit value in grams per mile determined in subsection (a)(7)(B) or (a)(7)(E), whichever is applicable.

Production = The total number of passenger cars or light-duty trucks plus medium-duty passenger vehicles, whichever is applicable, produced and delivered for sale in California, with the air conditioning system to which to the efficiency credit value from subsection (a)(7)(B) applies.

(D) The results of subsection (a)(7)(C), rounded to the nearest whole gram per mile, shall be included in the manufacturer's credit/debit totals calculated in subsection (b)(1)(B).

(E) For the purposes of this subsection (a)(7)(E), the AC17 Test Procedure shall mean the AC17 Air Conditioning Efficiency Test Procedure set forth in 40 CFR §86.167-17, incorporated in and amended by the "California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

1. For each air conditioning system selected by the manufacturer to generate air conditioning efficiency credits, the manufacturer shall perform the AC17 Test Procedure.
2. Using good engineering judgment, the manufacturer must select the vehicle configuration to be tested that is expected to result in the greatest increased CO<sub>2</sub> emissions as a result of the operation of the air conditioning system for which efficiency credits are being sought. If the air conditioning system is being installed in passenger cars, light-duty trucks, and medium-duty passenger vehicles, a separate determination of the quantity of credits for passenger cars and for light-duty trucks and medium-duty passenger vehicles must be made, but only one test vehicle is required to represent the air conditioning system, provided it represents the worst-case impact of the system on CO<sub>2</sub> emissions.
3. For each air conditioning system selected by the manufacturer to generate air conditioning efficiency credits, the manufacturer shall perform the AC17 Test Procedure according to the following requirements. Each air conditioning system shall be tested as follows:
  - a. Perform the AC17 test on a vehicle that incorporates the air conditioning system with the credit-generating technologies.
  - b. Perform the AC17 test on a vehicle which does not incorporate the credit-generating technologies. The tested vehicle must be similar to the vehicle tested under subsection (a)(7)(E)(3)a.

c. Subtract the CO<sub>2</sub> emissions determined from testing under subsection (a)(7)(E)(3)a from the CO<sub>2</sub> emissions determined from testing under subsection (a)(7)(E)(3)b and round to the nearest 0.1 grams/mile. If the result is less than or equal to zero, the air conditioning system is not eligible to generate credits. If the result is greater than or equal to the total of the gram per mile credits determined under subsection (a)(7)(B), then the air conditioning system is eligible to generate the maximum allowable value determined under subsection (a)(7)(B). If the result is greater than zero but less than the total of the gram per mile credits determined under subsection (a)(7)(B), then the air conditioning system is eligible to generate credits in the amount determined by subtracting the CO<sub>2</sub> emissions determined from testing under subsection (a)(7)(E)(3)a from the CO<sub>2</sub> emissions determined from testing under subsection (a)(7)(E)(3)b and rounding to the nearest 0.1 grams/mile.

4. For the first model year for which an air conditioning system is expected to generate credits, the manufacturer must select for testing the highest-selling subconfiguration within each vehicle platform that uses the air conditioning system. Credits may continue to be generated by the air conditioning system installed in a vehicle platform provided that:

a. The air conditioning system components and/or control strategies do not change in any way that could be expected to cause a change in its efficiency;

b. The vehicle platform does not change in design such that the changes could be expected to cause a change in the efficiency of the air conditioning system; and

c. The manufacturer continues to test at least one sub-configuration within each platform using the air conditioning system, in each model year, until all sub-configurations within each platform have been tested.

5. Each air conditioning system must be tested and must meet the testing criteria in order to be allowed to generate credits. Using good engineering judgment, in the first model year for which an air conditioning system is expected to generate credits, the manufacturer must select for testing the highest-selling subconfiguration within each vehicle platform using the air conditioning system. Credits may continue to be generated by an air conditioning system in subsequent model years if the manufacturer continues to test at least one sub-configuration within each platform on annually, as long as the air conditioning system and vehicle platform do not change substantially.

(8) Off-Cycle Credits. Manufacturers may generate credits for CO<sub>2</sub>-reducing technologies where the CO<sub>2</sub> reduction benefit of the technology is not adequately captured on the FTP and/or the HWFET. These technologies must have a measurable, demonstrable, and verifiable real-world CO<sub>2</sub> reduction that occurs outside the conditions of the FTP and the HWFET. These optional credits are referred to as “off-cycle” credits. Off-cycle technologies used to generate emission credits are considered emission-related components subject to applicable requirements, and must be demonstrated to be effective for the full useful life of the vehicle. Unless the manufacturer demonstrates that the technology is not subject to in-use deterioration, the manufacturer must account for the deterioration in their analysis. The manufacturer must use one of the three options specified in this subsection (a)(8) to determine the CO<sub>2</sub> gram per mile credit applicable to an off-cycle technology. The manufacturer should notify the Executive Officer in its pre-model year report of its intention to generate any credits under this subsection (a)(8).

(A) Credit available for certain off-cycle technologies.

1. The manufacturer may generate a CO<sub>2</sub> gram/mile credit for certain technologies as specified in the following table, provided that each technology is applied to the minimum percentage of the manufacturer's total U.S. production of passenger cars, light-duty trucks, and medium-duty passenger vehicles specified in the table in each model year for which credit is claimed. Technology definitions are in subsection (e).gram/mile credit for certain technologies as specified in the following table, provided that each technology is applied to the minimum percentage of the manufacturer's total U.S. production of passenger cars, light-duty trucks, and medium-duty passenger vehicles specified in the table in each model year for which credit is claimed. Technology definitions are in subsection (e).

<i>Off-Cycle Technology</i>	<i>Passenger Cars (g/mi)</i>	<i>Light-Duty Trucks and Medium-Duty Passenger Vehicles (g/mi)</i>		<i>Minimum Total Percent of U.S. Production</i>
		<i>Passenger Vehicles (g/mi)</i>	<i>Medium-Duty Passenger Vehicles (g/mi)</i>	
Active aerodynamics	0.6	1.0		10
High efficiency exterior lighting	1.1	1.1		10
Engine heat recovery	0.7 per 100W of capacity	0.7 per 100W of capacity		10
Engine start-stop (idle-off)	2.9	4.5		10
Active transmission warm-up	1.8	1.8		10
Active engine warm-up	1.8	1.8		10
Electric heater circulation pump	1.0	1.5		n/a
Solar roof panels	3.0	3.0		n/a
Thermal control	≤3.0	≤4.3		n/a

a. Credits may also be accrued for thermal control technologies as defined in subsection (e) in the amounts shown in the following table:

*Credit Value: Light-Duty*

	<i>Credit value:</i>	<i>Trucks and Medium-Duty Passenger Cars</i>
<i>Thermal Control Technology</i>	<i>Passenger Cars</i>	<i>Duty Passenger Vehicles</i>
	<i>(g/mi)</i>	<i>(g/mi)</i>
Glass or glazing	≤2.9	≤3.9
Active seat ventilation	1.0	1.3
Solar reflective paint	0.4	0.5
Passive cabin ventilation	1.7	2.3
Active cabin ventilation	2.1	2.8

b. The maximum credit allowed for thermal control technologies is limited to 3.0 g/mi for passenger cars and to 4.3 g/mi for light-duty trucks and medium-duty passenger vehicles. The maximum credit allowed for glass or glazing is limited to 2.9 g/mi for passenger cars and to 3.9 g/mi for light-duty trucks and medium-duty passenger vehicles.

c. Glass or glazing credits are calculated using the following equation:

$$\text{Credit} = \left[ Z \times \sum_{i=1}^n \frac{T_i \times G_i}{G} \right]$$

Where:

Credit = the total glass or glazing credits, in grams per mile, for a vehicle, which may not exceed 3.0 g/mi for passenger cars or 4.3 g/mi for light-duty trucks and medium-duty passenger vehicles;

Z = 0.3 for passenger cars and 0.4 for light-duty trucks and medium-duty passenger vehicles;

G<sub>i</sub> = the measured glass area of window i, in square meters and rounded to the nearest tenth;

G = the total glass area of the vehicle, in square meters and rounded to the nearest tenth;

T<sub>i</sub> = the estimated temperature reduction for the glass area of window i, determined using the following formula:

$$T_i = 0.3987 \times (T_{ts_{base}} - T_{ts_{new}})$$

Where:

T<sub>ts<sub>new</sub></sub> = the total solar transmittance of the glass, measured according to ISO 13837:2008, “Safety glazing materials - Method for determination of solar transmittance” (incorporated by reference, herein).

T<sub>ts<sub>base</sub></sub> = 62 for the windshield, side-front, side-rear, rear-quarter, and backlite locations, and 40 for rooflite locations.

2. The maximum allowable decrease in the manufacturer's combined passenger car and light-duty truck plus medium-duty passenger vehicle fleet average CO<sub>2</sub> emissions attributable to use of the default credit values in subsection (a)(8)(A)1 is 10 grams per mile. If the total of the CO<sub>2</sub> g/mi credit values from the table in subsection (a)(8)(A)1 does not exceed 10 g/mi for any passenger automobile or light truck in a manufacturer's fleet, then the total off-cycle credits may be calculated according to subsection (a)(8)(D). If the total of the CO<sub>2</sub> g/mi credit values from the table in subsection (a)(8)(A)1 exceeds 10 g/mi for any passenger car, light-duty truck, or medium-duty passenger vehicle in a manufacturer's fleet, then the gram per mile decrease for the combined passenger car and light-duty truck plus medium-duty passenger vehicle fleet must be determined according to subsection (a)(8)(A)2.a to determine whether the 10 g/mi limitation has been exceeded.

a. Determine the gram per mile decrease for the combined passenger car and light-duty truck plus medium-duty passenger vehicle fleet using the following formula:

$$\text{Decrease} = \frac{\text{Credits} \times 1,000,000}{[(\text{Prod}_C \times 195,264) + (\text{Prod}_T \times 225,865)]}$$

Where:

Credits = The total of passenger car and light-duty truck plus medium-duty passenger vehicles credits, in Megagrams, determined according to subsection (a)(8)(D) and limited to those credits accrued by using the default gram per mile values in subsection (a)(8)(A)1.

Prod<sub>C</sub> = The number of passenger cars produced by the manufacturer and delivered for sale in the U.S.

Prod<sub>T</sub> = The number of light-duty trucks and medium-duty passenger vehicles produced by the manufacturer and delivered for sale in the U.S.

b. If the value determined in subsection (a)(8)(A)2.a is greater than 10 grams per mile, the total credits, in Megagrams, that may be accrued by a manufacturer using the default gram per mile values in subsection (a)(8)(A)1 shall be determined using the following formula:

$$\text{Credit (Megagrams)} = \frac{[10 \times ((\text{Prod}_C \times 195,264) + (\text{Prod}_T \times 225,865))]}{1,000,000}$$

Where:

Prod<sub>C</sub> = The number of passenger cars produced by the manufacturer and delivered for sale in the U.S. = The number of passenger cars produced by the manufacturer and delivered for sale in the U.S.

Prod<sub>T</sub> = The number of light-duty trucks and medium-duty passenger vehicles produced by the manufacturer and delivered for sale in the U.S.

c. If the value determined in subsection (a)(8)(A)2.a is not greater than 10 grams per mile, then the credits that may be accrued by a manufacturer using the default gram per mile values in subsection (a)(8)(A)1 do not exceed the allowable limit, and total credits may be determined for each category of vehicles according to subsection (a)(8)(D).

d. If the value determined in subsection (a)(8)(A)2.a is greater than 10 grams per mile, then the combined passenger car and light-duty truck plus medium-duty passenger vehicle credits, in Megagrams, that may be accrued using the calculations in subsection (a)(8)(D) must not exceed the value determined in subsection (a)(8)(A)2.b. This limitation should generally be done by reducing the amount of credits attributable to the vehicle category that caused the limit to be exceeded such that the total value does not exceed the value determined in subsection (a)(8)(A)2.b.

3. In lieu of using the default gram per mile values specified in subsection (a)(8)(A)1 for specific technologies, a manufacturer may determine an alternative value for any of the specified technologies. An alternative value must be determined using one of the methods specified in subsection (a)(8)(B) or subsection (a)(8)(C).

(B) Technology demonstration using EPA 5-cycle methodology. To demonstrate an off-cycle technology and to determine a CO<sub>2</sub> credit using the EPA 5-cycle methodology, the manufacturer shall determine the off-cycle city/highway combined carbon-related exhaust emissions benefit by using the EPA 5-cycle methodology described in 40 CFR Part 600. Testing shall be performed on a representative vehicle, selected using good engineering judgment, for each model type for which the credit is being demonstrated. The emission benefit of a technology is determined by testing both with and without the off-cycle technology operating. Multiple off-cycle technologies may be demonstrated on a test vehicle. The manufacturer shall conduct the following steps and submit all test data to the Executive Officer.

1. Testing without the off-cycle technology installed and/or operating. Determine carbon-related exhaust emissions over the FTP, the HWFET, the US06, the SC03, and the cold temperature FTP test procedures according to the test procedure provisions specified in 40 CFR part 600 subpart B and using the calculation procedures specified in §600.113-08 of this chapter. Run each of these tests a minimum of three times without the off-cycle technology installed and operating and average the per phase (bag) results for each test procedure. Calculate the 5-cycle weighted city/highway combined carbon-related exhaust emissions from the averaged per phase results, where the 5-cycle city value is weighted 55% and the 5-cycle highway value is weighted 45%. The resulting combined city/highway value is the baseline 5-cycle carbon-related exhaust emission value for the vehicle.

2. Testing with the off-cycle technology installed and/or operating. Determine carbon-related exhaust emissions over the US06, the SC03, and the cold temperature FTP test procedures according to the test procedure provisions specified in 40 CFR part 600 subpart B and using the calculation procedures specified in 40 CFR §600.113-08. Run each of these tests a minimum of three times with the off-cycle technology installed and operating and average the per phase (bag) results for each test procedure. Calculate the 5-cycle weighted city/highway combined carbon-related exhaust emissions from the averaged per phase results, where the 5-cycle city value is weighted 55% and the 5-cycle highway value is weighted 45%. Use the averaged per phase results for the FTP and HWFET determined in subsection (a)(8)(B)1 for operation without the off-cycle technology in this calculation. The resulting combined city/highway value is the 5-cycle carbon-related exhaust emission value showing the off-cycle benefit of the technology but excluding any benefit of the technology on the FTP and HWFET.

3. Subtract the combined city/highway value determined in subsection (a)(8)(B)1 from the value determined in subsection (a)(8)(B)2. The result is the off-cycle benefit of the technology or technologies being evaluated. If this benefit is greater than or equal to three percent of the value determined in subsection (a)(8)(B)1 then the manufacturer may use this value, rounded to the nearest tenth of a gram per mile, to determine credits under subsection (a)(8)(C).

4. If the value calculated in subsection (a)(8)(B)3 is less than two percent of the value determined in subsection (a)(8)(B)1, then the manufacturer must repeat the testing required under subsections (a)(8)(B)1 and (a)(8)(B)2, except instead of running each test three times they shall run each test two additional times. The off-cycle benefit of the technology or technologies being

evaluated shall be calculated as in subsection (a)(8)(B)3 using all the tests conducted under subsections (a)(8)(B)1, (a)(8)(B)2, and (a)(8)(B)4. If the value calculated in subsection (a)(8)(B)3 is less than two percent of the value determined in subsection (a)(8)(B)1, then the manufacturer must verify the emission reduction potential of the off-cycle technology or technologies using the EPA Vehicle Simulation Tool, and if the results support a credit value that is less than two percent of the value determined in subsection (a)(8)(B)1 then the manufacturer may use the off-cycle benefit of the technology or technologies calculated as in subsection (a)(8)(B)3 using all the tests conducted under subsections (a)(8)(B)1, (a)(8)(B)2, and (a)(8)(B)4, rounded to the nearest tenth of a gram per mile, to determine credits under subsection (a)(8)(C).

(C) Review and approval process for off-cycle credits.

1. Initial steps required.

a. A manufacturer requesting off-cycle credits under the provisions of subsection (a)(8)(B) must conduct the testing and/or simulation described in that paragraph.

b. A manufacturer requesting off-cycle credits under subsection (a)(8)(B) must conduct testing and/or prepare engineering analyses that demonstrate the in-use durability of the technology for the full useful life of the vehicle.

2. Data and information requirements. The manufacturer seeking off-cycle credits must submit an application for off-cycle credits determined under subsection (a)(8)(B). The application must contain the following:

a. A detailed description of the off-cycle technology and how it functions to reduce CO<sub>2</sub> emissions under conditions not represented on the FTP and HWFET.

b. A list of the vehicle model(s) which will be equipped with the technology.

c. A detailed description of the test vehicles selected and an engineering analysis that supports the selection of those vehicles for testing.

d. All testing and/or simulation data required under subsection (a)(8)(B), as applicable, plus any other data the manufacturer has considered in the analysis.

e. An estimate of the off-cycle benefit by vehicle model and the fleetwide benefit based on projected sales of vehicle models equipped with the technology.

f. An engineering analysis and/or component durability testing data or whole vehicle testing data demonstrating the in-use durability of the off-cycle technology components.

3. Review of the off-cycle credit application. Upon receipt of an application from a manufacturer, the Executive Officer will do the following:

- a. Review the application for completeness and notify the manufacturer within 30 days if additional information is required.
- b. Review the data and information provided in the application to determine if the application supports the level of credits estimated by the manufacturer.

4. Decision on off-cycle application. The Executive Officer will notify the manufacturer in writing of its decision to approve or deny the application within 60 days of receiving a complete application, and if denied, the Executive Officer will provide the reasons for the denial.

(D) Calculation of total off-cycle credits. Total off-cycle credits in grams per mile of CO<sub>2</sub> (rounded to the nearest tenth of a gram per mile) shall be calculated separately for passenger cars and light-duty trucks plus medium-duty passenger vehicles according to the following formula:

$$\text{Total Credits (g/mi)} = \text{Credit} \times \text{Production}$$

Where:

Credit = the credit value in grams per mile determined in subsection (a)(8)(A) or subsection (a)(8)(B).

Production = The total number of passenger cars or light-duty trucks plus medium-duty passenger vehicles, whichever is applicable, produced and delivered for sale in California, produced with the off-cycle technology to which to the credit value determined in subsection (a)(8)(A) or subsection (a)(8)(B) applies.

(9) Credits for certain full-size pickup trucks. Full-size pickup trucks may be eligible for additional credits based on the implementation of hybrid technologies or on exhaust emission performance, as described in this subsection (a)(9). Credits may be generated under either subsection (a)(9)(A) or subsection (a)(9)(B) for a qualifying pickup truck, but not both.

(A) Credits for implementation of gasoline-electric hybrid technology. Full-size pickup trucks that implement hybrid gasoline-electric technologies may be eligible for an additional credit under this subsection (a)(9)(A). Pickup trucks using the credits under this subsection (a)(9)(A) may not use the credits described in subsection (a)(9)(B).

1. Full-size pickup trucks that are mild hybrid gasoline-electric vehicles and that are produced in the 2017 through 2021 model years are eligible for a credit of 10 grams/mile. To receive this credit, the manufacturer must produce a quantity of mild hybrid full-size pickup trucks such that the proportion of production of such vehicles, when compared to the manufacturer's total production of full-size pickup trucks, is not less than the amount specified in the table below for each model year.

<i>Model year</i>	<i>Required minimum percent of full-size pickup trucks</i>
2017	30%
2018	40%



2019	55%
2020	70%
2021	80%

2. Full-size pickup trucks that are strong hybrid gasoline-electric vehicles and that are produced in the 2017 through 2025 model years are eligible for a credit of 20 grams/mile. To receive this credit, the manufacturer must produce a quantity of strong hybrid full-size pickup trucks such that the proportion of production of such vehicles, when compared to the manufacturer's total production of full-size pickup trucks, is not less than 10 percent for each model year.

(B) Credits for emission reduction performance. 2017 through 2021 model year full-size pickup trucks that achieve carbon-related exhaust emission values below the applicable target value determined in subsection (a)(1)(B) may be eligible for an additional credit. Pickup trucks using the credits under this subsection (a)(9)(B) may not use the credits described in subsection (a)(9)(A).

1. Full-size pickup trucks that achieve carbon-related exhaust emissions less than or equal to the applicable target value determined in subsection (a)(1)(B) multiplied by 0.85 (rounded to the nearest gram per mile) and greater than the applicable target value determined in subsection (a)(1)(B) multiplied by 0.80 (rounded to the nearest gram per mile) in a model year are eligible for a credit of 10 grams/mile. A pickup truck that qualifies for this credit in a model year may claim this credit for subsequent model years through the 2021 model year if the carbon-related exhaust emissions of that pickup truck do not increase relative to the emissions in the model year in which the pickup truck qualified for the credit. To qualify for this credit in each model year, the manufacturer must produce a quantity of full-size pickup trucks that meet the emission requirements of this subsection (a)(9)(B)1 such that the proportion of production of such vehicles, when compared to the manufacturer's total production of full-size pickup trucks, is not less than the amount specified in the table below for each model year.

<i>Model year</i>	<i>Required minimum percent of full-size pickup trucks</i>
2017	15%
2018	20%
2019	28%
2020	35%
2021	40%

2. Full-size pickup trucks that achieve carbon-related exhaust emissions less than or equal to the applicable target value determined in subsection (a)(1)(B) multiplied by 0.80 (rounded to the nearest gram per mile) in a model year are eligible for a credit of 20 grams/mile. A pickup truck that qualifies for this credit in a model year may claim this credit for a maximum of five subsequent model years if the carbon-related exhaust emissions of that pickup truck do not increase relative to the emissions in the model year in which the pickup truck first qualified for the credit. This credit may not be claimed in any model year after 2025. To qualify for this credit, the manufacturer must produce a quantity of full-size pickup trucks that meet the emission requirements of subsection (a)(9)(B)1 such that the proportion of production of such vehicles, when compared to the manufacturer's total production of full-size pickup trucks, is not less than 10 percent in each model year.

(C) Calculation of total full-size pickup truck credits. Total credits in grams per mile of CO<sub>2</sub> (rounded to the nearest whole gram per mile) shall be calculated for qualifying full-size pickup trucks according to the following formula:

$$\text{Total Credits (g/mi)} = (10 \times \text{Production}_{10}) + (20 \times \text{Production}_{20})$$

Where:

Production<sub>10</sub> = The total number of full-size pickup trucks produced and delivered for sale in California with a credit value of 10 grams per mile from subsection (a)(9)(A) and subsection (a)(9)(B).

Production<sub>20</sub> = The total number of full-size pickup trucks produced and delivered for sale in California with a credit value of 20 grams per mile from subsection (a)(9)(A) and subsection (a)(9)(B).

(10) Greenhouse Gas In-Use Compliance Standards. The in-use exhaust CO<sub>2</sub> emission standard shall be the combined city/highway exhaust emission value calculated according to the provisions of subsection (a)(5)(A) for the vehicle model type and footprint value multiplied by 1.1 and rounded to the nearest whole gram per mile. For vehicles that are capable of operating on multiple fuels, a separate value 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 the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.”

(11) *Mid-Term Review of the 2022 through 2025 MY Standards*. The Executive Officer shall conduct a mid-term review to re-evaluate the state of vehicle technology to determine whether any adjustments to the stringency of the 2022 through 2025 model year standards are appropriate. California's mid-term review will be coordinated with its planned full participation in EPA's mid-term evaluation as set forth in [40 CFR §86.1818-12 \(h\)](#).

(b) Calculation of Greenhouse Gas Credits/Debits. Credits that are earned as part of the 2012 through 2016 MY National greenhouse gas program shall not be applicable to California's greenhouse gas program. Debits that are earned as part of the 2012 through 2016 MY National greenhouse gas program shall not be applicable to California's greenhouse gas program.

(1) Calculation of Greenhouse Gas Credits for Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles.

(A) A manufacturer that achieves fleet average CO<sub>2</sub> values lower than the fleet average CO values lower than the fleet average CO<sub>2</sub> requirement for the corresponding model year shall receive credits for each model year in units of g/mi. A manufacturer that achieves fleet average CO<sub>2</sub> values higher than the fleet average CO<sub>2</sub> requirement for the corresponding model year shall receive debits for each model year in units of g/mi. Manufacturers must calculate greenhouse gas credits and greenhouse gas debits separately for passenger cars and for combined light-duty trucks and medium-duty passenger vehicles as follows:

CO<sub>2</sub> Credits or Debits = (CO<sub>2</sub> Standard - Manufacturer's Fleet Average CO<sub>2</sub> Value) x (Total No. of Vehicles Produced and Delivered for Sale in California, Including ZEVs and HEVs).

Where:

CO<sub>2</sub> Standard = the applicable standard for the model year as determined in subsection (a)(1)(C);

Manufacturer's Fleet Average CO<sub>2</sub> Value = average calculated according to subsection (a)(5);

(B) A manufacturer's total Greenhouse Gas credits or debits generated in a model year shall be the sum of its CO<sub>2</sub> credits or debits and any of the following credits or debits, if applicable. The manufacturer shall calculate, maintain, and report Greenhouse Gas credits or debits separately for its passenger car fleet and for its light-duty truck plus medium-duty passenger vehicle fleet.

1. Air conditioning leakage credits earned according to the provisions of subsection (a)(6);
2. Air conditioning efficiency credits earned according to the provisions of subsection (a)(7);
3. Off-cycle technology credits earned according to the provisions of subsection (a)(8).
4. CO<sub>2</sub>-equivalent debits earned according to the provisions of subsection (a)(2)(D).

(2) A manufacturer with 2017 and subsequent model year fleet average Greenhouse Gas values greater than the fleet average CO<sub>2</sub> standard applicable 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 2017 and subsequent model years, the total g/mi Greenhouse Gas credits or debits earned for passenger cars and for light-duty trucks and medium-duty passenger vehicles 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 combined Greenhouse Gas debits for passenger cars, light-duty trucks, and medium-duty passenger vehicles 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 (a)(5)(D), 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 (a)(1). These emission debits shall be calculated for each individual state using the formula in subsections (b)(1) and (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 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 passenger car 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 light-duty trucks and medium-duty passenger vehicles 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 light-duty trucks and medium-duty passenger vehicles, applicable for the model year in which the debits were first incurred.

(B) Greenhouse Gas emission credits earned in the 2017 and subsequent model years shall retain full value through the fifth model year after they are earned, and will have no value if not used by the beginning of the sixth model year after being earned.

*(4) Use of Greenhouse Gas Emission Credits to Offset a Manufacturer's ZEV Obligations.*

(A) For a given model year, a manufacturer that has Greenhouse Gas credits remaining after equalizing all of its Greenhouse Gas debits may use those Greenhouse Gas credits to comply with its ZEV obligations for that model year, in accordance with the provisions set forth in the “California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent 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 1962.2.

(B) Any Greenhouse Gas credits used by a manufacturer to comply with its ZEV obligations shall retain no value for the purposes of complying with this section 1961.3.

(5) Credits and debits that are earned as part of the 2012 through 2016 MY National Greenhouse Gas Program, shall have no value for the purpose of complying with this section 1961.3.

*(c) Optional Compliance with the 2017 through 2025 MY National Greenhouse Gas Program.*

The optional compliance approach provided by this section 1961.3 (c) shall not be available for 2021 through 2025 model year passenger cars, light-duty trucks, and medium-duty passenger vehicles if the “2017 through 2025 MY National Greenhouse Gas Program” is altered via a final rule published in the *Federal Register* subsequent to October 25, 2016.

For the 2017 through 2025 model years, a manufacturer may elect to demonstrate compliance with this section 1961.3 by demonstrating compliance with the 2017 through 2025 MY National greenhouse gas program as follows:

(1) A manufacturer that selects compliance with this option must notify the Executive Officer of that selection, in writing, prior to the start of the applicable model year or must comply with 1961.3 (a) and (b);

(2) The manufacturer must submit to ARB all data that it submits to EPA in accordance with the reporting requirements as required under 40 CFR §86.1865-12, incorporated by reference in and amended by the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” for demonstrating compliance with the 2017 through 2025 MY National greenhouse gas program and the EPA determination of compliance. All such data 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;

(3) The manufacturer must provide to the Executive Officer separate values for the number of vehicles in each model type and footprint value 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), the applicable fleet average CO<sub>2</sub> standards for each of these model types and footprint values, the calculated fleet average CO<sub>2</sub> value for each of these model types and footprint values, and all values used in calculating the fleet average CO<sub>2</sub> values.

(d) *Test Procedures.* The certification requirements and test procedures for determining compliance with the emission standards in this section are set forth in the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” incorporated by reference in section 1961.2. In the case of hybrid electric vehicles, 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, or the “California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent 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 1962.2, as applicable.

(e) *Abbreviations.* The following abbreviations are used in this section 1961.3:

“CFR” means Code of Federal Regulations.

“CH<sub>4</sub>” means methane.

“CO<sub>2</sub>” means carbon dioxide.

“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.

“HWFET” means Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B).

“LDT” means light-duty truck.

“LVW” means loaded vehicle weight.

“MDPV” means medium-duty passenger vehicle.

“mg/mi” means milligrams per mile.

“MY” means model year.

“NHTSA” means National Highway Traffic Safety Administration.

“N<sub>2</sub>O” means nitrous oxide.

“ZEV” means zero-emission vehicle.

(f) *Definitions Specific to this Section.* The following definitions apply to this section 1961.3:

(1) “A/C Direct Emissions” means any refrigerant released from a motor vehicle's air conditioning system.

(2) “Active Aerodynamic Improvements” means technologies that are activated only at certain speeds to improve aerodynamic efficiency by a minimum of three percent, while preserving other vehicle attributes or functions.

(3) “Active Cabin Ventilation” means devices that mechanically move heated air from the cabin interior to the exterior of the vehicle.

(4) “Active Transmission Warmup” means a system that uses waste heat from the exhaust system to warm the transmission fluid to an operating temperature range quickly using a heat exchanger in the exhaust system, increasing the overall transmission efficiency by reducing parasitic losses associated with the transmission fluid, such as losses related to friction and fluid viscosity.

(5) “Active Engine Warmup” means a system using waste heat from the exhaust system to warm up targeted parts of the engine so that it reduces engine friction losses and enables the closed-loop fuel control to activate more quickly. It allows a faster transition from cold operation to warm operation, decreasing CO<sub>2</sub> emissions.

(6) “Active Seat Ventilation” means a device that draws air from the seating surface which is in contact with the occupant and exhausts it to a location away from the seat.

(7) “Blower motor controls which limit waste energy” means a method of controlling fan and blower speeds that does not use resistive elements to decrease the voltage supplied to the motor.

(8) “Default to recirculated air mode” means that the default position of the mechanism which controls the source of air supplied to the air conditioning system shall change from outside air to recirculated air when the operator or the automatic climate control system has engaged the air conditioning system (i.e., evaporator is removing heat), except under those conditions where dehumidification is required for visibility (i.e., defogger mode). In vehicles equipped with interior air quality sensors (e.g., humidity sensor, or carbon dioxide sensor), the controls may determine proper blend of air supply sources to maintain freshness of the cabin air and prevent fogging of windows while continuing to maximize the use of recirculated air. At any time, the vehicle operator may manually select the non-recirculated air setting during vehicle operation but the system must default to recirculated air mode on subsequent vehicle operations (i.e., next vehicle start). The climate control system may delay switching to recirculation mode until the interior air temperature is less than the outside air temperature, at which time the system must switch to recirculated air mode.

(9) “Electric Heater Circulation Pump” means a pump system installed in a stop-start equipped vehicle or in a hybrid electric vehicle or plug-in hybrid electric vehicle that continues to circulate hot coolant through the heater core when the engine is stopped during a stop-start event. This system must be calibrated to keep the engine off for 1 minute or more when the external ambient temperature is 30 deg F.

(10) “Emergency Vehicle” means a motor vehicle manufactured primarily for use as an ambulance or combination ambulance-hearse or for use by the United States Government or a State or local government for law enforcement.

(11) “Engine Heat Recovery” means a system that captures heat that would otherwise be lost through the exhaust system or through the radiator and converting that heat to electrical energy that is used to meet the electrical requirements of the vehicle. Such a system must have a capacity of at least 100W to achieve 0.7 g/mi of credit. Every additional 100W of capacity will result in an additional 0.7 g/mi of credit.

(12) “Engine Start-Stop” means a technology which enables a vehicle to automatically turn off the engine when the vehicle comes to a rest and restart the engine when the driver applies pressure to the accelerator or releases the brake.

(13) “EPA Vehicle Simulation Tool” means the “EPA Vehicle Simulation Tool” as incorporated by reference in [40 CFR §86.1](#) in the Notice of Proposed Rulemaking for EPA's 2017 and subsequent MY National Greenhouse Gas Program, as proposed at [76 Fed. Reg. 74854, 75357 \(December 1, 2011\)](#).

(14) “Executive Officer” means the Executive Officer of the California Air Resources Board.

(15) “Footprint” means the product of average track width (rounded to the nearest tenth of an inch) and wheelbase (measured in inches and rounded to the nearest tenth of an inch), divided by 144 and then rounded to the nearest tenth of a square foot, where the average track width is the average of the front and rear track widths, where each is measured in inches and rounded to the nearest tenth of an inch.

(16) “Federal Test Procedure” or “FTP” means 40 CFR, Part 86, Subpart B, as amended by the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.”

(17) “Full-size pickup truck” means a light-duty truck that has a passenger compartment and an open cargo box and which meets the following specifications:

1. A minimum cargo bed width between the wheelhouses of 48 inches, measured as the minimum lateral distance between the limiting interferences (pass-through) of the wheelhouses. The measurement shall exclude the transitional arc, local protrusions, and depressions or pockets, if present. An open cargo box means a vehicle where the cargo box does not have a permanent roof or cover. Vehicles produced with detachable covers are considered “open” for the purposes of these criteria.
2. A minimum open cargo box length of 60 inches, where the length is defined by the lesser of the pickup bed length at the top of the body and the pickup bed length at the floor, where the length at the top of the body is defined as the longitudinal distance from the inside front of the pickup bed to the inside of the closed endgate as measured at the height of the top of the open pickup bed along vehicle centerline, and the length at the floor is defined as the longitudinal distance from the inside front of the pickup bed to the inside of the closed endgate as measured at the cargo floor surface along vehicle centerline.
3. A minimum towing capability of 5,000 pounds, where minimum towing capability is determined by subtracting the gross vehicle weight rating from the gross combined weight rating, or a minimum payload capability of 1,700 pounds, where minimum payload capability is determined by subtracting the curb weight from the gross vehicle weight rating.

(18) “Greenhouse Gas” means the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.

(19) “GWP” means the global warming potential of the refrigerant over a 100-year horizon, as specified in Intergovernmental Panel on Climate Change (IPCC) 2007: Climate Change 2007 - The Physical Science Basis. S. Solomon et al. (editors), Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, UK and New York, NY, USA, ISBN 0-521-70596-7, or determined by ARB if such information is not available in the IPCC Fourth Assessment Report.

(20) “High Efficiency Exterior Lighting” means a lighting technology that, when installed on the vehicle, is expected to reduce the total electrical demand of the exterior lighting system by a minimum of 60 watts when compared to conventional lighting systems. To be eligible for this credit the high efficiency lighting must be installed in the following components: parking/position, front and rear turn signals, front and rear side markers, stop/brake lights (including the center-mounted location), taillights, backup/reverse lights, and license plate lighting.

(21) “Improved condensers and/or evaporators” means that the coefficient of performance (COP) of air conditioning system using improved evaporator and condenser designs is 10 percent higher, as determined using the bench test procedures described in SAE J2765 “Procedure for Measuring System COP of a Mobile Air Conditioning System on a Test Bench,” when compared to a system using standard, or prior model year, component designs. SAE J2765 is incorporated by reference herein. The manufacturer must submit an engineering analysis demonstrating the increased improvement of the system relative to the baseline design, where the baseline component(s) for comparison is the version which a manufacturer



most recently had in production on the same vehicle design or in a similar or related vehicle model. The dimensional characteristics (e.g., tube configuration/thickness/spacing, and fin density) of the baseline component(s) shall be compared to the new component(s) to demonstrate the improvement in coefficient of performance.

(22) “Mild hybrid gasoline-electric vehicle” means a vehicle that has start/stop capability and regenerative braking capability, where the recaptured braking energy over the FTP is at least 15 percent but less than 75 percent of the total braking energy, where the percent of recaptured braking energy is measured and calculated according to 40 CFR §600.108(g).

(23) “Model Type” means a unique combination of car line, basic engine, and transmission class.

(24) “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 on April 1, 2010 ([75 Fed. Reg. 25324, 25677 \(May 7, 2010\)](#)).

(25) “2017 through 2025 MY National Greenhouse Gas Program” means the national program that applies to new 2017 through 2025 model year passenger cars, light-duty-trucks, and medium-duty passenger vehicles as adopted by the U.S. Environmental Protection Agency as codified in 40 CFR Part 86, Subpart S, except as follows:

For model years 2021 through 2025, the “2017 through 2025 MY National Greenhouse Gas Program” means the national program that applies to new 2021 through 2025 model year passenger cars, light-duty-trucks, and medium-duty passenger vehicles as adopted by the U.S. Environmental Protection Agency as codified in 40 CFR Part 86, Subpart S, as last amended on October 25, 2016 that incorporates CFR sections 86.1818-12 (October 25, 2016), 86.1865-12 (October 25, 2016), 86.1866-12 (October 25, 2016), 86.1867-12 (October 25, 2016), 86.1868-12 (October 25, 2016), 86.1869-12 (October 25, 2016), 86.1870-12 (October 25, 2016), and 86.1871-12 (October 25, 2016).

(26) “Oil separator” means a mechanism that removes at least 50 percent of the oil entrained in the oil/refrigerant mixture exiting the compressor and returns it to the compressor housing or compressor inlet, or a compressor design that does not rely on the circulation of an oil/refrigerant mixture for lubrication.

(27) “Passive Cabin Ventilation” means ducts or devices which utilize convective airflow to move heated air from the cabin interior to the exterior of the vehicle.

(28) “Plug-in Hybrid Electric Vehicle” means “off-vehicle charge capable hybrid electric vehicle” as defined in the “California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes.”

(29) “Reduced reheat, with externally controlled, fixed-displacement or pneumatic variable displacement compressor” means a system in which the output of either compressor is controlled by cycling the compressor clutch off-and-on via an electronic signal, based on input from sensors (e.g., position or setpoint of interior temperature control, interior temperature, evaporator outlet air temperature, or refrigerant temperature) and air temperature at the outlet of the evaporator can be controlled to a level at 41 °F, or higher.

(30) “Reduced reheat, with externally-controlled, variable displacement compressor” means a system in which compressor displacement is controlled via an electronic signal, based on input from sensors (e.g., position or setpoint of interior temperature control, interior temperature, evaporator outlet air temperature, or refrigerant temperature) and air temperature at the outlet of the evaporator can be controlled to a level at 41 °F, or higher.

(31) “SC03” means the SC03 test cycle as set forth in the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles.”

(32) “Solar Reflective Paint” means a vehicle paint or surface coating which reflects at least 65 percent of the impinging infrared solar energy, as determined using ASTM standards E903-96 (Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres, DOI: 10.1520/E0903-96 (Withdrawn 2005)), E1918-06 (Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field, DOI: 10.1520/E1918-06), or C1549-09 (Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer, DOI: 10.1520/C1549-09). These ASTM standards are incorporated by reference, herein.

(33) “Solar Roof Panels” means the installation of solar panels on an electric vehicle or a plug-in hybrid electric vehicle such that the solar energy is used to provide energy to the electric drive system of the vehicle by charging the battery or directly providing power to the electric motor with the equivalent of at least 50 Watts of rated electricity output.

(34) “Strong hybrid gasoline-electric vehicle” means a vehicle that has start/stop capability and regenerative braking capability, where the recaptured braking energy over the Federal Test Procedure is at least 75 percent of the total braking energy, where the percent of recaptured braking energy is measured and calculated according to 40 CFR §600.108(g).

(35) “Subconfiguration” means a unique combination within a vehicle configuration of equivalent test weight, road load horsepower, and any other operational characteristics or parameters which is accepted by USEPA.

(36) “US06” means the US06 test cycle as set forth in the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles.”

(37) “Worst-Case” means the vehicle configuration within each test group that is expected to have the highest CO<sub>2</sub> - equivalent value, as calculated in section (a)(5).

(g) 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 both this section and this article remains in full force and effect.

Note: Authority cited: [Sections 38550, 38566, 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 and 43211, Health and Safety Code](#).

## HISTORY

1. New section filed 8-8-2012; operative 8-8-2012 pursuant to [Government Code section 11343.4](#) (Register 2012, No. 32).
2. New subsection (a)(3)(C)4., amendment of subsections (a)(6)(C)1.-2 and (a)(7)(E), new subsection (a)(11), amendment of subsection (b)(4)(A), new subsections (c)-(c)(3), subsection relettering, amendment of newly designated subsections (f)(13) and (f)(17)1.-2., new subsection (f)(25) and subsection renumbering filed 12-31-2012; operative 12-31-2012 pursuant to [Government Code section 11343.4](#) (Register 2013, No. 1).
3. Amendment of section heading and subsections (a)(1)(A)1.-2., (a)(1)(B)1., (c) and (f)(25) and amendment of Note filed 12-12-2018; operative 12-12-2018 pursuant to [Government Code section 11343.4\(b\)\(3\)](#) (Register 2018, No. 50).

This database is current through 6/5/20 Register 2020, No. 23

13 CCR § 1961.3, 13 CA ADC § 1961.3

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End of Document

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Barclays Official California Code of Regulations Currentness  
Title 13. Motor Vehicles  
Division 3. Air Resources Board  
Chapter 1. Motor Vehicle Pollution Control Devices  
Article 2. Approval of Motor Vehicle Pollution Control Devices (New Vehicles) (Refs & Annos)

13 CCR § 1962.2

§ 1962.2. Zero-Emission Vehicle Standards for 2018 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

(a) *ZEV Emission Standard.* The Executive Officer shall certify new 2018 and subsequent model year passenger cars, light-duty trucks, and medium-duty vehicles as ZEVs, vehicles that produce zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas, excluding emissions from air conditioning systems, under any possible operational modes or conditions.

(b) *Percentage ZEV Requirements.*

(1) *General ZEV Credit Percentage Requirement.*

(A) *Basic Requirement.* The minimum ZEV credit percentage requirement for each manufacturer is listed in the table below as the percentage of the PCs and LDTs, produced by the manufacturer and delivered for sale in California that must be ZEVs, subject to the conditions in this subdivision 1962.2(b). The ZEV requirement will be based on the annual NMOG production report for the appropriate model year.

<i>Model Year</i>	<i>Credit Percentage Requirement</i>
2018	4.5%
2019	7.0%
2020	9.5%
2021	12.0%
2022	14.5%
2023	17.0%
2024	19.5%
2025 and subsequent	22.0%

(B) *Calculating the Number of Vehicles to Which the Percentage ZEV Requirement is Applied.* For 2018 and subsequent model years, a manufacturer's production volume for the given model year will be based on the three-year average of the

manufacturer's volume of PCs and LDTs, produced and delivered for sale in California in the prior second, third, and fourth model year [for example, 2019 model year ZEV requirements will be based on California production volume average of PCs and LDTs for the 2015 to 2017 model years]. This production averaging is used to determine ZEV requirements only, and has no effect on a manufacturer's size determination (eg. three-year average calculation method). In applying the ZEV requirement, a PC or LDT, that is produced by one manufacturer (e.g., Manufacturer A), but is marketed in California by another manufacturer (e.g., Manufacturer B) under the other manufacturer's (Manufacturer B) nameplate, shall be treated as having been produced by the marketing manufacturer (i.e., Manufacturer B).

1. *[Reserved]*

2. *[Reserved]*

3. A manufacturer may apply to the Executive Officer to be permitted to base its ZEV obligation on the number of PCs and LDTs, produced by the manufacturer and delivered for sale in California that same model year (ie, same model-year calculation method) as an alternative to the three-year averaging of prior year production described above, for up to two model years, total, between model year 2018 and model year 2025. For the same model-year calculation method to be allowed, a manufacturer's application to the Executive Officer must show that their volume of PCs and LDTs produced and delivered for sale in California has decreased by at least 30 percent from the previous year due to circumstances that were unforeseeable and beyond their control.

(C) *[Reserved]*

(D) *Exclusion of ZEVs in Determining a Manufacturer's Sales Volume.* In calculating a manufacturer's applicable sales, using either method described in subdivision 1962.2(b)(1)(B), a manufacturer shall exclude the number of NEVs produced and delivered for sale in California by the manufacturer itself, or by a subsidiary in which the manufacturer has more than 33.4% percent ownership interest.

(2) *Requirements for Large Volume Manufacturers.*

(A) *[Reserved]*

(B) *[Reserved]*

(C) *[Reserved]*

(D) *[Reserved]*

(E) *Requirements for Large Volume Manufacturers in 2018 and through 2025 Model Years.* LVMs must produce credits from ZEVs equal to minimum ZEV floor percentage requirement, as enumerated below. Manufacturers may fulfill the remaining ZEV requirement with credits from TZEVs, as enumerated below.

<i>Model Years</i>	<i>Total ZEV</i>		<i>TZEVs</i>
	<i>Percent Requirement</i>	<i>ZEV floor</i>	
2018	4.5%	2.0%	2.5%
2019	7.0%	4.0%	3.0%
2020	9.5%	6.0%	3.5%
2021	12.0%	8.0%	4.0%
2022	14.5%	10.0%	4.5%
2023	17.0%	12.0%	5.0%
2024	19.5%	14.0%	5.5%
2025	22.0%	16.0%	6.0%

(F) *Requirements for Large Volume Manufacturers in Model Year 2026 and Subsequent.* In 2026 and subsequent model years, a manufacturer must meet a total ZEV credit percentage of 22%. The maximum portion of a manufacturer's credit percentage requirement that may be satisfied by TZEV credits is limited to 6% of the manufacturer's applicable California PC and LDT production volume. ZEV credits must satisfy the remainder of the manufacturer's requirement.

(3) *Requirements for Intermediate Volume Manufacturers.* For 2018 and subsequent model years, an intermediate volume manufacturer may meet all of its ZEV credit percentage requirement, under subdivision 1962.2(b), with credits from TZEV.

(4) *Requirements for Small Volume Manufacturers.* A small volume manufacturer is not required to meet the ZEV credit percentage requirements. However, a small volume manufacturer may earn, bank, market, and trade credits for the ZEVs and TZEVs it produces and delivers for sale in California.

(5) *[Reserved]*

(6) *[Reserved]*

(7) *Changes in Small Volume and Intermediate Volume Manufacturer Status in 2018 and Subsequent Model Years.*

(A) *Increases in California Production Volume.* For 2018 and subsequent model years, if a small volume manufacturer's average California production volume exceeds 4,500 units of new PCs, LDTs, and MDVs based on the average number of vehicles produced and delivered for sale for the three previous consecutive model years (i.e., total production volume exceeds 13,500 vehicles in a three-year period), for three consecutive averages, the manufacturer shall no longer be treated as a small volume manufacturer, and must comply with the ZEV requirements for intermediate volume manufacturers beginning with the next model year after the last model year of the third consecutive average. For example, if (a small volume) Manufacturer A exceeds 4,500 PCs, LDTs, and MDVs for their 2018-2020, 2019-2021, and 2020-2022 model year averages, Manufacturer A would be subject to intermediate volume requirements starting in 2023 model year.

If an intermediate volume manufacturer's average California production volume exceeds 20,000 units of new PCs, LDTs, and MDVs in five consecutive model years based on the average number of vehicles produced and delivered for sale in the five associated sets of three model year averages that begin no sooner than the 2018 model year associated with the 2015 through 2017 three-year average (i.e., total production volume exceeds 60,000 vehicles in each of five consecutive three-year periods), the manufacturer shall no longer be treated as an intermediate volume manufacturer and shall comply with the ZEV requirements for large volume manufacturers beginning with the next model year after the model year corresponding to the fifth consecutive three-year average. For example, if (an intermediate volume) Manufacturer B exceeds 20,000 PCs, LDTs, and MDVs for its 2016 - 2018, 2017 - 2019, 2018 - 2020, 2019 - 2021, and 2020 - 2022 averages, as evidenced by its 2019 through 2023 model year reports, Manufacturer B would be subject to large volume manufacturer requirements starting in the 2024 model year.

If an intermediate volume manufacturer's average annual automotive-related global revenue for the 2018, 2019, or 2020 fiscal year, based upon the immediately prior and consecutive three fiscal years, is no greater than 40 billion dollars, then the three-model-year production volume average corresponding to that fiscal year will not apply to the five consecutive three-model-year production volume averages necessary for transition to large volume manufacturer requirements conditional upon the manufacturer submitting to the Executive Officer, in writing, a report that demonstrates the types and numbers of ZEVs and TZEVs the manufacturer will deliver to California subsequent to the 2020 fiscal year to meet the requirements specified in subdivision 1962.2(b)(1)(A). For example, assuming the production volumes described for Manufacturer B at the end of the preceding paragraph, and assuming Manufacturer B had automotive-related global revenue of 39 billion dollars in fiscal year 2019 and 41 billion dollars in fiscal year 2020, the 2016-2018 production volume average associated with fiscal year 2019 would not apply, but the 2017-2019 production volume average associated with fiscal year 2020 would apply. Thus, Manufacturer B would be subject to large volume manufacturer requirements starting in the 2025 model year.

Any new requirement described in this subdivision will begin with the next model year after the last model year of the third or fifth consecutive three-year average when a manufacturer ceases to be a small or intermediate volume manufacturer respectively in 2018 or subsequent years due to the aggregation requirements in majority ownership situations. The first of the consecutive three-year averages shall not precede the 2015 through 2017 three-year average.

(B) *Decreases in California Production Volume.* If a manufacturer's average California production volume falls below 4,500 or 20,000 units of new PCs, LDT1 and 2s, and MDVs, based on the average number of vehicles produced and delivered for sale for the three previous consecutive model years, for three consecutive averages, the manufacturer shall be treated as a small volume or intermediate volume manufacturer, as applicable, and shall be subject to the requirements for a small volume or intermediate volume manufacturer beginning with the next model year. For example, if Manufacturer C falls below 20,000 PCs, LDTs, and MDVs for its 2019-2021, 2020-2022, and 2021-2023 averages, Manufacturer C would be subject to IVM requirements starting in 2024 model year.

(C) *Calculating California Production Volume in Change of Ownership Situations.* Where a manufacturer experiences a change in ownership in a particular model year, the change will affect application of the aggregation requirements on the manufacturer starting with the next model year. When a manufacturer is simultaneously producing two model years of vehicles at the time of a change of ownership, the basis of determining next model year must be the earlier model year. The manufacturer's small or intermediate volume manufacturer status for the next model year shall be based on the average California production volume in the three previous consecutive model years of those manufacturers whose production volumes must be aggregated for that next model year. For example, where a change of ownership during the 2019 calendar year occurs and the manufacturer is producing both 2019 and 2020 model year vehicles resulting in a requirement that the

production volume of Manufacturer A be aggregated with the production volume of Manufacturer B, Manufacturer A's status for the 2020 model year will be based on the production volumes of Manufacturers A and B in the 2017-2019 model years. Where the production volume of Manufacturer A must be aggregated with the production volumes of Manufacturers B and C for the 2019 model year, and during that model year a change in ownership eliminates the requirement that Manufacturer B's production volume be aggregated with Manufacturer A's, Manufacturer A's status for the 2020 model year will be based on the production volumes of Manufacturers A and C in the 2017-2019 model years. In either case, the lead time provisions in subdivisions 1962.2(b)(7)(A) and (B) will apply.

(c) *Transitional Zero-Emission Vehicles (TZEV).*

(1) *Introduction.* This subdivision 1962.2(c) sets forth the criteria for identifying vehicles delivered for sale in California as TZEVs.

(2) *TZEV Requirements.* In order for a vehicle to be eligible to receive a ZEV allowance, the manufacturer must demonstrate compliance with all of the following requirements:

(A) *SULEV Standards.* Certify the vehicle to the 150,000-mile SULEV 20 or 30 exhaust emission standards for PCs and LDTs in subdivision 1961.2(a)(1). Bi-fuel, fuel flexible and dual-fuel vehicles must certify to the applicable 150,000-mile SULEV 20 or 30 exhaust emission standards when operating on both fuels. Manufacturers may certify 2018 and 2019 TZEVs to the 150,000-mile SULEV exhaust emission standards for PCs and LDTs in subdivision 1961(a)(1);

(B) *Evaporative Emissions.* Certify the vehicle to the evaporative emission standards in subdivision 1976(b)(1)(G) or 1976(b)(1)(E);

(C) *OBD.* Certify that the vehicle will meet the applicable on-board diagnostic requirements in sections 1968.1 or 1968.2, as applicable, for 150,000 miles; and

(D) *Extended Warranty.* Extend the performance and defects warranty period set forth in subdivisions 2037(b)(2) and 2038(b)(2) to 15 years or 150,000 miles, whichever occurs first except that the time period is to be 10 years for a zero-emission energy storage device used for traction power (such as a battery, ultracapacitor, or other electric storage device).

(3) *Allowances for TZEVs*

(A) *Zero-Emission Vehicle Miles Traveled TZEV Allowance Calculation.* A vehicle that meets the requirements of subdivision 1962.2(c)(2) and has zero-emission vehicle miles traveled (VMT), as defined by and calculated by the "California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes," adopted March 22, 2012, last amended September 3, 2015, which is incorporated herein by reference, and measured as equivalent all electric range (EAER) capability will generate an allowance according to the following equation:

*UDDS Test Cycle Range*



<i>(AER)</i>	<i>Allowance</i>
< 10 all electric miles	0.00
≥ 10 all electric miles	TZEV Credit = [(0.01) * EAER + 0.30]
> 80 miles (credit cap)	1.10

1. *Allowance for US06 Capability.* TZEVs with US06 all electric range capability (AER) of at least 10 miles shall earn an additional 0.2 allowance. US06 test cycle range capability shall be determined in accordance with section G.7.5 of the “California Exhaust Emission Standards and Test Procedures for the 2018 and Subsequent Model Zero-Emission Vehicles, and Hybrid Electric Vehicles in the Passenger Car, Light-Duty Truck, and Medium Duty Vehicle Classes,” adopted March 22, 2012, last amended September 3, 2015, which is incorporated herein by reference.

(B) *[Reserved]*

(C) *[Reserved]*

(D) *[Reserved]*

(E) *Credit for Hydrogen Internal Combustion Engine Vehicles.* A hydrogen internal combustion engine vehicle that meets the requirements of subdivision 1962.2(c)(2) and has a total range of at least 250 UDDS miles will earn an allowance of 0.75, which may be in addition to allowances earned in subdivision 1962.2(c)(3)(A), and subject to an overall credit cap of 1.25

(d) *Qualification for Credits From ZEVs.*

(1) *[Reserved]*

(2) *[Reserved]*

(3) *[Reserved]*

(4) *[Reserved]*

(5) *Credits for 2018 and Subsequent Model Year ZEVs.*

(A) *ZEV Credit Calculations.* Credits from a ZEV delivered for sale are based on the ZEV's UDDS all electric range, determined in accordance with the “California Exhaust Emission Standards and Test Procedures for the 2018 and Subsequent Model Zero-Emission Vehicles, and Hybrid Electric Vehicles in the Passenger Car, Light-Duty Truck, and

Medium Duty Vehicle Classes,” adopted March 22, 2012, which is incorporated herein by reference, using the following equation:

$$\text{ZEV Credit} = (0.01) * (\text{UDDS range}) + 0.50$$

1. A ZEV with less than 50 miles UDDS range will receive zero credits.
2. Credits earned under this provision 1962.2(d)(5)(A) are be capped at 4 credits per ZEV.

(B) [Reserved]

(C) [Reserved]

(D) [Reserved]

(E) 1. *Counting Specified ZEVs Placed in Service in a Section 177 State and in California.* Large volume manufacturers and intermediate volume manufacturers with credits earned from hydrogen fuel cell vehicles that are certified to the California ZEV standards applicable for the ZEV's model year, delivered for sale and placed in service in California or in a Section 177 state, may be counted towards compliance in California and in all Section 177 states with the percentage ZEV requirements in subdivision 1962.2(b). The credits earned are multiplied by the ratio of a manufacturer's applicable production volume for a model year, as specified in subdivision 1962.2(b)(1)(B), in the state receiving credit to the manufacturer's applicable production volume as specified in subdivision 1962.2(b)(1)(B), for the same model year in California (hereafter, “proportional value”). Credits generated from ZEV placement in a Section 177 state will be earned at the proportional value in the Section 177 state, and earned in California at the full value specified in subdivision 1962.2(d)(5)(A).

2. *Optional Section 177 State Compliance Path.*

a. *Additional ZEV Requirements for Intermediate Volume Manufacturers.* Intermediate volume manufacturers that elect the optional Section 177 state compliance path must generate additional 2012 and subsequent model year ZEV credits, including no more than 50% Type 1.5x and Type IIx vehicle credits and excluding all NEV, Type 0 ZEV credits, and transportation system credits, in each Section 177 state to fulfill the following percentage requirements of their sales volume determined under subdivision 1962.2(b)(1)(B):

***Intermediate Volume Manufacturers***

<i>Model Years</i>	<i>Additional Section 177 State ZEV Requirements</i>
Two model years prior to transition	0.75%

to LVM status

.....  
One model year prior to transition 1.50%

LVM status

Subdivision 1962.2(d)(5)(E)1. and subdivision 1962.1(d)(5)(E) shall not apply to any ZEV credits used to meet an intermediate volume manufacturer's additional ZEV requirements for the appropriate model years as described in the table above under this subdivision 1962.2(d)(5)(E)2.a.

Intermediate volume manufacturers that choose to elect the optional Section 177 state compliance path must notify the Executive Officer and each Section 177 state in writing no later than September 1, 2016.

b. *ZEV and TZEZ Percentages for Intermediate Volume Manufacturers.* Intermediate volume manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. or intend to comply or have fully complied with requirements in subdivision 1962.2(d)(5)(E)2.a. are allowed to meet their total ZEV percentage requirements specified in 1962.2(b) in each Section 177 state by utilizing subdivisions 1962.2(d)(5)(E)2.b.i and ii, below.

i. *Trading and Transferring ZEV and TZEZ Credits within West Region Pool and East Region Pool.* Intermediate volume manufacturers may trade or transfer 2012 and subsequent model year ZEV and TZEZ credits within the West Region pool to meet the requirements in subdivision 1962.2(d)(5)(E)2.a, and will incur no premium on their credit values. For example, for a manufacturer to make up a 2020 model year shortfall of 100 credits in State X, the manufacturer may transfer 100 (2018 through 2020 model year) ZEV credits from State Y, within the West Region pool. Intermediate volume manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. or intend to comply or have fully complied with requirements in subdivision 1962.2(d)(5)(E)2.a. may trade or transfer 2018 and subsequent model year ZEV and TZEZ credits within the East Region pool to meet the requirements in subdivision 1962.2(b), and will incur no premium on their credit values. For example, for a manufacturer to make up a 2020 model year shortfall of 100 credits in State W, the manufacturer may transfer 100 (2018 through 2020 model year) ZEV credits from State Z, within the East Region pool.

ii. *Trading and Transferring ZEV and TZEZ Credits between the West Region Pool and East Region Pool.* Intermediate volume manufacturers may trade or transfer 2012 and subsequent model year ZEV and TZEZ credits to meet the requirements in subdivision 1962.2(b) between the West Region pool and the East Region pool; however, any credits traded will incur a premium of 30% of their value. For example, in order for a manufacturer to make up a 2020 model year shortfall of 100 credits in the West Region Pool, the manufacturer may transfer 130 (2018 through 2020 model year) credits from the East Region Pool. No credits may be traded or transferred to the East Region pool or West Region pool from a manufacturer's California ZEV bank, or from the East Region pool or West Region pool to a manufacturer's California ZEV bank.

c. *Reduced ZEV and TZEZ Percentages for Large Volume Manufacturers.* Large volume manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. are allowed to meet ZEV percentage requirements and optional TZEZ percentages reduced from the minimum ZEV floor percentages

and TZEV percentages in subdivision 1962.2(b)(2)(E) in each Section 177 state equal to the following percentages of their sales volume determined under subdivision 1962.2(b)(1)(B):

*ZEVs*

<i>Model Year</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>
Existing Minimum ZEV Floor	2.00%	4.00%	6.00%	8.00%
Section 177 State Adjustment for				
Optional Compliance Path	62.5%	75%	87.5%	100%
Minimum Section 177 State				
ZEV Requirement	1.25%	3.00%	5.25%	8.00%

*TZEVs*

<i>Model Year</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>
Existing TZEV Percentage	2.50%	3.00%	3.50%	4.00%
Section 177 State Adjustment for				
Optional Compliance Path	90.00%	100%	100%	100%
New Section 177 State TZEV				
Percentage	2.25%	3.00%	3.50%	4.00%

*Total Percent Requirement*

<i>Model Year</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>
New Total Section 177 State				
Optional Requirements <sup>1</sup>	3.50%	6.00%	8.75%	12.00%

<sup>1</sup> Intermediate volume manufacturers may meet these new total Section 177 State optional requirements entirely with TZEV credits.

i. *Trading and Transferring ZEV and TZEV Credits within West Region Pool and East Region Pool.* Manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. may trade or transfer 2012 and subsequent model year ZEV and TZEV credits within the West Region pool to meet the requirements in subdivision 1962.2(d)(5)(E)2.c., and will incur no premium on their credit values. For example, for a manufacturer to make up a 2019 model year shortfall of 100 credits in State X, the manufacturer may transfer 100 (2012 through 2019 model year) ZEV credits from State Y, within the West Region pool. Manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. may trade or transfer 2012 and subsequent model year ZEV and TZEV credits within the East Region pool to meet the requirements in subdivision 1962.2(d)(5)(E)2.c., and will incur no premium on their credit values. For

example, for a manufacturer to make up a 2019 model year shortfall of 100 credits in State W, the manufacturer may transfer 100 (2012 through 2019 model year) ZEV credits from State Z, within the East Region pool.

ii. *Trading and Transferring ZEV and TZEV Credits between the West Region Pool and East Region Pool.* Manufacturers that have fully complied with the optional Section 177 state compliance path requirements in subdivision 1962.1(d)(5)(E)3. may trade or transfer 2012 and subsequent model year ZEV and TZEV credits to meet the requirements in subdivision 1962.2(d)(5)(E)2.c. between the West Region pool and the East Region pool; however, any credits traded will incur a premium of 30% of their value. For example, in order for a manufacturer to make up a 2019 model year shortfall of 100 credits in the West Region Pool, the manufacturer may transfer 130 (2012 through 2019 model year) credits from the East Region Pool. No credits may be traded or transferred to the East Region pool or West Region pool from a manufacturer's California ZEV bank, or from the East Region pool or West Region pool to a manufacturer's California ZEV bank.

d. *Reporting Requirements.* On an annual basis, by May 1st of the calendar year following the close of a model year, each manufacturer that elects the optional Section 177 state compliance path under subdivision 1962.1(d)(5)(E)3., shall submit, in writing, to the Executive Officer and each Section 177 state a report, including an itemized list, that demonstrates the manufacturer has met the requirements of this subdivision 1962.2(d)(5)(E)2. within the East Region pool and within the West Region pool. The itemized list shall include the following:

i. The manufacturer's total applicable volume of PCs and LDTs delivered for sale in each Section 177 state within the regional pool, as determined under subdivision 1962.2(b)(1)(B).

ii. Make, model, credit earned, and Section 177 state where delivery for sale of TZEVs and ZEVs occurred to meet manufacturer's requirements under subdivision 1962.2(d)(5)(E)2.a, 2.b, and 2.c.

e. *Right to Request Vehicle Identification Numbers.* Upon request by the Executive Officer or a Section 177 state, each manufacturer that elects the optional Section 177 state compliance path under subdivision 1962.1(d)(5)(E)3. shall provide the vehicle identification numbers in the report required by subdivision 1962.2 (d)(5)(E)3.d.

f. *Failure to Meet Optional Section 177 State Compliance Path Requirements.* A large volume manufacturer that elects the optional Section 177 state compliance path under subdivision 1962.1(d)(5)(E)3., and does not meet the modified percentages in subdivision 1962.2(d)(5)(E)2.c. in a model year or make up their deficit within the specified time and with the specified credits allowed by subdivision 1962.2(g)(7)(A) in all Section 177 states of the applicable pool, shall be treated as subject to the total ZEV percentage requirements in section 1962.2(b) for all future model years in each Section 177 state, and the pooling provisions in subdivision 1962.2(d)(5)(E)2.c. shall not apply. Any future transfers of ZEV or TZEV credits between Section 177 states will be prohibited.

An intermediate volume manufacturer that elects the optional Section 177 state compliance path under subdivision 1962.1(d)(5)(E)3. or subdivision 1962.2(d)(5)(E)2. but delivers fewer ZEVs than required under subdivision 1962.2(d)(5)(E)2.a. shall make up the deficit by the end of the second model year in which the manufacturer is complying as a large volume manufacturer. For example, an intermediate volume manufacturer that becomes subject to large volume manufacturer requirements in 2019 model year must deliver the number of ZEVs required by subdivision 1962.2(d)(5)(E)2.a. by June 30, 2021. The pooling provisions in subdivision 1962.2(d)(5)(E)2.b.i and b.ii. shall not apply to an

intermediate volume manufacturer that fails to provide the required amount of ZEVs under subdivision 1962.2(d)(5)(E)2.a. In that case, any future transfers of ZEV or TZEV credits within or between Section 177 states will be prohibited.

Penalties shall be calculated separately by each Section 177 state where a manufacturer fails to make up the ZEV deficits within the specified time and with the credits allowed by subdivision 1962.2(g)(7)(A).

g. The provisions of section 1962.2 shall apply to a manufacturer electing the optional Section 177 state compliance path, except as specifically modified by this subdivision 1962.2(d)(5)(E)2.

(F) NEVs. NEVs must meet the following to be eligible for 0.15 credits:

1. *Specifications.* A NEV earns credit when it meets all the following specifications:

a. *Acceleration.* The vehicle has a 0-20 mph acceleration of 6.0 seconds or less when operating with a payload of at least 332 pounds and starting with the battery at a 50% state of charge.

b. *Top Speed.* The vehicle has a minimum top speed of 20 mph when operating with a payload of at least 332 pounds and starting with the battery at a 50% state of charge. The vehicle's top speed shall not exceed 25 mph when tested in accordance with [49 CFR 571.500](#) ([68 FR 43972](#), July 25, 2003).

c. *Constant Speed Range.* The vehicle has a minimum 25-mile range when operating at constant top speed with a payload of at least 332 pounds and starting with the battery at 100% state of charge.

2. *Battery Requirement.* A NEV must be equipped with one or more sealed, maintenance-free batteries.

3. *Warranty Requirement.* A NEV drive train, including battery packs, must be covered for a period of at least 24 months. The first 6 months of the NEV warranty period must be covered by a full warranty; the remaining warranty period may be optional extended warranties (available for purchase) and may be prorated. If the extended warranty is prorated, the percentage of the battery pack's original value to be covered or refunded must be at least as high as the percentage of the prorated coverage period still remaining. For the purpose of this computation, the age of the battery pack must be expressed in intervals no larger than three months. Alternatively, a manufacturer may cover 50 percent of the original value of the battery pack for the full period of the extended warranty.

Prior to credit approval, the Executive Officer may request that the manufacturer provide copies of representative vehicle and battery warranties.

4. *NEV Charging Requirements.* A NEV must meet charging requirements specific in subdivision 1962.3(c).

(G) *BEVx.* A BEVx must meet the following in order to receive credit, based on its all electric UDDS Range, through subdivision 1962.2(d)(5)(A):

1. *Emissions Requirements.* BEVxs must meet all TZEV requirements, specified in subdivision 1962.2(c)(2)(A) through (D).
2. *APU Operation.* The vehicle's UDDS range after the APU first starts and enters “charge sustaining hybrid operation” must be less than or equal to the vehicle's UDDS all-electric test range prior to APU start. The vehicle's APU cannot start under any user-selectable driving mode unless the energy storage system used for traction power is fully depleted.
3. *Minimum Zero Emission Range Requirements.* BEVxs must have a minimum of 75 miles UDDS all electric range.

(e) [Reserved]

(f) [Reserved]

(g) *Generation and Use of Credits; Calculation of Penalties*

(1) *Introduction.* A manufacturer that produces and delivers for sale in California ZEVs or TZEVs in a given model year exceeding the manufacturer's ZEV requirement set forth in subdivision 1962.2(b) shall earn ZEV credits in accordance with this subdivision 1962.2(g).

(2) *ZEV Credit Calculations.*

(A) *Credits from ZEVs.* The amount of credits earned by a manufacturer in a given model year from ZEVs shall be expressed in units of credits, and shall be equal to the number of credits from ZEVs produced and delivered for sale in California that the manufacturer applies towards meeting the ZEV requirements, or, if applicable, requirements specified under subdivision 1962.2(d)(5)(E)1.a. for the model year subtracted from the number of ZEVs produced and delivered for sale in California by the manufacturer in the model year.

(B) *Credits from TZEVs.* The amount of credits earned by a manufacturer in a given model year from TZEVs shall be expressed in units of credits, and shall be equal to the total number of TZEVs produced and delivered for sale in California that the manufacturer applies towards meeting its ZEV requirement, or, if applicable, requirements specified under subdivision 1962.2(d)(5)(E)1.a. for the model year subtracted from the total number of ZEV allowances from TZEVs produced and delivered for sale in California by the manufacturer in the model year.

(C) *Separate Credit Accounts.* Credits from a manufacturer's ZEVs, BEVxs, TZEVs, and NEVs shall each be maintained in separate accounts.

(D) *Rounding Credits.* ZEV credits and debits shall be rounded to the nearest 1/100th only on the final credit and debit totals using the conventional rounding method.

(3) *ZEV Credits for MDVs.* Credits from ZEVs and TZEVs classified as MDVs, may be counted toward the ZEV requirement for PCs and LDTs, and included in the calculation of ZEV credits as specified in this subdivision 1962.2(g) if the manufacturer so specifies.

(4) *ZEV Credits for Advanced Technology Demonstration Programs.*

(A) *[Reserved]*

(B) *ZEVs.* ZEVs, including BEVxs, excluding NEVs, placed in a small or intermediate volume manufacturer's California advanced technology demonstration program for a period of two or more years, may earn ZEV credits even if the vehicle is not "delivered for sale" or registered with the California DMV. To earn such credits, the manufacturer must demonstrate to the reasonable satisfaction of the Executive Officer that the vehicles will be regularly used in applications appropriate to evaluate issues related to safety, infrastructure, fuel specifications or public education, and that for 50 percent or more of the first two years of placement the vehicle will be operated in California. Such a vehicle is eligible to receive the same credit that it would have earned if delivered for sale, and for fuel cell vehicles, placed in service. To determine vehicle credit, the model year designation for a demonstration vehicle shall be consistent with the model year designation for conventional vehicles placed in the same timeframe. Manufacturers may earn credit for up to 25 vehicles per model, per Section 177 state, per year under this subdivision 1962.2(g)(4). A manufacturer's vehicles in excess of the 25-vehicle cap will not be eligible for advanced technology demonstration program credits.

(5) *ZEV Credits for Transportation Systems.*

(A) *[Reserved]*

(B) *[Reserved]*

(C) *Cap on Use of Transportation System Credits.*

1. *ZEVs.* Transportation system credits earned or allocated by ZEVs or BEVxs pursuant to subdivision 1962.1 (g)(5), not including any credits earned by the vehicle itself, may be used to satisfy up to one-tenth of a manufacturer's ZEV obligation in any given model year, and may be used to satisfy up to one-tenth of a manufacturer's ZEV obligation which must be met with ZEVs, as specified in subdivision 1962.2(b)(2)(E) or, if applicable, requirements specified under subdivision 1962.2(d)(5)(E)2.a.

2. *TZEVs.* Transportation system credits earned or allocated by TZEVs pursuant to subdivision 1962.1(g)(5), not including all credits earned by the vehicle itself, may be used to satisfy up to one-tenth of the portion of a manufacturer's ZEV obligation that may be met with TZEVs, or, if applicable, the portion of a manufacturer's obligation that may be met with TZEVs specified under subdivision 1962.2(d)(5)(E)2.a. in any given model year, but may only be used in the same manner as other credits earned by vehicles of that category.



(6) *Use of ZEV Credits.* A manufacturer may meet the ZEV requirements in a given model year by submitting to the Executive Officer a commensurate amount of ZEV credits, consistent with subdivision 1962.2(b). Credits in each of the categories may be used to meet the requirement for that category as well as the requirements for lesser credit earning ZEV categories, but shall not be used to meet the requirement for a greater credit earning ZEV category, except for discounted PZEV and AT PZEV credits. For example, credits produced from TZEVs may be used to comply with the portion of the requirement that may be met with credits from TZEV, but not with the portion that must be satisfied with credits from ZEVs. These credits may be earned previously by the manufacturer or acquired from another party.

(A) *Use of Discounted PZEV and AT PZEV Credits and NEV Credits.* For model years 2018 through 2025, discounted PZEV and AT PZEV credits, and NEV credits may be used to satisfy up to one-quarter of the portion of a manufacturer's requirement that can be met with credits from TZEVs, or, if applicable, the portion of a manufacturer's obligation that may be met with TZEVs specified under subdivision 1962.2(d)(5)(E)2.a. Intermediate volume manufacturers may fulfill their entire requirement with discounted PZEV and AT PZEV credits, and NEV credits in model years 2018 and 2019. These credits may be earned previously by the manufacturer or acquired from another party. Discounted PZEV and AT PZEV credits may no longer be used after model year 2025 compliance.

(B) *Use of BEVx Credits.* BEVx credits may be used to satisfy up to 50% of the portion of a manufacturer's requirement that must be met with ZEV credits.

(C) *GHG-ZEV Over Compliance Credits.*

1. *Application.* Manufacturers may apply to the Executive Officer, no later than December 31, 2016, to be eligible for this subdivision 1962.2(g)(6)(C), based on the following qualifications:

a. A manufacturer must have no model year 2017 compliance debits and no outstanding debits from all previous model year compliance with sections 1961.1 and 1961.3, or must have demonstrated compliance with the National greenhouse gas program as allowed by subdivisions 1961.1(a)(1)(A)(ii) and 1961.3(c); and

b. A manufacturer must have no model year 2017 compliance debits and no outstanding debits from all previous model year compliance with section 1962.1; and

c. A manufacturer must submit documentation of its projected product plans to show over compliance with the manufacturer's section 1961.3 requirements, or over compliance with National greenhouse gas program requirements as allowed by subdivision 1961.3(c), by at least 2.0 gCO<sub>2</sub>/mile in each model year through the entire 2018 through 2021 model year period, and its commitment to do so in each year.

2. *Credit Generation and Calculation.* Manufacturers must calculate their over compliance with section 1961.3 requirements, or over compliance with the National greenhouse gas program requirements as allowed by subdivision 1961.3(c), for model years 2018 through 2021 based on compliance with the previous model year standard. For example, to generate credits for this subdivision 1962.2(g)(6)(C) for model year 2018, manufacturers would calculate credits based on model year 2017 compliance with section 1961.3, or over compliance with the National greenhouse gas program as allowed by subdivision 1961.3(c).

a. At least 2.0 gCO<sub>2</sub>/mile over compliance with section 1961.3, or over compliance with the National greenhouse gas program as allowed by subdivision 1961.3(c), is required in each year and the following equation must be used to calculate the amount of ZEV credits earned for purposes of this subdivision 1962.2(g)(6)(C), and:

$$\frac{[(\text{Manufacturer US PC and LDT Sales}) \times (\text{gCO}_2/\text{mile below manufacturer GHG standard for a given model year})]}{(\text{Manufacturer GHG standard for a given model year})}$$

b. Credits earned under subdivision 1961.3(a)(9), or credits earned under 40 CFR, part 86, Subpart S, §86.1866-12(a), §86.1866-12(b), or §86.1870-12, may not be included in the calculation of gCO<sub>2</sub>/mile credits for use in the above equation in subdivision a. All ZEVs included in the calculation above must include upstream emission values found in section 1961.3.

c. Banked gCO<sub>2</sub>/mile credits earned under sections 1961.1 and 1961.3, or under the National greenhouse gas program requirements as allowed by subdivision 1961.3(c), from previous model years or from other manufacturers may not be included in the calculation of gCO<sub>2</sub>/mile credits for use in the above equation in subdivision a.

3. *Use of GHG-ZEV Over Compliance Credits.* A manufacturer may use no more than the percentage enumerated in the table below to meet either the total ZEV requirement nor the portion of their ZEV requirement that must be met with ZEV credits, with credits earned under this subdivision 1962.2(g)(6)(C).

2018	2019	2020	2021
50%	50%	40%	30%

Credits earned in any given model year under this subdivision 1962.2(g)(6)(C) may only be used in the applicable model year and may not be used in any other model year.

gCO<sub>2</sub>/mile credits used to calculate GHG-ZEV over compliance credits under this provision must also be removed from the manufacturer's GHG compliance bank, and cannot be banked for future compliance toward section 1961.3, or towards compliance with the National greenhouse gas program requirements as allowed by subdivision 1961.3(c).

4. *Reporting Requirements.* Annually, manufacturers are required to submit calculations of credits for this subdivision 1962.2(g)(6)(C) for the model year, any remaining credits/debits from previous model years under section 1961.3 or under the National greenhouse gas program requirements as allowed by subdivision 1961.3(c), and projected credits/debits for future years through 2021 under section 1961.3 or under the National greenhouse gas program requirements as allowed by subdivision 1961.3(c) and this subdivision 1962.2(g)(6)(C).

If a manufacturer, who has been granted the ability to generate credits under this subdivision 1962.2(g)(6)(C), fails to over comply by at least 2.0 gCO<sub>2</sub>/mile in any one year, the manufacturer will be subject to the full ZEV requirements for the model year and future model years, and will not be able to earn credits for any other model year under this subdivision 1962.2(g)(6)(C).

(D) *Cap on Use of Specified Credits.* For 2018 and subsequent model year, manufacturers may only meet up to 50% of the portion of their requirement that must be met with credits from ZEVs from a combination of credits earned under

subsections 1962.1(d)(5)(G), 1962.2 (d)(5)(G), 1962.1(g)(5), or 1962.2(g)(6)(C). Individual caps for credits earned under subsections 1962.1(d)(5)(G), 1962.2 (d)(5)(G), 1962.1(g)(5), or 1962.2(g)(6)(C) remain in effect in any given model year.

(7) *Requirement to Make Up a ZEV Deficit.*

(A) *General.* A manufacturer that produces and delivers for sale in California fewer ZEVs or TZEVs than required to meet its ZEV credit obligation in a given model year must make up the deficit by the next model year by submitting a commensurate amount of ZEV credits to the Executive Officer. An intermediate volume manufacturer may request, and the Executive Officer may grant, up to three consecutive model years to make up a credit deficit for a given model year provided that: (1) it has delivered for sale in California ZEVs or TZEVs within that model year, and (2) it submits a plan to the Executive Officer, as part of the request, demonstrating how it will make up the credit deficit within the requested time period. The amount of ZEV credits required to be submitted shall be calculated by [i] adding the number of credits from ZEVs produced and delivered for sale in California by the manufacturer for the model year to the number of credits from TZEVs produced and delivered for sale in California by the manufacturer for the model year (for a LVM, not to exceed that permitted under subdivision 1962.2(b)(2)), and [ii] subtracting that total from the number of credits required to be produced and delivered for sale in California by the manufacturer for the model year. BEV<sub>x</sub>, TZEV, NEV, or converted AT PZEV and PZEV credits are not allowed to be used to fulfill a manufacturer's ZEV deficit; only credits from ZEVs may be used to fulfill a large volume manufacturer's ZEV deficit. Intermediate volume manufacturers may only use ZEV and TZEV credits to fulfill a manufacturer's ZEV deficit.

(8) *Penalty for Failure to Meet ZEV Requirements.* Any manufacturer that fails to produce and deliver for sale in California the required number of ZEVs and submit an appropriate amount of credits and does not make up ZEV deficits within the specified time allowed by subdivision 1962.2(g)(7)(A) shall be subject to the [Health and Safety Code section 43211](#) civil penalty applicable to a manufacturer that 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 ZEV deficit is not balanced by the end of the specified time allowed by subdivision 1962.2(g)(7)(A). For the purposes of [Health and Safety Code section 43211](#), the number of vehicles not meeting the state board's standards shall be equal to the manufacturer's credit deficit, rounded to the nearest 1/100th, calculated according to the following equation, provided that the percentage of a manufacturer's ZEV requirement for a given model year that may be satisfied with TZEVs or credit from such vehicles may not exceed the percentages permitted under subdivision 1962.2(b)(2):

(No. of ZEV credits required to be generated for the model year) - (Amount of credits submitted for compliance for the model year)

(h) *Test Procedures.*

(1) *Determining Compliance.* The certification requirements and test procedures for determining compliance with this section 1962.2 are set forth in "California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes," adopted March 22, 2012, and last amended September 3, 2015, which is incorporated herein by reference.

(2) *NEV Compliance.* The test procedures for determining compliance with subdivision 1962.1(d)(5)(F)1. are set forth in ETA-NTP002 (revision 3) "Implementation of SAE Standard J1666 May 93: Electric Vehicle Acceleration,

Gradeability, and Deceleration Test Procedure” (December 1, 2004), and ETA-NTP004 (revision 3) “Electric Vehicle Constant Speed Range Tests” (February 1, 2008), both of which are incorporated by reference herein.

(i) *ZEV-Specific Definitions*. The following definitions apply to this section 1962.2.

(1) “Auxiliary power unit” or “APU” means any device that provides electrical or mechanical energy, meeting the requirements of subdivision 1962.2(c)(2), to a BEV<sub>x</sub>, after the zero emission range has been fully depleted. A fuel fired heater does not qualify under this definition for an APU.

(2) “Charge depletion range actual” or “R<sub>cda</sub>” means the distance achieved by a hybrid electric vehicle on the urban driving cycle at the point when the zero-emission energy storage device is depleted of off-vehicle charge and regenerative braking derived energy.

(3) “Conventional rounding method” means to increase the last digit to be retained when the following digit is five or greater. Retain the last digit as is when the following digit is four or less.

(4) “Discounted PZEV and AT PZEV credits” means credits earned under section 1962 and 1962.1 by delivery for sale of PZEVs and AT PZEVs, discounted according to subdivision 1962.1(g)(2)(F).

(5) “East Region pool” means the combination of Section 177 states east of the Mississippi River.

(6) “Energy storage device” means a storage device able to provide the minimum power and energy storage capability to enable engine stop/start capability, traction boost, regenerative braking, and (nominal) charge sustaining mode driving capability. In the case of TZEVs, a minimum range threshold relative to certified, new-vehicle range capability is not specified or required.

(7) “Hydrogen fuel cell vehicle” means a ZEV that is fueled primarily by hydrogen, but may also have off-vehicle charge capability.

(8) “Hydrogen internal combustion engine vehicle” means a TZEV that is fueled exclusively by hydrogen.

(9) “Majority ownership situations” means when one manufacturer owns another manufacturer more than 33.4%, for determination of size under CCR Section 1900.

(10) “Manufacturer US PC and LDT Sales” means a manufacturer's total passenger car and light duty truck (up to 8,500 pounds loaded vehicle weight) sales sold in the United States of America in a given model year.

(11) “Neighborhood electric vehicle” or “NEV” means a motor vehicle that meets the definition of Low-Speed Vehicle either in [section 385.5 of the Vehicle Code](#) or in [49 CFR 571.500](#) (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

(12) “Placed in service” means having been sold or leased to an end-user and not to a dealer or other distribution chain entity, and having been individually registered for on-road use by the California DMV.

(13) “Proportional value” means the ratio of a manufacturer's California applicable sales volume to the manufacturer's Section 177 state applicable sales volume. In any given model year, the same applicable sales volume calculation method must be used to calculate proportional value.

(14) “Range Extended Battery Electric Vehicle” or “BEVx” means a vehicle powered predominantly by a zero emission energy storage device, able to drive the vehicle for more than 75 all-electric miles, and also equipped with a backup APU, which does not operate until the energy storage device is fully depleted, and meeting requirements in subdivision 1962.2(d)(5)(G).

(15) “Section 177 state” means a state that is administering the California ZEV requirements pursuant to section 177 of the federal Clean Air Act (42 U.S.C. § 7507).

(16) “Transitional zero emission vehicle” or “TZEV” means a vehicle that meets all the criteria of subdivision 1962.2(c)(2) and qualifies for an allowance in subdivision 1962.2(c)(3)(A) or (E).

(17) “West Region pool” means the combination of Section 177 states west of the Mississippi River.

(18) “Zero emission vehicle” or “ZEV” means a vehicle that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

(19) “Zero emission vehicle fuel” means a fuel that provides traction energy in on-road ZEVs. Examples of current technology ZEV fuels include electricity, hydrogen, and compressed air.

(j) *Abbreviations.* The following abbreviations are used in this section 1962.2:

“AER” means all-electric range.

“APU” means auxiliary power unit.

“AT PZEV” means advanced technology partial zero-emission vehicle.

“BEVx” means range extended battery electric vehicle.

“CFR” means Code of Federal Regulations.

“CO<sub>2</sub>” means carbon dioxide.

“DMV” means the California Department of Motor Vehicles.

“EAER” means equivalent all-electric range.

“FR” means Federal Register.

“g” means grams.

“HEV” means hybrid-electric vehicle.

“LDT” means light-duty truck.

“LDT1” means a light-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, or a “LEV I” light-duty truck with a loaded vehicle weight of 3751-5750 pounds.

“LVM” means large volume manufacturer.

“MDV” means medium-duty vehicle.

“NMOG” means non-methane organic gases, or the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

“NEV” means neighborhood electric vehicle.

“NOx” means oxides of nitrogen.

“PC” means passenger car.

“PZEV” means partial allowance zero-emission vehicle

“SAE” means Society of Automotive Engineers.

“SULEV” means super-ultra-low-emission-vehicle.

“TZEV” means transitional zero emission vehicle.

“UDDS” means urban dynamometer driving cycle.

“US” means United States of America.

“US06” means the US06 Supplemental Federal Test Procedure

“VMT” means vehicle miles traveled.

“ZEV” means zero-emission vehicle.

(k) *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.

(l) *Public Disclosure.* Records in the Board's possession for the vehicles subject to the requirements of section 1962.2 shall be subject to disclosure as public records as follows:

- (1) Each manufacturer's annual production data and the corresponding credits per vehicle earned for ZEVs and TZEVs for the 2018 and subsequent model years; and
- (2) Each manufacturer's annual credit balances for 2018 and subsequent years for:
  - (A) Each type of vehicle: ZEV (minus NEV), BEV<sub>x</sub>, NEV, TZEV, and discounted PZEV and AT PZEV credits; and
  - (B) Advanced technology demonstration programs; and
  - (C) Transportation systems; and
  - (D) Credits earned under section 1962.2(d)(5)(A), including credits acquired from, or transferred to another party, and the parties themselves.

Note: Authority cited: [Sections 39600, 39601, 43013, 43018, 43101, 43104 and 43105, Health and Safety Code](#). Reference: [Sections 38562, 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43018.5, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43204 and 43205.5, Health and Safety Code](#).

## HISTORY

1. Renumbering of former section 1962.1 to new section 1962.2 filed 3-18-2009; operative 4-17-2009 (Register 2009, No. 12).
2. Renumbering of former section 1962.2 to section 1962.3 and new section 1962.2 filed 8-7-2012; operative 8-7-2012 pursuant to [Government Code section 11343.4](#) (Register 2012, No. 32).
3. Amendment of subsections (c), (c)(2)(B), (c)(3)(A), (c)(3)(A)1., (g)(6)(C)1.a.-c. and (g)(6)(C)2.-(g)(6)(C)4., repealer of subsection (g)(6)(C)5. and amendment of subsection (h)(1) filed 12-31-2012; operative 12-31-2012 pursuant to [Government Code section 11343.4](#) (Register 2013, No. 1).
4. Amendment of subsections (c)(3)(A)-(c)(3)(A)1., subsections within subsections (d) and (g) and subsection (h)(1) filed 7-10-2014; operative 7-10-2014 pursuant to [Government Code section 11343.4\(b\)\(3\)](#) (Register 2014, No. 28).
5. Amendment of subsection (h)(1) filed 10-8-2015; operative 10-8-2015 pursuant to [Government Code section 11343.4\(b\)\(3\)](#) (Register 2015, No. 41).
6. Amendment of subsections (b)(7)-(b)(7)(A), (c)(3)(A)-(c)(3)(A)1., redesignation of former subsection (d)(5)(E) as new subsection (d)(5)(E)1., subsection renumbering, new subsections (d)(5)(E)2.a.-(d)(5)(E)2.b.ii., subsection relettering and amendment of newly designated subsections (d)(5)(E)c.-g., (g)(7)(A), (h)(1) and (i)(16) filed 10-12-2015; operative 1-1-2016 (Register 2015, No. 42).

This database is current through 6/5/20 Register 2020, No. 23

13 CCR § 1962.2, 13 CA ADC § 1962.2

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End of Document

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## ORAL ARGUMENT NOT YET SCHEDULED

No. 19-1230

Consolidated with Nos. 19-1239, 19-1241, 19-1242, 19-1243,  
19-1245, 19-1246, 19-1249, 20-1175, and 20-1178

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

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UNION OF CONCERNED SCIENTISTS et al.,  
*Petitioners,*

v.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION,  
*Respondent,*

COALITION FOR SUSTAINABLE AUTOMOTIVE REGULATION et al.,  
*Respondent-Intervenors.*

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**STATE AND LOCAL GOVERNMENT PETITIONERS AND PUBLIC  
INTEREST PETITIONERS' ADDENDUM OF STATUTES,  
REGULATIONS, AND STANDING DECLARATIONS**

**VOLUME B: STANDING DECLARATIONS**

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**UNITED STATES COURT OF APPEALS  
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UNION OF CONCERNED  
SCIENTISTS, *et al.*,

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v.

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

*Respondents.*

No. 19-1230

(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, and upon my review of the relevant rulemakings, reports, and other documents discussed below. I submit this declaration in support of the State, Local Government, and Public Interest Petitioners' Brief filed in this challenge to the final actions of the United States Environmental Protection Agency and the National Highway Traffic Safety Administration, the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, Part One: One National Program," 84 Fed. Reg. 51,310 (September 27, 2019) (Actions).

2. I am the Chief of the Air Quality Planning Branch in the Air Quality Planning & Science Division at the California Air Resources Board (CARB). I have held this position since May 2013.

3. I am the lead manager responsible for the Clean Air Act state implementation planning development throughout the State, emission inventory development, and control strategy development 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 Strategy<sup>1</sup> 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 and climate change, 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 contribute to air pollution, is critical to my management of

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<sup>1</sup> Mobile Source Strategy (May 2016),  
<https://ww3.arb.ca.gov/planning/sip/2016sip/2016mobsrsrc.pdf>.

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 Clean Air Act (Act) requires states to develop and enforce state 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. The United States Environmental Protection Agency (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<sub>2.5</sub>)—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.

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<sub>2.5</sub>, and 2025 for annual PM<sub>2.5</sub>, 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<sub>x</sub> emissions from on-road light-and heavy-duty vehicles by 85% from 2015 levels.<sup>2</sup>

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 does not attain an air quality standard by the applicable deadline under the Clean Air Act, the consequences are substantial. One significant consequence for failing to meet a standard in the time required is additional obligations on the State to develop and submit a new plan that could lead to increased costs and restrictions on the myriad activities that cause air pollution.

#### **California's Zero-Emission Vehicle Standards and Greenhouse Gas Emission Standards for Light-duty Vehicles Are Important for Reducing Criteria Pollution**

14. California's zero-emission vehicle (ZEV) and greenhouse gas emission standards for light-duty vehicles are critical tools for reducing emissions of criteria pollutants and greenhouse gases and thereby achieving attainment of NAAQS for particulate matter and ozone.

15. Since 2009, the ZEV standards have required increased sales of ZEVs in the light-duty vehicle fleet over time. ZEVs emit fewer criteria pollutants than do

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<sup>2</sup> 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>.

conventional gasoline-fueled vehicles. For instance, ZEVs have zero evaporative emissions of hydrocarbons, and they have lower emissions of NO<sub>x</sub>, carbon monoxide, and fine particulate matter. Therefore, ZEV displacement of combustion-engine vehicles, to comply with both the ZEV standard and the greenhouse gas emission standard, reduces these emissions and ambient concentrations of PM<sub>2.5</sub> and ozone. In fact, in its 2016 Strategy for the State Implementation Plan, California relied on its ZEV standards as a critical component to meet the PM<sub>2.5</sub> and ozone NAAQS.<sup>3</sup> The ZEV standards are a critical component in the Extreme ozone state implementation plans for the San Joaquin Valley and the South Coast air basins.<sup>4</sup>

16. ZEV technology has significantly advanced since CARB adopted its greenhouse gas emission and ZEV standards beginning with the 2012 model year. As zero-emission technology has improved for light-duty vehicles, the technology has and will become available for other applications. This will lead to greater criteria, toxic, and greenhouse gas emission reductions over time. This expansion is essential for California to meet its goals and obligations to reduce emissions, as explained, for example, in CARB's 2016 Mobile Source Strategy. This comprehensive planning document describes how the State relies on zero-emission technology and other emission reductions to simultaneously meet health-based air quality standards,

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<sup>3</sup> CARB, Revised Proposed 2016 State Strategy for the State Implementation Plan (Mar. 7, 2017).

<sup>4</sup>San Joaquin Valley APCD, 2016 Ozone Plan for 2008 8-Hour Ozone Standard (June 16, 2016); South Coast AQMD, 2016 Air Quality Management Plan (March 3, 2017).

greenhouse gas emission reduction targets, and its other pollution-related goals.

Pertinent here, it described “actions to deploy zero-emission technologies across a broad spectrum of sources, including passenger vehicles, targeted truck and bus applications, forklifts, transport refrigeration units, and airport ground support equipment.”<sup>5</sup>

17. In addition, the greenhouse gas emission reductions associated with CARB’s greenhouse gas emission and ZEV standards are critical for attaining the NAAQS. Climate change is making it more difficult to attain NAAQS for ozone and particulate matter, because 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

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<sup>5</sup> Mobile Source Strategy at 7 (May 2016), <https://ww3.arb.ca.gov/planning/sip/2016sip/2016mobsrc.pdf>.

temperatures on record.<sup>6</sup> Additional emission controls will need to be implemented to make up for the “climate penalty” that causes higher air pollutant concentrations.<sup>7,8,9</sup>

18. The increased frequency of wildfires and droughts due to climate change will also impede progress toward attainment. Decades of air pollution gains within the western United States are being erased by the increasing number and severity of wildfires.<sup>10</sup> Smoke from wildfires contains fine particulate matter, which is the most damaging size of particulate matter for human health. Similarly, climate change is increasing the frequency of droughts, which will increase wind erosion and ambient dust concentration.<sup>11</sup> 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

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<sup>6</sup> 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>.

<sup>7</sup> D.J. Jacob & D.A. Winner, *Effect of Climate Change on Air Quality*, *ATMOS. ENVIRON.* 43, 51–63 (2009).

<sup>8</sup> S. Wu, et al., *Effects of 2000–2050 Global Change on Ozone Air Quality in the United States*, *J. GEOPHYS. RES.-ATMOS.*, 113 (2008).

<sup>9</sup> A.M. Fiore, et al., *Air Quality and Climate Connections*, *J. AIR WASTE MANAGE. ASSOC.* 65 (6), 645–685 (2015).

<sup>10</sup> *Proc. Nat'l Acad. Sci.* (Jul. 16, 2018), <https://www.ncbi.nlm.nih.gov/pubmed/30012611>.

<sup>11</sup> 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).

infections like bronchitis and pneumonia, which will result in greater health costs to the State.<sup>12,13</sup>

**The SAFE Part One Actions increase criteria pollutant and greenhouse gas emissions and jeopardize several of California's NAAQS attainment plans by necessitating additional emission reductions.**

19. By withdrawing the Clean Air Act waiver for and declaring California ZEV and greenhouse gas emission standards for light-duty vehicles preempted, the federal Agencies' Part One Actions will result in higher criteria pollutant and greenhouse gas emissions and increase concentrations of ground-level ozone and particulate matter.

20. In particular, without enforceable ZEV sales requirements, it is reasonable to expect that there would be fewer ZEVs produced and sold and thus additional gasoline-fueled vehicles produced and sold in future years to meet the market's demand for vehicles, all else being equal. This will increase criteria pollutant emissions, as CARB modeling has confirmed. And the increase in greenhouse gas emissions resulting from preemption of both standards will also impede progress toward attaining NAAQS.

21. As a result, for each of California's current implementation plans that included the ZEV mandate, the increased emissions resulting from the Part One

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<sup>12</sup> C. Stanke, et al., *Health Effects of Drought: A Systematic Review of the Evidence*, PLOS CURRENTS, 5 (2013).

<sup>13</sup> 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).

Actions will need to be mitigated by developing additional control measures. But the implementation plans already include all reasonably available control measures and other measures necessary to attain the standards by the Clean Air Act's deadlines. Moreover, section 182(e)(5) of the 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 already worked with the South Coast air district to include these new or improved technologies expectations into the existing implementation plan<sup>14</sup>—and this was based in part on a robust State ZEV mandate. Developing additional control measures, therefore, would be onerous in all nonattainment areas, but would 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 June 22, 2020, at Sacramento, County of Sacramento, California.

  
SYLVIA VANDERSPEK

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<sup>14</sup> 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.

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*Respondents.*

No. 19-1230  
(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 B.S. in Earth and Atmospheric Sciences from the Georgia Institute of Technology, a Masters of Public Policy from the Kennedy School of Government at Harvard University, and a Masters 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 (U.S. 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, Local Government, and Public Interest Petitioners' Brief filed in this challenge to the final actions of U.S. EPA and the National Highway Traffic Safety Administration (NHTSA), the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, Part One: One National Program," 84 Fed. Reg. 51,310 (Sept. 27, 2019) ("Actions").

### **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, the predominant source of climate-change-causing greenhouse gas emissions has been human activities. Human activities cause the emission of greenhouse gases in various ways, including 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 (CO<sub>2</sub>), methane, and nitrous oxide; of those three, CO<sub>2</sub> is the most important because, even though it absorbs less heat per molecule than methane or nitrous oxide, it is more abundant and stays in the atmosphere much

longer. Before the Industrial Revolution started in the mid-1700s, the global average amount of CO<sub>2</sub> was about 280 parts per million. The most recent data from the National Oceanic and Atmospheric Association (NOAA) shows average global CO<sub>2</sub> concentrations, measured at Mauna Loa Observatory in April 2020, at 416.21 parts per million, the highest since measurements began in Hawaii in 1958.<sup>1</sup>

8. Because of this dramatic uptick in CO<sub>2</sub> concentrations, the average global temperature has already risen almost one degree Celsius (1.8 degrees Fahrenheit) since pre-industrial times.<sup>2</sup> 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 five years have been the warmest of the last 140 years.<sup>3</sup>

9. The warming climate is also driving up ocean surface temperatures. The ocean has absorbed about 29 percent of global CO<sub>2</sub> emissions since the end of the pre-industrial era. Adding additional CO<sub>2</sub> to the ocean is changing the ocean's chemistry, making it more acidic and slowing its ability to take up more CO<sub>2</sub>. If the

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<sup>1</sup> NOAA Global Monitoring Laboratory, TRENDS IN ATMOSPHERIC CARBON DIOXIDE, <https://www.esrl.noaa.gov/gmd/ccgg/trends/>.

<sup>2</sup> 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](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.).

<sup>3</sup> James Hanson, et al., *Global Temperature in 2019* (Jan. 15, 2020), [http://www.columbia.edu/~jeh1/mailings/2020/20200115\\_Temperature2019.pdf](http://www.columbia.edu/~jeh1/mailings/2020/20200115_Temperature2019.pdf)

ocean starts to take up less CO<sub>2</sub>, 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 and melting sea ice and glaciers around the world.

10. The timing of greenhouse gas emissions is also important because greenhouse gases can remain in the atmosphere for long time periods. Their warming effect is compounded by future emissions, thereby accelerating climate impacts. Carbon dioxide in particular remains in the atmosphere longer than the other major greenhouse gases emitted as a result of human activities: once emitted, 40 percent will remain in the atmosphere for 100 years, 20 percent will reside for 1000 years, and the final 10 percent will take 10,000 years to turn over. Thus, emissions now more rapidly accelerate global warming than emissions later on. As explained in the 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).”<sup>4</sup>

11. The timing of greenhouse gas emissions also affects the likelihood of reaching climate tipping points. Tipping points are thresholds of abrupt and irreversible change (such as creating an irreversible shift to a hotter world with higher

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<sup>4</sup> U.S. Global Change Research Program, *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*, at 1488 (2018).

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)<sup>5,6</sup> suggest that tipping points could be exceeded by warming of even between 1 and 2 degrees Celsius. For instance, a recent commentary in the journal *Nature* warned that the acceleration of ice loss and other effects of climate change have brought the world “dangerously close” to tipping points.<sup>7</sup> As global temperature increases, threshold environmental events are increasingly likely to occur that will themselves significantly accelerate climate change beyond current projections.

12. Because of the compounding effect of greenhouse gas emissions (particularly CO<sub>2</sub>) and the cascade effect of tipping points, additional emissions now, which accelerate global warming and its impacts, are more harmful than additional emissions in the future.

### **California’s Climate Laws, Including Light-Duty Vehicle Emission Standards**

13. In anticipation of, and increasingly in response to, harms from climate change, California has been proactive in taking steps to reduce greenhouse gas emissions. In 2006, California enacted Assembly Bill (AB) 32, the Global Warming Solutions Act, requiring the State to reduce its greenhouse gas emissions to 1990

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<sup>5</sup> IPCC, *Global Warming of 1.5°C* (2018), <https://www.ipcc.ch/sr15/>.

<sup>6</sup> IPCC, *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate* (2019), <https://www.ipcc.ch/2019/09/25/srocc-press-release/>.

<sup>7</sup> 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>.

levels by 2020. This legislation directed CARB to adopt regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions. It further directed CARB to develop a Scoping Plan laying out California's strategy for meeting its climate goals, to be updated every five years. 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.

14. As part of its efforts to reduce both greenhouse gas emissions and criteria pollutants (air pollutants with national ambient air quality standards), CARB has regulated emissions from light-duty vehicles since 1959. In 2012, CARB combined these emission standards and established its Advanced Clean Cars program. In 2013, California obtained from U.S. EPA a waiver of preemption under the Clean Air Act for each component of this program, including the State's vehicle criteria pollutant standards, greenhouse gas emission standards, and zero-emission vehicle (ZEV) mandate.

15. California's ZEV mandate is technology forcing, as it has required increasing numbers of ZEVs to be sold annually within the State since 2009.<sup>8</sup> And it has been successful: sales of ZEVs have risen to more than 7 percent of new car sales

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<sup>8</sup> 13 Cal. Code Regs. §§ 1962.1, 1962.2.

in California, equal to more than 140,000 ZEVs and plug-in hybrids in 2019.<sup>9</sup>

California's ZEV mandate, if retained, would result in 1.5 million ZEVs on the road by 2025 and 4.2 million ZEVs on the road by 2030. California's light-duty vehicle greenhouse gas standards, if retained, would also have produced year-over-year reductions in greenhouse gas emissions, by about 5 percent per year for model years 2020 through 2025.<sup>10</sup> Together, California's light-duty vehicle greenhouse gas emission standards and the ZEV mandate with its resulting technological penetration were key pieces to California's 2017 Scoping Plan update, by which the State outlined how it would meet its progressive climate obligations.<sup>11</sup>

### **The Impacts of EPA and NHTSA's Actions**

16. EPA and NHTSA's September 27, 2019 Actions will result in higher greenhouse gas emissions. In addition to preventing enforcement of standards that require greenhouse gas emission reductions, these Actions will result in fewer ZEVs sold and thus additional gasoline-fueled vehicles sold in future years. These additional gasoline-fueled cars will produce substantially more greenhouse gas emissions over their lifetimes than the ZEVs they will displace not only because gasoline-fueled vehicles produce emissions, unlike ZEVs, but also because vehicle tailpipe emissions

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<sup>9</sup> *E.g.*, California New Car Dealers Association, 16 CAL. AUTO OUTLOOK, no. 1, Feb. 2020, at 2, <https://www.cncda.org/wp-content/uploads/Cal-Covering-4Q-19.pdf>.

<sup>10</sup> 13 Cal. Code Regs. § 1961.3.

<sup>11</sup> *E.g.*, CARB, *California's 2017 Climate Change Scoping Plan* at 25 (Nov. 2017), [https://ww3.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).

substantially increase over time due to the deterioration of the emission controls. For instance, a model year 2020 gasoline-fueled vehicle overall produces about four times as many greenhouse gas emissions as a ZEV.<sup>12</sup>

17. Over time, these repercussions will expand. Without the critical push from the ZEV standards, we can expect ZEVs' market share to at best stagnate and not expand at the rate needed to meet California's climate and public health requirements. This loss of progressive greenhouse gas emissions reductions from expanding zero-emission technology and from increasingly stringent light-duty vehicle greenhouse gas emission standards amplifies the risk of further climate impacts California is already facing, 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 wildfires<sup>13</sup> to rising sea levels and increasingly

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<sup>12</sup> CARB, *Fact Sheet: The Zero Emission Vehicle (ZEV) Regulation* (2018), [https://ww2.arb.ca.gov/sites/default/files/2019-06/zev\\_regulation\\_factsheet\\_082418\\_0.pdf](https://ww2.arb.ca.gov/sites/default/files/2019-06/zev_regulation_factsheet_082418_0.pdf).

<sup>13</sup> 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>.

acidic seas<sup>14</sup> to less reliable snowpack,<sup>15</sup> climate change poses an immediate and escalating threat to California's environment, public health, and economic vitality.

19. California is already experiencing the effects of climate change, and it is expected that these effects will worsen in the coming decades. For instance, average air temperatures have increased throughout the State since 1895, with the rate of increase accelerating since the 1980s. The last four years for which data are available were the hottest on record, with 2014 being the warmest, followed by 2015, 2017, and 2016. In July 2018, California experienced its hottest single month in 124 years of recordkeeping, according to NOAA's monthly summary of United States climate.<sup>16</sup> Nighttime temperatures have also been rising faster than daytime temperatures. Warmer air temperatures 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.<sup>17</sup>

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<sup>14</sup> 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>.

<sup>15</sup> 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>.

<sup>16</sup> Bob Henson, *July 2018: Hottest Month in California History, Record-Wet in Mid-Atlantic*, Wunderground.com (Aug. 8, 2018), <https://www.wunderground.com/cat6/July-2018-Hottest-Month-California-History-Record-Wet-Mid-Atlantic>.

<sup>17</sup> Office of Environmental Health Hazard Assessment, *Indicators of Climate Change*, [oehha.ca.gov/climate-change/document/indicators-climate-change-california](http://oehha.ca.gov/climate-change/document/indicators-climate-change-california).



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. 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 the State providing key services, and impairment of natural habitats within the State.<sup>18</sup>

21. 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 frequent flooding and inundation as well as increased cliff, bluff, dune, and beach erosion.<sup>19</sup>

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<sup>18</sup> Legislative Analyst's Office, *Assessing Vulnerability of State Assets to Climate Change* (Jan. 9, 2020), <https://lao.ca.gov/Publications/Report/4133>.

<sup>19</sup> 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).

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.<sup>20,21,22</sup> 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.<sup>23</sup> California’s annual wildfire extent has increased fivefold since the 1970s, aided by extremely large and destructive wildfires in 2017 and 2018. 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.<sup>24</sup> 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).<sup>25</sup>

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<sup>20</sup> 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](http://www.climateassessment.ca.gov/techreports/docs/20180827-Projections_CCCA4-CEC-2018-014.pdf).

<sup>21</sup> 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>.

<sup>22</sup> 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/>.

<sup>23</sup> 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).

<sup>24</sup> 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>.

<sup>25</sup> 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).

23. California's Fourth Climate Change Assessment<sup>26</sup> 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.<sup>27</sup> If greenhouse gas emissions continue to rise, 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.<sup>28</sup>

24. Climate change also exacerbates other air pollution problems throughout California. Increasing temperatures generally cause increases in ozone concentrations in California's polluted regions.<sup>29</sup> Increasing frequency and intensity of wildfires is already having a measurable effect on air quality.<sup>30</sup> And particulate matter exposure is a heightened problem during droughts, which climate change is also anticipated to exacerbate in California as changes in weather patterns block rainfall from reaching

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<sup>26</sup> CA.GOV, California's Fourth Climate Change Assessment, <http://www.climateassessment.ca.gov/>.

<sup>27</sup> 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](https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf).

<sup>28</sup> *Id.*

<sup>29</sup> *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>.

<sup>30</sup> 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).

the State.<sup>31,32</sup> Worse air quality leads to increased risk for respiratory infections like bronchitis and pneumonia, which will result in greater health costs to the State.<sup>33,34,35</sup>

25. Increasing greenhouse gas emissions, due to the federal agencies' Actions, will worsen these climate impacts throughout California.

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 June 22, 2020, at Sacramento, County of Sacramento, California.



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ELIZABETH SCHEEHLE

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<sup>31</sup> 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>.

<sup>32</sup> 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>.

<sup>33</sup> 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](https://www.rand.org/pubs/research_briefs/RB9501.html).

<sup>34</sup> 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.

<sup>35</sup> 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>.

UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

UNION OF CONCERNED  
SCIENTISTS, *et al.*,

*Petitioners,*

v.

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

*Respondents.*

No. 19-1230  
(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, Part One: One National Program," 84 Fed. Reg. 51,310 (Sept. 27, 2019) ("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 ("DPR"), 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 for the State Park System.

4. DPR 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 DPR.

6. For years, DPR 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 DPR and other agency staff concerning these phenomena.

7. Scientific models of global climate change— which link the buildup of greenhouse gases (“GHGs”) 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 GHG 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 even a few inches, the 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 one of the purposes of State Beaches, which 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, 18<sup>th</sup> century missions, historic lighthouses and piers, and buildings, including historic campgrounds and other sites constructed by the Civilian Conservation Corps. These kinds of 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, dating back thousands of years, 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. Fifteen of the 20 most destructive wildfires in the State's history have occurred since 2000, with 10 of the most destructive occurring since 2015.

12. Increases in the frequency and severity of wildfires will have a significant impact on the State Park System. DPR 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. For example, 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.

13. Observed changes, along with global climate change models, also suggest that coastal fog declines observed in recent decades could accelerate due to GHG-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 DPR.


14. DPR 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 associated revenues from the Sno-Park Program.

15. 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 GHGs from motor vehicles in California and other States due to the federal Agencies' Actions will result in increased impacts to the State Park System of the type I have described in this declaration. Conversely, the decreased GHGs that would result from vacating the federal Actions would reduce or 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 June 18, 2020 in SACRAMENTO, California.

  
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JAY CHAMBERLIN

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

UNION OF CONCERNED  
SCIENTISTS, *et al.*,

*Petitioners,*

v.

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

*Respondents.*

No. 19-1230  
(and consolidated cases)

**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 United States Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) to preempt California's state greenhouse gas emission and zero-emission vehicle standards for light-duty vehicles, the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, Part One: One National Program," 84 Fed. Reg. 51,310 (Sept. 27, 2019). 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 employees 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.

### **About the District**

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 the economic base for more than 16.9 million people and spans 10,743 square miles, and it 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 fine particulate matter, 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.
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 required under Section 110 of the Clean Air Act, 42 U.S.C. § 7410, applicable to its geographic jurisdiction. Cal. Health & Safety Code §§ 40460–40470.

### **Sources of Air Pollution**

6. The District uses emission inventories to help determine significant sources of air pollutants and to target regulatory actions. Consistent with this, the Clean Air Act requires attainment plans to use a “comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant.” 42 U.S.C. § 7502(c)(3). According to the District’s inventory, emissions from

mobile sources, including passenger automobiles and light trucks, represent over 80% of nitrogen oxide (NO<sub>x</sub>) pollution in the region. NO<sub>x</sub> is a leading precursor to ozone formation, and the control of NO<sub>x</sub>, including from mobile sources, is essential for the District to meet the ozone NAAQS.

7. The District is required by statute to attain the 2008 ozone standard no later than 2031. Attainment by this date is numerically impossible without further reductions of smog-forming pollutants either through the California Air Resources Board's (CARB) mobile source programs or through Federal requirements for mobile sources under Title II of the Clean Air Act.

#### **Need for Zero-Emission Technologies**

8. Zero-emission technologies are advanced technology or control equipment that generate zero end-use emissions from stationary or mobile source applications. Zero Emission Vehicles, or ZEVs, are vehicles that produce no emissions from their on-board source of power. For on-road light- and medium-duty vehicle categories, zero-emission technologies are already commercialized and being rapidly introduced in large part due to the CARB Advanced Clean Cars Program, which includes the ZEV program. Air pollution conditions in the South Coast Air Basin call for further deployment of zero-emission technologies for various mobile sources, including already-commercialized technology for passenger vehicle types covered by the ZEV program.



9. The ozone NAAQS cannot be achieved solely by stationary source emission reductions, and even wholesale elimination of those emissions could not achieve the NAAQS. The District lacks direct authority to regulate manufacture and sale of mobile sources and depends on CARB and U.S. EPA to develop and adopt enforceable emission standards for all mobile source types.
10. The actions of EPA and the National Highway Traffic Safety Administration (NHTSA) under the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program,” 84 Fed. Reg. 51,310 (September 27, 2019) (“SAFE Rule Part One”), injure the District and its interests. Specifically, the agencies’ actions to declare California’s standards preempted and to withdraw the Clean Air Act Section 209 waiver for those standards injure the District because the District’s planning process for attaining the NAAQS accounts for and relies upon mobile source emission reductions from California’s Clean Cars Program, including its ZEV program. The District’s future planning process is impaired, because the District has consistently acknowledged that meeting the NAAQS will require increasing deployment and market penetration of zero-emission technologies.<sup>1</sup>

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<sup>1</sup> South Coast Air Quality Management District, *Final 2016 Air Quality Management Plan*, at 29 (Preface), available at <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>

### **Reliance on Mobile Source Emission Reductions**

11. The District's latest Air Quality Management Plan specifically depends on reductions from CARB's Advanced Clean Cars Program, which include its ZEV program. The District relied on these reductions in multiple ways. First, the emission reductions from Advanced Clean Cars Program and the latest amendments to the ZEV program were made enforceable in State of California by U.S. EPA's action in 2013 to grant a waiver of preemption under Section 209(b) of the Clean Air Act. 78 Fed. Reg. 2,112 (January 9, 2013). Second, the U.S. EPA approved reliance on these reductions for air quality planning when it approved the use of the 2014 version of the EMFAC model (short for "EMission FACtor" model). 80 Fed. Reg. 77,337 (December 14, 2015). Approved versions of the EMFAC model are used in California to calculate air pollution emission factors from several types of mobile sources, and EPA acknowledged this approved version had included "emission reductions associated with CARB's Advanced Clean Cars regulations." *Id.* at 77,338. These reductions thus appear in the baseline emissions inventory for the attainment plan. Last, EPA made the requirements of the ZEV program federally enforceable by their approval into the State Implementation Plan. 81 Fed. Reg. 39,424 (June 16, 2016).

### **Emission Impacts of Agencies' Actions on ZEVs**

12. EPA and NHTSA did not finalize any new and amended GHG and Corporate Average Fuel Economy (CAFE) standards for model year 2021 to 2026 in their SAFE Part One Actions. Instead, the agencies finalized that rollback in the later final action, “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), which relaxed applicable Federal GHG standards from 5% year-on-year improvements down to mere 1.5% year-on-year increases.<sup>2</sup> The actions at issue in here, however, exposed California and the South Coast Air Basin to the air pollution impacts of the agencies’ weakened national standard. The actions at issue here also cause air pollution impacts, specifically via the nullification of CARB’s ZEV program. 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 air quality standards.
13. I am familiar with off-model adjustment CARB published for 2014 and 2017 versions of EMFAC that EPA previously approved for use in the development of State Implementation Plans.<sup>3</sup> These adjustments take account of the

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<sup>2</sup> “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks,” 85 Fed. Reg. 24174 (April 30, 2020)

<sup>3</sup>CARB Staff Document, “EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Part One,” November 20, 2019, [https://ww3.arb.ca.gov/msei/emfac\\_off\\_model\\_adjustment\\_factors\\_final\\_draft.pdf?utm\\_medium=email&utm\\_source=govdelivery](https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf?utm_medium=email&utm_source=govdelivery)

emissions impacts attributable to the “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program,” 84 Fed. Reg. 51310 (September 27, 2019). Specifically, these adjustments hold future year ZEV sales constant at model year 2020 levels instead of showing legally-required increasing sales under the ZEV mandate that EPA had approved in the State Implementation Plan.<sup>4</sup> These adjustments recognize that the projected fleet for 2021 and beyond will have a lower number of future ZEVs and a correspondingly greater number of future gasoline internal combustion engine vehicles.

14. EMFAC provides tailpipe and evaporative emissions for the inventory. Even though “fleet average” standards as found in CARB’s Advanced Clean Cars program can include ZEV sales toward satisfaction of fleet averaged requirements, those standards do not take account of certain pollutants (e.g., particulate matter and carbon monoxide), do not capture emissions from all operating conditions, and do not account for how tailpipe and evaporative criteria pollutant emissions substantially increase over time due to deterioration of the emission controls on gasoline-vehicles. Though fleet-average standards

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<sup>4</sup> In a letter to CARB dated March 12, 2020, an EPA official indicated the EMFAC off-model adjustment factors to account for SAFE Vehicle Part One could be used in State Implementation Plan applications in California.

can offset a portion of increases that come with eliminating the ZEV program, this will not forestall major increases in ozone-forming pollution.

15. The District faces a Clean Air Act mandate to attain the 2008 NAAQS for ozone by 2031. Using EMFAC2014, as was used in developing the District's attainment plan for this NAAQS, District staff has calculated the emission increases from vehicles alone due to the ZEV mandate rollback. By the year 2023, ozone precursor emissions will already be well over ten tons per year (11.8 tons VOC evaporative, 1.0 VOC exhaust, 6.0 NO<sub>x</sub> exhaust). By the attainment year of 2031, ozone precursor emissions will exceed 140 tons per year (106.7 tons VOC evaporative, 3.6 tons VOC exhaust, 37.4 tons NO<sub>x</sub> exhaust). Moreover, the impacts of the ZEV rollback enlarge and persist even further into the future, including the attainment date of August 2038 set by the 2015 NAAQS for ozone. Thus, because of the agencies' actions, the District faces an increased pollution burden that it has a legal mandate to reduce.

#### **Impact to District's Attainment Planning Process.**

16. In addition to the increase in the pollution burden that the District must reduce to attain the NAAQS, the agencies' actions also weaken or outright remove important tools the District relies on to develop attainment plans. NHTSA's action directly removes the current ZEV program and preempts any future ZEV mandate that California may develop. EPA's action for the first time in history revoked a previously granted waiver, notwithstanding its use in

approved State Implementation Plans, making future waiver-based standards less certain for the District's long-term planning process.

**Failure to Make a General Conformity Determination.**

17. The District submitted extensive comments on the agencies' proposed actions, including a lead-off comment that EPA must comply with the Clean Air Act's general conformity requirements, which prohibit federal agency actions and activities that do not conform to a state's approved attainment plan. The stated focus of the District's objection was EPA's proposed action to revoke approved waiver measures and, specifically, to undercut the ZEV standards that EPA had approved into California's State Implementation Plan in 2016. The District also cited to EPA's regulations which mandate that federal agencies undertake a conformity determination for "any activity" that is not exempt and would cause new emissions to exceed threshold emission rates set forth in 40 C.F.R. § 93.153(b), including the relevant threshold of ten tons per year that applies to extreme nonattainment areas such as the South Coast Air Basin. EPA finalized its action without responding to the District's comments on the general conformity requirements.

18. When increased emissions are greater than the threshold amount to necessitate a general conformity determination, as the District had asserted in its comments, a demonstration of conformity must be made with "emission reductions from an offset or mitigation measure," including the possibility of

offsetting reductions at a specified 1.5-to-1 ratio. *See* 40 C.F.R. § 93.163. EPA's failure to make a conformity determination injures the District by depriving it of the analysis that would oblige the federal government to provide for offsets or mitigation measures. EPA's action further harms the District's ability to develop plans to meet air quality standards.

### **Procedural Injuries under NEPA**

19. Because NHTSA failed to engage in any process under the National Environmental Policy Act (NEPA), the District was deprived of both the opportunity to comment on the environmental impacts, and the information that such an impact statement necessarily provides, to better understand the direct, indirect, and cumulative impacts of the agency's decision. As the District is responsible for the long-term planning for attainment of the NAAQS in the South Coast Air Basin, failing to perform an assessment of the full range of impacts from the loss of the ZEV mandate (which is integral to the attainment plan) is itself an injury to the District, because the District would otherwise incorporate such information into the data review, analysis and modeling it does for its attainment planning process.
20. Air pollution impacts in the South Coast Air Basin would have been acknowledged by both agencies had NHTSA engaged in the procedural process required by NEPA. The NEPA process, including the provision of a detailed Environmental Impact Statement for major federal actions, would have added

to the modeling and assessment of direct, indirect, and cumulative impacts from NHTSA's action. Such analysis could impact the scope of both agencies' actions.

21. For example, had it been afforded an opportunity to review and comment upon an Environmental Impact Statement that evaluated other actions, the District would have commented on how a proposal more in keeping with court decisions on the Energy Policy Conservation Act could reduce the emissions harms to the South Coast Air Basin. Specifically, a scenario where the agencies would relax federal standards for some other parts of the Country, while recognizing the continuing force of California's vehicle standards and ZEV mandate, would have significant benefits to the South Coast Air Basin and potentially mitigate broader adverse effects. The District did comment that NHTSA must analyze this alternative. Because NHTSA declined to perform any NEPA analysis in finalizing its action, the comment went unconsidered. Likewise, EPA, though not bound to perform a NEPA analysis for its own action, would nonetheless be bound to consider available information and would have had a better assessment from which to make a conformity determination, which is designed to offset the harms to the South Coast Air Basin.

### **Injury to Interest in the Continued Enforceability of District Rules**



22. The District does not impose standards on manufacturers relating to new vehicle emissions. However, it does assert historic power to adopt use and operation regulations to control emissions from fossil-fuel combustion. Cal. Health & Safety Code §§ 40716, 40717; see 42 U.S.C. § 7543(d).
23. In 1995, the District first adopted District Rule 2202, entitled “On-Road Motor Vehicle Mitigation Options,” which is designed to reduce mobile source emissions from employee commutes. Under this rule, employers are entitled to credits toward emission reduction targets for employees and carpools arriving to work using a ZEV. Additionally, employers may elect to implement commute reduction strategies that may include incentives for employees to acquire and use ZEVs in their commutes. Any failure to implement an emission reduction program, including strategy components relating to ZEVs, is subject to enforcement by the District. NHTSA’s regulation on preemption presents concrete injury to Plaintiff South Coast District’s interest in the continued enforceability of District Rule 2202.
24. The District also enforces District Rule 1194, entitled “Commercial Airport Ground Access,” as it applies to private entities under contract to state or local public entities. In submitting comments on NHTSA’s proposed preemption regulation, the District requested that NHTSA acknowledge that EPCA preemption does not disturb local governmental authority to impose requirements on nongovernmental parties contracted to provide governmental

or public goods and services. Rule 1194 applies, *inter alia*, to certain private fleet operators that provide passenger transportation services under contract to a governmental airport authority. The Rule requires fleet operators to procure or lease cleaner vehicles; vehicles certified to meet ZEV emissions standards are a compliance option to meet the rule's fleet purchase requirement. NHTSA ignored the District's comment. NHTSA's regulation on preemption is a concrete injury to the District's interest in the continued enforceability of Rule 1194.

25. The District also has authority to adopt an "indirect source review program" under Clean Air Act Section 110(a)(5)(A)(i), 42 U.S.C. § 7410(a)(5)(A)(i). An indirect source is defined as a "facility, building, structure, installation, real property, road, or highway which attracts or may attract, mobile sources of pollution." 42 U.S.C. § 7410(a)(5)(C); Cal. Health & Safety Code § 40716. Mobile source activities at indirect sources are subject to regulation, and such regulations may require or incentivize the use of zero emission technologies, including ZEVs. The District has an avowed planning need for reliance on this authority (or for voluntary substitute reductions) as set forth in its 2016 Air Quality Management Plan to meet the NAAQS for ozone and particulate matter.<sup>5</sup> NHTSA's regulation on preemption injures the District

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<sup>5</sup> See South Coast Air Quality Management District, Final 2016 Air Quality Management Plan (March 2017), pgs. 4-25 to 4-29, EPA-R09-OAR-2019-0051.

by potentially limiting its authority to reduce or mitigate emissions from indirect sources.

### **Impacts to Programs Promoting Commercial Adoption and Use of ZEVs**

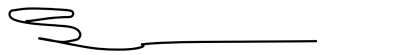
26. The District runs several incentive programs to promote commercial adoption and use of ZEVs. These programs include an incentive pilot program to offset the costs of hardware for residential electric vehicle charging and the “Replace Your Ride” program that provides funds to income-eligible vehicle owners who elect to replace their older vehicles with electric vehicles. These incentive programs mean to spur increased consumer adoption of electric vehicles to achieve air quality benefits. The long-term certainty of the ZEV mandate is a critical component to incentive program planning and is needed to assure program success and the fullest realization of the air quality and other benefits of these expenditures and commitments.

27. NHTSA’s preemption regulation and EPA’s action to withdraw the waiver of preemption for California’s ZEV mandate each work to eliminate legal inducements for automobile manufacturers to make electric vehicle replacement options available to consumers according to the numbers and schedule that EPA approved in the State Implementation Plan. The District’s incentive programs are meant to work in tandem with the ZEV mandates to further encourage and accelerate consumer adoption of ZEVs to achieve air quality improvements. The actions of NHTSA and EPA undermine these

incentive programs and their projected environmental benefits, causing injury to the District's economic and pecuniary interests in having efficacious incentive programs.

28. The District expects future attainment of the NAAQS will depend on the adoption of ZEV mandates for other mobile source categories, including heavy-duty vehicles. The ZEV mandate works, in part, to help develop technology and infrastructure that will help advance commercialization of ZEV technology for other vehicles and mobile sources. The actions of NHTSA and EPA create legal and practical barriers to the adoption of future ZEV mandates for categories of mobile sources other than motor vehicles, which hinders the District's abilities to develop plans to meet the NAAQS.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed this 18th day of June, 2020, in Los Angeles County, California.



Sarah Rees

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

UNION OF CONCERNED  
SCIENTISTS, *et al.*,

*Petitioners,*

v.

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

*Respondents.*

No. 19-1230  
(and consolidated cases)

**DECLARATION OF FRANK KOHLASCH**

I, Frank Kohlasch, state and declare as follows:

1. I am the Climate Director for the Minnesota Pollution Control Agency (MPCA). In my role as Climate Director, I am responsible for Minnesota's greenhouse gas (GHG) emissions inventory, as well as the MPCA's policies to mitigate and adapt to climate change in Minnesota. I have personal knowledge and experience with the Clean Cars Minnesota rulemaking as well as Minnesota's other state programs to reduce GHG emissions from the transportation sector, and

state and regional scale analyses of policies and strategies to reduce GHG emissions from all sources in Minnesota.

2. The purpose of this declaration is to describe Minnesota's process to adopt its Clean Cars Minnesota Rule and the impact that this litigation has on our State's ability to implement the Rule.

3. I submit this declaration in support of the State of Minnesota'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, Part One: One National Program," 84 Fed. Reg. 51,310 (Sept. 27, 2019) ("Actions"). I make this declaration of my own personal knowledge, unless otherwise indicated.

3. My educational background includes a Juris Doctorate from Hamline University School of Law, a Bachelor's of Science in Chemistry from Fort Hays State University, and graduate level coursework at the University of Minnesota in environmental chemistry, environmental toxicology, environmental health, and at Washington State University in advanced analytical chemistry. I have worked in environmental analysis, environmental data, and climate change programs for the

MPCA for 24 years. For the last 11 years, I have been directly responsible for the development and implementation of GHG reduction policies for the State of Minnesota, as well as GHG emissions inventory development, reporting, and analysis. I have experience and interest in the formation of fine particles and ozone, mercury emissions, air monitoring, environmental justice, regional haze control, air modeling, risk and science communication, and carbon regulations.

4. On September 25, 2019, Minnesota Governor Tim Walz directed the MPCA to initiate a rulemaking to adopt the Zero Emission Vehicle (“ZEV”) program and the Low Emission Vehicle (“LEV”) standards developed by California, which the MPCA refers to as “Clean Cars Minnesota.” The MPCA is pursuing this rulemaking to address two major air pollution challenges facing Minnesota: the greenhouse gas emissions that are causing climate change and the emissions of criteria air pollutants.

5. Minnesota’s climate is already rapidly changing and is projected to continue to change for the foreseeable future.<sup>1</sup> The Next

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<sup>1</sup> Minnesota Department of Natural Resources, Climate Trends. [https://www.dnr.state.mn.us/climate/climate\\_change\\_info/climate-trends.html](https://www.dnr.state.mn.us/climate/climate_change_info/climate-trends.html) (referenced June 10, 2020).

Generation Energy Act, Minn. Stat. § 216H.02, subd. 1, establishes a statewide goal “to reduce statewide greenhouse gas emissions across all sectors producing those emissions to a level at least 15 percent below 2005 levels by 2015, to a level at least 30 percent below 2005 levels by 2025, and to a level at least 80 percent below 2005 levels by 2050.” The MPCA develops a biennial inventory of GHG emissions in the state. The most recent inventory and report released in 2019, “Greenhouse gas emissions in Minnesota: 1990-2016,”<sup>2</sup> showed that Minnesota did not meet its 2015 goal and is not on track to achieve the 2025 or 2050 goals.

6. Transportation is now the largest emitter of GHGs in Minnesota. To date, the transportation sector has only seen about an 8% GHG emission reduction since 2005, and transportation accounts for about a quarter of overall GHG emissions in Minnesota. Surface transportation includes on-road vehicles such as cars, trucks, buses and motorcycles, and accounts for most of the transportation sector’s GHG emissions. Within the surface transportation category, light-duty and medium-duty vehicles account for 74% of the subsector’s emissions. It is therefore necessary to achieve significant emissions reductions from

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<sup>2</sup> MPCA GHG emissions inventory, 2019. <https://www.pca.state.mn.us/air/greenhouse-gas-emissions-data>.



light-duty and medium-duty vehicles in order to address GHG emissions from transportation.

7. In 2019, the Minnesota Department of Transportation, along with the MPCA and other Minnesota state agencies conducted a study called “Pathways to Decarbonizing Transportation in Minnesota,” which included modeling that showed if Minnesota continued on a business as usual path of transportation GHG emissions, the state would begin to see emissions increases in transportation, making it impossible to achieve our Next Generation Energy Act goals.<sup>3</sup>

8. The MPCA is also pursuing the Clean Cars Minnesota rulemaking to reduce emissions of criteria air pollutants. In Minnesota, on-road vehicles produce about 30% of overall emissions of NO<sub>x</sub>, 17% of non-biogenic volatile organic compounds (“VOCs”), and about 13.5% of emissions of fine particles.<sup>4</sup> In June 2019, the MPCA and the Minnesota Department of Health released the “Life and breath” report that showed fine particles and ground-level ozone contributed to roughly 2,000-4,000 deaths in Minnesota in 2013 (most recent data) as well as hundreds of

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<sup>3</sup> MnDOT, “Pathways to Decarbonizing Transportation,” <http://www.dot.state.mn.us/sustainability/pathways.html>.

<sup>4</sup> MPCA statewide and county air emissions, <https://www.pca.state.mn.us/air/statewide-and-county-air-emissions>.

increased hospital visits.<sup>5</sup> Reducing emissions of these pollutants is critical for protecting the health of Minnesotans.

9. Reducing air pollution from vehicles is especially necessary for addressing environmental justice. MPCA research shows that communities of color and under-resourced communities are disproportionately exposed to pollution from vehicles because those communities are disproportionately located near busy roadways.<sup>6</sup> Reducing emissions from vehicles is necessary to reduce exposures to these vulnerable and already overburdened communities and to address environmental justice.

10. Since the Governor's announcement, the MPCA has initiated the rulemaking process, including publishing a Request for Comments, hosting seven community listening sessions, including a webinar, and five technical stakeholder meetings, holding over 40 meetings with interested stakeholders and community groups, and has reviewed over 1,000 written comments and over 1,000 survey results. The agency is also in the process of drafting rule language and a Statement of Need

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<sup>5</sup> "Life and breath: How air pollution affects health in Minnesota," David Bael and Kathy Raleigh, <https://www.pca.state.mn.us/air/life-and-breath-report>

<sup>6</sup> Traffic, Air Pollution, Minority and Socio-Economic Status: Addressing Inequities in Exposure and Risk. Gregory C. Pratt, et al., <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4454972/>.

and Reasonableness, which includes an emissions analysis and a cost/benefit analysis of the proposed rule. Going forward, the MPCA will continue the administrative rulemaking process by publishing the Notice of Intent to Adopt a Rule with a Hearing, which will include the draft rule language and Statement of Need and Reasonableness. After publishing the Notice of Intent to Adopt, we will begin a new public comment period, will host public information sessions, and an Administrative Law Judge will hold hearings where members of the public can testify along with a subsequent rebuttal period. The Administrative Law Judge will then develop a report that will allow the MPCA to adopt the rule or tell the agency we cannot proceed without making changes to the rulemaking. The MPCA intends to adopt its Clean Cars Minnesota Rule as soon as practicable after completing the administrative process.

11. Minnesota's standards cannot take full legal effect, however, until California's waiver is restored.

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 June 15, 2020 in Hennepin County, Minnesota.



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Frank L Kohlasch

## ORAL ARGUMENT NOT YET SCHEDULED

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

UNION OF CONCERNED SCIENTISTS,  
*et al.*,

Petitioners,

v.

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

Respondents.

No. 19-1230 and  
consolidated cases

**DECLARATION OF CHRISTINE KIRBY**

I, Christine Kirby, declare as follows:

1. I am currently employed by the Massachusetts Department of Environmental Protection (MassDEP) as the Assistant Commissioner in charge of the Bureau of Air and Waste and was, prior to my current position, the Director of Air and Climate Programs. I have held the former position for more than 3 years, and I held the latter for 6 years. I have been employed by MassDEP since 1985, having previously held the positions of Deputy Division Director of the Mobile Source Section for 8 years, and Branch Chief for Transportation Programs for 7 years.

2. My job duties include, but are not limited to, overseeing the promulgation and implementation of MassDEP regulations that establish emission standards and other emission-related requirements applicable to on-road mobile sources. I have managed the Massachusetts Low Emission Vehicle (LEV) program since 1997 in my various capacities as Branch Chief, Deputy Director, Director, and Assistant Commissioner. As part of my management responsibilities, I have been involved in numerous revisions to keep the LEV program up-to-date with the California standards in order to ensure that Massachusetts meets its air-quality obligations and greenhouse gas-reduction goals. I have also been the Massachusetts point of contact with the California Air Resources Board (CARB) on development and implementation of the California standards.

3. In my tenure as the Director of Air and Climate Programs, I was the chair of the Mobile Source Committee of the Ozone Transport Commission, which is a multi-state organization created under the Clean Air Act and is responsible for advising the United States Environmental Protection Agency (EPA) on transportation issues and for developing and implementing regional solutions to the ground-level ozone problem in the Northeast and Mid-Atlantic regions. I also served on the Board of Directors of the Northeast States for Coordinated Air Use Management (NESCAUM), an association of the air quality agencies in eight

Northeast states that provides scientific, technical, analytical, and policy support to the air quality programs of those agencies, especially regarding implementation of national environmental programs required under the Clean Air Act and other federal legislation. I currently serve on the Board of Directors of the National Association of Clean Air Agencies—a national association of state and local air quality agencies. I also currently serve as a co-chair of the Technical Analysis Workgroup of the Transportation Climate Initiative's effort to design a regional policy for a "cap and invest" program for the transportation sector.

4. I have a Bachelor of Arts degree from Clark University.

5. This declaration refers to final actions of Respondents EPA and the National Highway Traffic Safety Administration (NHTSA) set forth in the notice published at 84 Federal Register 51,310 (September 27, 2019) and titled “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program” (Challenged Actions). Among other things, the Challenged Actions eliminate the authority of Massachusetts and other states to adopt and enforce California’s light-duty vehicle greenhouse gas emission standards and certain requirements for zero-emission vehicles, including battery-electric vehicles and fuel-cell vehicles. I am personally familiar with the Challenged Actions.

6. I am submitting this declaration in support of State and Local Government and Public-Interest Petitioners’ June 26, 2020 Joint Opening Brief in

*Union of Concerned Scientists, et al. v. NHTSA, et al.*, United States Court of Appeals for the District of Columbia Circuit, No. 19-1230 (and consolidated cases).

**Massachusetts is Legally Obligated to Reduce Economywide Greenhouse Gas Emissions**

7. The Commonwealth of Massachusetts (Commonwealth) is committed to protecting public health and the environment through programs and policies that address air pollution and climate change.

8. Massachusetts state law imposes legally binding requirements on the Commonwealth to reduce emissions of climate-warming greenhouse gases from sources across the economy. *See Kain v. Mass. Dep't Envtl. Prot.*, 474 Mass. 278, 287–88 (2016). The Global Warming Solutions Act of 2008 (GWSA) mandates that the Commonwealth reduce statewide greenhouse gas emissions at least 80% below the 1990 emissions level by 2050 and meet interim emissions-reduction limits. MASS. GEN. LAWS ch. 21N, §§ 3(b) & 4(a). Specifically, the GWSA required the Commonwealth's Secretary of Energy and Environmental Affairs (Secretary) to adopt a 2020 statewide greenhouse gas emissions limit between 10% and 25% below the 1990 emissions level. *Id.* § 4(a).



9. In 2010, the Secretary established the emissions limit for 2020 to be 25% below the 1990 emissions level.<sup>1</sup>

10. On April 22, 2020, the Secretary established an emissions limit for 2050 to be net zero greenhouse gas emissions (*i.e.*, emissions equal in quantity to the amount of carbon dioxide or its equivalent that is removed from the atmosphere and stored annually by, or attributable to, the Commonwealth), and at least 85% below the 1990 emissions level.<sup>2</sup>

11. The GWSA also directs the Secretary to develop implementation plans for obtaining sufficient emissions reductions to meet the 2020, 2030, 2040, and 2050 emissions limits, and to update the Commonwealth's implementation plans at least once every 5 years. MASS. GEN. LAWS ch. 21N, §§ 3(b), 4(h).

12. In 2010, the Secretary published the first GWSA implementation plan, entitled the "Massachusetts Clean Energy and Climate Plan for 2020," which included a menu of policies to reduce greenhouse gas emissions from all significant emitting sectors, including transportation. As required by the GWSA, the Secretary updated the "Massachusetts Clean Energy and Climate Plan for 2020" in 2015. The "2015 update to the Massachusetts Clean Energy and Climate

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<sup>1</sup> See Ian A. Bowles, *Determination of Greenhouse Gas Emission Limit for 2020* (Dec. 28, 2010), <https://tinyurl.com/y8uaromz>.

<sup>2</sup> See Kathleen A. Theoharides, *Determination of Statewide Emissions Limit for 2050* (Apr. 22, 2020), <https://www.mass.gov/doc/final-signed-letter-of-determination-for-2050-emissions-limit>.

Plan for 2020” (MA Climate Plan) supersedes the 2010 plan and describes policies that Massachusetts relies on to achieve its legally binding 2020 emissions-reduction requirement. MASS. EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS, 2015 UPDATE: MASSACHUSETTS CLEAN ENERGY AND CLIMATE PLAN FOR 2020 (Dec. 31, 2015) [MA Climate Plan]. The policies set forth in the MA Climate Plan represent the Commonwealth’s comprehensive strategy to address greenhouse gas emissions from emissions sources across the economy. Although the MA Climate Plan focuses on achieving the Commonwealth’s near-term emissions-reduction requirement for 2020, the MA Climate Plan also looks ahead to the statutory 2050 emission-reduction requirement and describes policies and plans that will help achieve this long-term limit, as well as to-be-determined interim limits for 2030 and 2040.

13. The GWSA also requires the Secretary to convene an advisory committee to advise the Commonwealth on matters related to implementation of the GWSA, including strategies to achieve emissions-reduction targets. MASS. GEN. LAWS ch. 21N, § 8. The required advisory committee, known as the GWSA Implementation Advisory Committee, has been advising the Commonwealth on development of the forthcoming “Massachusetts Clean Energy and Climate Plan

for 2030.”<sup>3</sup> The Implementation Advisory Committee is also providing input to a “Massachusetts Decarbonization Roadmap to 2050” planning process to identify cost-effective and equitable strategies to ensure Massachusetts reduces 2050 greenhouse gas emissions by at least 90% below the 1990 emissions level, to ensure compliance with the 2050 limit.<sup>4</sup>

14. By Executive Order 569, Massachusetts Governor Charles Baker directed the Secretary to consult with the GWSA Implementation Advisory Committee regarding emissions limits for 2030 and 2040, as well as strategies to reduce emissions from the transportation sector.<sup>5</sup> This Executive Order further requires the Secretary to develop and publish every five years a comprehensive energy plan, which shall include strategies to meet the Commonwealth’s energy demands for the transportation sector.<sup>6</sup>

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<sup>3</sup> See, e.g., Mass. Executive Office of Energy & Environmental Affairs, Meeting Slidedeck for GWSA IAC Meeting (June 11, 2020), <https://www.mass.gov/event/june-11-2020-meeting-of-the-gwsa-implementation-advisory-committee-iac-2020-06-11t140000-0400>.

<sup>4</sup> See Mass. Executive Office of Energy & Environmental Affairs, MA Decarbonization Roadmap (2020), <https://www.mass.gov/info-details/ma-decarbonization-roadmap>.

<sup>5</sup> See Exec. Order No. 569, § 1.1 (Mass. 2016) <https://www.mass.gov/executive-orders/no-569-establishing-an-integrated-climate-change-strategy-for-the-commonwealth>.

<sup>6</sup> *Id.*, §§ 1.3, 1.5.

15. By separate Executive Order, Governor Baker established the Commission on the Future of Transportation in the Commonwealth to advise the Governor on how to ensure that transportation planning, forecasting, operations, and investments for 2020 through 2040 can best account for likely demographic, technological, climate, and other changes in future mobility and transportation behaviors, needs, and options.<sup>7</sup>

16. MassDEP plays a critical role in implementing the GWSA and facilitating the Commonwealth's compliance with emissions-reduction requirements. For instance, MassDEP monitors state-level emissions trends, collects data on emissions from various sources, and records and reports annual statewide and sector-specific emissions through the Commonwealth's Greenhouse Gas Emissions Inventory. MassDEP is also responsible for implementing numerous policies and programs included in the MA Climate Plan. The Commonwealth's highest court, the Massachusetts Supreme Judicial Court, has recognized that MassDEP shoulders a crucial responsibility in statewide emissions-reductions efforts. Section 3(d) of the GWSA requires MassDEP to promulgate regulations that address multiple sources or categories of sources of greenhouse gas emissions, impose a limit on emissions that may be released from such sources,

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<sup>7</sup> See Exec. Order No. 579, § 1 (Mass. 2018), <https://www.mass.gov/executive-orders/no-579-establishing-the-commission-on-the-future-of-transportation-in-the>.

limit the aggregate emissions released from each group of regulated sources or categories of sources, set emission limits for each year, and set limits that decline on an annual basis. *See Kain*, 474 Mass. at 292. MassDEP has promulgated two regulations that impose declining limits on the transportation sector. *See* 310 MASS. CODE REGS. 60.05 (“GWSA Requirements for Transportation”); *id.* 60.06 (“CO<sub>2</sub> Emission Limits for State Fleet Passenger Vehicles”).

### **Reductions in Transportation-Sector Emissions Are Critical to Achieving Massachusetts’ Required Greenhouse Gas-Emissions Reductions**

17. Significant reductions in transportation-sector greenhouse gas emissions are critical to achieving Massachusetts’ emission-reduction requirements for 2020 and beyond. The transportation sector is the single largest source of greenhouse gas emissions in the Commonwealth, accounting for 41.9% of Massachusetts’ statewide emissions in 2017.<sup>8</sup> Motor vehicles, including light-duty cars and trucks, are a significant source of emissions in the transportation sector. If Massachusetts’ transportation-sector emissions were to remain, through 2050, at the 2017 level of 30.7 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e), or even at the lower end of the projected range of 2020 levels—29

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<sup>8</sup> *See* MASS. DEP’T ENVTL. PROT., STATEWIDE GREENHOUSE GAS (GHG) EMISSIONS BASELINE & PROJECTION UPDATE, APPENDIX C: MASSACHUSETTS ANNUAL GREENHOUSE GAS EMISSIONS INVENTORY: 1990–2017, WITH PARTIAL 2018 DATA (2019), <https://www.mass.gov/doc/appendix-c-massachusetts-annual-greenhouse-gas-emissions-inventory-1990-2017-with-partial-2018/download>.

MMTCO<sub>2</sub>e—Massachusetts would not be able to meet its required 2050 emissions limit of, at maximum, 14.2 MMTCO<sub>2</sub>e (which is equivalent to 85% below the 1990 emissions level). *See* MA Climate Plan, *supra*, at 13, tbl. 3 (projecting 2020 emissions). Even if emissions from all other sectors of the economy were eliminated, emissions from the transportation sector alone would exceed Massachusetts' economy-wide 2050 emissions limit if they did not decline after 2020.

**Zero-Emission-Vehicle Standards and Greenhouse Gas Emission Standards for Motor Vehicles Are Key to Massachusetts' Compliance with Mandated Emissions Reductions and Provide Substantial Benefits to Massachusetts Residents**

18. The Massachusetts Clean Air Act, MASS. GEN. LAWS ch. 111, §§ 142A–142O, specifically section 142K, requires MassDEP to adopt and implement California's emissions standards for new motor vehicles if such standards, in the aggregate, are at least as protective as federal motor-vehicle emissions standards. *See* MASS. GEN. LAWS ch. 111, § 142K. MassDEP initially adopted California's Low Emission Vehicle (LEV) program under regulations promulgated in 1991. *See* 310 MASS. CODE. REGS. 7.40.

19. MassDEP amended its LEV program regulations in 1999 and again in 2012 to adopt amendments to California's LEV program, including zero-emission-vehicle standards and greenhouse gas emission standards.

20. Under the zero-emission-vehicle standards, large- and intermediate-volume automobile manufacturers have been required to deliver and place in service within the Commonwealth a certain percentage of zero-emission vehicles, including battery-electric vehicles and fuel-cell vehicles. A vehicle manufacturer's zero-emission-vehicles requirement has been based on a percentage of all passenger vehicles and light-duty trucks up to a certain weight limit that it delivers for sale in the Commonwealth. The requirement has been set to increase through 2025 and remain constant for years beyond 2025. Manufacturers subject to the zero-emission-vehicle standards have earned varying credits depending on the numbers and types of vehicles they delivered and placed in service within Massachusetts. Regulated automobile manufacturers and other entities that earned credits have been permitted to trade or transfer credits to one another and to third parties. Through mechanisms such as credit banking and trading and alternative compliance options, the zero-emission-vehicle standards provide manufacturers flexibility to pool credits in order to allow manufacturers to develop their preferred compliance strategy to place zero-emission vehicles in states that have committed to develop or have established fueling infrastructure to adequately support those vehicles.

21. Under the greenhouse gas emission standards, automobile manufacturers must decrease greenhouse gas emissions on a fleetwide basis for 2017 and subsequent model year cars and light trucks.

22. Reducing greenhouse gas emissions from motor vehicles is an important objective of Massachusetts's LEV program. Zero-emission vehicles have zero tailpipe emissions of greenhouse gas emissions, and indirect emissions associated with zero-emission-vehicle fueling are far lower than emissions associated with fueling a conventional internal-combustion engine vehicle with gasoline. For instance, accounting for emissions associated with electricity generation, powering an electric vehicle in Massachusetts results in approximately 71 percent fewer carbon dioxide emissions than powering the average gasoline-fueled vehicle.<sup>9</sup>

23. Massachusetts has long relied on its zero-emission-vehicle and greenhouse gas emission requirements as key components of its strategy to accelerate vehicle electrification and satisfy GWSA mandates. The current LEV regulations are among the emissions-reduction policies included in the MA Climate Plan as part of the Commonwealth's strategy to meet both near-term and long-term emissions-reduction requirements. *See* MA Climate Plan, *supra*, at 26.

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<sup>9</sup> *See* U.S. Dep't of Energy, *Emissions from Hybrid and Plug-In Electric Vehicles*, ALTERNATIVE FUELS DATA CENTER, [https://afdc.energy.gov/vehicles/electric\\_emissions.html](https://afdc.energy.gov/vehicles/electric_emissions.html).



As detailed in the MA Climate Plan, the greenhouse gas emission reductions associated with the LEV program are critical to meeting near-term and long-term emissions-reduction requirements and complying with the GWSA. *See* MA Climate Plan, *supra*, at 26–27. The MA Climate Plan estimates that the LEV program will reduce greenhouse gas emissions by 3.7 MMTCO<sub>2</sub>e in 2020, accounting for greater emission reductions than any other transportation-sector policy in Massachusetts. *Id.* at 26. According to the MA Climate Plan, “[b]ecause of these standards, per-mile [greenhouse gas] emissions from 2025 model year vehicles are forecast to be 34% lower, on average, compared to 2016 model year vehicles.” *Id.* The MA Climate Plan expects continued reductions in transportation-sector emissions after 2020 from the regulations. *See id.* at 28, fig. 8.

24. The MA Climate Plan also emphasizes that “[m]eeting the 2050 emission limit requires powering the transportation sector largely with electricity.” *Id.* at 16. Because only a portion of Massachusetts’ vehicle fleet turns over each year, “[t]his transition [to transportation electrification] requires . . . sustained policy over the 15–30 years it takes for the vehicle fleet to turnover.” *Id.* The key program for the Commonwealth to achieve this policy objective—and thereby comply with the GWSA—is the zero-emission-vehicle standards.

25. In practice, the zero-emission-vehicle standards have proven successful at increasing sales of zero-emission vehicles in Massachusetts. As a result of market and technology changes spurred by the zero-emission-vehicle standards, annual registrations of zero-emission vehicles in Massachusetts grew from 114 in 2011 to 8990 in 2018.<sup>10</sup> The total population of electric vehicles in Massachusetts increased more than 1,300 percent between December 31, 2013 and December 31, 2019, from 3,333 to 25,838 electric vehicles.<sup>11</sup> The MA Climate Plan anticipated that vehicle electrification would continue to accelerate through 2020 and beyond as a result of the zero-emission-vehicle standards and complementary state policies to support and encourage adoption of zero-emission vehicles. Specifically, the MA Climate Plan anticipated 300,000 zero-emission vehicles in use in Massachusetts in 2025, leading to statewide reductions in greenhouse gas emissions from clean or electric vehicles of 0.1 MMTCO<sub>2</sub>e in 2020 and generating continued and increasing emissions reductions thereafter. MA Climate Plan, *supra*, at 27.

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<sup>10</sup> See Auto Alliance, *Advanced Technology Vehicle Sales Dashboard*, <https://autoalliance.org/energy-environment/advanced-technology-vehicle-sales-dashboard/>.

<sup>11</sup> See *Massachusetts Electric (EV) and Plug-In Hybrid Electric (PHEV) Vehicles*, <https://www.mass.gov/doc/chart-showing-electric-vehicle-growth-in-massachusetts/download>.

26. Massachusetts also relied on its zero-emission-vehicle standards to further other important policy goals that benefit the Commonwealth and its residents. Because zero-emission vehicles have a lower total cost of ownership than gasoline-powered vehicles—including lower and less variable fuel costs and fewer vehicle maintenance requirements—those who drive zero-emission vehicles save on overall costs, and those savings spur corresponding local economic benefits. Increased uptake and use of zero-emission vehicles also has broad societal benefits shared by zero-emission-vehicle users and non-users alike. Gasoline-powered vehicles are a major source of local and regional air pollution, emitting carbon monoxide, nitrogen oxides, volatile organic compounds, and fine particulate matter that harm human health and the environment and contribute to dangerous ground-level smog. Zero-emission vehicles, by contrast, have zero tailpipe emissions of conventional pollutants and thus promote pollution reduction, clean air, and public health improvements. Zero-emission vehicles also have the potential to benefit Massachusetts' electric power system—and thus, all electricity consumers—by providing valuable power system services such as dispatching stored energy to the electricity grid during times of high demand.

**Massachusetts Has Invested Considerable Public Resources in Complementary Policies Designed to Work in Coordination with the Zero-Emission-Vehicle Standards**

27. Massachusetts has implemented a variety of complementary policies designed to work in coordination with the zero-emission-vehicle standards and ensure their long-term success in reducing greenhouse gas emissions and delivering health, economic, and other benefits to Massachusetts residents.

28. For instance, the Governor of Massachusetts joined the Governors of California and nine other states that have adopted California's zero-emission-vehicle standards in forming a "Multi-State ZEV Task Force" to coordinate state actions to build a robust market for zero-emission vehicles.<sup>12</sup> In 2014, the task force states developed a "Multi-State ZEV Action Plan," which sets forth key zero-emission-vehicle adoption efforts such as the development of publicly available electric vehicle charging infrastructure and installation of fast-charging infrastructure along major travel corridors. *Id.*

29. In 2018, Massachusetts joined eight other states in releasing an updated Multi-State ZEV Action Plan for 2018–2021.<sup>13</sup> Building on the success of the 2014 plan, the 2018–2021 action plan details 81 efforts to rapidly accelerate consumer adoption of zero-emission vehicles in Massachusetts and partner states.

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<sup>12</sup> See *About the ZEV Task Force*, MULTI-STATE ZEV TASK FORCE, <https://www.zevstates.us/about-us/>.

<sup>13</sup> Available at: <http://www.nescaum.org/documents/2018-zev-action-plan.pdf>.

30. Many of the initiatives identified in the action plans have been successfully implemented or are underway, including collaborations with vehicle dealerships, consumer outreach and education campaigns in partnership with the automobile industry, and public utility commission proceedings to further transportation electrification programs. And Massachusetts has initiated a variety of programs, with funding from state and other sources, to provide vehicle charging infrastructure, incentives, and education to support the zero-emission-vehicle standards. For example, the Massachusetts Department of Energy Resources funds rebates of up to \$2,500 to residents who purchase or lease zero-emission vehicles. To date, Massachusetts has committed approximately \$32.7 million to its rebate program.<sup>14</sup> Massachusetts also has invested substantial public funds in the development of charging infrastructure to support the zero-emission-vehicle standards' increasing requirements through 2025. Since 2018, MassDEP has committed \$5.5 million in settlement funds and other funds to various Massachusetts Electric Vehicle Incentive Program (MassEVIP) efforts, including efforts to expand: workplace charging (\$1.5 million), multi-unit dwelling charging

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<sup>14</sup> See Center for Sustainable Energy, *MOR-EV Program Statistics*, MASSACHUSETTS DEPARTMENT OF ENERGY RESOURCES MASSACHUSETTS OFFERS REBATES FOR ELECTRIC VEHICLES (June 5, 2020), <https://mor-ev.org/program-statistics>.

(\$1.5 million), public access charging (\$2 million), and fleet electrification and charging (\$0.5 million).

31. As the foregoing examples demonstrate, Massachusetts has invested significant public resources in developing and implementing a set of policies designed to complement, and facilitate compliance with, the zero-emission-vehicle standards. Massachusetts has done so based on the assumption the zero-emission-vehicle standards would remain in effect and require a minimum percentage of zero-emission vehicles to be delivered and placed in service within the Commonwealth through 2025 and beyond.

32. In making these investments, Massachusetts also anticipated that the zero-emission-vehicle standards would amplify the benefits of the Commonwealth's complementary policies, and vice versa. Specifically, the complementary policies were designed to work in coordination with zero-emission-vehicle standards to overcome inherent "network" barriers to developing a robust market for zero-emission vehicles in Massachusetts. For instance, where too few electric vehicles are in use, businesses are reluctant to invest in vehicle charging infrastructure, the paucity of which, in turn, reduces the value of electric vehicles to consumers and further depresses demand for electric vehicles. The reverse is also true: a consumer's purchase of an electric vehicle increases demand for vehicle charging infrastructure, and increased supply of charging infrastructure

further encourages consumers to purchase electric vehicles. Increased uptake of zero-emission vehicles resulting from the zero-emission-vehicle standards would thus promote the market conditions necessary for the Commonwealth's complementary policies and investments to be most effective. In short, the zero-emission-vehicle standards are essential to realize the full extent of benefits Massachusetts anticipated from its suite of complementary zero-emission-vehicle policies, including development of a robust market for zero-emission vehicles in Massachusetts.

### **The Challenged Actions Directly and Concretely Harm Massachusetts**

33. By eliminating the authority of Massachusetts to maintain its zero-emission-vehicle standards, the Challenged Actions will result in significantly fewer sales of zero-emission vehicles and lower market penetration of zero-emission vehicles in Massachusetts. Massachusetts' zero-emission-vehicle standards have resulted in more zero-emission vehicles in the state as compared to other states that have not adopted zero-emission-vehicle standards. Massachusetts' zero-emission-vehicle standards have also sent a market signal to other zero-emission-vehicle-related businesses (e.g., electric vehicle supply equipment vendors) to increase deployment of zero-emission vehicles and focus on Massachusetts.

34. In addition, because the Challenged Actions eliminated the authority of Massachusetts to adopt and enforce California's greenhouse gas emission standards, Massachusetts can no longer be assured that its LEV program will continue to achieve anticipated reductions in greenhouse gas emissions from motor vehicles. Federal greenhouse gas emissions standards do not require 2021 to 2026 model year vehicles to obtain reductions in emissions equivalent to the reductions required under Massachusetts' regulations.

35. As a result, greenhouse gas emissions from Massachusetts' transportation sector will be higher. Given that the transportation sector is the single largest source of greenhouse gas emissions in the Commonwealth, the Challenged Actions will result in higher transportation-sector emissions and will significantly undermine Massachusetts' ability to obtain the greenhouse gas emissions reductions mandated by the GWSA.

36. Eliminating Massachusetts' zero-emission-vehicle standards also will reduce the benefits anticipated from the Commonwealth's complementary zero-emission-vehicle policies, which had been designed to work in concert with the zero-emission-vehicle standards and capitalize on network effects. Because significantly fewer zero-emission vehicles will be delivered and placed in service within the Commonwealth as a result of the Challenged Actions, Massachusetts will no longer be able to expect its policies to lead to development of a robust



market for zero-emission vehicles in Massachusetts—further jeopardizing Massachusetts’ ability to comply with long-term greenhouse gas emissions-reduction mandates.

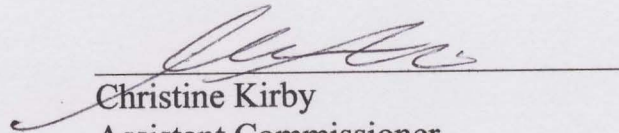
37. In addition, eliminating Massachusetts’ zero-emission-vehicle standards and greenhouse gas emissions requirements for motor vehicles also eliminates other benefits associated with uptake and use of zero-emission vehicles that otherwise would have accrued to Massachusetts residents, including direct consumer cost savings, local economic benefits, public health and environmental improvements, and power system benefits. Those foregone benefits represent substantial losses for Massachusetts residents.

38. Eliminating the zero-emission-vehicle standards also will negatively impact the Commonwealth’s business sector. MassDEP can no longer expect that, given the cutting-edge nature of the vehicle technologies and technology programs at Massachusetts’ colleges and universities, the zero-emission-vehicle standards will facilitate the creation of start-up ventures related to the increased requirement for advanced technology vehicles, or that companies that produce parts for or service zero-emission vehicles will be incentivized to move to or expand within the Commonwealth.

39. In conclusion, the Challenged Actions have directly and concretely harmed Massachusetts.

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Amherst, Massachusetts on June 24, 2020.



Christine Kirby  
Assistant Commissioner  
Bureau of Air and Waste  
Massachusetts Department of  
Environmental Protection

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

UNION OF CONCERNED  
SCIENTISTS, *et al.*,

*Petitioners,*

v.

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

*Respondents.*

No. 19-1230  
(and consolidated cases)

**DECLARATION OF STEVEN E. FLINT**

Pursuant to 28 U.S.C § 1746, I, Steven E. Flint, P.E., declare as follows:

1. I am the Director of the Division of Air Resources (DAR) at the New York State Department of Environmental Conservation (NYSDEC), where I have worked since 1980. I provide this declaration in support of the State Petitioners' brief filed in this lawsuit challenging the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, Part One: One National Program," which was jointly adopted by the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA), 84 Fed. Reg. 51,310 (September 27, 2019) (the "Final Actions"). The State of New York filed this case because of our

strong interest in the state-level environmental protections allowed under Sections 209 and 177 of the Clean Air Act (42 U.S.C. §§ 7543, 7507).

2. As an administrator of New York's program for adopting California's vehicle emissions standards under Section 177, it is clear to me that New York will suffer harm due to EPA's and NHTSA's actions to remove states' ability to adopt California's regulations under Section 177. These actions, together with EPA and NHTSA's action to significantly weaken current federal emissions standards, *see* 85 Fed. Reg. 24,174 (Apr. 30, 2020)<sup>1</sup> will result in New York suffering the effects of increased greenhouse gas (GHG) emissions both in and outside its borders. These increased emissions will prevent New York from reaching its statutorily mandated emissions goals. Failure to reduce GHG emissions both inside and outside New York will continue 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.

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<sup>1</sup> A second action, "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), attempts to roll back federal motor vehicle greenhouse gas emission standards and fuel economy standards, was published by EPA and NHTSA is the subject of a separate lawsuit U.S. Court of Appeals for the District of Columbia Circuit Case No. 20-1167

## PERSONAL BACKGROUND AND QUALIFICATIONS

3. I have Bachelor of Science and Master of Science in Civil and Environmental Engineering degrees from Clarkson College. I am a licensed Professional Engineer in New York.

4. I have been the Director of the Division of Air Resources for approximately 4 years. In addition to my current position, I have held the positions of Assistant Director of Air Resources; Director, Bureau of Mobile Sources and Technology Development; Chief of Light and Heavy Duty Vehicle Section of the Bureau of Mobile Sources and Technology Development; and other engineering positions within DEC.

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 DEC's nine regional offices, which are responsible for air permitting and enforcement throughout the state.

6. Another of my responsibilities is overseeing DEC's air quality planning efforts, including regulation and mitigation of greenhouse gas (GHG) emissions.

7. I also oversee the development of Clean Air Act-mandated State Implementation Plans (SIP). SIPs detail how DEC 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<sub>2.5</sub>) and sulfur dioxide (SO<sub>2</sub>), 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.

8. As part of my job responsibilities, I have worked on efforts within New York to adopt motor vehicle emission control programs that reduce emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs), which are pollutants that lead to the formation of ozone and are commonly referred to as “ozone precursors,” as well as GHG emissions. These control programs include 6 New York Code of Rules & Regulations (NYCRR) Part 217, Motor Vehicle Emissions and 6 NYCRR Part 218 (Part 218), Emission Standards for Motor Vehicles and Motor Vehicle Engines.

### **POINT I**

#### **THE ABILITY TO ADOPT CALIFORNIA’S MORE STRINGENT GHG EMISSIONS STANDARDS IS CRITICAL TO NEW YORK**

##### **A. New York’s Historic Use of Section 177 Has Reduced the State’s GHG Emissions.**

9. 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, in the form of 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 more stringent GHG emissions standards, including the most recent ones for model years 2017-2025.

10. In 2012, with the support of the auto industry, EPA promulgated greenhouse gas emissions standards for MY2017-2025, again jointly with NHTSA. 77 Fed. Reg. 62,623 (Oct. 15, 2012). The standards, expressed as reductions of CO<sub>2</sub> in grams/mile (g/mi) are achieved through a combination of measures, including increases in engine and vehicle efficiency, changes to air conditioning, and off-cycle credits. EPA's standards require a combined (passenger car and light-duty truck) fleet-wide average of 243 g/mi CO<sub>2</sub> in 2017, decreasing to a combined fleetwide average of 163 g/mi CO<sub>2</sub> in 2025. The agencies estimated that these reductions would correspond to a combined fleetwide fuel economy average

of 35 mpg in 2017 increasing to about 49 mpg in 2025. 77 Fed. Reg. at 62,640.<sup>2</sup> 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.

11. The Final Actions purport to revoke California’s ability to adopt and enforce its own GHG standards—and thus other states’ ability to adopt those standards. This would deprive California, New York, and the other Section 177 states of the ability to enforce more stringent standards than those imposed by EPA and NHTSA, including the 2021-2025 standards. Furthermore, the Final Actions include EPA’s novel determination that Section 177 precludes New York and other states from adopting and enforcing California’s GHG standards even in the event that California’s authority to adopt and enforce those standards is restored.

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<sup>2</sup> EPA noted that real world CO<sub>2</sub> emissions are generally 25% higher than compliance values, and real world fuel efficiency values generally 20% lower than compliance values. 77 F.R. 62,624, 62630 fn. 11.



12. Without the ability to enforce the California standards that New York previously adopted for model years 2021-2025, or the ability to adopt California's GHG emission standards for model years after 2025, New York will not be able to continue the GHG emissions reductions detailed above—and neither will the other Section 177 states. The public health, environmental and economic harms from GHG emissions set forth below in Point 2 would only worsen. This scenario of worsening harms would only be exacerbated by the combined effect of EPA/NHTSA's attempt to preempt California's GHG standards, and EPA's interpretation of Section 177 with the agencies' rollback of the current model year 2021-2025 GHG emissions. Indeed, as the agencies themselves acknowledge, 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 its Full Section 177 Authority to Meet Statutorily Mandated GHG Emissions Reduction Goals**

13. 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.

14. 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. Under the CLCPA, DEC is also to promulgate regulations to ensure compliance with the Statewide GHG emission limits. ECL § 75-0109. Importantly, as defined by the CLCPA, the definition of “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).

15. New York’s ability to use Section 177 to adopt California’s motor vehicle emission standards is 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.

16. For instance, California has mandated that a certain percentage of vehicles each manufacturer sells must be “zero-emission vehicles” (ZEVs). Cal.

Code Regs. Title 13 § 1960-1960.2. New York has adopted these percentages. 6 N.Y.C.R.R. § 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 as well as the more stringent GHG emissions standards mandated fleetwide, 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 cannot expect to meet its climate goals, including the statutory requirements of CLCPA.

## POINT II

### **NEW YORK AND ITS CITIZENS WILL SUFFER SHORT- AND LONG-TERM HARM FROM THE FINAL ACTIONS**

17. The Final Actions, by increasing 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 the 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**

18. 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, impaired ability to deliver public health and medical services, increased respiratory diseases such as asthma, and increased outbreaks of gastrointestinal diseases. Vector-borne diseases, such as those spread by mosquitoes and ticks (e.g., West Nile virus and Lyme disease), may expand or their distribution patterns may change, either of which may adversely affect additional populations. Water- and food-borne diseases are likely to increase without mitigation and adaptation intervention.<sup>3</sup>

19. The New York City metropolitan area has a significant ozone problem. Climate change is likely to worsen the harms New York is already

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<sup>3</sup> Rosenzweig, C., W. Solecki, A. DeGaetano, M. O'Grady, S. Hassol, P. Grabhorn (Eds.) 2011 at 421, 403. 'Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation'. New York State Energy Research and Development Authority <http://www.nyserda.ny.gov/climaid>.

suffering from ozone. As NHTSA recognized during the 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.”<sup>4</sup>

20. 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.

21. 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.

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<sup>4</sup> 77 Fed. Reg. at 63,148.

## **B. Climate Change is Already Harming New York's Environment**

22. Anthropogenic emissions of the predominant GHG, CO<sub>2</sub>, are contributing to the observed warming of the planet.<sup>5</sup> 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 variability of the climate.<sup>6</sup> These changes are and will continue to harm New York State's environment, including shorelines, drinking water sources, agriculture, forests, and wildlife diversity.

### **1. Climate Change Has and Continues to Alter New York's Weather**

23. Similarly, New York's climate has also begun to change. Temperatures in New York State have risen on average 0.25°F per decade over the past century, with the greatest warming coming in recent decades. This warming

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<sup>5</sup> Intergovernmental Panel on Climate Change Working Group I Fifth Assessment Report, Climate Change 2013: The Physical Science Basis, 2013, and available at: <https://www.ipcc.ch/report/ar5/wg1/>

<sup>6</sup> Ibid.

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). The 2011 New York State ClimAID assessment<sup>7</sup> and the 2014 update to ClimAID<sup>8</sup> present the numerous direct impacts that have already been observed in New York State. These impacts are described in more detail below.

24. New York State is likely to see widespread shifts in species composition in the State's forests and other natural landscapes within the next 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 CO<sub>2</sub> 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

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<sup>7</sup> Rosenzweig, C., W. Solecki, A. DeGaetano, M. O'Grady, S. Hassol, P. Grabhorn (Eds.) 2011. 'Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation'. New York State Energy Research and Development Authority <http://www.nyscrda.ny.gov/climaid>

<sup>8</sup> Horton, R., D. Bader, C. Rosenzweig, A. DeGaetano, and W. Solecki. 2014. Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information. New York State Energy Research and Development Authority (NYSERDA), Albany, New York.

duration of ice cover. Increasing water temperatures will negatively affect brook trout and other native cold-water fish.

25. 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. 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 Mississippi and consists of six million acres including 2.6 million acres of state-owned forest preserve.<sup>9</sup> The Adirondack Park, one the most significant hardwood ecosystems in the world, is likely to be threatened by these changes. 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**

26. Warming ocean waters contribute to sea level rise, with adverse impacts for New York State. Warmer ocean water, which results in thermal

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<sup>9</sup> New York State Adirondack Park Agency (APA), [http://www.apa.ny.gov/About\\_Park/index.html](http://www.apa.ny.gov/About_Park/index.html)



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 significantly greater than the global mean, ranging from 0.9 to 1.5 inches per decade.<sup>10</sup>

27. 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.<sup>11</sup> That flooding devastated areas of New York, including the Brooklyn-Queens Waterfront, the East and South Shores of Staten Island, South Queens, Southern Manhattan, and Southern Brooklyn, which in some areas lost power and other critical services for extended

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<sup>10</sup> Rosenzweig et al. 19; 127; 135;.

<sup>11</sup> 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>

periods. Overall, Hurricane Sandy caused 53 deaths and the estimated costs of damage and loss in New York State exceeded \$30 billion.<sup>12</sup>

28. 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,<sup>13</sup> 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.

29. 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 21<sup>st</sup> century, coastal flood levels currently associated with a 100-year flood could occur approximately

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<sup>12</sup> FEMA expenditures in New York State totaled \$16.9 billion (<https://www.fema.gov/news-release/2015/10/21/fema-aid-reaches-169-billion-new-yorks-hurricane-sandy-recovery>). US HUD expenditures totaled \$7 billion (HUD Archives News Release, HUD # 13-153, 10/28/13. <https://archives.hud.gov/news/2013/pr13-153.cfm>). Total insurance payments in New York State totaled \$8.3 billion, including National Flood Insurance payments, and private auto, homeowner, and commercial property insurance. (Hurricane Sandy: Rebuilding Task Force: Hurricane Sandy Rebuilding Strategy, August 2013, page 29. <https://www.hud.gov/sites/documents/hsrebuildingstrategy.pdf>)

<sup>13</sup> U.S. Bureau of the Census, *Statistical Abstract of the United States 1987* at 187 (107<sup>th</sup> Ed.).

four times as often under conservative sea level rise scenarios. This trend will increase localized flash flooding in urban areas and hilly regions.<sup>14</sup>

30. New York State incurs significant costs from damage from flooding. Grants to the State from the FEMA 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 made 4,127 Public Assistance grants totaling nearly \$10 billion to State and local governments for facilities damaged by the storm, including parks, beaches, marinas, water treatment plants, hospitals, schools, public housing and other public buildings. While FEMA grants to New York covered 90% of the eligible costs of such projects, the State was left responsible for covering the remaining 10 percent.<sup>15</sup>

31. 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

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<sup>14</sup> Rosenzweig et al. 35; 103.

<sup>15</sup> <https://www.fema.gov/news-release/2015/10/21/fema-aid-reaches-169-billion-new-yorks-hurricane-sandy-recovery>

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, beach-going, and fishing. The U.S. Secretary of Health and Human Services issued Public Health Emergency Declarations in New York<sup>16</sup> following Hurricane Sandy and Tropical Storm Lee, in large part because of post-flood conditions.

32. 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.<sup>17</sup> The storms closed 400 road segments and bridges and required repairs at 945 locations on the State highway system.

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<sup>16</sup> <https://www.phe.gov/emergency/news/healthactions/phe/Pages/default.aspx>

<sup>17</sup> 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>

33. 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.”<sup>18</sup> Indeed, “[e]xtensive erosion has already been documented across the mid-Atlantic region, New England, and New York.”<sup>19</sup> 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).<sup>20</sup> 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).<sup>21</sup>

34. New York State and entities it funds maintain or own critical transportation infrastructure in lower Manhattan, including the Hugh L. Carey

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<sup>18</sup> CAFE 2017-2025 EIS § 5.5.2.1.3.

<sup>19</sup> *Id.*

<sup>20</sup> 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>.

<sup>21</sup> <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>

Tunnel (formerly the Brooklyn-Battery Tunnel),<sup>22</sup> the South Ferry Terminal,<sup>23</sup> and the West Side Highway.<sup>24</sup>

35. 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.<sup>25</sup> In 2016, the MTA identified 46 resiliency projects across its transit system, requiring a total expenditure of just over \$750 million, which included federal funding.<sup>26</sup> These projects included:

- a. Resiliency measures (e.g., hardening of pump systems, watertight doors, and portal-sealing) designed to improve underground and 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;

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<sup>22</sup> See Metropolitan Transit Authority, *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>

<sup>23</sup> *Id.* at 106.

<sup>24</sup> New York State Department of Transportation, Real Estate Division, Notice of Appropriation, "Route 9A Reconstruction Project," available at [http://a836-acris.nyc.gov/DS/DocumentSearch/DocumentImageView?doc\\_id=FT\\_1840006500484](http://a836-acris.nyc.gov/DS/DocumentSearch/DocumentImageView?doc_id=FT_1840006500484).

<sup>25</sup> MTA, *MTA Climate Adaptation Task Force Resiliency Report* at 8, available at <https://new.mta.info/document/10456>

<sup>26</sup> *Id.* at 12

- 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.<sup>27</sup>

36. 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.<sup>28</sup>

### **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.<sup>29</sup>

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<sup>27</sup> *Id.* at 16-27.

<sup>28</sup> MTA, *MTA Climate Adaptation Task Force 2019 Resiliency Report: Update on agency-wide climate resiliency projects*, available at <https://new.mta.info/document/10461>.

<sup>29</sup> Rosenzweig et al. 103.

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 rainfall events, and more frequent and intense summer water deficits by mid-to late-century.<sup>30</sup>

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.<sup>31</sup> New York is the third largest producer of

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<sup>30</sup> Rosenzweig et al. 236; III-69; 187-88; II-58; 222-23; 241-243.

<sup>31</sup> Garcia, Alvaro. Dealing with Heat Stress in Dairy Cows. South Dakota Cooperative Extension Service. September, 2002. Page 1.



milk in the United States, behind California and Wisconsin, with 14.8 billion pounds of milk produced in 2016.<sup>32</sup> 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.<sup>33</sup> In 2016, New York reported approximately \$2.5 billion dollars of cash receipts from its dairy industry.<sup>34</sup> A loss of milk production efficiency from heat effects could result in the loss of hundreds of millions of dollars annually for New York's dairy industry.

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<sup>32</sup> Milk Production, Disposition and Income: 2016 Summary, at p. 10, United States Department of Agriculture, National Agricultural Statistics Service, April 2017, available [https://www.nass.usda.gov/Publications/Todays\\_Reports/reports/mlkpd17.pdf](https://www.nass.usda.gov/Publications/Todays_Reports/reports/mlkpd17.pdf)

<sup>33</sup> Frumhoff, Peter. Confronting Climate Change in the U.S. Northeast: Science, Impacts, and Solutions, Northeast Climate Impacts Assessment, July 2007, p. 69.

<sup>34</sup> Milk Production, Disposition and Income: 2016 Summary, at p. 12.

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 June 18, 2020.

  
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Steven E. Flint, P.E.

**COLLEEN A. McCARTHY**  
Notary Public, State of New York  
Qualified in Albany County  
No. 02MC5046480  
Commission Expires July 27, 2021



**DECLARATION OF SYLVIA ARRENDONDO**  
**FOR THE CENTER FOR BIOLOGICAL DIVERSITY**

I, Sylvia Arredondo, state and declare as follows:

1. I am over 18 years of age and competent to give this declaration. I have personal knowledge of the following facts, and if called as a witness could and would testify competently to them. As to those matters which reflect an opinion, they reflect my personal opinion and judgment on the matter.

2. I have been a member of the Center for Biological Diversity (the “Center”) since 2015, and I rely upon the Center to represent my interests in protecting our air quality and our environment by their gathering and disseminating information about air pollution, advocating for the remediation of that pollution, and enforcing our environmental laws in the courts.

3. I grew up in Wilmington and lived about a mile from a refinery and directly across the street from oil wells, drilling installations and train switching stations. As a child, I was diagnosed with mild asthma and, on one occasion, I have developed bronchitis because of it. I lived in Wilmington until I moved away to the Bay Area for college. While living in the Bay Area, I began feeling much better and my health improved. In 2012, I returned to Wilmington. Three years later, I began living in an area close to the Phillips 66 refinery, Interstate 110 freeway, and the Port of Los Angeles.

4. Four months ago, I moved from Wilmington to Long Beach,

California. I now live close to the Interstate 710 freeway, which is heavily congested with passenger cars and light trucks. I also live within eight miles of the Valero Wilmington, Marathon Carson, and Marathon Los Angeles refineries. I am employed as a Civic Engagement Coordinator for Communities for a Better Environment (“CBE”), an environmental justice organization that seeks to prevent pollution and build healthy communities and environments. I work out of CBE’s Wilmington office, which is less than a quarter mile from the Phillips 66 oil refinery, 5.5 miles from the Port of Los Angeles, and less than three miles from the Interstate 110 freeway, which carries very heavy car and truck traffic to and from the Port and the refinery.

5. I am extremely concerned and care greatly about the bad air quality where I live and work both for myself and those on whose behalf I advocate. There are approximately six refineries in and around Wilmington. These nearby refineries process enormous amounts of oil and emit large quantities of pollutants, including particulate matter (“PM2.5”) and nitrogen oxides, which are precursors for ozone (also known as “smog”). Sometimes I can smell the pollution and toxic fumes from the refinery when I drive on nearby roads or take walks in the vicinity. I often see the black soot and grime that comes from the refinery and vehicle traffic near my home and place of work.

6. I often suffer air pollution sickness due to the emissions from the

refineries, heavy traffic on nearby freeways, and the Port of Los Angeles, and when traffic and refinery pollution increases, my symptoms get worse. In 2018, I suffered from sinus infections that were worse than any I had experienced previously. In one instance, I was so sick I had to miss work for about a week. I might have lost my job if I did not work for an organization dedicated to caring for communities and people affected by air pollution. When I get sinus infections, I become extremely sensitive to light and noise, and feel painful pressure in my nasal cavities, above my eyelids, in my temples and in my ears. When my nasal cavity is inflamed, it often feels as if I have a painful ear infection. My throat becomes sore, and the discomfort and pain keep me from being able to work. I was fully incapacitated in this way twice in 2017 and once the year before. When the temperature rises, as it has in recent years, my sinus infections are more frequent and intense, and my overall health worsens. I know that the greenhouse gases produced by refineries and vehicles are responsible for the ever-rising temperatures that make air pollution and my symptoms worse.

7. I am on a medication regimen that calls for administering a nasal decongestant weekly or daily, depending on the temperature. I also take allergy tablets and prescribed eye drops to prevent my eyes from becoming dry and itchy. I try to use these medicines to preempt any air pollution sickness, but I still become incapacitated. I suffer all these effects even though I changed my diet to

make it as healthy as possible and increased my fluid intake. I use an inhaler whenever I exercise, hike, or go for a bike ride. I know it is the emissions from the oil refinery and from vehicles that make me so sick.

8. Because of my job, I am aware of many people in Wilmington who live close to the refinery, the Port of Los Angeles, and the 110 freeway and suffer from air pollution-related illnesses, such as asthma, sinus infections, other lung diseases, and even heart attacks. Particulate matter and ozone pollution are known causes for all of these conditions. Refineries like Phillips 66 in Wilmington emit benzene, which is a known carcinogen. The Wilmington area is notoriously described as a “cancer cluster,” particularly for leukemia, a cancer directly associated with benzene emissions. I know many Wilmington community members suffering from leukemia, including children already diagnosed with the disease. In 2015, my friend died of leukemia. The harmful and often lethal consequences of refinery emissions make me anxious and fearful of my own risk of contracting cancer.

9. Poor air quality also impacts my family, especially my younger nieces who are seven and five years-old, who live in Wilmington about one mile from a refinery and across the street from oil wells, and who go to elementary school near the Port, 110 freeway, and several refineries. They both have to use inhalers and nebulizers to assist their breathing. I have watched how air pollution

adversely impacts their health and prevents them from leading happy, healthy, and unencumbered lives. They must always remember to bring their inhalers to school and could be disciplined by the school if they use it without first going to the school nurse's office.

10. Because of my personal health issues from fossil-fuel-related pollution and my job duties, I am well-informed of regulations, programs, and workshops designed to reduce the air pollution affecting my health and that of the communities I serve. For example, there are state programs that provide financial assistance to low-income communities for purchasing zero-emission vehicles. At CBE, we have been advocating for greater investments for an electric bus fleet in Wilmington. Unlike other California cities, Wilmington lags far behind when it comes to embracing clean transportation technology that could drastically improve the health and wellbeing of its residents. Until recently, city buses would spew exhaust as they traveled by our office and neighboring frontline communities. Now those buses are powered by "clean" natural gas; however, what the community wants and needs most is a zero-emission fleet.

11. In 2012, the Environmental Protection Agency ("EPA") and the National Highway Traffic Safety Administration ("NHTSA") issued regulations that set increasingly stringent standards which reduce pollution, such as PM2.5, ozone precursors like nitrogen oxides, and greenhouse gases, from cars and light

trucks built during the years 2017-2025 (the “2012 Vehicle Rule”). I learned, however, that in April 2018, EPA reversed course and withdrew its 2017 final determination, finding that the 2012 Vehicle Rule was no longer appropriate, too stringent, and would be rolled back. Now, NHTSA and EPA have issued the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks” (“SAFE Vehicles Rule”). The first part of the SAFE Vehicles Rule states that federal law preempts—and on that basis revokes—California’s ability to set stricter GHG standards and require auto manufacturers to produce and sell more ZEVs (“waiver”). The second part of the SAFE Vehicles Rule will be significantly weaker on GHG pollution reduction and fuel efficiency requirements than the 2012 Vehicle Rule. I am aware that both parts of the Rule have now been finalized.

12. I am deeply concerned by the rollback of federal vehicle standards and the federal government’s attempt to revoke California’s waiver. These decisions would make it exceedingly difficult for communities like mine to reduce tailpipe emissions in our environment.

13. I fear that the federal government’s lack of support for ZEV requirements and stricter fuel economy standards will undermine national and state-level efforts that encourage investments in and adoption of electric vehicles. I am also concerned that the confusion caused by the SAFE Vehicles Rule will



cause uncertainty in the ZEV market, leading to fewer ZEVs being manufactured and available, leading to more pollution from cars and refineries, and making it less likely that I could afford to purchase a ZEV in the future. I currently drive a fuel-dependent vehicle—a 2010 Kia Forte. Two years ago, I looked into purchasing a low-emission or zero-emission vehicle. At the time, I was not able to make the investment. Now that I have paid off my Kia Forte, I have recommitted to the idea of purchasing a used zero-emission vehicle like the Nissan Leaf. I would consider purchasing a new zero-emission vehicle if the cost of the car came down due to widespread penetration of electric vehicles in the state and national market.

14. I am also concerned that SAFE Vehicles Rule will increase PM2.5, ozone-forming nitrogen oxides, and greenhouse gas emissions from Interstate 710 and 110 freeways and refineries near where I live and work, resulting in more polluted air. I am concerned these rules will increase pollution from cars on the freeway, and also from the refineries near me because people will be driving less-fuel-efficient cars and will need more gas to power them. I am very worried that, as a result, the SAFE Vehicles Rule will cause direct harm to my health. I will very likely miss more days of work due to more bouts of air pollution sickness. I am anxious about the prospect of more traumatic health experiences such as severe sinus infections, unnerving light and noise sensitivity, pressure in my head,

pain in my ears, shortness of breath, and increased risk of developing cancer. I experience fear and anxiety about how much my health and that of my community will continue to deteriorate.

15. Furthermore, I know that increased GHG emissions worsen climate change. I am also concerned that by undermining ZEVs and encouraging cars with lower gas mileage, the SAFE Vehicles Rule will harm the climate. Urban areas like mine can suffer from “heat island” effects, warming my area faster than others. Warmer temperatures increase air pollution, including ozone, and mean that I, and the communities I serve, will suffer more of the severe health consequences I have described. Wilmington is also low lying, and likely to suffer the consequences of storm surges and sea-level rise if climate change gets worse.

16. My job requires me to reach out to the community and provide information about: local air quality; air pollution emissions and their sources; impacts to public and environmental health; and how to resist these effects at a grassroots level. Neither EPA nor NHTSA has provided important information related to: the environmental and health impacts of the SAFE Vehicles Rule; an evaluation of scenarios with stricter fuel economy standards; the rationale behind the inclusion or exclusion of certain scenarios or assumptions; the effects of this rule on air pollution control efforts; and the impacts to federally-listed or critically-imperiled species and habitats.

17. This lack of information deprives me of my procedural rights to be informed of the additional impacts and burdens placed on communities like mine that are already suffering disproportionately from the degradation of the air we must breathe. I need this information as part of my job to enable members to advocate more effectively on behalf of stronger pollution control measures. For the same reason, the Center, on which I also rely to advocate for air pollution reduction, is hampered in its ability to protect me and others by sharing that information.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on June 8, 2020 at Wilmington, California.



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Sylvia Arredondo

**DECLARATION OF JANET DIETZKAMEI**  
**FOR THE CENTER FOR BIOLOGICAL DIVERSITY**

I, Janet DietzKamei, state and declare as follows:

1. I am over 18 years of age and competent to give this declaration. I have personal knowledge of the following facts, and if called as a witness could and would testify competently to them. As to those matters which reflect an opinion, they reflect my personal opinion and judgment on the matter.

2. I live in Fresno, California, and have lived there since 2003. I am retired from a 25-year career as a federal employee, where I worked for the Air Force, the U.S. Department of the Treasury, the Veterans' Administration, and the United States Department of Agriculture Forest Service.

3. I am deeply concerned and care greatly about the air quality in Fresno. Poor air quality in my home town and California's air-polluted Central Valley make me severely ill. I am keenly interested in doing all I can to improve the air I must breathe.

4. I have been a member of the Center for Biological Diversity (the "Center") since 2017, and I rely on the Center to represent my interests in protecting our air quality and environment by: gathering and disseminating information about air pollution, advocating for the remediation of pollution, and enforcing our environmental laws.

5. I have also been a member of the Fresno Environmental Reporting

Network (“FERN”) and Central Valley Air Quality Coalition (“CVAQ”) since December 2015 and June 2016, respectively. CVAQ and FERN are organizations that monitor and report on local air pollution and advocate on behalf of myself and other citizens to reduce that pollution.

6. I am aware that in 2012, the Environmental Protection Agency (“EPA”) and the National Highway Transportation and Safety Administration (“NHTSA”) issued fuel efficiency and greenhouse gas standards for all cars and light trucks manufactured during Model Years 2017 through 2025 (the “2012 Vehicle Rule”) and that those standards increased these vehicles’ fuel efficiency and greenhouse gas reductions every year through 2025, on a rising curve that contains steeper increases in the later years. I know that in April 2018, EPA reversed course and withdrew the final determination of the 2012 Vehicle Rule, finding that it was “not appropriate,” too stringent, and needed to be revised.

7. I’m also aware that in August 2018, NHTSA and EPA jointly released a notice of proposed rulemaking for the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021 through 2026 Passenger Cars and Light Trucks” (“SAFE Vehicles Rule”), which proposes to drastically reduce fuel economy from the 2012 Vehicles Rule. In the first part of the SAFE Vehicles Rule, NHTSA issued a preemption rule, which states that federal law preempts California’s ability under the Clean Air Act to set stricter greenhouse gas tailpipe

standards or to require auto manufacturers to produce and sell an increasing number of zero emissions vehicles (“ZEVs”), and EPA revoked California’s Clean Air Act waiver. The second part of the SAFE Vehicles Rule will result in a drastic reduction in fuel efficiency standards and means that Model Years 2021 through 2026 vehicles will combust more gasoline per mile traveled, thereby drastically increasing the amount of dangerous pollutants they emit, including ozone-forming nitrogen oxides, particulate matter (“PM2.5”), and greenhouse gases.

8. I am extremely concerned and personally injured by all parts of the SAFE Vehicles Rule, because it makes fuel efficiency standards and ZEV requirements less stringent than they were. I fear that the increased pollution from the vehicle fleet will restrict my daily life activities even more since I cannot help but breathe the pollution.

9. The SAFE Vehicles Rule directly harms my health and has concrete, direct, and frightening daily effects on my personal quality of life. I had allergies before moving to Fresno in 2003, but had never had asthma. Around 2009, I was diagnosed with asthma after having a severe reaction to an unknown trigger pollutant when I was in Virginia on vacation. Within five days of the onset of this reaction, I was in the Emergency Room (“ER”) with severe bronchitis. The consulting doctor was leaning toward admitting me to hospital. I was prescribed inhalers and other asthma relieving medications with the understanding that if I

did not improve, I would return to the ER. Until the ER visit in Virginia, I had not known that I had asthma. After I was diagnosed, I realized that I had been suffering from asthma-related sicknesses since at least 2006, three years after I moved to Fresno.

10. Air quality in Fresno and the Central Valley is among the worst in the nation. I understand that the significant number of vehicles travelling on the road contributes enormously to the pollution. My house is located about 1,400 feet from the busy Interstate 180 highway. The highway has seen a spike in traffic due to the partially complete extension; however, more congestion is expected once all 4.5 mile is finally complete. Since I purchased my home, a business park was constructed approximately 1,400 feet away, and adjacent to that is a new housing development. These sites are major contributors to increased tailpipe pollution near my home.

11. When the air quality for ozone or PM2.5 turns from “good” to “moderate,” I am immediately affected. When ozone is less than “good,” I cannot leave my house because I find it exceedingly difficult to get enough air into my lungs. When particulate matter is less than “good,” I cannot leave the house without wearing a mask. When I do leave my house, my husband must drop me off right in front of the building I am entering. Even with these precautionary measures, I still run the risk of suffering an asthma attack or becoming sick with

bronchitis or pneumonia. When I begin having an attack, I feel heaviness in my chest and cannot get air. Often I also start coughing. I feel like a fish out of water, gasping. If I am outside and begin to feel this chest pressure, shortness of breath, and/or coughing, I go into a building, a house, a car, or anywhere else that is enclosed so that I am better sheltered from the polluted air. Other effects of particulate matter and ozone air pollution on my health sometimes include sneezing and sniffing, feeling tired, achy, suffering from headaches, and feeling as if I am about to come down with a cold or flu. I also have a chronic cough when the particulate matter count increases.

12. I also cannot leave my house any time there is smoke in the air. During the months of November through February, my asthma symptoms are exacerbated by smoky air. To prevent pollutants from entering our home, my husband and I take off our outside clothing and put on clean clothing that is only worn inside the house. I have towels on my sofa and chairs that are washed after visitors sit on our furniture. No one can wear shoes inside our home. We have a nine pound in-door dog. When he returns from a walk or goes out for potty breaks, we wash his feet and wipe him with a damp towel.

13. Asthma has made me exceedingly sick. When I suffer an attack, it is very difficult to breathe. A particularly severe attack occurred in the summer of 2012 when I went outside to take my dog for a walk. Even though I wore a mask,



PM2.5 particulates and ozone were in the “moderate” level. I began having trouble breathing and getting enough oxygen into my lungs. Feeling faint and lightheaded, I panicked and turned around to go back home. I nearly lost consciousness right there on the road. I believe that only the adrenaline produced by my panic allowed me to make it back home, where I administered asthma medication and then passed out. I learned a lesson that day—the mask only protected me from the PM2.5 particulates not ozone. The entire experience was horrific.

14. Because I never want to experience such an attack again, I use multiple sources and devices to monitor air pollution in Fresno and the Central Valley. I must monitor both the PM2.5 and the ozone in my area on a daily and sometimes hourly basis because I have become increasingly sensitive to both pollutants over time. I use the San Joaquin Valley Air Pollution Control District’s Real-Time Air Advisory Network (RAAN) to monitor for ozone. I access the RAAN database through my computer or on the phone. I also receive alerts on my phone when air quality has degraded to a level where I will not be able to breathe. Even after leaving my house, I again check the RAAN database to make sure the air quality has not changed. I also have a PurpleAir Air Quality Sensor device in my yard to track PM2.5. I hang it outside at the same level where I am breathing air. Additionally, I wear a portable Wynd monitor around my neck to track air quality wherever I am at any given moment. My Wynd monitor is connected to

my in-home air purifying system in my bedroom and living room. I depend on my personal monitors, which provide up-to-date, “real-time” readings of PM2.5 air quality. I always consult my PurpleAir and Wynd monitors before going outside. This past winter, I did not become air pollution sick due to the readings I received from my PurpleAir monitor in my back yard.

15. I love to ride my bike and have been an avid outdoor person for my entire life, but now must spend most of my time inside my house. Because my activity level is so severely restricted, I now also suffer from unhealthy weight gain. To protect myself from pollutants, I always check the air quality before going to the gym to do some water aerobics. If there is an unexpected trigger when I do drive to the gym, I cannot walk from the parking lot to the gym because I begin to feel an asthma attack coming on. I end up having to go back home. Many of my friends and acquaintances and their children who live in Fresno or elsewhere in the Central Valley suffer from asthma or other severe health complications because of the air pollution caused by motor vehicles. I am concerned for them as well and fear for their well-being. During periods when air pollution is above moderate, many asthmatics end up in Central Valley Emergency Rooms and hospitals. I do all I can to avoid becoming so ill.

16. Now that EPA and NHTSA have proposed the SAFE Vehicles Rule, I am afraid that ozone-forming nitrogen oxides, PM2.5, and greenhouse gases will

increase. As a result, the air I must breathe will continue to be too polluted for me to participate or enjoy outdoor activities for fear of getting sick. My only option is to stay locked in my home as much as possible.

17. Because of the out-sized influence air quality has on my daily life, I am active in learning about and disseminating information about Fresno's poor air quality and its causes. When the air quality permits it, I speak about the effects of air pollution on my health at local, district, and state-level air quality board meetings. I routinely travel to Sacramento to speak to lawmakers on this subject. I also participate in air quality improvement workshops and training regarding California's array of electric vehicle programs. For example, I regularly attend the Air Resource Board's meetings and workshops regarding the proposed Advanced Clean Truck Regulation, which, if implemented, would require manufacturers to sell zero-emission trucks as a greater percentage of their annual state sales from 2024 to 2030. I also participate in and follow Fresno City Plans to develop strategies to reduce city vehicle usage, including promoting and improving city transportation such as bus service. As a member of CVAQ, I advocated for much-needed infrastructure and investment to increase the adoption of electric vehicles in my community and throughout California. California's Zero-Emission Vehicle mandate makes it easier for advocates like me to persuade leaders and encourage communities to support the state's clean transportation initiatives and future.

18. I am a proud owner of a 2018 Chevrolet electric vehicle, which has a driving range of approximately 238 miles when fully charged. Due to the lack of dependable charging infrastructure in California, I must also own an internal combustion engine vehicle so that I can reliably travel from San Joaquin Valley to the Bay Area and Sacramento without having to worry about whether or not I will be able to charge my vehicle when necessary. I would gladly trade in my gas-guzzling car if the range of ZEVs improved and if more charging infrastructure were available throughout the state. The SAFE Vehicles Rule causes direct and severe harm to me personally. I am concerned that my health will continue to suffer and get even worse, and my quality of life cannot improve. I suffer emotional distress knowing that the 2012 Vehicle Rule has been withdrawn and may be replaced by the less stringent SAFE Vehicles Rule.

19. The announcement of the SAFE Vehicles Rule has deprived me of vital information, including: an analysis of the environmental and health impacts of the proposed rule; an evaluation of scenarios with stricter fuel economy standards; the rationale behind the inclusion or exclusion of certain scenarios or assumptions; the effects of this proposed rule on federal and state air pollution control efforts; and the impact(s) to federally-listed or critically-imperiled species and habitats. Furthermore, the SAFE Vehicles Rule has limited my ability to effectively communicate with others about this action so it might be stopped, or to

rely on the Center to do so. As such, the lack of information has harmed my procedural rights as a citizen and a member of the Center.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on November 22, 2019 at Fresno, California.



Janet DietzKamei

**DECLARATION OF SHAYE WOLF**  
**FOR THE CENTER FOR BIOLOGICAL DIVERSITY**

I, Shaye Wolf, declare as follows:

The facts set forth in this declaration are based on my personal knowledge and if called as a witness, I could and would testify competently thereto under oath.

**Professional Background**

1. I reside in the city of Kensington, California.
2. I am the Climate Science Director for the Center for Biological Diversity's ("Center") Climate Law Institute, where I have worked since 2007. I received my Bachelor of Science degree in Biology at Yale University, my Master of Science degree in Ocean Sciences at the University of California, Santa Cruz, and my Ph.D. in Ecology and Evolutionary Biology from the University of California, Santa Cruz. My doctoral work, focused on forecasting the effects of climate change on seabird populations along the west coast of the United States, was published in *Global Change Biology and Ecology*.<sup>1</sup>

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<sup>1</sup> Shaye G. Wolf et al., *Predicting population consequences of ocean climate change for an ecosystem sentinel, the seabird Cassin's auklet*, 16 GLOBAL CHANGE BIOLOGY 1923 (2010); Shaye G. Wolf et al., *Range-wide reproductive consequences of marine climate variability for the seabird Cassin's auklet*, 90 ECOLOGY 742 (2009).

3. In my role as Climate Science Director for the Center's Climate Law Institute, I have developed expertise in the identification and mitigation of the harms from anthropogenic climate change to human communities, species and ecosystems. In my role, I regularly review scientific studies and reports on climate change; communicate with scientists and the public about climate change; attend scientific conferences on climate change; author technical comments, reports, and other publications on the harms of climate change to human communities, species, and ecosystems; contribute to climate change mitigation and adaptation plans; and support the Center for Biological Diversity's work fighting the climate crisis by urging and compelling all levels of government to implement urgent, large-scale cuts in greenhouse gas pollution—focused on phasing out fossil fuel production and combustion—to avoid devastating harms from climate change.

***The world faces a climate change emergency with widespread and escalating harms, driven by greenhouse gas emissions from fossil fuel combustion.***

4. The science is clear that the world faces a climate emergency. An international scientific consensus has established that human-caused climate change is already causing widespread harms, climate change threats are escalating and becoming increasingly dangerous, and fossil fuels are the dominant driver of the climate crisis.

5. The Intergovernmental Panel on Climate Change (IPCC), the international scientific body for the assessment of climate change, concluded in its 2014 Fifth Assessment Report that: “[w]arming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen,” and further that “[r]ecent climate changes have had widespread impacts on human and natural systems.”<sup>2</sup>

6. Moreover, the U.S. federal government has repeatedly recognized that human-caused climate change is causing widespread and intensifying harms across the country in the authoritative National Climate Assessments, scientific syntheses prepared by hundreds of scientific experts and reviewed by the National Academy of Sciences and federal agencies, including the U.S. Environmental Protection Agency (EPA) and Department of Transportation. Most recently, the Fourth National Climate Assessment, comprised of the 2017 *Climate Science Special*

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<sup>2</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SYNTHESIS REPORT. CONTRIBUTION OF WORKING GROUPS I, II AND III TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2014) at 2, [https://www.ipcc.ch/site/assets/uploads/2018/05/SYR\\_AR5\\_FINAL\\_full\\_wcover.pdf](https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf).



*Report* (Volume I)<sup>3</sup> and the 2018 *Impacts, Risks, and Adaptation in the United States* (Volume II),<sup>4</sup> concluded that “there is no convincing alternative explanation” for the observed warming of the climate over the last century other than human activities.<sup>5</sup> It found that “evidence of human-caused climate change is overwhelming and continues to strengthen, that the impacts of climate change are intensifying across the country, and that climate-related threats to Americans’ physical, social, and economic well-being are rising.”<sup>6</sup>

7. In 2009, the U.S. Environmental Protection Agency found that the then-current and projected concentrations of greenhouse gas pollution endanger the public health and welfare of current and future generations, based on robust scientific evidence of the harms from climate change.<sup>7</sup> On that basis, EPA began to regulate greenhouse gas emissions under the Clean Air Act. A 2018 study

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<sup>3</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. I (2017), <https://science2017.globalchange.gov/>.

<sup>4</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018), <https://nca2018.globalchange.gov/>.

<sup>5</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. I (2017) at 10.

<sup>6</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 36, <https://nca2018.globalchange.gov/>.

<sup>7</sup> U.S. Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule, 74 Federal Register 66496 (Dec. 15, 2009).

reviewed the scientific evidence that has emerged since 2009 and concluded that this evidence “lends increased support” for EPA’s endangerment finding.<sup>8</sup> The study by 16 prominent scientists examined the topics covered by the endangerment finding and concluded that “[f]or each of the areas addressed in the [endangerment finding], the amount, diversity, and sophistication of the evidence has increased dramatically, clearly strengthening the case for endangerment.”<sup>9</sup> The study also found that the risks of some impacts are even more severe or widespread than anticipated in 2009.<sup>10</sup>

8. Further, the National Climate Assessments and the IPCC decisively recognize the dominant role of fossil fuels in driving climate change. As stated by the Third National Climate Assessment: “observations unequivocally show that climate is changing and that the warming of the past 50 years is primarily due to human-induced emissions of heat-trapping gases. These emissions come mainly from burning coal, oil, and gas.”<sup>11</sup> The Fourth National Climate Assessment

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<sup>8</sup> Philip B. Duffy et al., *Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases*, 363 SCIENCE 1 (2019) at 1.

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*

<sup>11</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (Jerry M. Melillo et al., eds. 2014), [http://s3.amazonaws.com/nca2014/high/NCA3\\_Climate\\_Change\\_Impacts\\_in\\_the\\_United%20States\\_HighRes.pdf](http://s3.amazonaws.com/nca2014/high/NCA3_Climate_Change_Impacts_in_the_United%20States_HighRes.pdf) at 2. *See also* Report Finding 1 at 15: “The global warming of the past 50 years is primarily due to human activities, predominantly the burning of fossil fuels.”

reported that “fossil fuel combustion accounts for approximately 85 percent of total U.S. greenhouse gas emissions,”<sup>12</sup> which is “driving an increase in global surface temperatures and other widespread changes in Earth’s climate that are unprecedented in the history of modern civilization.”<sup>13</sup> The IPCC stated in its Fifth Assessment Report that “[c]arbon dioxide concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions.”<sup>14</sup>

***The transportation sector, including fossil fuel pollution from cars and light-duty trucks, is a significant contributor to U.S. greenhouse gas emissions.***

9. Fossil fuel emissions from internal combustion engine vehicles (ICEVs) are a significant component of global and U.S. greenhouse gas pollution. In 2017 the transportation sector was responsible for nearly one-quarter (24 percent) of global greenhouse gas emissions, with cars and trucks comprising the largest source (i.e., road transport emissions made up three-quarters of global

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<sup>12</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 60.

<sup>13</sup> *Id.* at 39.

<sup>14</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, SUMMARY FOR POLICYMAKERS, CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP I TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (Stocker, T.F. et al eds. 2013) at 9, [https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5\\_SPM\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_SPM_FINAL.pdf).

transportation sector emissions).<sup>15</sup> In the United States, the transportation sector was the largest contributor to greenhouse gas emissions in 2018, accounting for nearly 28 percent of total U.S. greenhouse gas emissions.<sup>16</sup> In terms of CO<sub>2</sub> pollution, the transportation sector accounted for nearly 36 percent of total U.S. CO<sub>2</sub> emissions from fossil fuel combustion in 2018, with passenger cars as the largest source at 41.0 percent and light-duty trucks comprising another 17.5 percent.<sup>17</sup> In the global context, the U.S. is responsible for one quarter of global light-duty vehicle emissions.<sup>18</sup>

10. In California, the level of zero emission vehicle (ZEV) adoption will have a direct impact on the state's ability to meet its mid-century climate goals. Executive Order B-55-18, issued by former Governor Brown in 2018, set the goal of achieving carbon neutrality by no later than 2045, and achieving and maintaining net negative emissions thereafter. To meet these goals, all major

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<sup>15</sup> INTERNATIONAL ENERGY AGENCY, CO<sub>2</sub> EMISSIONS FROM FUEL COMBUSTION: HIGHLIGHTS (2019), at 11, 13, [https://iea.blob.core.windows.net/assets/eb3b2e8d-28e0-47fd-a8ba-](https://iea.blob.core.windows.net/assets/eb3b2e8d-28e0-47fd-a8ba-160f7ed42bc3/CO2_Emissions_from_Fuel_Combustion_2019_Highlights.pdf)

160f7ed42bc3/CO2\_Emissions\_from\_Fuel\_Combustion\_2019\_Highlights.pdf.

<sup>16</sup> U.S. ENVIRONMENTAL PROTECTION AGENCY, DRAFT INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS, 1990-2018 (2020) at ES-26, <https://www.epa.gov/sites/production/files/2020-02/documents/us-ghg-inventory-2020-main-text.pdf>.

<sup>17</sup> *Id.* at ES-13.

<sup>18</sup> UNITED NATIONS ENVIRONMENT PROGRAMME, EMISSIONS GAP REPORT 2019, UNEP, Nairobi (2019) at 60, <https://www.unenvironment.org/resources/emissions-gap-report-2019>.

economic sectors, including the transportation, industrial, electric power, commercial, residential, and agriculture sectors, have to be, in effect, fully decarbonized.<sup>19</sup> Transportation constitutes the greatest share of California's greenhouse gas emissions, accounting for 40% of the state's total emissions.<sup>20</sup> As light-duty passenger vehicles alone amount to 70% of the state's transportation emissions and nearly 30% of the state's total emissions,<sup>21</sup> rapidly phasing in zero-emission vehicles (ZEVs) and phasing out internal combustion engine vehicles (ICEVs) are foundational components to decarbonizing California's transport sector, in line with the executive order. Considering that even the state's 2045 goal may not be restrictive enough to represent California's fair share of the reductions needed to keep warming below 1.5°C (i.e., as discussed below, the estimated U.S. "fair share" of emissions reductions needed to meet a 1.5°C climate target equates

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<sup>19</sup> See e.g., CALIFORNIA COUNCIL ON SCIENCE & TECHNOLOGY [CCST], CCST EXPERT BRIEFING, CALIFORNIA'S PATHWAYS TO CARBON NEUTRALITY (2018), <https://ccst.us/wp-content/uploads/CCST-OnePager-Pathways-to-Carbon-Neutrality-2018-12-17-2.pdf>.

<sup>20</sup> See CALIFORNIA AIR RESOURCES BOARD, CALIFORNIA GREENHOUSE GAS EMISSIONS FOR 2000 TO 2016 (2018 ED.), [https://www.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2016/ghg\\_inventory\\_trends\\_00-16.pdf](https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf).

<sup>21</sup> M. TAYLOR, ASSESSING CALIFORNIA'S CLIMATE POLICIES—TRANSPORTATION, CALIFORNIA LEGISLATIVE ANALYST'S OFFICE (2018). Importantly, any electrification of passenger vehicles must be coupled with the deployment of clean and renewable energy sources to fuel the electricity supply.

to cutting domestic emissions to near zero by 2040), the importance of the state pursuing ambitious ZEV adoption is apparent.

11. At the same time, ICEVs threaten the public health and safety of Californians. According to the American Lung Association, air pollution from ICEVs resulted in \$15 billion in health and climate costs in California in 2015 alone, including costs related to respiratory illness, premature mortality, and lost work days.<sup>22</sup> The rapid electrification of passenger vehicles, coupled with decreasing vehicle miles traveled through public transit improvements, is necessary to combatting California's egregious air pollution problems.

**Global greenhouse gas emissions must be cut in half by 2030 to avoid catastrophic damages from the climate crisis, with faster emissions reductions required in the United States, highlighting the need for rapid decarbonization of the transportation sector.**

12. In 2018, the Intergovernmental Panel on Climate Change (IPCC) *Special Report on Global Warming of 1.5°C* provided overwhelming scientific evidence for the necessity of immediate, deep greenhouse gas reductions across all sectors to avoid devastating climate change-driven damages, and underscored the

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<sup>22</sup> See AMERICAN LUNG ASSOCIATION, CLEAN AIR FUTURE (October 2016) at 14, <https://www.lung.org/local-content/california/documents/2016zeroemissions.pdf>.

high costs of inaction or delays, particularly in the next crucial decade, in making these cuts. The IPCC *Special Report* quantified the harms that would occur at 2°C warming compared with 1.5°C warming, and highlighted the necessity of limiting warming to 1.5°C to avoid catastrophic impacts to people and life on Earth.<sup>23</sup>

According to the IPCC's analysis, the damages that would occur at 2°C warming compared with 1.5°C are stark, including significantly more deadly heatwaves, drought and flooding; 10 centimeters of additional sea level rise within this century, exposing 10 million more people to flooding; a greater risk of triggering the collapse of the Greenland and Antarctic ice sheets with resulting multi-meter sea level rise; dramatically increased species extinction risk, including a doubling of the number of vertebrate and plant species losing more than half their range, and the virtual elimination of coral reefs; 1.5 to 2.5 million more square kilometers of thawing permafrost area with the associated release of methane, a potent greenhouse gas; a tenfold increase in the probability of ice-free Arctic summers; a higher risk of heat-related and ozone-related deaths and the increased spread of mosquito-borne diseases such as malaria and dengue fever; reduced yields and

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<sup>23</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5°C, AN IPCC SPECIAL REPORT ON THE IMPACTS OF GLOBAL WARMING OF 1.5°C ABOVE PRE-INDUSTRIAL LEVELS AND RELATED GLOBAL GREENHOUSE GAS EMISSION PATHWAYS, IN THE CONTEXT OF STRENGTHENING THE GLOBAL RESPONSE TO THE THREAT OF CLIMATE CHANGE, SUSTAINABLE DEVELOPMENT, AND EFFORTS TO ERADICATE POVERTY (2018), <https://www.ipcc.ch/sr15/>.

lower nutritional value of staple crops like corn, rice, and wheat; a doubling of the number of people exposed to climate change-induced increases in water stress; and up to several hundred million more people exposed to climate-related risks and susceptible to poverty by 2050.<sup>24</sup>

13. The IPCC emphasized that pathways consistent with limiting warming to 1.5°C require “rapid and far-reaching transitions” across all sectors including transport.<sup>25</sup> At the global level, 1.5°C pathways require global net anthropogenic CO<sub>2</sub> emissions to decline by about 45 percent below 2010 levels by 2030, and to reach near zero around 2045 or 2050.<sup>26</sup>

14. The United States and other wealthy nations have a responsibility to make much larger emissions reductions than the global average, due to their dominant role in driving climate change and its harms, combined with their greater financial resources and technical capabilities to implement emissions cuts and transition to clean energy. The U.S. is the world’s largest historic emitter of greenhouse gas pollution, responsible for 25 percent of cumulative global CO<sub>2</sub> emissions since 1870, and is currently the world’s second highest emitter on an

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<sup>24</sup> *Id.* at SUMMARY FOR POLICYMAKERS 7-11.

<sup>25</sup> *Id.* at SUMMARY FOR POLICYMAKERS 15.

<sup>26</sup> *Id.* at SUMMARY FOR POLICYMAKERS 12.



annual and per capita basis.<sup>27</sup> Clearly the U.S. has a responsibility to lead in phasing out fossil fuel production and use and rapidly transition to clean energy.

15. Estimates of an equitable U.S. “fair share” of emissions reductions needed to meet a 1.5°C climate target make clear that the U.S. must rapidly decarbonize across all sectors, including transportation. Using an equity approach based on responsibility and capability, the U.S. fair share of emissions reductions for meeting a 1.5°C Paris target equates to cutting U.S. domestic emissions by at least 60 to 70% below 2005 levels by 2030 and reaching near zero emissions by 2040, paired with financial and technological support for large-scale emissions reductions internationally.<sup>28</sup> The U.S. simply has no time to delay in decarbonizing the transportation sector, particularly since the technologies to do so are already available.

16. The authoritative 2019 United Nations Environment Programme *Emissions Gap Report* concluded that limiting warming to 1.5°C requires countries to strengthen their climate pledges fivefold to cut emissions by at least 7.6 percent

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<sup>27</sup> Corinne LeQuéré et al., *Global carbon budget 2018*, 10 EARTH SYST. SCI. DATA 2141 (2018) at Figure 5, 2167; GLOBAL CARBON PROJECT, GLOBAL CARBON BUDGET 2018 (Dec 5, 2018) [https://www.globalcarbonproject.org/carbonbudget/18/files/GCP\\_CarbonBudget\\_2018.pdf](https://www.globalcarbonproject.org/carbonbudget/18/files/GCP_CarbonBudget_2018.pdf) at 19 (See Historical cumulative fossil CO<sub>2</sub> emissions by country).

<sup>28</sup> Christian Holz, et al., *The Climate Equity Reference Calculator*, 4 J. OF OPEN SOURCE SOFTWARE 35, 1273. DOI:10.21105/joss.01273. *The Climate Equity Reference Calculator* is available at <https://climateequityreference.org/>

per year through 2030, for a total emissions reduction of 55 percent between 2020 and 2030.<sup>29</sup>

17. Importantly, the report concluded that the U.S. “in particular” must ramp up climate action to meet global climate targets and its pledge under the Paris Agreement.<sup>30</sup> The report specifically identified the urgent need for stronger emissions cuts in the U.S. transportation sector which is responsible for a quarter of global light-duty vehicle emissions.<sup>31</sup> The report pointed out that the Trump Administration’s freezing of the vehicle emissions and fuel economy standards for cars and light-duty trucks would significantly increase greenhouse gas emissions.<sup>32</sup> To be consistent with Paris climate targets, the report recommends that the U.S. instead “strengthen vehicle and fuel economy standards to be in line with zero emissions for new cars in 2030.”<sup>33</sup>

18. The report warned that further delays in emissions cuts threaten the global economy, food security, and biodiversity: “Further delaying the reductions

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<sup>29</sup> UNITED NATIONS ENVIRONMENT PROGRAMME, EMISSIONS GAP REPORT 2019, UNEP, Nairobi (2019), <https://www.unenvironment.org/resources/emissions-gap-report-2019> at XV, XX, 26.

<sup>30</sup> *Id.* at 12 (“the main contributions would need to come in particular from the United States of America.”) and 11 (Table 2.2 shows the U.S. on course to exceed its pledge under the Paris Agreement by 16.5 percent by 2030 under current policy).

<sup>31</sup> *Id.* at 60.

<sup>32</sup> *Id.* at 20.

<sup>33</sup> *Id.* at 37.

needed to meet the goals would imply future emission reductions and removal of CO<sub>2</sub> from the atmosphere at such a magnitude that it would result in a serious deviation from current available pathways. This, together with necessary adaptation actions, risks seriously damaging the global economy and undermining food security and biodiversity.”<sup>34</sup>

19. Similarly, a 2019 study emphasized that immediately phasing out fossil fuel-powered vehicles is critical for keeping warming below 1.5°C.<sup>35</sup> The study concluded that phasing out all fossil fuel infrastructure at the end of its design lifetime, starting immediately, preserves a 64 percent chance of keeping peak global mean temperature rise below 1.5°C.<sup>36</sup> This includes replacing internal combustion engine vehicles with zero carbon alternatives at the end of their lifespans, starting now. The study found that delaying this phase-out until 2030 reduces the likelihood that 1.5°C would be attainable. In other words, every year of delay in phasing out fossil fuel infrastructure including ICEVs makes “lock-in” more difficult to escape and the possibility of keeping global temperature rise below 1.5°C less likely.

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<sup>34</sup> *Id.* at XX.

<sup>35</sup> Christopher J. Smith et al., *Current fossil fuel infrastructure does not yet commit us to 1.5°C warming*, Nature Communications, doi.org/10.1038/s41467-018-07999-w (2019).

<sup>36</sup> *Id.* at 1.

**Instead of contributing to the decarbonization of the transportation sector, the SAFE Rule will increase greenhouse gas pollution and criteria pollutant emissions from cars and light-duty trucks.**

20. At a time when the U.S. must rapidly decarbonize the transportation sector, the Trump administration's Safer Affordable Fuel Efficient (SAFE) Vehicles Rule for Model Years 2021-2026, paired with the revocation of California's waiver authority under Section 209 of the Clean Air Act under Part One of the SAFE Rule, would take the U.S. in the opposite direction by increasing greenhouse gas pollution from light-duty cars and trucks, as compared to the standards finalized under the Obama administration. According to analysis by EPA and the National Highway Traffic Safety Administration (NHTSA) which likely underestimate the greenhouse gas impacts of the rule, the SAFE Rule would result in substantial additional carbon emissions: approximately 867 to 923 million metric tons of additional CO<sub>2</sub> emissions over the lifetimes of vehicles through Model Year (MY) 2029<sup>37</sup> and an additional 7.8 billion metric tons of CO<sub>2</sub> emissions between 2021 to 2100, compared to the No Action Alternative.<sup>38</sup> In

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<sup>37</sup> National Highway Traffic Safety Administration, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021–2026 Passenger Cars and Light Trucks, Final Rule, 85 Federal Register 24174 (April 30, 2020) (“Final Rule”) at 24176, Tables I-5, I-6, VII-116, VII-117, VII-118, VII-119.

<sup>38</sup> National Highway Traffic Safety Administration, Final Environmental Impact Statement for the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model

addition, according to EPA and NHTSA, the Rule would result in increased emissions of two other potent greenhouse gases: 1.116 to 1.182 million metric tons of additional methane emissions and 19,500 to 24,300 metric tons of additional nitrous oxide emissions over the lifetimes of vehicles through MY 2029, compared with the No Action Alternative.<sup>39</sup>

21. An independent analysis estimated that the SAFE Rule would result in an additional 1.5 billion metric tons of climate pollution by 2040—an amount equivalent to the total pollution from 68 coal plants operating for five years.<sup>40</sup>

22. The SAFE Rule will also increase emissions of criteria pollutants including NO<sub>x</sub>, VOC, PM, and SO<sub>2</sub><sup>41</sup> that are harmful to public health, wildlife and ecosystems. For example, EPA and NHTSA estimated that the SAFE Rule would result in a cumulative increase in NO<sub>x</sub> of 20,500 to 25,500 metric tons over the lifetime of vehicles through MY 2029, compared to the No Action Alternative.<sup>42</sup> EPA and NHTSA also estimated that the SAFE Rule would result in a cumulative increase in SO<sub>2</sub> of 22,400 metric tons over the lifetimes of vehicles through MY

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Year 2021–2026 Passenger Cars and Light Trucks, March 2020, (“FEIS”) at Table 5.4.1-1.

<sup>39</sup> FEIS at 5-36; Final Rule at Tables VII-117, VII-119.

<sup>40</sup> ENVIRONMENTAL DEFENSE FUND, TRUMP ADMINISTRATION MOVES AHEAD WITH HARMFUL CLEAN CARS ROLLBACK, [https://www.edf.org/sites/default/files/Cars\\_Final\\_Rollback\\_Factsheet.pdf](https://www.edf.org/sites/default/files/Cars_Final_Rollback_Factsheet.pdf).

<sup>41</sup> Final Rule at Tables VII-120 to VII-127.

<sup>42</sup> Final Rule at Tables VII-120, VII-121, VII-122, VII-123.

2029, although the agencies alternately estimated the potential for a cumulative decrease in SO<sub>2</sub> from the rule.<sup>43</sup>

23. In short, the SAFE rule would escalate the dangers and damages of the climate crisis, harm public health and ecosystem health, and put the U.S. and rest of the world in further jeopardy.

24. Instead, the U.S. Environmental Protection Agency and National Highway Traffic Safety Administration must take urgent action to significantly and steadily reduce emissions from passenger cars and light-duty trucks and push for the prompt, widespread adoption of zero emission vehicles to avoid the worst consequences of the climate crisis. These actions would make a significant contribution to lowering the U.S.'s greenhouse gas emissions and help put the U.S. on the path to avoiding catastrophic damages from the climate crisis. As detailed below, each cumulative increase in greenhouse gas emissions, especially over this critical decade, means that meeting a 1.5°C target becomes less likely, pushes the Earth toward climate tipping points, and increases devastating harms to current and future generations.

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<sup>43</sup> Final Rule at Tables VII-120, VII-121, VII-122, VII-123.

**U.S. and global greenhouse gas emissions have continued to rise because of inadequate climate action.**

25. Because of U.S. failures to show climate leadership, as exemplified by the SAFE Rule and other rollbacks of climate regulations by the Trump administration, U.S. greenhouse gas emissions have continued to increase. The U.S. Environmental Protection Agency estimated that U.S. CO<sub>2</sub> emissions from fossil fuel combustion increased by 2.9 percent between 2017 and 2018, with emissions rising across all sectors including transportation.<sup>44</sup> According to the EPA *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, 2018 CO<sub>2</sub> emissions from passenger cars were 1.8 percent higher than 2014 levels, 16 percent higher than 2005 levels, and 22 percent higher than 1990 levels.<sup>45</sup> As one analysis warned, “the U.S. was already off track in meeting its Paris Agreement targets” and the steep emissions increase in 2018 has made the gap even wider.<sup>46</sup>

26. The 2019 UN *Emissions Gap Report* similarly warned that the United States is vastly off-track to limit warming to 1.5°C or even 2°C and must greatly

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<sup>44</sup> U.S. ENVIRONMENTAL PROTECTION AGENCY, DRAFT INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS, 1990-2018, <https://www.epa.gov/sites/production/files/2020-02/documents/us-ghg-inventory-2020-main-text.pdf> at ES-11, ES-13.

<sup>45</sup> *Id.* at 2-31.

<sup>46</sup> RHODIUM GROUP, PRELIMINARY US EMISSIONS ESTIMATES FOR 2018, ENERGY AND CLIMATE STAFF (January 8, 2019), <https://rhg.com/research/preliminary-us-emissions-estimates-for-2018/>.

accelerate greenhouse gas emissions reductions.<sup>47</sup> At the global level, the report found that global greenhouse gas emissions have risen by 1.5 percent per year in the last decade—with warming projected to reach 3.2°C by the end of the century based on the insufficient climate pledges (i.e., Nationally Determined Contributions) by the U.S. and other countries under the Paris Agreement.<sup>48</sup>

27. As emissions continue to rise, the average global atmospheric CO<sub>2</sub> concentration in 2018 reached 405 parts per million (ppm), a level not seen for millions of years.<sup>49</sup> The last time CO<sub>2</sub> in Earth's atmosphere was at 400 ppm, global mean surface temperatures were 2 to 3°C warmer and the Greenland and West Antarctic ice sheets melted, leading to sea levels that were 10 to 20 meters higher than today.<sup>50</sup> The current atmospheric CO<sub>2</sub> concentration is nearly one and half times larger than the pre-industrial level of 280 ppm, and much greater than

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<sup>47</sup> UNITED NATIONS ENVIRONMENT PROGRAMME EMISSIONS GAP REPORT 2019, UNEP, Nairobi (2019), <https://www.unenvironment.org/resources/emissions-gap-report-2019> at 37.

<sup>48</sup> *Id.* at XIV, XIX, 27.

<sup>49</sup> Corinne LeQuéré et al., *Global carbon budget 2018*, 10 EARTH SYST. SCI. DATA 2141 (2018); WORLD METEOROLOGICAL ORGANIZATION, WMO GREENHOUSE GAS BULLETIN, No. 13, (OCTOBER 30, 2017) at 5, [https://library.wmo.int/doc\\_num.php?explnum\\_id=4022](https://library.wmo.int/doc_num.php?explnum_id=4022).

<sup>50</sup> WORLD METEOROLOGICAL ORGANIZATION, WMO GREENHOUSE GAS BULLETIN, No. 13 (OCTOBER 30, 2017) at 5, [https://ane4bf-datap1.s3-eu-west-1.amazonaws.com/wmocms/s3fs-public/ckeditor/files/GHG\\_Bulletin\\_13\\_EN\\_final\\_1\\_1.pdf?LGJNmHpwKkEG2Qw4mEQjdm6bWxgWAJHa](https://ane4bf-datap1.s3-eu-west-1.amazonaws.com/wmocms/s3fs-public/ckeditor/files/GHG_Bulletin_13_EN_final_1_1.pdf?LGJNmHpwKkEG2Qw4mEQjdm6bWxgWAJHa).



levels during the past 800,000.<sup>51</sup> The atmospheric concentrations of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), two other potent greenhouse gases, are 257 percent and 122 percent of their pre-industrial levels.<sup>52</sup> Global carbon emissions over the past 15 to 20 years have tracked the highest emission scenario used in IPCC climate projections, the RCP8.5 scenario<sup>53</sup> which is projected to lead to devastating impacts.<sup>54</sup>

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<sup>51</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SYNTHESIS REPORT. CONTRIBUTION OF WORKING GROUPS I, II AND III TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2014) at 4, 44; WORLD METEOROLOGICAL ORGANIZATION, WMO GREENHOUSE GAS BULLETIN, No. 13 (OCTOBER 30, 2017) at 1, 4.

<sup>52</sup> *Id.* at 2.

<sup>53</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME I (2017) at 31, 133, 134, and 152 (e.g. “The observed increase in global carbon emissions over the past 15–20 years has been consistent with higher scenarios (e.g., RCP8.5) (*very high confidence*)” at 31).

<sup>54</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SYNTHESIS REPORT. CONTRIBUTION OF WORKING GROUPS I, II AND III TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2014) at Figure 2.1.

**The climate crisis, driven by rising greenhouse gas emissions, is causing widespread, escalating, catastrophic harms in the United States and worldwide, leaving no room for delay in making rapid, aggressive cuts in greenhouse gas pollution.**

28. The National Climate Assessments, based on thousands of scientific studies, establish that rising greenhouse gas emissions—and resulting human-caused climate change—are causing widespread harms in the United States and worldwide, and these harms will worsen as greenhouse gas pollution continues to rise. As detailed in the Assessments and the IPCC 2019 *Special Report on the Ocean and Cryosphere*, key climate change impacts include rising temperatures, the increasing frequency of heat waves and other extreme weather events, the flooding of coastal regions by rising seas and increasing storm surge, the intensification of Atlantic hurricanes' destructive power, the rapid loss of Arctic sea ice and the collapse of Antarctic ice shelves, declining food and water security, ocean acidification, increasing species extinction risk, the global collapse of coral reefs, and devastating economic losses.<sup>55</sup> As summarized by the Fourth National

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<sup>55</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (Jerry M. Melillo et al. eds. 2014); U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. I (2017); U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018); Nirilie Abram et al., *Summary for Policymakers, in* IPCC SPECIAL REPORT ON THE

Climate Assessment, “Thousands of studies conducted by researchers around the world have documented changes in surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea ice; rising sea levels; ocean acidification; and increasing atmospheric water vapor.”<sup>56</sup>

29. Chief among its harms, human-caused climate change poses serious threats to public health and well-being.<sup>57</sup> The Fourth National Climate Assessment concluded that “[t]he health and well-being of Americans are already affected by climate change, with the adverse health consequences projected to worsen with additional climate change.”<sup>58</sup> The health impacts from climate change include increased exposure to heat waves, floods, droughts, and other extreme weather events; increases in infectious diseases; decreases in the quality and safety of air, food, and water including rising food insecurity and increases in air pollution;

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OCEAN AND CRYOSPHERE IN A CHANGING CLIMATE (H.-O. Pörtner et al., eds. 2019), <https://www.ipcc.ch/srocc/>.

<sup>56</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. I (2017) at 10.

<sup>57</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 540; U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016); U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (Jerry M. Melillo et al. eds. 2014) at 220.

<sup>58</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 540.

displacement; and stresses to mental health and well-being.<sup>59</sup> Although everyone is vulnerable to health harms from climate change, populations experiencing greater health risks include children, older adults, low-income communities, some communities of color, immigrant groups, and persons with disabilities and pre-existing medical conditions.<sup>60</sup> The 2015 Lancet Commission on Health and Climate Change warned that climate change is causing a global medical emergency, concluding that “the implications of climate change for a global population of 9 billion people threatens to undermine the last half century of gains in development and global health.”<sup>61</sup>

30. Climate change-driven health impacts are already occurring in the United States, particularly from illnesses and deaths caused by extreme weather

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<sup>59</sup> *Ibid*; U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016); U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (Jerry M. Melillo et al. eds. 2014) at 221; Perry Sheffield & Philip J. Landrigan, *Global climate change and children’s health: Threats and strategies for prevention*, 119 ENVIRON. HEALTH PERSPECTIVES 291 (2011).

<sup>60</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 548; U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016).

<sup>61</sup> Nick Watts et al., *Health and climate change: policy responses to protect public health*, 386 THE LANCET 1861 (2015) at 1861.

events which are increasing in frequency and intensity.<sup>62</sup> Heat is the leading cause of weather-related deaths in the U.S., and extreme heat is projected to increase future mortality on the scale of thousands to tens of thousands of additional premature deaths per year across the U.S. by the end of this century.<sup>63</sup> Hot days have been conclusively linked to an increase in heat-related deaths and illnesses—particularly among older adults, pregnant women, and children—including cardiovascular and respiratory complications, renal failure, electrolyte imbalance, kidney stones, negative impacts on fetal health, and preterm birth.<sup>64</sup> One study estimated that nearly one-third of the world’s population is currently exposed to a deadly combination of heat and humidity for at least 20 days a year, and that percentage is projected to rise to nearly three-quarters by the end of the century without deep cuts in greenhouse gas pollution, with particular impacts to the southeastern U.S.<sup>65</sup>

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<sup>62</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 541.

<sup>63</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016).

<sup>64</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 544-545.

<sup>65</sup> Camilo Mora et al., *Global risk of deadly heat*, 7 NATURE CLIMATE CHANGE 501 (2017).

31. Extreme precipitation events have become more common in the United States, contributing to increases in severe flooding in some regions.<sup>66</sup> Without urgent climate action, heavy precipitation events are projected to increase in frequency and intensity across the United States, with the number of extreme events rising by two to three times the historical average by the end of the century under a higher emissions scenario.<sup>67</sup> Floods are the second deadliest of all weather-related hazards in the United States and can lead to drowning, contaminated drinking water, and mold-related illnesses.<sup>68</sup>

32. Human-caused climate change is also worsening the destructive power of hurricanes by increasing their intensity, rainfall and storm surge—ramping up the risks to lives and property. Because hurricanes are fueled by heat, rising ocean temperatures are increasing the strength of Atlantic hurricanes<sup>69</sup> and

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<sup>66</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (Jerry M. Melillo et al., eds. 2014) at 221; U.S. Global Change Research Program, Climate Science Special Report: Fourth National Climate Assessment, Vol. I (2017) at 20.

<sup>67</sup> *Id.* at 207, 218.

<sup>68</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (Jerry M. Melillo et al., eds. 2014) at 224.

<sup>69</sup> James B. Elsner et al., *The increasing intensity of the strongest tropical cyclones*, 455 NATURE 92 (2008); Mark A. Saunders & Adam S. Lea, *Large contribution of sea surface warming to recent increase in Atlantic hurricane activity*, 451 NATURE 557 (2008); G. Holland & C.L. Bruyère, *Recent intense hurricane response to global climate change*, 42 CLIMATE DYNAMICS 617 (2014); Erik Fraza & James B. Elsner, *A climatological study of the effect of sea-surface temperature on North Atlantic hurricane intensification*, 36 PHYSICAL GEOGRAPHY 395 (2015); U.S.

allowing them to intensify more quickly.<sup>70</sup> Warmer air also holds more moisture, causing heavier rainfall during hurricanes.<sup>71</sup> In 2017 Hurricane Harvey dropped record amounts of rainfall topping 60 inches over southeastern Texas,<sup>72</sup> unleashing catastrophic flooding that left 89 dead, displaced over 30,000 people and damaged or destroyed over 200,000 homes and businesses.<sup>73</sup> Studies estimate that global warming made Harvey's downpour 3.5 times more likely and at least 19 percent more intense.<sup>74</sup> In addition, rising sea levels due to climate change are causing higher storm surge—the enormous walls of water pushed onto the coast by storms. Large storm surge events of Hurricane Katrina magnitude have already doubled in

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GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. I (2017) at 257; U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 74.

<sup>70</sup> K. Bhatia et al., *Projected response of tropical cyclone intensity and intensification in a global climate model*, 31 J. OF CLIMATE 8281 (2018).

<sup>71</sup> Kerry Emanuel, *Assessing the present and future probability of Hurricane Harvey's rainfall 2017*, 114 PNAS 12681 (2017); David Keellings & José J. Hernández Ayala, *Extreme rainfall associated with Hurricane Maria over Puerto Rico and its connections to climate variability and change*, 46 GEOPHYSICAL RES. LETT. 2964 (2019).

<sup>72</sup> NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) & NATIONAL WEATHER SERVICE, NATIONAL HURRICANE CENTER TROPICAL CYCLONE REPORT: HURRICANE HARVEY, NATIONAL HURRICANE CENTER (9 MAY 2018), [https://www.nhc.noaa.gov/data/tcr/AL092017\\_Harvey.pdf](https://www.nhc.noaa.gov/data/tcr/AL092017_Harvey.pdf).

<sup>73</sup> NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION (NCEI), U.S. BILLION-DOLLAR WEATHER AND CLIMATE DISASTERS (2019), <https://www.ncdc.noaa.gov/billions/>.

<sup>74</sup> Mark D. Risser & Michael F. Wehner, *Attributable human-induced changes in the likelihood and magnitude of the observed extreme precipitation during Hurricane Harvey*, 44 GEOPHYSICAL RES. LETT. 12,457 (2017).

response to global warming and are projected to increase in frequency by twofold to sevenfold for each degree Celsius of temperature rise.<sup>75</sup> The costs of climate change-fueled storms are stark. The National Oceanic and Atmospheric Administration reported that during 2017 and 2018 alone, 5 major hurricanes cost the US at least 3,269 lost lives and \$325 billion in damages.<sup>76</sup>

33. Air pollutants—particularly ozone, particulate matter, and allergens—are projected to increase with climate change.<sup>77</sup> Climate-driven increases in ozone will cause more premature deaths, hospital visits, lost school days, and acute respiratory symptoms.<sup>78</sup> In 2020, projected climate-related increases in ground-level ozone concentrations could lead to an average of 2.8 million more occurrences of acute respiratory symptoms, 944,000 more missed school days, and

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<sup>75</sup> Aslak Grinsted et al., *Homogeneous record of Atlantic hurricane surge threat since 1923*, 109 PNAS 19601 (2012); Aslak Grinsted et al., *Projected hurricane surge threat from rising temperatures*, 110 PNAS 5369 (2013).

<sup>76</sup> NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION (NCEI) U.S. BILLION-DOLLAR WEATHER AND CLIMATE DISASTERS (2019), <https://www.ncdc.noaa.gov/billions/>.

<sup>77</sup> U.S. Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule, 74 Federal Register 66496 (Dec. 15, 2009), <https://www.ucsusa.org/sites/default/files/2019-09/climate-change-and-ozone-pollution.pdf>; U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016).

<sup>78</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016).



over 5,000 more hospitalizations for respiratory-related problems.<sup>79</sup> The continental U.S. could pay an average of \$5.4 billion (2008\$) in health impact costs associated with climate-related increases in ozone in 2020, with California experiencing the greatest impacts estimated at \$729 million.<sup>80</sup>

34. Risks from infectious diseases are increasing as climate change alters the geographic and seasonal distribution of tick- and mosquito-borne diseases like Lyme disease and West Nile virus.<sup>81</sup> The risk of human exposure to Lyme disease—the most common vector-borne illness in the U.S.<sup>82</sup>— is expected to increase as ticks carrying Lyme disease and other pathogens become active earlier in the season and expand northward in response to warming temperatures.<sup>83</sup> The two species of ticks capable of spreading Lyme disease have already expanded to new regions of the U.S. partly because of rising temperatures; in 2015, they were found in more than 49 percent of counties in the continental U.S., a nearly 45

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<sup>79</sup> UNION OF CONCERNED SCIENTISTS, RISING TEMPERATURES AND YOUR HEALTH: RISING TEMPERATURES, WORSENING OZONE POLLUTION (2011).

<sup>80</sup> *Id.*

<sup>81</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016).

<sup>82</sup> Amy M. Schwartz et al., *Surveillance for Lyme Disease — United States, 2008-2015*, 66 MMWR, Centers for Disease Control and Prevention (2017).

<sup>83</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016).

percent increase since 1998.<sup>84</sup> Rising temperatures and changes in rainfall have also contributed to the maintenance of West Nile virus in parts of the United States,<sup>85</sup> and cases of West Nile disease are projected to more than double by 2050 due in part to increasing temperatures, resulting in approximately \$1 billion per year in hospitalization costs and premature deaths under a higher emissions scenario.<sup>86</sup>

35. Numerous studies have emphasized that many lives could be saved with rapid reductions in greenhouse gas pollution.<sup>87</sup> The Fourth National Climate Assessment concludes that “reducing greenhouse gas emissions would benefit the

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<sup>84</sup> Rebecca J. Eisen, *County-Scale Distribution of Ixodes scapularis and Ixodes pacificus (Acari: Ixodidae) in the Continental United States*, 53 J. OF MED. ENTOMOLOGY 349 (2016).

<sup>85</sup> Ryan J. Harrigan et al., *A continental risk assessment of West Nile virus under climate change*, 20 GLOBAL CHANGE BIOLOGY 2417 (2014); Shlomit Paz, *Climate change impacts on West Nile virus transmission in a global context*, 370 PHILOSOPHICAL TRANS. OF THE ROYAL SOC’Y B 20130561 (2015).

<sup>86</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 552.

<sup>87</sup> Antonio Gasparrini et al., *Projections of temperature-related excess mortality under climate change scenarios*, 1 LANCET PLANET HEALTH e360 (2017); Solomon Hsiang et al., *Estimating economic damage from climate change in the United States*, 356 SCIENCE 1362 (2017); Raquel A. Silva et al., *Future global mortality from changes in air pollution attributable to climate change*, 7 NATURE CLIMATE CHANGE 647 (2017); Marshall Burke et al., *Higher temperatures increase suicide rates in the United States and Mexico*, 8 NATURE CLIMATE CHANGE 723 (2018); Drew Shindell et al., *Quantified, localized health benefits of accelerate carbon dioxide emissions reductions*, 8 NATURE CLIMATE CHANGE 723 (2018).

health of Americans in the near and long term.”<sup>88</sup> The Assessment projects that “by the end of this century, thousands of American lives could be saved and hundreds of billions of dollars in health-related economic benefits gained each year under a pathway of lower greenhouse gas emissions.”<sup>89</sup> Another recent study reported that faster reductions in carbon pollution will prevent millions of premature deaths globally. Compared with a 2°C pathway, a 1.5°C pathway is projected to result in 153 million fewer premature deaths worldwide due to reduced PM 2.5 and ozone exposure, including 130,000 fewer premature deaths in Los Angeles and 120,000 in the New York metropolitan area.<sup>90</sup>

36. The Fourth National Climate Assessment makes clear that human-caused climate change is already leading to substantial economic losses in the U.S. and that these losses will be much more severe under higher emissions scenarios, impeding economic growth: “Without substantial and sustained global mitigation and regional adaptation efforts, climate change is expected to cause growing losses

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<sup>88</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 541.

<sup>89</sup> *Id.* at 541.

<sup>90</sup> Drew Shindell et al., *Quantified, localized health benefits of accelerated carbon dioxide emissions reductions*, 8 NATURE CLIMATE CHANGE 291 (2018) at 291 and Table S1, <https://www.nature.com/articles/s41558-018-0108-y>.

to American infrastructure and property and impede the rate of economic growth over this century.”<sup>91</sup>

37. The Fourth National Climate Assessment warns: “In the absence of more significant global mitigation efforts, climate change is projected to impose substantial damages on the U.S. economy, human health, and the environment. Under scenarios with high emissions and limited or no adaptation, annual losses in some sectors are estimated to grow to hundreds of billions of dollars by the end of the century. It is very likely that some physical and ecological impacts will be irreversible for thousands of years, while others will be permanent.”<sup>92</sup>

38. According to the Fourth National Climate Assessment, the number of extreme weather events per year costing more than one billion dollars per event has increased significantly since 1980, with total costs exceeding \$1.1 trillion.<sup>93</sup> The National Oceanic and Atmospheric Administration estimated that, between 2015 and April 2018, 44 billion-dollar weather and climate disasters struck the United States, producing nearly \$400 billion in damages.<sup>94</sup>

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<sup>91</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 25.

<sup>92</sup> *Id.* at 1357.

<sup>93</sup> *Id.* at 81.

<sup>94</sup> *Id.* at 66.

39. By the end of the century, the Fourth National Climate Assessment estimates that warming on our current trajectory would cost the U.S. economy hundreds of billions of dollars each year and up to 10 percent of U.S. gross domestic product due to damages including lost crop yields, lost labor, increased disease incidence, property loss from sea level rise, and extreme weather damage.<sup>95</sup> Ultimately, the magnitude of financial burdens imposed by climate change depends on how effectively we curb emissions. Across sectors and regions, significant reductions in emissions will substantially lower the costs resulting from climate change damages.<sup>96</sup> For example, annual damages associated with additional extreme temperature-related deaths are projected at \$140 billion (in 2015 dollars) under the higher RCP 8.5 emissions scenario compared with \$60 billion under the lower RCP 4.5 scenario by 2090.<sup>97</sup> Annual damages to labor would be approximately \$155 billion under RCP 8.5, but reduced by 48 percent under RCP 4.5.<sup>98</sup> While coastal property damage would carry an annual cost of \$118 billion under RCP 8.5 in 2090, 22 percent of this cost would be avoided under RCP 4.5.<sup>99</sup>

40. Anthropogenic climate change is also causing widespread harm to life across the planet. Climate change is already impacting 82 percent of key ecological

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<sup>95</sup> *Id.* at 1358, 1360.

<sup>96</sup> *Id.* at 1349.

<sup>97</sup> *Id.* at 552.

<sup>98</sup> *Id.* at 1349.

<sup>99</sup> *Ibid.*

processes that underpin ecosystem function and support basic human needs.<sup>100</sup>

Climate change-related local extinctions are already widespread and have occurred in hundreds of species, including almost half of the 976 species surveyed.<sup>101</sup> Nearly half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds may have already been negatively impacted by climate change in at least part of their range.<sup>102</sup> Furthermore, across the globe, populations of terrestrial birds and mammals that are experiencing greater rates of climate warming are more likely to be declining at a faster rate.<sup>103</sup> Genes are changing, species' physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress.<sup>104</sup>

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<sup>100</sup> Brett R. Scheffers et al., *The broad footprint of climate change from genes to biomes to people*, 354 SCIENCE 719 (2016).

<sup>101</sup> John J. Wiens, *Climate-related local extinctions are already widespread among plant and animal species*, 14 PLOS BIOLOGY e2001104 (2016) at 1.

<sup>102</sup> Michela Pacifici et al., *Species' traits influenced their response to recent climate change*, 7 NATURE CLIMATE CHANGE 205 (2017) at 205. The study concluded that "populations of large numbers of threatened species are likely to be already affected by climate change, and ... conservation managers, planners and policy makers must take this into account in efforts to safeguard the future of biodiversity." *Id.* at 205.

<sup>103</sup> Fiona E.B. Spooner et al., *Rapid warming is associated with population decline among terrestrial birds and mammals globally*, 24 GLOBAL CHANGE BIOLOGY 4521 (2018).

<sup>104</sup> Camille Parmesan & Gary Yohe, *A globally coherent fingerprint of climate change impacts across natural systems*, 421 NATURE 37 (2003); Terry L. Root et al., *Fingerprints of global warming on wild animals and plants*, 421 NATURE 57 (2003); Camille Parmesan, *Ecological and evolutionary responses to recent*

41. Because climate change is occurring at an unprecedented pace with multiple synergistic impacts, human-caused climate change is increasing the extinction risk for many species. Numerous studies have projected catastrophic species losses during this century if climate change continues unabated: 15 to 37 percent of the world's plants and animals committed to extinction by 2050 under a mid-level emissions scenario;<sup>105</sup> the potential extinction of 10 to 14 percent of species by 2100;<sup>106</sup> global extinction of five percent of species with 2°C of warming and 16 percent of species with business-as-usual warming;<sup>107</sup> and the loss of a third or more of animals and plant species in the next 50 years.<sup>108</sup> A comprehensive 2019 United Nations report came to the shocking conclusion that

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*climate change*, 37 ANN. REV. OF ECOLOGY EVOLUTION AND SYSTEMATICS 637 (2006); I-Ching Chen et al., *Rapid range shifts of species associated with high levels of climate warming*, 333 SCIENCE 1024 (2011); Ilya M. D. Maclean & Robert J. Wilson, *Recent ecological responses to climate change support predictions of high extinction risk*, 108 PNAS 12337 (2011); Rachel Warren et al., *Increasing impacts of climate change upon ecosystems with increasing global mean temperature rise*, 106 CLIMATIC CHANGE 141 (2011); Abigail E. Cahill et al., *How does climate change cause extinction?*, 280 PROC. OF THE ROYAL SOCIETY B 20121890 (2012).

<sup>105</sup> Chris. D. Thomas et al., *Extinction risk from climate change*, 427 NATURE 145 (2004).

<sup>106</sup> Ilya M. D. Maclean & Robert J. Wilson, *Recent ecological responses to climate change support predictions of high extinction risk*, 108 PNAS 12337 (2011).

<sup>107</sup> Mark C. Urban, *Accelerating extinction risk from climate change*, 348 SCIENCE 571 (2015).

<sup>108</sup> Cristian Román-Palacios & J.J. Wiens, *Recent responses to climate change reveal the drivers of species extinction and survival*, 117 PNAS 8 (2020) .

one million animal and plant species are now threatened with extinction, with climate change as a major contributing factor.<sup>109</sup>

42. The Third National Climate Assessment warned that “landscapes and seascapes are changing rapidly, and species, including many iconic species, may disappear from regions where they have been prevalent or become extinct, altering some regions so much that their mix of plant and animal life will become almost unrecognizable.”<sup>110</sup>

43. California is particularly vulnerable to harms of the climate crisis, identified as “one of the most ‘climate-challenged’ regions of North America.”<sup>111</sup> The state is already experiencing rising temperatures, declining snowpack, more heavy precipitation events, intensifying drought, and rising seas.<sup>112</sup> Climate change has contributed to a series of some of the most extreme events in California’s recorded history: a severe drought from 2012-2016, an almost non-existent Sierra

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<sup>109</sup> INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES (IPBES), GLOBAL ASSESSMENT REPORT (MAY 6, 2019), <https://ipbes.net/news/Media-Release-Global-Assessment>.

<sup>110</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (Jerry M. Melillo et al., eds. 2014) at 196.

<sup>111</sup> L. BEDSWORTH ET AL., STATEWIDE SUMMARY REPORT, CALIFORNIA’S FOURTH CLIMATE CHANGE ASSESSMENT, CALIFORNIA GOVERNOR’S OFFICE OF PLANNING AND RESEARCH, SCRIPPS INSTITUTION OF OCEANOGRAPHY, CALIFORNIA ENERGY COMMISSION, CALIFORNIA PUBLIC UTILITIES COMMISSION (2018) at 13.

<sup>112</sup> CALIFORNIA NATURAL RESOURCES AGENCY, CALIFORNIA’S CHANGING CLIMATE 2018, Thorne, J. et al., eds. 2018) at 4, <http://www.climateassessment.ca.gov/state/docs/20180827-SummaryBrochure.pdf>.



Nevada winter snowpack in 2014-2015, increased destruction of communities by wildfires, and back-to-back years of the warmest average temperatures.<sup>113</sup>

44. Average annual temperatures have increased in California by about 2°F since the early 20th century<sup>114</sup> and are projected to rise by 8.8°F by 2100 if emissions continue at current rates.<sup>115</sup> Heat waves—which are responsible for the most deaths in California over the past 30 years<sup>116</sup>—are becoming more frequent both on land and in the ocean.<sup>117</sup> Precipitation is becoming more variable, and heavy downpours—with their associated flooding—are projected to become more frequent, especially due to an increase in atmospheric rivers.<sup>118</sup> Mountain snowpack is declining, and by 2050 the average water supply from snowpack is projected to decline to two-thirds of historical levels.<sup>119</sup> Rising temperatures and loss of snowpack are intensifying drought conditions which threaten water supplies

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<sup>113</sup> *Id.* at 3.

<sup>114</sup> NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION, 2017: CALIFORNIA STATE CLIMATE SUMMARY (Frankson, R., L. et al. eds. 2017), <https://statesummaries.ncics.org/ca>.

<sup>115</sup> CALIFORNIA NATURAL RESOURCES AGENCY, CALIFORNIA'S CHANGING CLIMATE 2018 (Thorne, J. et al. eds.2018) at 5, <http://www.climateassessment.ca.gov/state/docs/20180827-SummaryBrochure.pdf>.

<sup>116</sup> *Id.* at 7.

<sup>117</sup> *Id.* at 3,15.

<sup>118</sup> CALIFORNIA NATURAL RESOURCES AGENCY, CALIFORNIA'S CHANGING CLIMATE 2018 (Thorne, J. et al. eds.2018) at 24, 25.

<sup>119</sup> *Id.* at 5.

and agriculture.<sup>120</sup> Warmer and drier conditions are contributing to an increase in the acreage burned by wildfires and a longer fire season, with a 77 percent increase in mean area burned by 2100 projected under the current emissions rate.<sup>121</sup> Sea level has risen by an average of 9 inches off the southern and central California coasts, and is projected to rise by 54 inches by 2100 if emissions continue at current rates,<sup>122</sup> which would erode beaches, flood major seaports and airports, and cause devastating coastal property damage.<sup>123</sup> By mid-century, direct costs from human mortality, damages to coastal properties, and intensified droughts and damaging floods will reach an estimated tens of billions of dollars.<sup>124</sup>

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<sup>120</sup> P. Gonzalez et al., *Chapter 25: Southwest*, in U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (Reidmiller, D.R. et al. eds. 2018) at 1103, 1104, 1107, <https://nca2018.globalchange.gov/chapter/25/>.

<sup>121</sup> L. BEDSWORTH ET AL., CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, SCRIPPS INSTITUTION OF OCEANOGRAPHY, CALIFORNIA ENERGY COMMISSION, CALIFORNIA PUBLIC UTILITIES COMMISSION, STATEWIDE SUMMARY REPORT, CALIFORNIA'S FOURTH CLIMATE CHANGE ASSESSMENT (2018) at 9, 30.

<sup>122</sup> P. Gonzalez et al., *Chapter 25: Southwest*, in U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (Reidmiller, D.R. et al. eds. 2018) at 1118, <https://nca2018.globalchange.gov/chapter/25/>; L. BEDSWORTH ET AL., CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, SCRIPPS INSTITUTION OF OCEANOGRAPHY, CALIFORNIA ENERGY COMMISSION, CALIFORNIA PUBLIC UTILITIES COMMISSION, STATEWIDE SUMMARY REPORT, CALIFORNIA'S FOURTH CLIMATE CHANGE ASSESSMENT (2018) at 70.

<sup>123</sup> CALIFORNIA NATURAL RESOURCES AGENCY, CALIFORNIA'S CHANGING CLIMATE 2018 (Thorne, J. et al., eds. 2018) at 10, 15.

<sup>124</sup> *Id.* at 9.

**The choices we make today on reducing greenhouse gas pollution determine the severity of the climate change damages that we will suffer in the coming decades and centuries.**

45. Importantly, the harms of climate change are long-lived, and the choices we make now on reducing greenhouse gas pollution will affect the severity of the climate change damages that will be suffered in the coming decades and centuries: “[t]he impacts of global climate change are already being felt in the United States and are projected to intensify in the future—but the severity of future impacts will depend largely on actions taken to reduce greenhouse gas emissions.”<sup>125</sup> As the Fourth National Climate Assessment explains: “[m]any climate change impacts and associated economic damages in the United States can be substantially reduced over the course of the 21st century through global-scale reductions in greenhouse gas emissions.”<sup>126</sup> Without urgent climate action, “[i]t is very likely that some physical and ecological impacts will be irreversible for thousands of years, while others will be permanent.”<sup>127</sup> As highlighted by the National Research Council: “[E]mission reduction choices made today matter in

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<sup>125</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 34.

<sup>126</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II (2018) at 1347.

<sup>127</sup> *Id.* at 1357.

determining impacts experienced not just over the next few decades, but in the coming centuries and millennia.”<sup>128</sup>

46. Continued warming increases the likelihood that the climate system will cross tipping points—large-scale shifts in the climate system—that could result in climate states wholly outside human experience and result in severe physical and socioeconomic impacts.<sup>129</sup> The IPCC Fifth Assessment Report similarly warned that “with increasing warming, some physical and ecological systems are at risk of abrupt and/or irreversible changes” and that the risk “increases as the magnitude of the warming increases.”<sup>130</sup>

47. Evidence that the climate system is already close to crossing critical tipping points highlights the urgency of implementing emissions cuts.<sup>131</sup> For example, research indicates that a critical tipping point important to the stability of the West Antarctic Ice Sheet has been crossed. According to the Fourth National Climate Assessment, “observational evidence suggests that ice dynamics already in progress have committed the planet to as much as 3.9 feet (1.2 m) worth of sea

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<sup>128</sup> NATIONAL RESEARCH COUNCIL, CLIMATE STABILIZATION TARGETS: EMISSIONS, CONCENTRATIONS, AND IMPACTS OVER DECADES TO MILLENNIA (2011) at 3.

<sup>129</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. I (2017) at 411.

<sup>130</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SYNTHESIS REPORT. CONTRIBUTION OF WORKING GROUPS I, II AND III TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2014) at 72-73.

<sup>131</sup> *Id.* at 73-74.

level rise from the West Antarctic Ice Sheet alone” and that “under the higher RCP8.5 scenario, Antarctic ice could contribute 3.3 feet (1 m) or more to global mean sea level over the remainder of this century, with some authors arguing that rates of change could be even faster.”<sup>132</sup> A recent analysis suggests the Earth System is at risk of crossing a planetary threshold that could lock in a rapid pathway toward much hotter conditions (“Hothouse Earth”) propelled by self-reinforcing feedbacks. This threshold could be crossed at 2°C temperature rise, and the risk will increase significantly with additional warming.<sup>133</sup> A prominent 2019 review of the risks from tipping points concluded that “the evidence from tipping points alone suggests that we are in a state of planetary emergency: both the risk and urgency of the situation are acute.”<sup>134</sup> The time for bold climate action is now.

48. In sum, the Trump administration’s SAFE Rule both rolling back California’s waiver authority and national vehicle emissions standards would result in substantial greenhouse gas and criteria pollutant emissions. The evidence is clear that the world faces a climate emergency and we cannot afford the emissions that would result from this rollback. As the science demonstrates, rather than

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<sup>132</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. I (2017) at 420.

<sup>133</sup> Will Steffen et al., *Trajectories of the Earth System in the Anthropocene*, 115 PNAS 33 (2018).

<sup>134</sup> Timothy M. Lenton et al., *Climate tipping points—too risky to bet against*, 575 NATURE 592 (2019) at 2019) at 595.

rolling back existing standards and requirements, the U.S. government must rapidly decarbonize the transportation sector by promulgating vehicle emissions standards that significantly and steadily reduce greenhouse gas emissions from passenger cars and light-duty trucks and by requiring the prompt, widespread adoption of zero emission vehicles to avoid the worst consequences of the climate crisis.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on June 9, 2020 at Kensington, California.



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Shaye Wolf

DECLARATION OF ROBERT AKE

I, Robert Ake, declare as follows:

1. I am over the age of 18, competent to testify, and have personal knowledge of the following facts.
2. I live at 6603 Catherine Street in Norfolk, Virginia on an alcove off the Lafayette River. I have lived here for over 23 years. I have lived in Virginia for over fifty years, and in my free time I enjoy birding. I lead bird tours and trips and conduct surveys for the Fish and Wildlife Service in the Hampton Roads area, including in Back Bay National Wildlife Refuge.
3. I am a member of the Chesapeake Bay Foundation. I have been a member since 2006. I am aware of CBF's mission to "Save the Bay" and I support this mission. The Chesapeake Bay Foundation works to restore water quality and habitat, which I support because of my interest in birds and fish that live in the Bay and its watershed. I have participated in CBF's oyster gardening program by growing oysters off my dock.
4. I have lived in my home for 23 years and have seen first-hand what happens when large storms like hurricanes and northeasters hit my community. These storms can bring high winds, storm surges, and rains, which have resulted in my yard being flooded on multiple occasions, and one storm that brought water

levels all the way up to our home's foundation. We were forced to raise our furniture off the floor to prepare for possible flooding.

5. I understand that climate change is making these sorts of storms increasingly likely and I have significant concerns about damage to my home and property value.

6. Flooding has also become a regular occurrence in my community and affects routine activities. Flooding is something I always have to take into account now as I travel in and around the Hampton Roads area. Hampton Boulevard, much of downtown Norfolk, and one of the roads I frequently use are particularly susceptible to this flooding. There are times when I have to take alternate routes due to flooded roads, and times when I must abandon my travel altogether.

7. In addition to impacts to my personal property and community, sea level rise has had a significant impact on my ability to observe birds and conduct surveys for Fish and Wildlife Service—two activities I value and enjoy.

8. There is a small saltwater marsh adjacent to my property that provides important habitat for birds, including Clapper Rails and Marsh Wrens. The marsh provides breeding habitat for these birds, as well as a food source. Unfortunately, in the 23 years I have lived here, the marsh has been reduced to almost half its size due to rising water levels. The rising water levels inundate the marsh, killing the



grasses and eventually destroying the habitat. I expect that the marsh will be completely gone in the next 15 years or so.

9. This issue is not unique to my property. I have seen these same impacts to saltwater marshes occurring all along Virginia's coast. For example, I have observed and understand that marsh habitat is being destroyed in Chincoteague due to sea level rise, posing significant threats to a large Laughing Gull population.

10. I also perform bird surveys for the Fish and Wildlife Service in the Back Bay National Wildlife Refuge, the Eastern Shore of Virginia National Wildlife Refuge, and other marsh habitats on Virginia's Eastern Shore. I have done this work for over 40 years. During the course of this work, I have observed and understand that rising sea levels are reducing the quality and quantity of saltwater marshes in these locations. For example, Black Rails are a species of bird that require this type of tidal marsh habitat and they have virtually disappeared from Virginia due to the loss of tidal marsh habitat.

11. As sea levels continue to rise, the quality and quantity of marshes all along Virginia's coast will continue to decline, further threatening the feeding and breeding habitat for these birds and many others. Eventually, many of the marshes will simply disappear, as will the wildlife populations that depend on them. These

losses will interfere with or entirely prevent me from engaging in the birding activities I value and enjoy.

12. I understand that impacts from sea level rise are directly tied to greenhouse gas emissions, including tailpipe exhaust from motor vehicles.

13. I understand that EPA has issued the SAFE Part One Rule, which removes the ability of states to adopt greenhouse gas emissions and zero emission vehicle standards for passenger cars and trucks. I understand that EPA and NHTSA have also issued the SAFE Part Two Rule, which weakens fuel economy standards and greenhouse gas emission standards for passenger cars and trucks.

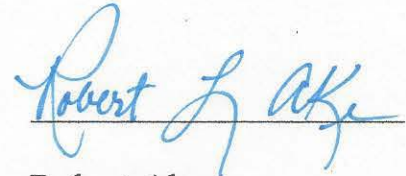
14. The SAFE Rules, individually and collectively, allow an increase in emissions of carbon dioxide and other greenhouse gases from tailpipes. I know that emissions of carbon dioxide and other greenhouse gases contribute to climate change, which leads to sea level rise and increased storms that harm my interests.

15. I am aware that the Chesapeake Bay Foundation has filed petitions with the D.C. Circuit challenging the SAFE Rules. I support CBF's challenges because I am experiencing harm from climate change, and the Agencies' actions directly contribute to this harm by preventing states from reducing climate-harming greenhouse gas emissions from cars and trucks and by weakening the federal standards for greenhouse gas emissions from tailpipes. Decisions from the

Court that strike down the SAFE Rules and revive existing programs and standards aimed at reducing greenhouse gas pollution from cars would alleviate my harm.

I declare under penalty of perjury and based on personal knowledge that the foregoing is true and correct to the best of my knowledge and belief.

Executed on the 27 day of May 2020.



Robert Ake

**DECLARATION OF WILLIAM C. BAKER**

I, William C. Baker, declare as follows:

1. I am over 18 years of age, competent to testify, and based on personal knowledge, information, and belief, I have knowledge of the facts stated herein.

2. I am President of the Chesapeake Bay Foundation, Inc. (“CBF”), which is located at 6 Herndon Ave., Annapolis, Maryland 21403. I was Executive Director of CBF from 1982 until 1984, when my title changed to President. I have held that position since 1984. Because of my position and responsibilities, I am familiar with CBF’s mission, organization, and activities, and with the environmental interests and concerns of CBF's members and board of trustees. I am also familiar with the demographics of CBF’s membership and board of trustees.

3. CBF is a regional, nonprofit, nonpartisan, public-interest advocacy organization with members throughout the Chesapeake Bay region. As of July 2019, CBF has over 300,000 members and electronic subscribers nationwide, including 109,137 members in Maryland; 6,368 members and electronic subscribers in Delaware; 6,094 members and electronic subscribers in the District of Columbia; 91,425 members and electronic subscribers in Virginia; 47,070 members and electronic subscribers in Pennsylvania; 18,102 members and electronic subscribers in New York; and 1,604 members and electronic subscribers in West Virginia.

4. CBF maintains offices in Annapolis and Easton, MD; Richmond and Virginia Beach, VA; Harrisburg, PA; and Washington, DC. CBF operates several environmental education centers on the Chesapeake Bay and maintains oyster restoration operations in Shady Side, MD and Gloucester Point, VA.

5. CBF’s mission is to “Save the Bay” and keep it saved, as defined by reaching a 70

on CBF's Health Index. *See* CBF, 2018 State of the Bay Report, <https://www.cbf.org/about-the-bay/state-of-the-bay-report/>. For over 50 years, CBF has worked to restore and protect the Chesapeake Bay through education, advocacy, restoration, and litigation. CBF uses its various resources to achieve its mission. However, climate change has adversely affected CBF's ability to do so and is worsened by continued increases in air pollution.

6. The Chesapeake Bay faces persistent water quality challenges due to nitrogen, phosphorus, and sediment pollution. Excessive nitrogen and phosphorus lead to an overabundance of algae which blocks sunlight from reaching underwater grasses that serve as food and habitat. As the algae decay, they rob the Bay of oxygen, leading to hypoxic or anoxic dead zones—water with little to no oxygen where it is impossible for oxygen-dependent creatures to survive.

7. Climate change, fueled by greenhouse gas emissions, exacerbates the Bay's water quality problems by increasing water temperatures, which decreases dissolved oxygen levels; increasing the frequency and strength of precipitation events and associated runoff pollution; changing salinity regimes; and causing the loss of wetlands and marshes, which provide valuable habitat and water-filtering services throughout the watershed, due to sea level rise. *See* CBF, "Climate Change", <https://www.cbf.org/issues/climate-change/>.

8. CBF is the largest independent organization dedicated solely to restoring and protecting the Chesapeake Bay and its tributary rivers. Our goal is to improve water quality through the implementation of the Chesapeake Bay Clean Water Blueprint. The "Blueprint" refers to the Chesapeake Bay Total Maximum Daily Load (TMDL), issued by the United States Environmental Protection Agency (EPA) in December 2010, and state-developed Watershed Implementation Plans (WIPs) which outline Bay jurisdictions' strategies to meet the pollution

reduction targets of the Bay TMDL. The Bay jurisdictions are Maryland, Pennsylvania, Virginia, Delaware, West Virginia, New York, and the District of Columbia.

9. The Bay Blueprint set the pollution reduction targets for the Bay’s three primary pollutants (nitrogen, phosphorus, and sediment) at levels necessary to meet water quality standards for dissolved oxygen and water clarity in the Bay. U.S. EPA, Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus, and Sediment (Dec. 2010), <https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document>. The Bay TMDL is designed to ensure that “by 2025 all practices necessary to fully restore the Bay and its tidal waters are in place.” *Id.* at ES-6.

10. CBF and a coalition of groups and individuals sued EPA to ensure development and implementation of the Bay TMDL. *Fowler v. EPA*, No. 1:09-C-00005-CKK, 2009 U.S. Dist. LEXIS 132084 (D.D.C. 2009). This matter resulted in a settlement agreement requiring EPA to, among other things, issue the Chesapeake Bay TMDL by December 31, 2010.

11. I am aware that EPA and the National Highway Traffic Safety Administration (NHTSA) recently finalized rules that weaken efforts to reduce air pollution from cars and trucks. In the first action, EPA withdrew California’s authority to establish greenhouse gas and zero-emission vehicle (ZEV) standards for passenger cars and trucks and removed other states’ ability to adopt those standards. Five of the seven watershed jurisdictions have adopted elements of the California standards in their efforts to fight climate change, reduce air pollution, and clean up the Bay.<sup>1</sup> In the second action, EPA and NHTSA weakened the federal greenhouse gas emissions and fuel economy standards, respectively, for passenger cars and trucks.

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<sup>1</sup> See Maryland Department of the Environment, “States Adopting California’s Clean Cars Standards”, <https://mde.maryland.gov/programs/air/mobilesources/pages/states.aspx> (including Maryland, Delaware, New York, Pennsylvania, and Washington, D.C.).

12. I understand that, collectively, the rules will lead to an increase in greenhouse gas emissions from vehicles, further exacerbating the impacts of climate change, as well as an increase in nitrogen oxides and other harmful air pollutants from increased fuel consumption. This increased air pollution will negatively impact the health of the Chesapeake Bay and CBF's members.

### **Air Pollution and Chesapeake Bay Health**

13. CBF's interest in improving the water quality of the Chesapeake Bay is intertwined with regional air quality issues. The Chesapeake Bay airshed is 570,000 square miles, stretching from Canada in the north, to South Carolina in the south, and to Indiana and Kentucky in the west. The airshed is more than nine times the area of the Bay's watershed. *See* Chesapeake Bay TMDL, Appendix L: Setting the Chesapeake Bay Atmospheric Nitrogen Deposition Allocations, at L-4 (Dec. 29, 2010), [https://www.epa.gov/sites/production/files/2015-02/documents/appendix\\_l\\_atmos\\_n\\_deposition\\_allocations\\_final.pdf](https://www.epa.gov/sites/production/files/2015-02/documents/appendix_l_atmos_n_deposition_allocations_final.pdf).

14. When the Bay TMDL was established in 2010, EPA identified the atmospheric deposition of nitrogen as contributing approximately one-third of the entire nitrogen input to the Bay watershed via deposition onto tidal surface waters and the surrounding Bay watershed. *See id.* at L-2. Atmospheric loads of nitrogen come from the emission of nitrogen oxides and ammonia (NH<sub>3</sub>). Primary sources of nitrogen oxides are industrial-sized boilers and internal combustion engines in cars, trucks, and other vehicles. *Id.* at L-1.

15. As EPA updated the modeling associated with the TMDL, the Agency relied in part on the implementation of federal and state vehicle emissions programs to achieve necessary reductions in atmospheric nitrogen in order to meet the requirements of the Chesapeake Bay TMDL. *See* U.S. EPA, Midpoint Assessment of the Chesapeake Bay Total Maximum Daily

Load at 4, <https://www.epa.gov/sites/production/files/2018-07/documents/factsheet-epa-midpoint-assessment-chesapeake-bay-tmdl.pdf> (“EPA and the jurisdictions will need to continue implementing Clean Air Act regulations for both stationary and mobile source pollution to ensure that the air deposition reduction goals will be achieved.”).

16. Climate change poses a significant threat to water quality and to achieving the goals of the Chesapeake Bay Blueprint. *See* U.S. EPA Chesapeake Bay Program, “Climate Change”, [https://www.chesapeakebay.net/issues/climate\\_change](https://www.chesapeakebay.net/issues/climate_change). Among other impacts, warmer water holds less oxygen, meaning that as temperatures continue to rise, dissolved oxygen in the Bay will decrease, worsening dead zones; stronger storms with more rainfall will lead to more polluted runoff entering the tributaries of the Bay; and climate change-induced sea level rise destroys marshes and wetlands necessary for filtering polluted runoff and for providing critical habitat to watershed species. Climate change and its impacts are fueled by increases in greenhouse gas emissions.

17. CBF has expended significant resources and time investigating regional air pollution to better understand and communicate how air pollution, especially greenhouse gases and nitrogen oxides, affects the Chesapeake Bay. These activities require a substantial amount of policy, advocacy, and scientific staff time. CBF recognizes the importance of participating in public comment and hearing processes related to federal and state air pollution regulation and regularly contributes its unique expertise and regional interests to such proceedings. CBF also devotes resources to educating the public, including members, about the impact of air pollution and climate change on water quality in the Bay watershed.

### **Impact to CBF Members**

18. CBF members engage in a wide array of activities around the Bay watershed



including fishing, crabbing, boating, swimming, hiking, bird watching, and oyster-gardening (growing oysters in baskets attached to a dock: <https://www.cbf.org/how-we-save-the-bay/programs-initiatives/frequently-asked-questions-about-oyster-gardening.html>). In this way, CBF members rely on a healthy Bay watershed for economic, recreational, and aesthetic interests.

19. Many CBF members live, work, recreate, and/or own property in areas throughout the watershed that are impacted by sea level rise, including sunny day flooding and increased storm events.

20. Numerous CBF members live near high traffic areas, interstate highway corridors traversing the Bay region, and in cities and areas that suffer from increasing days of extreme heat.<sup>2</sup> Many CBF members also live in Bay watershed areas impacted by harmful ground-level ozone pollution, including all or part of three areas currently not attaining federal air quality standards for ozone: Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE (Marginal Nonattainment); Washington, DC-MD-VA (Marginal Nonattainment); Baltimore, MD (Marginal Nonattainment). EPA, Greenbook: “8-Hour Ozone (2015) Designated Area/State Information” (current as of May 31, 2020), <https://www3.epa.gov/airquality/greenbook/jbtc.html>. I understand that climate change contributes to an increase in heat-related formation of ground-level ozone pollution.

21. Increases in greenhouse gases, nitrogen oxides, and other pollutants contribute to air pollution and climate change impacts suffered by communities in the Bay region, especially vulnerable communities who are already disproportionately impacted by pollution. These

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<sup>2</sup> See U.S. Global Change Research Program, Fourth National Climate Assessment, Chapter 18: Northeast (2018), available at <https://nca2018.globalchange.gov/chapter/18/>.

impacts harm CBF members' health, livelihoods, and interests in the Bay watershed.

### **Impact to CBF Restoration Work**

22. CBF operates a watershed-wide restoration department. CBF's restoration programs within the Chesapeake Bay watershed are designed to improve water quality, in many cases by taking up nitrogen in the air and water. Those restoration efforts include planting vegetative buffers along rivers and streams, planting trees, and growing and planting oysters and underwater grasses. During fiscal year 2019, CBF spent over \$3.1 million on restoration programs in the Chesapeake Bay region.

23. CBF's restoration department engages in numerous oyster restoration projects designed to revive the Chesapeake Bay's native oyster population after decades of decline due to pollution, overharvesting, and disease. Current estimates place the Bay's native oyster population at a fraction of historic levels. By restoring the Bay's oyster population, CBF aims to harness oysters' filtering ability to improve both water quality and clarity in the Bay. But climate change poses a serious threat to oyster populations in the Bay, including both restoration efforts and commercial fishing and aquaculture operations.

24. CBF's oyster restoration projects include oyster plantings, population and habitat monitoring, project maintenance, and public education (including the oyster gardening program). The primary restoration activity is planting juvenile oysters (or "spat") to build and enhance oyster reefs throughout the Bay. In 2019, CBF planted 6 million oysters in the Little Choptank River, 2 million at Fort Carroll on the Patapsco River, and 250 spat-covered reef balls in the South River. Additionally, CBF launched its Making History Campaign in 2018. As a part of the Campaign, CBF set a goal to achieve 10 billion more oysters in the Chesapeake Bay by 2025; and to restore and protect oyster populations in ten Chesapeake Bay watershed tributaries in

accordance with the goals of the Chesapeake Bay Watershed Agreement. *See* U.S. EPA Chesapeake Bay Program, “Chesapeake Bay Watershed Agreement”, [https://www.chesapeakebay.net/what/what\\_guides\\_us/watershed\\_agreement](https://www.chesapeakebay.net/what/what_guides_us/watershed_agreement).

25. Funding for these projects comes from a variety of sources including, but not limited to: National Oceanic and Atmospheric Administration (NOAA) grants; Abell Foundation grants; financial support from outside organizations such as Arundel Rivers Federation; and CBF’s Making History Campaign. Climate change is damaging CBF’s ability to meet grant deliverables.

26. Sea level rise and intense precipitation events are threatening the success and straining the resources of CBF’s oyster restoration program. In 2019, high precipitation caused large segments of the Bay to become less saline, CBF’s program suffered severe setbacks in larval oyster availability and survival. These setbacks caused CBF to default on grant program project deliverables and prevented CBF from assisting smaller Bay watershed groups with their own oyster restoration projects.

27. Sea level rise poses a serious threat to CBF’s Maryland Oyster Restoration Center in Shadyside, Maryland. Due to rapid sea level rise, CBF is searching for an alternative site to move its terrestrial oyster growing operations sometime in the next three years. Replacement sites suitable for such work are costly—one prospective property would cost CBF at least two million dollars to purchase and renovate. Additional greenhouse gases will contribute to continued sea level rise and intense precipitation events, which will continue to threaten the viability of CBF’s oyster restoration programs and its ability to support the programmatic goals of the Chesapeake Bay Watershed Agreement and the Bay Blueprint.

28. In addition to oyster restoration projects, CBF conducts agricultural restoration

projects throughout the watershed to protect and restore water quality. A key component of CBF's agricultural restoration projects is planting streamside buffers and stream restoration. The goal of these projects is to reduce the nutrient and sediment load entering Chesapeake Bay tributaries. Planting native grasses, shrubs, and trees along streams stabilizes the stream banks, filters pollutants from agricultural runoff, provides wildlife habitat for aquatic and terrestrial wildlife, sequesters carbon dioxide, and provides cooling shade for the water.

29. In Pennsylvania, tree plantings serve both CBF agricultural restoration goals as well as the Keystone 10 Million Tree Partnership, which is a CBF-led campaign to plant ten million trees in Pennsylvania—many in the Bay watershed—by 2025. Unfortunately, extreme weather events and unpredictable precipitation patterns threaten to derail these efforts. During 2018, the Bay watershed experienced a heavy rainfall season, with numerous storms producing multiple inches of precipitation at a time. These events led to flooding, which washed out numerous tree-planting projects and sent trees and planting materials downstream. In some cases, entire projects were decimated. Even for those projects that were not completely destroyed, they were ultimately ineffective because these projects require a threshold number of planted trees in order for the project to provide its intended ecological services. As a result, CBF had to replant numerous riparian buffers, which costs roughly \$8 per tree for hundreds of trees per acre on often multi-acre projects.

30. Conversely, due to a dry summer in 2019, CBF's inventory of unplanted tree seedlings dried out faster than they could be watered, and as a result, could not be successfully planted. This weather also dries out potential planting ground, making it difficult for staff and volunteers to dig holes appropriate for planting. Without viable seedlings and arable land, seedlings cannot be planted in a timely fashion and will ultimately be unlikely to survive the

winter. Frequent and intense weather events, be they droughts or severe rainstorms, harm CBF's ability to meet its goals in an effective and economically efficient manner. Increased greenhouse gas emissions will contribute to these chaotic weather patterns, threatening the viability of CBF's agricultural restoration programs and its ability to support the programmatic goals of the Chesapeake Bay Watershed Agreement and the Bay Blueprint.

### **Impact to CBF Education Programs**

31. The CBF Education Department operates three main programs: Student Field Programs, Teacher Professional Learning, and Student Leadership Programs.

32. The Field Programs represent the lion's share of the department's work. CBF currently operates sixteen different programs throughout the watershed. *See* CBF, "Field Programs", <https://www.cbf.org/join-us/education-program/field-programs/>. CBF operates five Boat Investigation Programs—Baltimore Harbor (Baltimore and Havre de Grace, MD); Hampton Roads (Hampton Roads, VA); James River (Hopewell, VA); Potomac River (Washington, DC); and Arthur Sherwood (Annapolis, MD)—utilizing scientific data collection and traditional watermen's fishing techniques to allow students to discover the health of their local rivers. CBF operates two Green Building Investigation Programs out of the Brock Environmental Center in Virginia Beach and the Phillip Merrill Environmental Center in Annapolis. CBF runs four canoe programs: the Susquehanna Watershed Environmental Education Program in Pennsylvania; the Elizabeth Reed Carter Environmental Education Program in tidal rivers of Virginia; the Virginia Watershed Environmental Education Center in non-tidal rivers of Virginia; and the Maryland Rivers and Streams Environmental Education Program. CBF operates a program of one-day field experiences throughout the Susquehanna River watershed via the Pennsylvania Student Action and Restoration Program. Lastly, CBF

operates four multi-day education programs out of the Karen Noonan Center (Dorchester County, MD); Smith Island (Tylerton, MD); and Port Isobel (Tangier, VA) (Port Isobel EAST and Port Isobel WEST).

33. The CBF Education Department educates over 34,000 students and teachers per year, measured in participant days. CBF's Education Department subsidizes much of the cost of these programs for schools and students.

34. Heavy rainfall and increased water pollution negatively impact field programs and the experiences available to students. After significant rainfall, CBF educators will avoid water contact on programs run in areas that are prone to contamination as a result of surface runoff that carries human and animal fecal waste, pesticides, fertilizers, oil, and various other contaminants. As a result, students would either have to wear gloves and goggles to do water sampling and bottom dredging, or these activities would be skipped due to concerns over water quality and student safety.

35. CBF's canoe programs are impeded during heavy rain events and seasons, as well as periods of long drought and low water levels. These scenarios make navigation both difficult and dangerous. Heavy rains cause high waters and large amounts of debris in the water. Droughts lower water levels so boats cannot travel on certain waters. Erratic precipitation patterns often prevent CBF's canoe programs from operating for weeks at a time.

36. CBF's outdoor education programs are also impacted by extreme heat events such as those experienced in July 2019. The heat alone is dangerous to participants, but it also exacerbates air quality issues, which further endanger student and adult participants in CBF's Teacher Professional Learning and Student Leadership Courses.

37. In recent years, CBF education courses and programming have been cancelled

due to extreme weather; cancellations lead to loss of revenue from programming. Increases in severe weather—such as hurricanes and high winds, extreme summer heat, and heavy rainstorms and high waters—will increase the risk of program cancellations, create more safety risks, and threaten CBF’s capital investments in education centers and boats.

38. Increased greenhouse gas emissions will contribute to climate change and exacerbate the weather patterns that disrupt numerous aspects of CBF’s education programming and resources.

### **Impact to CBF Property**

39. Climate change and its attendant sea level rise threatens to inundate significant portions of the 11,000-mile Chesapeake Bay shoreline—including Chesapeake Bay Foundation property. While the threat of sea level rise is imminent worldwide, the Chesapeake Bay faces additional, unique challenges due to regional land subsidence—exacerbating the deleterious effect of sea level rise. *See* Chesapeake Bay Foundation Report: *Climate Change and the Chesapeake Bay: Challenges, Impacts, and the Multiple Benefits of Agricultural Conservation Work*, at 2 (2007), <https://www.cbf.org/document-library/cbf-reports/Climate-Change37bf.pdf>. Thousands of acres of environmentally critical wetlands have been and continue to be at risk. This combination of processes has resulted in approximately one foot of net sea level rise in the Chesapeake Bay over the past 100 years—a rate nearly twice that of the global historic average. According to some scientists, the region might see as much as a three-to-four-foot sea level rise this century.<sup>3</sup>

40. Additionally, in low-lying areas, storm surges combined with higher sea levels

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<sup>3</sup> *See, e.g.,* Zhang, Fan & Li, Ming. (2019). Impacts of Ocean Warming, Sea Level Rise and Coastline Management on Storm Surge in a Semi-enclosed Bay. *Journal of Geophysical Research: Oceans*. 10.1029/2019JC015445.

and increasingly erratic storm activity may create a “perfect storm” that would flood thousands of acres. Many of those areas are economically disadvantaged, and the combination of flooding and limited access to emergency facilities—facilities that might themselves be flooded—could be disastrous.

41. CBF owns property throughout the Chesapeake Bay Watershed. CBF operates two environmental centers: the Phillip Merrill Environmental Center in Annapolis, MD and the Brock Environmental Center in Virginia Beach, VA. Both waterfront properties are raised to account for flooding from storms, but both centers are still threatened by sea level rise projected for this region. Additionally, CBF owns farmland in Maryland, including Holly Beach Farm, Harry Green Wildlife Preserve, and Clagett Farm. CBF owns other small islands and marshland in Accomack County, VA and Broad Creek, MD.

42. CBF holds nineteen conservation easements across the watershed in Maryland and Virginia, ranging from small one-acre easements to expansive 120-acre easements. Most of these properties are tidal marsh and are receding due to the erosive effects of sea level rise.

43. CBF’s Clagett Farm is in Upper Marlboro, MD and uses sustainable farming methods to grow vegetables and raise beef cattle and sheep, as well as growing trees and shrubs for restoration projects. Through its Community Supported Agriculture (CSA) program, Clagett Farm sells a variety of organic vegetables to subscribers who invest in a “share” of the Farm’s crop yield at the beginning of the planting season. These subscriptions financially support Clagett Farm. The Farm also grows organic produce that is donated to provide free and reduced-price fruits and vegetables to people living in poverty and near-poverty in Prince George’s County, Maryland. Clagett Farm also operates a native tree nursey, which provides CBF with trees to be potted, transported, and planted throughout the watershed as part of CBF’s restoration



programs.

44. Clagett Farm operates best, and produces its highest yields, with moderate, predictable weather. In 2018, the Farm experienced its wettest year on record. The water-logged soils inhibited plant growth and, in some fields, completely killed crops. This resulted in Clagett Farm's lowest yield in its 20-plus-year history. In 2019, Clagett Farm saw a drought where there were more than three months without soaking rain, along with extremely high temperatures. This led to a steep decline in late summer fruiting crops, such as tomatoes, eggplants, peppers, and beans. And hay fields and pasture grasses stopped growing. A side-effect of these conditions is desperate animal behavior as animals face food and habitat constraints, leading to destruction of crops and fencing.

45. Without predictable weather patterns, Clagett Farm's staff must plant for all possible weather scenarios—planting warm spring crops and cool spring crops simultaneously to ensure there will be some crops to harvest. Likewise, farm staff must plant both water-friendly crops as well as drought-tolerant crops. Under these conditions, staff now expect that in any given year, half of the planted crops will not produce a sustainable yield. Making matters worse, Clagett Farm must shift financial resources to invest in additional fencing, animal control, irrigation systems, and well-digging to protect the crops that are thriving. Ultimately, all of this threatens the financial stability of Clagett Farm. Because Clagett Farm is a CSA and has subscribers who invest in the harvest upfront, multiple seasons of reduced harvest could lead to lower subscriber retention rates, which could result in the Farm selling fewer shares and increasing prices to cover the cost of supplies and labor. If greenhouse gas emissions are not reduced and climate change continues unabated, CBF's Clagett Farm can expect these sporadic weather patterns to continue and/or worsen. As a result, Clagett Farm's financial stability will

continue to be threatened.

46. CBF's education facilities are on the front lines of climate change impacts and CBF has invested significant resources to protect these facilities, especially from sea level rise. CBF operates the Karen Noonan Education Center on the shores of the Bay in Dorchester County, MD. CBF also operates three Island Education Programs on the Eastern Shore of Maryland and Virginia; the Smith Island Environmental Education Center and the Port Isobel Island Education Center's EAST and WEST programs. The Centers are located in the island communities of Smith Island and Tangier Island, respectively, where the economic livelihood of the community is tied directly to the Chesapeake Bay. Due to the many impacts of climate change articulated herein, the commercial watermen's communities of Tangier and Smith Islands will be hard hit, not only by sea level rise but by the loss of fish, oyster, and crab stocks that are integral to their economic livelihoods and well-being. As a landowner in both communities, any impact to the economies of Smith and Tangier will affect CBF's property values, as well as those of our friends and neighbors.

47. CBF's Smith Island Education Center is located in Tylerton, MD on Smith Island. Somerset County, MD, in partnership with the U.S. Army Corps of Engineers and the State of Maryland, built a sea wall to protect Smith Island. But the seawall has become ineffective at preventing "tide overs", whereby the tide is so high it breaches the seawall. This leads to significant nuisance flooding on a near-daily basis. This flooding regularly inundates roads around the Education Center, making access to Smith Island and its buildings increasingly difficult.

48. CBF's Fox Island Environmental Education Center is in Accomack County, VA. The Fox Island Center was built in 1929 as a hunting lodge, which CBF later converted to an

education center. When CBF obtained Fox Island, the deed stated the acreage of the property was 426 acres. The property was appraised in April of 2019, and the estimate of remaining acreage is 34.5 acres. The Fox Island Center was closed after the Fall 2019 education season because of safety concerns due to sea level rise. The surrounding islands that protected the Fox Island Center from high winds have eroded due to sea level rise, leaving the Center unprotected and exposed to high winds that pose a safety issue for students. The emotional loss of this center, which has been in operation for forty years, was felt by CBF staff as well as the innumerable students who first experienced the Chesapeake Bay at Fox Island. Moreover, the unique teaching experience Fox Island provided has now been lost.

49. CBF has invested significant financial resources into protecting the Port Isobel Island Education Center near Tangier Island, VA. CBF has invested more than \$500,000 dollars into shoreline protection projects, including installing rock revetments to protect the dunes that shelter the Center's harbor, and underwater and beach grass plantings to control erosion. Continued sea level rise and extreme weather will require continued improvements to protect Port Isobel.

50. CBF has invested significant resources into protecting the Karen Noonan Center and the roads leading to the Center from increased flooding. CBF installed a breakwater to protect tidal shoreline from erosion and create a safe harbor for boats to access the Center. CBF has spent thousands of dollars to protect and maintain the driveway around the Center, and has also devoted significant staff time to advocating for county and federal partners to repair and maintain the road that leads to the Karen Noonan Center. The road is frequently awash during above-average high tides, which are increasing in height and frequency. The frequency of nuisance flooding is also increasing and often affects other roads leading to this area. This

flooding prevents school buses from traveling on paved county roads as they try to reach the Center. CBF soon anticipates not being able to drive to the Center and transitioning the program to a boat-only program as the road becomes permanently inundated with water. Such a transition will make the program vulnerable to weather conditions on the water and may limit how often visits can occur.

### **Impact to CBF**

51. I understand that climate change and its impacts, including sea level rise, are directly tied to greenhouse gas emissions, including those from vehicle tailpipe pollution. Increased greenhouse gas emissions contribute to climate change and sea level rise in the Chesapeake Bay and further threaten CBF members, programs, and property, and require CBF to expend financial and other resources to protect its assets. I understand that these threats are expected to worsen without meaningful action to reduce greenhouse gas emissions.

52. I understand that EPA and NHTSA issued final rules that collectively allow an increase in greenhouse gases, nitrogen oxides, and other harmful air pollution. I understand that the rules will negatively impact the Chesapeake Bay watershed and may interfere with the goals of the Chesapeake Bay Blueprint and the Chesapeake Bay Watershed Agreement.

53. I also understand that EPA's action will impede states' abilities to implement zero-emission vehicle standards in order to increase the number of ZEVs on their roadways and reduce vehicle-related air pollution. In this way, the rules harm CBF's interest in ensuring the reduction of nitrogen oxides and other air pollution sufficient to meet the goals of the Bay Blueprint and protect the health of its members throughout the watershed.

54. Decisions from the Court finding the rules invalid would allow more stringent standards to stay in place, thereby ensuring reductions in air pollutants. This outcome would

contribute to CBF's organizational mission of improving water quality and achieving the goals of the Bay Blueprint; advance the interests of its members who rely on and value clean air and clean water throughout the watershed; and protect CBF's properties and programs from worsening climate change impacts.

I declare under penalty of perjury and based on personal knowledge that the foregoing is true and correct to the best of my knowledge and belief.

Executed on this 15th day of June 2020.



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William C. Baker

## DECLARATION OF ESTHER GOOLSBY

I, Esther Goolsby, state and declare as follows:

1. I am forty-three years old. Other than 10 months in Arizona, I have lived in Oakland, CA for my entire life. Oakland is a city in Alameda County. My address is 1144 82nd Ave, Oakland CA 94621.
2. I am currently a core member of Communities for a Better Environment (CBE). I joined CBE as a member in 2011 and was also a CBE staff member for three years. I decided to join CBE after taking one of their toxic tours. Even though I had lived in the same place for twenty years, I did not realize that there were toxic facilities surrounding my neighborhood. The toxic tour changed my life and I decided I had to become involved.
3. I spend a lot of time outdoors. I'm typically outside on a daily basis for more than eight hours. I mostly spend time with my community, talking and getting to know people. I also volunteer at the community garden and spend a lot of time gardening. When I worked for CBE, I spent a lot of time outdoors organizing.
4. Because of coronavirus and my health status I currently stay at home, but I plan to continue these outdoor activities when the pandemic ends.
5. I am very concerned about climate change - the state of our climate is an emergency. One very clear sign of that is that wildfires are getting worse. In my neighborhood, the smoke from the last wildfires was so bad that here on my street

we could not even see the cars in front of us. I took a lot of photos in my community, and around Oakland, just surrounded with smoke.

6. I was a CBE staff member when the last two fire seasons happened. We were like emergency responders, passing out masks to the unhoused communities and to our members. Thinking about the community being affected by the smoke was heavy and took an emotional toll on me. Working for an environmental justice group, we know there are so many toxins in the air that affect our development and affect us long-term, even when the air is invisible. But when wildfires happen, we know that that is when other people are suddenly paying attention. For me and my community, wildfires are making bad air quality even worse.

7. I suffer from asthma and Chronic Obstructive Pulmonary Disease (COPD), so breathing is almost always a problem. The wildfires and the heat exacerbate my health issues and there have been times where I have been outside and have felt like I was going to pass out. My asthma and COPD were worse in the wildfire smoke. You wear a mask even when it restricts your breathing, you wear it anyway because the air is so bad.

8. After the 2018 fires, in May of 2019, I had to go to the hospital because I was having trouble breathing. I had never been treated for not being able to breath before, but the previous fire season had an effect on my breathing. Just knowing

that my lungs are not in a position to handle more fires in the future has taken a toll emotionally.

9. Wildfires are not the only sign of climate change I see. I have noticed the effect of climate change on my neighborhood and my home. My home is shifting and there are backyard floods, so I am trying to fix it now by filling the yard with more dirt. I have also noticed that both of the exit routes from my neighborhood to the closest freeway get flooded in the big rainstorms, so it is harder for me and my neighbors to leave.

10. I also live in an area that does not have many trees, so we get the urban heat island effect. The hot asphalt smells and vapors come up off it. I also live near a lot of polluting industry, like foundries. When the heat happens, it makes everything worse. It makes it very hard to breath. I worry for the children with developing bodies at the elementary school near me.

11. My home does not have air conditioning, and I live on the top floor of the building. This means that heat incidents, when I am forced to be inside, are extremely uncomfortable and unhealthy for me.

12. I go to the Martin Luther King Jr. Shoreline to enjoy the wildlife and the plants, and I worry what climate change will do to the area.

13. My asthma gets worse during heavy traffic too. I live right down the street from International Boulevard, which is always busy with traffic. They took out a



lane of traffic to make a bus route, and you cannot make certain left or right turns, so the cars move even slower now. Sometimes the cars hardly move on International, and it causes drivers to take other streets to avoid the traffic. Drivers come down my street, which is a narrow residential street.

14. I am concerned that increasing emissions from cars will cause health problems for me and my family. I believe that pollution, wildfires, heat, and climate change are all affecting me. Not being able to afford the medication I need and not having insurance is a fear right now.

15. I have had to change my behavior because of all the pollution. I bought masks after the first wildfire and have them on hand all the time. If there is even more pollution from cars I would not to be able to go outdoors as much.

16. I bought an air-filtration system, but it is currently in my mother's home because she suffers from emphysema and asthma. I cannot afford to purchase another one, so I am very concerned about increases in pollution from cars and about climate change impacting me in my home.

17. Depending on grants or if I could afford one, I would buy an electric or hybrid vehicle.

18. If we do not change anything to slow climate change, and just keep going how we are, it is just going to keep getting hotter and wildfires are going to happen more. Knowing how the future looks and projections of wildfires and climate

change is an everyday psychological strain. Learning of my health issues and trying to advocate and still be out there, being able to breathe is a life and death situation for me. That is what this climate and this environment is doing – taking away that ability from me. It is very emotional. I have the whole understanding of the people making these decisions and they are not the people who suffer the trauma of the impacts. I am not saying that they do not care, but we should do some trading places some time so they can breathe the air where I live.

I declare that the foregoing is true and correct to the best of my knowledge and belief.

Executed this 18th day of June 2020, in Oakland, California.

/s/ Esther Goolsby (by permission)  
Esther Goolsby

## DECLARATION OF TEREZ SANOGO

I, Terez Sanogo, state and declare as follows:

1. I am a member of Communities for a Better Environment. I live in Long Beach, CA. Long Beach is a city in Los Angeles County. My current address is 1120 E 2nd St, Apt 11, Long Beach, CA 90802; until December 2019 I lived at 5437 Cherry Avenue, Suite B, Floor 2, Long Beach, CA 90805 for three years. My partner, Danny Gamboa, lived with me on Cherry Avenue and continues to live there.
2. The apartment on Cherry Avenue is close to several freeways and other sources of air pollution. It is one mile from the 91 Freeway, three miles from the 405 Freeway, and one or two miles from the 710 Freeway. One of the reasons I moved in December 2019 was because of the pollution levels I was being exposed to living in the Cherry Avenue apartment.
3. While California and LA County responses to coronavirus have changed the way I am currently living, in non-pandemic conditions I spend a lot of time outdoors, for both errands and for fun. My partner and I do some of our errands on foot. We walk to places nearby like the grocery store and the post office.
4. On Cherry Avenue, my partner and I would do about a quarter of our errands by bus. When we take the bus, we have to walk outside. One of the bus stops we use is a half a block away, but the stop I used to get to work in non-pandemic

conditions was a twelve-minute walk from my apartment on Cherry Avenue. I would also occasionally ride my bike to work on the LA River path, which runs alongside the 710 Freeway the whole way.

5. I am able to run a lot more errands on foot at my new apartment, but I am still concerned about air pollution because it is still close to the 710 freeway. From my current apartment, the walk to the train I take to work is approximately 15 minutes, and I still intend occasionally to ride my bike to work along the LA River path when my office reopens.

6. I also use my bike to get places other than work, mostly to do errands. I ride my bike to some grocery stores, to ceramics classes I take, and sometimes when I babysit.

7. In non-pandemic conditions, my partner and I go to my partner's nieces' and nephews' baseball games, which are held outside. The baseball games are usually down the street on Cherry Avenue, so they are near all the same freeways as the Cherry Avenue apartment.

8. In non-pandemic conditions, I take classes outside at the Long Beach city parks. My ceramics classes are held at a ceramics studio at a park in an open courtyard. About once a week, my partner and I will also walk outside for fun. We like being outside and spending time together outdoors.

9. I saw on the news that the EPA passed a rule declaring that California can no longer set its own emissions standards under the Clean Air Act. I understand that this means that California can no longer mandate a certain number of electric vehicles on the road each year or set higher emission standards than the federal government. I believe that this will increase the number of vehicles on the road that burn gasoline, and as a result, car emissions are likely to increase.

10. I am very concerned about an increase in gas-powered cars on the road in my community. I know my health, my partner's health, and his family's health are already severely impacted by gas-powered vehicle emissions. An increase in those emissions means higher rates of illness and death in our community.

11. I have personally experienced headaches and shortness of breath as a result of vehicle emissions in my community. I used to work with a mobility justice organization that did a walking audit at Starr King Elementary School in Long Beach. We were seeing if the campus is actually accessible for differently abled folks. This was about a year and a half ago. The school is located right where the 710 and 91 freeways cross. I walked around with a group of people for an hour and started to feel shortness of breath pretty immediately. It lasted the whole time I was there.

12. Sometimes when I ride my bike on the river by the freeway, I feel out of breath. I would ride my bike along the river more if it didn't feel so unpleasant.

13. I alter my schedule to do my errands when there are fewer cars on the road. Cars are dangerous and make the air quality worse in my neighborhood, so I want to protect myself from that if I can.

14. I am concerned that if there were more gas-powered vehicles on the road, I would have more accumulated exposure to emissions over time. That's a problem because it could cause chronic illness or premature death. If there are more cars, I feel the city will invest less in public and active transportation.

15. My partner has been diagnosed with asthma. He moved to Long Beach when he was five years old and was diagnosed with asthma shortly thereafter. He has to manage his asthma daily. He has an inhaler with him at all times.

16. Changes in the air quality impact my partner's ability to breathe. He will start wheezing, then he needs his inhaler. He can't be outside if the air quality is bad. We like to walk in the neighborhood, but we can't do that if the air quality is bad. Also, it's hard to run errands with him when the air quality is bad—even in the car.

17. All of my partner's three siblings also have asthma. My partner's six-year-old nephew has been hospitalized for asthma more than once a year for three years. My partner's sister has been hospitalized for asthma several times as well.

18. I want to buy a car, but I'm thinking about the cost of buying a hybrid or electric vehicle. I would like to have options. If there are fewer electric vehicles on

the market, then there will be more gas-powered vehicles on my list. I would prefer to get an electric vehicle or hybrid. If my options are limited, though, then I might have to buy a gas-powered vehicle.

19. If the EPA rule were struck down and there were more electric vehicles available, I would hope to have a larger list of electric vehicles and hybrids to choose from. I would like to choose a vehicle that fits my needs without contributing to environmental degradation and illnesses associated with poor air quality. Also, in a few years, I'm hoping that when I am able to buy an electric vehicle or if I buy a plug-in hybrid, there will be more infrastructure to charge electric vehicles.

20. I'm interested in an electric vehicle because I would like to contribute to lowering emissions in my community and the state. Both the town of Long Beach, where I live, and other communities in the LA area have active oil extraction sites. I know that these operations are contributing to the poor air quality that my partner, his family and I experience. I would like to contribute to phasing out oil extraction because I know how harmful it is to our environment and to our health. Since we have the technology to not extract petroleum for transportation, we should use that technology.

I declare that the foregoing is true and correct to the best of my knowledge and belief.

Executed this 23rd day of June 2020, in Long Beach, California.

/s/ Terez Sanogo (by permission)  
Terez Sanogo



**DECLARATION OF PHILIP B. COUPE  
FOR CONSERVATION LAW FOUNDATION**

I, Philip B. Coupe, hereby declare and state:

1. This declaration is based on my personal knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity.

2. I have been a resident of Maine for 40 years. I live at 345 Mitchell Road in Cape Elizabeth, which is located in Cumberland County.

3. I am currently a member of CLF's Maine State Board. I have served on CLF's Maine State Board for two years and have been a CLF member for ten years. I am a member of CLF because they are one of the most effective non-governmental organizations in New England when it comes to protecting citizens' rights to clean air, clean water and a healthy, sustainable environment.

4. Among the most important current and future threats to Maine's natural and built environment is the ongoing damage due to anthropogenic climate change. I am aware of the science documenting the existence of climate change, its causes, and its potential adverse impacts on public health and welfare and the environment. I understand that human activities—including transportation—have resulted in elevated levels of carbon dioxide pollution in earth's atmosphere. Carbon dioxide and other greenhouse gases trap heat in the Earth's atmosphere and are now causing a variety of climatic and environmental changes, including, but not limited to, increased local and global temperatures, sea level rise, and increases

in the frequency and intensity of extreme weather events, including increased precipitation and heavy downpours in the northern United States.

5. I understand that 2019 was the second hottest year on record for the United States and that this is part of a pattern of increased warming globally and in my region. Between 1895 and 2011, average annual temperatures in Maine, indeed in the entire Northeast U.S., increased by almost two degrees Fahrenheit, and precipitation increased by more than ten percent. I am also aware that 2019 was the wettest year to date on record for the contiguous U.S. Additionally, I understand that sea level rise is already documented in Maine and that global sea levels are projected to rise up to 6.5 feet by 2100, substantially increasing coastal flooding risks in my region.

6. I am familiar with the final rule published by the Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) as *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program* (Sept. 27, 2019) (Part I Rule). I understand that in this action, now challenged by CLF, EPA withdrew pieces of a waiver it had previously granted to California for its vehicular emissions standards and purported to interpret the law to prohibit other states from following California's standards. I also understand that NHTSA declared California's greenhouse gas and zero emissions vehicle standards to be preempted by federal law. The Part I Rule

purports to preempt States – including Maine – from adopting or enforcing standards to control vehicular emissions of greenhouse gases, including zero emission vehicle requirements.

7. The Part I Rule harms me and my family, because preempting state standards will increase greenhouse gas emissions as well as air pollution in Maine. My family enjoys spending time outdoors and participating in outdoor activities including camping, swimming, canoeing, fishing, biking, hiking, and running, as well as outdoor sports like soccer, ultimate frisbee, and lacrosse. Both of my sons (age 15), my daughter (age 17), and I suffer from episodic asthma, which can cause shortness of breath, wheezing, and coughing. Our symptoms are aggravated by ground-level ozone and ozone smog. We are, therefore, directly impacted by climate change because increased temperatures lead to more frequent bad ozone days, exacerbating our symptoms. This will make it harder for us to breathe when we attempt to exercise and recreate outdoors and will force us to curtail these activities. If climate-related temperature rises remain unchecked, these bad ozone days will only continue to increase, and the associated adverse health impacts will be compounded. Greenhouse gas emissions will increase as a result of the Part I Rule, thereby contributing to climate change and increasing the number of days our asthma symptoms are exacerbated.

8. My three children are an important reason why I am so concerned about the issue of climate change. I worry about how the changing climate will impact their health and their futures. I believe we must do everything we can to protect them from the adverse effects of climate change.

9. I am also the Co-founder and Managing Partner of a solar energy company called ReVision Energy. Our company mission is to transition northern New England from a fossil fuel-based economy to a sustainable, renewable energy-based economy. As a 100% employee-owned company and certified B Corp, we are committed to creating the better future we know is possible for ourselves and future generations by drastically reducing fossil fuel consumption and the associated emissions. We are particularly focused on helping consumers acquire solar electric systems and electric vehicle charging stations so they can meet their transportation needs with zero emissions.

10. Recognizing that more than 50% of northern New England's carbon pollution comes from vehicle tailpipe emissions, ReVision Energy has created an Electric Vehicle Charging division as part of its overall business strategy to reduce fossil fuel consumption and associated emissions. Zero-emission electric vehicles and low-emission plug-in hybrid vehicles are critically important to the regional effort to reduce carbon pollution and ReVision Energy is actively participating in the market-based business solution of installing "EVSE" (electric vehicle supply

equipment) to encourage adoption of electric vehicles and plug-in hybrid electric vehicles. ReVision Energy has become a market leader in the installation of electric vehicle charging stations in Maine, New Hampshire and Massachusetts for homeowners, commercial businesses, nonprofits, schools and municipalities.

11. The Part I Rule harms ReVision Energy's business interests.

Disallowing state zero emission vehicle requirements will lead to lower availability and fewer sales of electric vehicles. This will lead to less consumer demand for ReVision Energy's EVSE installation services. This will materially harm ReVision's business interests by reducing revenues and profits. As the managing partner of ReVision Energy, I and other ReVision Energy employee-owners stand to lose business and money due to the Part I Rule.

12. It is my opinion that the Part I Rule is an illegal assault on citizens' rights to enjoy clean, healthy air and water. It is worth noting that electric vehicles are roughly 50% less expensive to operate than internal combustion engine vehicles because electric vehicles are vastly more efficient and because they require virtually zero maintenance (no oil changes, no engine work, etc). For these economic reasons, and because electric vehicles drastically reduce carbon pollution, electric cars are superior to the more expensive and polluting internal combustion engine vehicles. ReVision Energy is building the EVSE infrastructure that enables this beneficial transition.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 15th day of June, 2020.

*Phil Coupe*

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Philip B. Coupe

**DECLARATION OF DANIEL W. HILDRETH  
FOR CONSERVATION LAW FOUNDATION**

I, Daniel W. Hildreth, hereby declare and state:

1. This declaration is based on my personal knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity.

2. I live at 55 Thornhurst Rd, Falmouth, Maine 04105. I have been living at this address since approximately 1995. I rented the property initially and purchased it in 2003.

3. I am a member of Conservation Law Foundation (CLF). I have been a member since 1994. I joined the Maine State Board of CLF in January 2018. I continue to be a member of CLF because of their promotion of policies to implement a transition to a clean energy economy and away from reliance on fossil fuels. This is important to me because I believe that climate change poses a catastrophic threat to our economy and to our society.

4. The property where I live is on a cove in Casco Bay. I own approximately 460 feet of coastal waterfront land. At high tide, the high-water mark comes, in my approximation, to about 50 feet from the nearest corner of my house and reaches an area of steep banking. The banking is about 25 to 30 feet high and is composed of ledge at the base. Most of the rest of the banking is made of clay and is vegetated, except where the erosion is worst. At low tide, there are roughly 300 yards of mudflat between the seawater and the base of the banking. My house sits above, on clay soil atop ledge, about 50 feet from the edge of the banking.

5. In storms, the water comes higher up the banking than it does at other times. In some storms, the higher water levels have caused erosion at the base. The water has begun to undercut the banking, and there are a few places where the edge is sagging as a result.

6. I am aware that climate change poses a threat to coastal property and buildings such as my own. My understanding is that climate change is driving sea level rise because of the

melting of glaciers and ice caps. The warming atmosphere is also driving sea level rise because as ocean water temperatures warm, the ocean expands. The rate of glacial melt seems to be increasing. It is my understanding, based on the U.S. Fourth National Climate Assessment and other resources, that the problems associated with climate change will only continue to build. I also understand from the report that sea level rise in New England is projected to exceed the global average on a yearly basis. I have looked at maps of certain areas of coastal Maine depicting projections of sea level rise and I know that it will have an increasing impact on my community and my home.

7. I am aware from the U.S. Fourth National Climate Assessment that sea level rise has contributed to higher storm surges that extend further inland, and that climate change is expected to lead to extreme hurricanes that are stronger and more frequent. I have read that there are two dynamics at play – the atmosphere is warmer, and there is more moisture in it. Climate change results in systemic impacts on the formation of storms and makes them more intense. As a coastal homeowner, this is particularly concerning for both economic and safety reasons. The report forecasts that future impacts from intense storms and sea level rise will lead to increased coastal erosion, necessitating ongoing efforts to protect (or adapt) existing manmade structures. Sea level rise caused by climate change threatens the banking protecting my home from the ocean, while storm surge levels and increasing intensity of storms could exacerbate the erosion. My personal experiences with storms on my property over the last 20 plus years gives me the impression that storms have increased in intensity. Based on my own observations, the storm surges also appear to be higher than they used to be. The best means I have of judging the tide levels is a rock in the middle of the cove. Though the top is always above water, in my perception, the highest tides are covering more of it than they used to.



8. It is very present in my mind that my house and property are under threat from these impacts of climate change. Because of climate change and impacts on the eroding shoreline, I expect that it will become impossible to live there at some point in the future.

9. The U.S. Fourth National Climate Assessment's projections of more and stronger storms also concerns me because of a tree on the ocean-side of the house, about 38 feet from the building. Our house has previously experienced storms with sustained winds of 60 mph. I have been cutting the tree back dramatically because I am worried that increasing wind gusts due to more extreme storms could cause the tree to snap mid-trunk. The tree could cause damage to my house if it were to break in a storm.

10. My enjoyment of my home is dependent upon stable sea levels and weather. Worsening impacts of climate change threaten my property, my economic investment in my home, and my enjoyment of my house and land.

11. I understand the challenged action to be the National Highway Traffic Safety Administration's purported declaration that state greenhouse gas and zero emission vehicle regulations are preempted by federal law. I also understand that the U.S. Environmental Protection Agency has withdrawn parts of California's waiver and purported to prohibit states, like Maine, from continuing to implement certain California standards. These state standards are critical to reducing carbon emissions from the transportation sector and to addressing climate change.

12. The federal government's action harms me because it impairs the ability of states to regulate greenhouse gas emissions from vehicles. This means that more emissions will be released, contributing to climate change. Actions that contribute to climate change harm me by

increasing the risk of sea level rise and storm intensity, which increases the risk that my property will be harmed in a storm. This adversely impacts my economic and social well-being.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 15<sup>th</sup> day of June, 2020.

  
\_\_\_\_\_  
Daniel W. Hildreth

**DECLARATION OF SEAN MAHONEY  
FOR CONSERVATION LAW FOUNDATION**

I, Sean Mahoney, hereby declare and state:

1. This declaration is based on my personal knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity.

2. I am the Executive Vice President of Conservation Law Foundation (CLF), a membership-supported nonprofit corporation organized and existing under the laws of the Commonwealth of Massachusetts. I have held this position since 2013. I also serve as the Director of CLF's Maine Advocacy Center, a position I have held since 2007.

3. In my capacity as Executive Vice President, I am familiar with CLF's mission: to protect New England's environment for the benefit of all people. CLF uses the law, science and the market to create solutions that preserve our natural resources, build healthy communities, and sustain a vibrant economy.

4. Given my role as Executive Vice President, I also understand the nature and scope of CLF's organizational structure. Founded in 1966, CLF has its principal office at 62 Summer Street, Boston, MA. CLF also has offices in Maine, New Hampshire, Rhode Island and Vermont, and its members reside throughout New England and other states. CLF has more than 5,000 members.

5. CLF works on behalf of its members toward comprehensive long-term solutions to environmental challenges. Our members rely upon CLF to

advocate for and safeguard the health, quality of life, and economic prosperity of our communities for generations to come, with a priority of meeting the challenge of climate change. CLF engages in federal and state regulatory and legislative advocacy as well as policy development and litigation to work toward a healthy climate and resilient communities across New England.

6. One of CLF's areas of focus is reducing emissions from the transportation sector to avert the worst impacts of climate change and protect public health. Across the country, the transportation sector is the greatest source of greenhouse gas emissions. In New England, the transportation sector contributes an even higher percentage of overall greenhouse gas emissions. CLF's mission entails working to reduce vehicular emissions.

7. CLF's work aimed at reducing emissions from the transportation sector includes, for instance: writing to former U.S. Environmental Protection Agency (EPA) Administrator Scott Pruitt opposing the roll back of environmental safeguards under the Clean Air Act that reduce pollution from motor vehicles and engines; commenting to urge the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) to conduct a comprehensive analysis of environmental consequences of revisions to fuel standards; writing to DOT to oppose weakening rules regarding fuel efficiency and fuel consumption; challenging the EPA issuance of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles; and

challenging *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), *see* Case Nos. 20-1168, 1169.

8. At the state level, CLF’s advocacy aimed at reducing vehicular emissions includes, for instance: promoting zero emission vehicle legislative policies, including by submitting oral and written comments; serving on the Massachusetts Zero Emission Vehicle Commission to recommend policies increasing access to electric vehicle infrastructure; intervening in utility rate cases and other utility proceedings before state public utilities commissions to advocate for investments and rate structures promoting beneficial electrification of the transportation sector; developing regional transportation policy white papers; and submitting comments on state transportation plans. CLF regularly submits comments on rulemakings and challenges regulations by petition for reconsideration to the agency or by seeking judicial review in court. CLF’s members rely on CLF to advocate for state greenhouse gas emissions standards and zero emission vehicles programs.

9. I am familiar with *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program* (Sept. 27, 2019) (Part I Rule).

10. The Part I Rule purports to preempt States – including those in New England – from adopting or enforcing standards to control vehicular emissions of greenhouse gases, including zero emission vehicle requirements, which harms

CLF and its members. The Part I Rule will increase vehicular emissions of both greenhouse gases as well as harmful air pollution caused by pollutants such as oxides of nitrogen, volatile organic compounds, fine particulate matter, and sulfur oxides, as well as hazardous air pollutants.

11. CLF's members' injuries due to the Part I Rule include economic and recreational harms from property damage caused by climate change. CLF's members' enjoyment of and investment in their homes and coastal property is threatened by the amplified storm surges and higher sea levels that are a result of climate change. Climate change directly threatens CLF's members' coastal property and homes.

12. The Part I Rule also harms CLF's members that work in or own businesses in the electric vehicle or electric vehicle service equipment industries. The Part I Rule will inflict economic harm on these members by depressing demand for their services.

13. Additionally, the Part I Rule harms CLF's members by negatively impacting air quality in New England states, both by increasing air pollution levels and by contributing to climate change, which increases the number and severity of bad ozone days. This exacerbates symptoms of respiratory illnesses suffered by CLF's members, such as asthma.

14. The Part I Rule harms CLF because it frustrates the organization's mission to protect New England's environment for the benefit of all people, which

entails reducing vehicular emissions. The Part I Rule will prompt CLF to expend resources to counteract its harms. The Part I Rule will necessitate additional federal and state rulemakings and other actions to achieve New England states' decarbonization targets and other climate change objectives. CLF will be forced to devote time and resources to petitioning for and participating in those rulemakings.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 15th day of June, 2020.

A handwritten signature in blue ink that reads "Sean Mahoney". The signature is written in a cursive style with a large initial "S".

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Sean Mahoney

**DECLARATION OF SARA CROSBY**

I, Sara Crosby, state and declare as follows:

1. I am over 18 years of age and competent to give this declaration. I have personal knowledge of the following facts and, if called as a witness, I would testify competently to them. As to those matters that reflect an opinion, they reflect my personal opinion and judgment on the matter.

2. Currently, I live in Columbus, Ohio, but I grew up in Grand Isle, Louisiana. Grand Isle is a narrow barrier island in the Gulf of Mexico. I lived in Grand Isle and in Cut Off, a small town a few miles up the bayou from the island, from the time that I was born until I went away for college when I was 17 years old. My parents still own and live in the house that I grew up in. That property has been in my family for about 200 years. My parents also own two rental properties in Grand Isle. My sister and I will inherit the properties from my parents after they pass away. I would like to move back to Grand Isle and live in the house that was my childhood home and has been in my family for generations.

3. During the past several years, Grand Isle has experienced intensified storms and flooding. The storms and flooding have negatively impacted, and continue to negatively impact, the existence and value of the property that my family owns in Grand Isle.

4. For example, when Hurricane Katrina hit in 2005, my parents were forced to evacuate. It was a couple of months before anyone was allowed back on the island. The storm surge generated by Hurricane Katrina caused my parents' house to flood with about six feet of water. Both rental properties also flooded. My parents lost almost everything that they owned, including some items that could not be replaced. For example, my great-grandmother was a photographer and many of her old photographs were destroyed. The salt water caused significant



damage to property. The house where my parents live is made out of cypress, which is able to maintain itself pretty well, but the entire house had to be gutted. Insurance helped cover some of the repair costs, but my family was still required to incur significant out-of-pocket costs to repair the damage.

5. Now, even a relatively small amount of rain causes flooding in areas of the island that previously didn't flood, for example, areas in the middle of the island that are not right next to the water. My parents have also noticed flooding on their property that previously would not have occurred with a similar amount of rain. There is also increased flooding on Louisiana Highway 1 (LA 1), which is the only land access to or from Grand Isle.

6. Many properties are for sale in Grand Isle, but hardly anyone is buying them. My family feels like it doesn't have any good options when it comes to the properties. We don't want to sell them, but we feel like we should. However, even if we decided to sell the properties, we'd have to sell at a very low price because so many properties are for sale and no one is buying because they know that the island is threatened.

7. The price of flood insurance has also significantly increased in the past several years. My understanding is that my parents are currently paying about \$5,000 per year for flood insurance.

8. I have been a member of Environment America since about 2016. I became a member of Environment America because I have a young daughter, and I am very frightened and concerned about the world that I'm leaving for her. I am also concerned that global warming and the rising sea level threatens the value and existence of my family's property in Grand Isle, and I might not be able to pass that property on to my daughter as I would like.

9. I know that strong standards for greenhouse gas emissions and fuel economy for cars were put in place during the Obama administration and that the Trump administration wants to reverse course and roll back these strong standards. I know that California and other states want to be able to keep stronger emissions standards. I support Environment America's efforts to oppose the Trump administration's plans and keep the stronger standards in place.

I declare under penalty of perjury that the foregoing is true and correct.



Sara Crosby  
Columbus, Ohio

5/28/20

Date

## DECLARATION OF JAMES AUSMAN

I, James Ausman, declare as follows:

1. I am currently a member of Environmental Defense Fund (EDF). I reside in San Francisco, California with my wife and two daughters, who are 9 and 12 years old. I have resided in California for more than 47 years. I received my bachelor's degree in Biophysics from the University of California, Berkeley and my area of expertise is in engineering project management.

2. I understand that California has long experienced extraordinary air pollution challenges. Growing up as a child with asthma in Riverside, California I frequently experienced acute asthma symptoms such as shortness of breath and tightening in my chest. As an adult living with asthma I chose to move to San Francisco with my family in 1993 because of its superior air quality.

3. I am familiar with, and deeply concerned about, the impacts of climate change due to greenhouse gas emissions. I am aware of the latest scientific evidence, which concludes that warming of the climate is unequivocal, that it is extremely likely that human influences have been the dominant cause of this warming since the mid-20th century, and that continued emissions of greenhouse gases will cause further warming.

4. This evidence demonstrates that climate change is posing a significant threat to the wellbeing of humans, wildlife, and the natural environment. For instance, I am aware of scientific evidence suggesting that certain types of extreme weather events—including heat waves, heavy downpours, and, in some areas, floods and droughts—have become more frequent and/or intense. Studies also confirm that warming is causing sea levels to rise, oceans to become more acidic, and snowpack to decline.

5. I see many of these impacts occurring in California, where my family and I live and recreate. For instance, Californians are experiencing drought and increased incidence of wildfires, reduced snowfall in the mountains, and an increase in both the occurrence and severity of extreme weather events like droughts and heat waves.

6. The evidence also shows that these and other changes threaten human health. For example, among other things, climate change is considered a key driver of the drought and high winds that have exacerbate wildfires in California.<sup>1</sup> Wildfires can cause personal injury, damage infrastructure, and contribute to worsening air pollution. I am aware that the 2018 California wildfire season was the most destructive in the state’s history with 1.8 million acres burned, 17,000 residences and

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<sup>1</sup> California Department of Forestry & Fire Protection, 2019 Fire Season, <https://www.fire.ca.gov/incidents/2019/10/23/> (last visited November 11, 2019).

700 businesses destroyed, and more than 100 fatalities across the state.<sup>2</sup> In 2019, over 250,000 acres burned, destroying over 700 structures and killing three people.<sup>3</sup>

Climate change also leads to increased ground-level ozone formation, and exposure to ozone can lead to and exacerbate a variety of respiratory and cardiovascular problems, including asthma.

7. Those who suffer from respiratory illness are disproportionately impacted by poor air quality exacerbated by climate change. I have suffered from asthma since childhood. When I was a child, I had two hospital admissions due to difficulty breathing caused by bronchitis, which was likely exacerbated by poor air quality. Over the years I have experienced acute asthma symptoms including shortness of breath requiring me to visit the Emergency Room and reduce outdoor physical activity, wheezing, many cases of bronchitis and pneumonia, and shortened vacations.

8. I have used several medications and inhalers throughout the years to treat my asthma. I currently treat my asthma with a steroidal inhaler and allergy medication administered in a series of shots. I have a rescue inhaler containing albuterol and Prednisone for emergencies.

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<sup>2</sup> Joseph Serna, 2018 was California's worst year for fire ever, federal report confirms, Los Angeles Times (March 9, 2019), <https://www.latimes.com/local/lanow/la-me-ln-california-fires-record-report-20190309-story.html>.

<sup>3</sup> CAL FIRE, 2019 Incident Archive, <https://www.fire.ca.gov/incidents/2019/> (last visited May 24, 2020).

9. These treatments are expensive and time consuming. Insurance does not cover the full cost of my asthma treatments and multiple treatments have cost me thousands of dollars. I also spend hours traveling to and from the doctor's office in addition to time spent meeting with physicians and receiving treatment.

10. My family and I enjoy spending time outdoors and frequently engage in camping, hiking, bicycling, and fishing.

11. Following exposure to degraded air quality—including smoke from climate change-exacerbated wildfires, and high ozone levels—I have experienced acute asthma symptoms including shortness of breath and tightness in my chest. Because exposure to air pollution can exacerbate my asthma symptoms, I am forced to limit my time engaging in outdoor activities when air quality is poor. For example, when ozone levels are high I refrain from riding my bike and limit the time I spend outside. Additionally, the acute asthma symptoms I experience during exposure to air pollution have caused me to cut short family vacations and to miss work.

12. In August of 2017, during a family trip to Mexico City following time spent outdoors, I began to have trouble breathing and started to feel disoriented. Over time my symptoms worsened even as I remained indoors. I began to experience shortness of breath, and was unable to lay down due to difficulty breathing when prone. I continued to experience these symptoms until a doctor could travel to and treat me by administering a steroidal (dexamethasone) shot.

13. More recently, I experienced acute asthma symptoms as a result of exposure to wildfire smoke while on vacation with my family in Yosemite National Park in early August of 2018. The Ferguson Fire that started in Sierra National Forest located south of Yosemite had been burning in a northwest direction during the weeks leading up to our vacation.<sup>4</sup> Within a day of arriving at the Evergreen Lodge located near Hetch Hetchy Valley in the northwestern portion of the Park, I began to experience shortness of breath and to feel lethargic. During my second night at the Park, I could not sleep and had trouble breathing. My wife and I feared that I would again have to receive medical treatment to alleviate my symptoms and so we returned home, ending our vacation two days early. Shortly after we left, Yosemite Valley residents were evacuated, and the National Park Service closed the park to the public.<sup>5</sup>

14. California wildfire smoke has caused me to experience acute asthma symptoms in the past. In the fall of 2017, as several wildfires burned in Sonoma and

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<sup>4</sup> The National Wildfire Coordinating Group, Incident Information System, Ferguson Fire, <https://inciweb.nwcg.gov/incident/5927/> (“The Ferguson Fire started on Friday night, July 13 at 9:36 PM in the South Fork Merced River drainage on Sierra National Forest...”)

<sup>5</sup> The National Wildfire Coordinating Group, Incident Information System, Ferguson Fire, <https://inciweb.nwcg.gov/incident/5927/> (“On August 3 the residents of Yosemite Valley were evacuated and the Park Service closed it to the public due to multiple hazards from firefighters working in the area.”).

Santa Rosa California,<sup>6</sup> smoke blew into San Francisco<sup>7</sup> and I started to experience wheezing and shortness of breath on exertion. During this time, the Environmental Protection Agency (EPA) designated San Francisco's air quality as "very unhealthy,"<sup>8</sup> indicating that everyone, not just those with sensitivities, may experience negative health impacts.<sup>9</sup> I again started to experience asthma symptoms. In an attempt to limit my exposure, I bought face masks from a hardware store to wear until the smoke subsided and air quality improved. The symptoms I experienced as a result of this exposure caused me to miss about two days of work.

15. I understand that the transportation sector is the leading cause of carbon dioxide (CO<sub>2</sub>) emissions in the United States and that the majority of greenhouse gas emissions from the transportation sector are from passenger cars and light trucks.<sup>10</sup>

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<sup>6</sup> Peter Fimrite, Jill Tucker, Kurtis Alexander and Demian Bulwa, Wine Country wildfires leave a trail of death, devastation across the North Bay, San Francisco Chronicle (Oct. 10, 2017), <https://www.sfchronicle.com/news/article/2-big-wildfires-prompt-evacuations-in-Napa-County-12262945.php&cmpid=twitter-premium>

<sup>7</sup> Brock Keeling, Smoke and ash covering San Francisco: How bad is it and how long will it last?, Curbed San Francisco, (updated Oct. 10, 2017), <https://sf.curbed.com/2017/10/9/16447874/smoke-ash-fire-air-quality-napa>

<sup>8</sup> Brock Keeling, Smoke and ash covering San Francisco: How bad is it and how long will it last?, Curbed San Francisco, (updated Oct. 10, 2017), <https://sf.curbed.com/2017/10/9/16447874/smoke-ash-fire-air-quality-napa>

<sup>9</sup> Environmental Protection Agency, AirNow, Current Air Quality Index, <https://airnow.gov/index.cfm?action=airnow.main>

<sup>10</sup> EPA, *Sources of Greenhouse Gas Emissions-Transportation*, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation> (last updated April 11, 2018).



16. I am aware that EPA and the National Highway Traffic Safety Administration recently finalized regulations that dramatically weaken the federal greenhouse gas standards for light-duty vehicles, and that declare state greenhouse gas standards for vehicles and state zero-emission vehicle standards unlawful.

17. I am deeply concerned that these new rules will increase climate-harming and ozone-forming pollution, intensifying and extending California's wildfire season and likewise worsening ground-level ozone pollution. These pollutants present an imminent and concrete injury to my health and well-being and that of my family. More intense wildfires likewise threaten the survival, health, and natural beauty of the ecosystems where I live and recreate.

I declare under penalty of perjury that the foregoing is true and correct.



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James Ausman

Executed on June 1, 2020

## DECLARATION OF DYLAN BROCK

I, Dylan Brock, declare as follows:

1. I am a member of Environmental Defense Fund (EDF). I reside in Denver, Colorado. I have lived in Denver since 2015.
2. I am a pediatric neurologist at Children's Hospital Colorado. As a pediatric physician, I understand that children are particularly vulnerable to air pollution because they typically spend more time outdoors than adults, and because their lungs are still developing.
3. I have a 16-month-old daughter who loves to be outside, and spends time playing in our backyard every day.
4. I am aware that Denver County, where my family and I reside, is in nonattainment with EPA's health-based ozone standard. I understand that this means Denver County has unhealthy levels of ground-level ozone, or smog.
5. I am familiar with the Suncor refinery off Brighton Boulevard in Denver. The facility sits between three major highways—I-25, I-70, and I-270. I understand that it produces about a third of the gasoline consumed in Colorado.<sup>1</sup>

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<sup>1</sup> Moe Clark, Suncor oil refinery agrees to \$9 million settlement with Colorado for air quality violations in Commerce City (March 6, 2020), <https://coloradosun.com/2020/03/06/suncore-commerce-city-colorado-settlement-air-quality/>.

According to Google Maps, I-270 runs within 2,000 feet from the refinery. I-25 and I-70 run within two miles from the refinery.

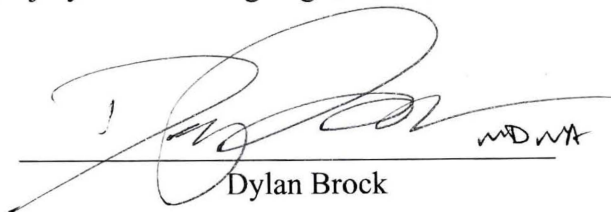
6. The Suncor refinery is notorious for permit exceedances, evidenced by periodic local news reports of air and water pollution events caused by malfunctions at the complex.<sup>2</sup>
7. I live approximately six miles from the refinery and pass it frequently when I drive with my daughter in the car on I-25, I-70, and I-270. I use these highways on at least a weekly basis. I use stretches of I-25 and I-70 that pass the refinery to get from my home to other parts of Denver, and to get to the recreation areas west of the city. I use the stretch of I-270 that directly passes the refinery to get to Boulder and recreation areas northwest of Denver. When we near the refinery from I-270 the fumes pervade our car.
8. I am aware that the Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) have recently issued a rule that dramatically weakens the federal greenhouse gas and fuel economy standards for passenger vehicles. I understand that this rule will increase fuel consumption—and demand for gasoline—compared to the prior standards.

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<sup>2</sup> See, e.g., *id.* (reporting that the refinery “emitted volatile organic compounds in excess of its permit, including sulfur dioxide, hydrogen sulfide, hydrogen cyanide, nitrogen oxides, carbon monoxide, and particulate matter.”).

9. In the course of my daily life I will continue to drive in close proximity to the Suncor refinery with my daughter in tow. I am deeply concerned that this rule will result in an increase in emissions of dangerous pollution from the refinery—directly impacting my health and the health of my daughter—both because we will have to continue driving in close proximity to the refinery, and because the refinery will contribute more ozone-forming pollution to the already unhealthy ozone levels in Denver county.

I declare under penalty of perjury that the foregoing is true and correct.



Dylan Brock

Executed on May 29, 2020

## DECLARATION OF ARTHUR P. COOLEY

I, Arthur P. Cooley, declare as follows:

1. I am a member of Environmental Defense Fund (“EDF”) and have been a board member since I and several other scientists founded EDF on Long Island, New York, in 1967. I reside in La Jolla, a neighborhood in San Diego, California, having moved here from New York in 2003.

2. I have a graduate degree in biology from Cornell University, and am a retired high school biology teacher. I am also a former adjunct Associate Professor in the Marine Sciences Research Center at Stony Brook University in Stony Brook, New York, a part of the New York State University System. In that role, I taught marine biology to secondary school teachers for seven summers. I served for 20 years as a Naturalist and Expedition Leader for Lindblad Expeditions, an organization that offers small-ship expedition cruises that give passengers the opportunity to encounter some of the world’s most pristine places with the experts who know them best. As a naturalist and expedition leader, I have taught guests about the natural world and have coordinated our guests’ outdoor activities. Through this process I have traveled to all seven continents and learned a great deal about the birds, whales, geology, and other natural phenomena in these areas.

3. I am familiar with and concerned about emissions of greenhouse gases, which are causing climate change. I am aware of the latest scientific evidence,

which concludes that warming of the climate is unequivocal, that it is extremely likely that human influences have been the dominant cause of this warming since the mid-20th century; and that continued emissions of greenhouse gases will cause additional warming.<sup>1</sup>

4. I understand that climate change poses an imminent threat to human health and the environment. I am aware of science suggesting that certain types of extreme weather events—including heat waves, heavy downpours, and, in some areas, floods and droughts—have become more frequent or more intense due to climate change.<sup>2</sup> Data also shows that warming is causing sea levels to rise; oceans to become more acidic;<sup>3</sup> and snowpack to decline.<sup>4</sup> California’s Fourth National Climate Assessment projects that San Diego County, in which I live, will see

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<sup>1</sup> International Panel on Climate Change, Understanding Global Warming of 1.5°C, Summary for Policymakers, available at <https://www.ipcc.ch/sr15/chapter/spm/> (“Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a likely range of 0.8 °C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.”).

<sup>2</sup> International Panel on Climate Change, Understanding Global Warming of 1.5°C, 3.4.2.2 Extreme Hydrological events (floods and droughts), *available at* <https://www.ipcc.ch/sr15/chapter/chapter-3/>

<sup>3</sup> *See generally* International Panel on Climate Change, Understanding Global Warming of 1.5°C, 3.4.4 Ocean Ecosystems, *available at* <https://www.ipcc.ch/sr15/chapter/chapter-3/>

<sup>4</sup> International Panel on Climate Change, Understanding Global Warming of 1.5°C, 3.4.9.1 Tourism, available at <https://www.ipcc.ch/sr15/chapter/chapter-3/> (“Studies from 27 countries consistently project substantially decreased reliability of ski areas that are dependent on natural snow, increased snowmaking requirements and investment in snowmaking systems, shortened and more variable ski seasons...”).

increases in temperature of between five and ten degrees Fahrenheit by the end of this century.<sup>5</sup> Such changes also threaten human health. For example, among other things, increasing temperatures caused by climate change contribute to deteriorating air quality by exacerbating ozone pollution.<sup>6</sup> California is home to seven of the ten most smog-polluted cities in the nation.<sup>7</sup> The San Diego region in which I live, was recently ranked number 6 out of 228 metropolitan areas for greatest number of high ozone days.<sup>8</sup>

5. I also understand that immediate action to reduce greenhouse gas emissions is necessary to mitigate the impacts of climate change. Incremental actions addressing significant emissions sources can lessen harms associated with a changing climate and can reduce the risk that the climate system reaches certain

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<sup>5</sup> California's Fourth Climate Change Assessment, San Diego Region Report, at 6 (2019) <https://www.energy.ca.gov/sites/default/files/2019-07/Reg%20Report-%20SUM-CCCA4-2018-009%20SanDiego.pdf>

<sup>6</sup> See American Lung Association, 2019 State of the Air Report, Key Findings Ozone Pollution, available at <https://www.lung.org/our-initiatives/healthy-air/sota/key-findings/ozone-pollution.html> ("Increased heat in 2017 likely drove this increase in ozone. Warmer temperatures stimulate the reactions in the atmosphere that cause ozone to form, and 2017 saw the second warmest temperatures on record in the United States.").

<sup>7</sup> American Lung Association, 2019 State of the Air Report, Most Polluted Cities, <https://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/most-polluted-cities.html>.

<sup>8</sup> American Lung Association, 2019 State of the Air Report, Most Polluted Cities, San Diego-Chula Vista-Carlsbad, CA, <https://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/msas/san-diego-chula-vista-carlsbad-ca.html#ozone>.

“tipping points”—reflecting abrupt or irreversible changes in climatic conditions.<sup>9</sup>

Meaningful actions in the United States can also help to encourage other countries to take similar action.

6. My home in La Jolla is one block from the ocean. The ability to live so close to the ocean and the beach was a significant reason why my wife and I chose this residence and it features prominently as a factor in the economic value of our property. I routinely visit the ocean where I walk along Windansea beach, and intend to continue to do so. I also visit, examine, and immensely enjoy the biology and ecology of the ocean shore. I have a significant recreational, aesthetic, and personal connection to this particular area of the ocean and Windansea beach that I regularly visit. I will not be able to continue to enjoy our property and my current recreational routine if the sea level continues to rise and the current beach changes or disappears.

7. Indeed, there is already documented sea level rise in San Diego coastal communities,<sup>10</sup> and Windansea beach on which I take frequent walks is now

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<sup>9</sup> U.S. Executive Office of the President, *The cost of Delaying Action to Stem Climate Change*, at 20 (July 2014) (“[T]he Earth’s climate history suggests the existence of ‘tipping points,’ that is, thresholds beyond which major changes occur that may be self-reinforcing and are likely to be irreversible over relevant time scales.”).

<sup>10</sup> Erik Anderson, *Sea Level Rise Could Sink California Property Values*, KPBS (June 18, 2018), <https://www.kpbs.org/news/2018/jun/18/sea-level-rise-could-sink-california-property-valu/>



completely inundated in high surf and high tide conditions.<sup>11</sup> Recent analysis projects that along the San Diego County coastline, sea levels will rise by one foot by the middle of this century.<sup>12</sup> The most recent United States climate assessment also found that “[w]ithout significant reductions in global greenhouse gas emissions and regional adaptation measures, many coastal regions will be transformed by the latter part of this century.”<sup>13</sup> If greenhouse gas emissions continue unabated and the sea level continues to rise, I am concerned that the sandy beach will disappear, and I will be unable to enjoy this activity.

8. As a biologist who studies nature, I spend extensive time outside, along the coast and the beach, to carry out my work. As a naturalist for Lindblad Expeditions, my duties included teaching guests about many different types of wildlife including, birds, whales, and dolphins, and also educating guests about the geology of the areas we visited. As an Expedition Leader, I coordinated all the activities of the guests, which included landings, zodiac cruises, lectures, arrivals,

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<sup>11</sup> Matthew Baldwin, *Those Giant Tides Are Worse Than Ever and May be Hint of What's to Come*, Voice of San Diego (Jan. 7, 2016), <https://www.voiceofsandiego.org/topics/science-environment/those-giant-tides-are-worse-than-ever-and-may-be-hint-of-whats-to-come/>

<sup>12</sup> California's Fourth Climate Change Assessment, San Diego Region Report, at 6 (2019) <https://www.energy.ca.gov/sites/default/files/2019-07/Reg%20Report-%20SUM-CCCA4-2018-009%20SanDiego.pdf>

<sup>13</sup> U.S. Global Change Research Program, Fourth National Climate Assessment, Summary of Findings, *available at* [https://nca2018.globalchange.gov/downloads/NCA4\\_Ch01\\_Summary-Findings.pdf](https://nca2018.globalchange.gov/downloads/NCA4_Ch01_Summary-Findings.pdf).

and departures, much of which involves enjoyment, observation, or use of natural areas.

9. I also spend additional time outside because of my deep appreciation for and interest in nature. I am very concerned about the adverse impact of climate change on the wildlife, resources, and ecosystems that I study and routinely visit. If climate change causes adverse impacts to these natural systems, as is occurring now and will likely continue to occur, I expect to be personally harmed by being unable to observe these systems free of such impacts.

10. Climate change is already adversely impacting the natural systems that I value, including the oceans.<sup>14</sup> For example, ocean acidification threatens to upset the ocean's delicate balance of marine life by harming those organisms that rely upon calcium carbonate to build their shells.<sup>15</sup> This is negatively impacting both

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<sup>14</sup> See Susan Murphy, *Rising Acidity Threatens Marine Ecosystems Off of San Diego*, KPBS, (Nov. 19, 2013), <https://www.kpbs.org/news/2013/nov/19/ocean-acid-threatens-san-diego-marine-ecosystems/>

<sup>15</sup> International Panel on Climate Change, *Understanding Global Warming of 1.5°C*, Chapter 3, Executive Summary, available at <https://www.ipcc.ch/sr15/chapter/chapter-3/> (“The ocean has absorbed about 30% of the anthropogenic carbon dioxide, resulting in ocean acidification and changes to carbonate chemistry that are unprecedented for at least the last 65 million years (high confidence). Risks have been identified for the survival, calcification, growth, development and abundance of a broad range of marine taxonomic groups, ranging from algae to fish, with substantial evidence of predictable trait-based sensitivities (high confidence).”); see also *id.* at 3.4.4.5 Ocean Acidification (“Organisms with shells and skeletons made out of calcium carbonate are particularly at risk, as are the early life history stages of a large number of organisms...”).

far-away coral reefs as well as sensitive organisms, like mussels, sea urchins and crabs in the tidal pools that I regularly visit with my children and with friends.<sup>16</sup>

One of the key findings of California's most recent statewide climate assessment is that ocean acidification and other ocean impacts caused by a changing climate are "transforming and degrading California's coastal and marine ecosystems."<sup>17</sup> One

of the key findings from California's most recent statewide climate assessment is that ocean acidification and other ocean impacts caused by a changing climate are "transforming and degrading California's coastal and marine ecosystems."<sup>18</sup>

These impacts will worsen unless greenhouse gas emissions are reduced.

11. I am aware that EPA and NHTSA have issued two joint rules that, respectively, weaken the federal greenhouse gas and fuel economy standards for light-duty vehicles, and declare state greenhouse gas emission standards for vehicles and state zero-emission vehicle standards unlawful, attacking California's

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<sup>16</sup> U.S. Environmental Protection Agency, Effects of Ocean and Coastal Acidification on Marine Life, <https://www.epa.gov/ocean-acidification/effects-ocean-and-coastal-acidification-marine-life> (last updated Dec. 21, 2016).

<sup>17</sup> California's Fourth Climate Change Assessment, Statewide Summary Report, at 58 (2019), <https://www.energy.ca.gov/sites/default/files/2019-07/Statewide%20Reports-%20SUM-CCCA4-2018-013%20Statewide%20Summary%20Report.pdf>.

<sup>18</sup> California's Fourth Climate Change Assessment, Statewide Summary Report, at 58 (2019), <https://www.energy.ca.gov/sites/default/files/2019-07/Statewide%20Reports-%20SUM-CCCA4-2018-013%20Statewide%20Summary%20Report.pdf>.

well-established Clean Air Act authority to implement protective vehicle emission standards.

12. I understand that the transportation sector is the leading source of greenhouse gas emissions in the United States. Nearly 30% of the nation's greenhouse gas emissions come from the transportation sector.<sup>19</sup> Within the transportation sector, light-duty vehicles are the largest contributors to greenhouse gas emissions, accounting for almost 60% of transportation-related climate pollution.<sup>20</sup>

13. I understand that the California Air Resources Board projects that, even with its protective standards in place, light-duty vehicles will account for 23% of statewide GHG emissions in 2030.<sup>21</sup>

14. Without protective state and federal standards in place, climate-destabilizing pollution will significantly increase. This in turn will increase the negative impacts

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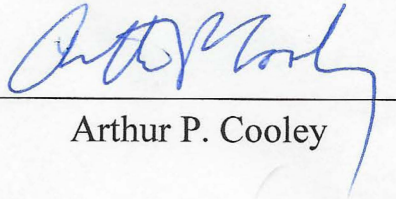
<sup>19</sup> Fast Facts on Transportation Greenhouse Gas Emissions, <https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions> (last updated July 16, 2019).

<sup>20</sup> Fast Facts on Transportation Greenhouse Gas Emissions, <https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions> (last updated July 16, 2019).

<sup>21</sup> California Air Resources Board, Proposed Amendments to the Low-Emission Vehicles (LEV) III Greenhouse Gas Emission Regulation, at 2 (Sept. 28, 2018), [https://ww3.arb.ca.gov/board/books/2018/092718/18-7-5pres.pdf?\\_ga=2.75791125.1650977375.1563834626-1026101495.1522858958](https://ww3.arb.ca.gov/board/books/2018/092718/18-7-5pres.pdf?_ga=2.75791125.1650977375.1563834626-1026101495.1522858958)

of climate change that are already affecting the natural resources and biological diversity that I treasure, impeding my ability to enjoy the ocean shore near my home.

I declare under penalty of perjury that the foregoing is true and correct.

  
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Arthur P. Cooley

Executed on May 23, 2020, 2020

## DECLARATION OF TRISHA DELLO IACONO

I, Trisha Dello Iacono, declare as follows:

1. I am currently a member of the Environmental Defense Fund (“EDF”) and have been since 2012. I also work as the National Field Manager with Moms Clean Air Force, a special project of EDF where I manage the field staff and volunteers from across the country to develop and deploy strategic plans to increase grassroots advocacy on key public health and environmental issues at the local, state, and federal level. I have worked with Moms Clean Air Force since 2013.
2. I support EDF’s mission and Moms Clean Air Force’s mission to protect the health and future of our children from climate change and dangerous air pollution because as a parent to four young children, I want them to have a safe and healthy world to grow up in.
3. I currently live in Mullica Hill in Gloucester County, New Jersey with my three young sons, ages fourteen, ten, and three, and newborn baby girl. We have lived at our current location for about a year, and lived in Haddon Heights in Camden County, New Jersey for two years prior to that.
4. From my work with Moms Clean Air Force I understand that in 2012, EPA established gradually strengthening national greenhouse gas emission standards for

passenger cars and trucks for Model Years 2017-2025 and the National Highway Traffic Safety Administration established gradually strengthening fuel efficiency standards for Model Years 2017-2021. I understand that New Jersey has adopted the Advanced Clean Cars program, as have 13 other states, which includes protective greenhouse gas emission standards and “Zero Emission Vehicle” or “ZEV” standards.

5. I am also aware that the current administration recently finalized rules that dramatically weaken the federal clean car standards for upcoming years and declare state greenhouse gas and ZEV standards unlawful, seeking to end states’ authority to enforce more protective ZEV and greenhouse gas emission standards.

6. I am aware that Gloucester County, New Jersey, where my family resides, is in nonattainment with the 2015 national health-based standard for ground-level ozone.

7. I understand that there is well-established scientific research linking ozone pollution with serious health problems such as respiratory disease, asthma attacks, and impaired lung function. I know that being outside during high ozone days can be dangerous for children and adults. But, in particular, I’m aware that ozone pollution poses more serious danger to children because their lungs are still developing and they spend more time outdoors than adults.

8. My children enjoy riding their bikes, playing soccer, and being outside or in our backyard with their friends. However, on days when ozone pollution is unsafe to breathe, I limit my children's outdoor activities, so they are not exposed to this harmful pollution.

9. I am also aware that carbon dioxide and other greenhouse gas pollutants are rapidly changing our climate.

10. I grew up in Southern New Jersey, where my parents farm over 5,000 acres of land. My children and I live about a five-minute drive away and will visit this farm several times each month. I have personally watched the impacts of climate change affect my parents' vegetable farming business. Increased heavy downpours lead to smaller crop yields and cause greater fungal growth, necessitating increased fungicide use. Higher temperatures entail increased water use and result in a reduced crop yield when daytime temperatures exceed 90 degrees for even short periods of time. Warmer temperatures and higher carbon dioxide concentration also contribute to an increase in crop disease, necessitating higher concentrations and more frequent spraying of toxic chemical pesticides. Not only does this increased pesticide use raise operating costs for the farm, it also creates greater health risks for my parents and the farmworkers who apply the pesticides, and for my children who want to enjoy eating the produce directly from the fields, as I once did as a



child. Now they have to check with my dad first to find out when he last sprayed, and cannot eat the produce if he sprayed too recently.

11. I hope that my children will be able to continue enjoying and, in the future, help operate our family farm. I am concerned that the impacts of climate change will negatively affect our family business and decrease the chances that my family and children can continue operating our farm in the future.

12. I am also aware from my work that climate change contributes to higher levels of ground-level ozone. I am concerned that the impacts of climate change will worsen Gloucester County's ozone levels and increase the frequency and severity of high ozone days when I must either keep my children indoors or expose their developing lungs to harmfully high ozone levels.

13. I am concerned that the administration's action weakening federal clean car standards and efforts to eliminate state authority for protective greenhouse gas and ZEV standards will lead to increased GHG and criteria pollution that will adversely impact my health and the health of my family. I am further concerned that my children and I will be less able to engage in the recreational activities that we enjoy because I must keep them inside more frequently to avoid harmfully high ozone levels exacerbated by the additional climate pollution and criteria pollution caused

by this rule. I am also concerned that the action will contribute to climate change that harms the operations and long-term future of my family's farm.

14. In addition, I am concerned that the administration's new rules will undermine my ability to buy the kind of car I want and need for my growing family.

15. Having experienced the way in which environmental pollution can fundamentally diminish the health and well-being of a family, it is deeply important to me that my family minimize its own contribution to dangerous air and climate pollution, for the sake of my own family and others.

16. This desire is particularly acute with respect to pollution from cars and trucks.

17. My family uses our two cars a lot. Because part of our family lives in New Hampshire, my husband and our children drive every other week from New Jersey to New Hampshire. We also use our cars regularly for day-to-day errands, work, and school events.

18. In December 2018, my husband and I determined that we needed to replace one of our two vehicles with a minivan to accommodate our growing family. We initially preferred the Toyota Sienna, but specifically decided to buy a Chrysler Pacifica because the Pacifica is the only minivan with an electric or plug-in hybrid model available. I want to own a zero-emission vehicle—*i.e.*, electric or plug-in

hybrid—both to reduce my contribution to air and climate pollution, and to save money on gas expenses. Consequently, my husband and I drove to New Hampshire from our New Jersey home to purchase a Chrysler Pacifica electric minivan after learning that a New Hampshire car dealership had one for sale.

19. The dealership informed us upon our arrival that the electric minivan was out of stock and repeatedly redirected our requests for an electric model, refusing to help us find one and instead pointing us towards the standard combustion Pacifica.

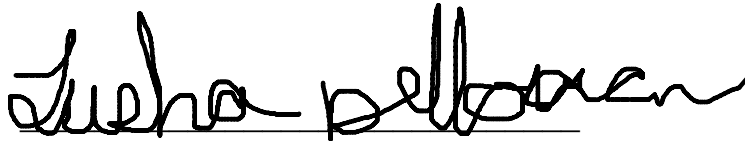
20. Needing a minivan as soon as possible, we ultimately were convinced by the dealership to purchase a standard combustion Pacifica. We are already dissatisfied with this car, largely because of its pollution impact, and have voiced this dissatisfaction to the dealership. We would like to replace this vehicle with a zero-emission car that fits our whole family at some point in the future, when it is financially viable given our outstanding loan on the car.

21. We also own a second family vehicle that does not fit our entire family. Because it cannot fit all of us at once, we anticipate needing to replace this vehicle in the next five years or even sooner. Ideally, we would also like to replace this car with a zero-emission minivan.

22. I understand that the recently finalized rule that declares state greenhouse gas and ZEV standards unlawful claims to block New Jersey's ability to implement and

enforce its ZEV standards, which would otherwise provide gradually strengthening incentives for the sale of zero-emission vehicles in-state. I am concerned that this rule, as well as the weakening of the federal standards, will reduce incentives for automakers and dealers to provide and sell low-emission vehicles, and specifically that fewer zero-emission vehicles—and fewer models of zero-emission vehicles—will be available for my family to purchase in the future. I am concerned that these rules will reduce dealerships' interest in helping my family buy a zero-emission vehicle.

I declare the foregoing is true and correct.



Trisha Dello Iacono

Dated: May 28, 2020

## DECLARATION OF SHANA REIDY

I, Shana Reidy, under penalties of perjury, declare as follows:

1. I have been a member of the Environmental Defense Fund (EDF) since April 2018.
2. I currently reside in Seattle, Washington's Ballard neighborhood with my husband and two sons, who are aged seven and nine. We have lived in our current location since 2009.
3. My younger son suffers from Cornelia de Lange Syndrome, a genetic disorder that can cause a broad range of potential physical, cognitive, and medical challenges. According to the Cornelia de Lange Syndrome Foundation, the syndrome "typically affects: growth, with smaller body and head size; skeletal system, with smaller hands and feet or missing forearms and fingers; development, with delayed development, intellectual disability or learning disabilities; behavior, with ADHD, anxiety or autistic features; and internal body organs including the GI, cardiac, genitourinary and neurologic body systems."
4. In my son's case, he has been formally diagnosed with chronic lung disease, which makes him acutely sensitive to congestion and respiratory infections.
5. In addition, he suffers from severe sleep apnea because his airway is not properly developed.

6. He is entirely tube-fed because he has extreme oral aversion and hypotonia (reduced muscle strength), which means his chewing and swallowing are not well coordinated and he is at heightened risk of aspirating his food.

### **Sensitivity to Air Pollution**

7. Because of my younger son's compromised medical condition, any respiratory infection has the potential to be life threatening. Every time he gets sick, even with a simple cold or fever, I fear he is going to die.

8. My younger son is prone to serious respiratory infections, experiencing them as many as three to five times per year. When he was younger, these respiratory infections would typically result in a stay in the hospital. Over the years we have learned how to manage his treatment better, such that now when he gets a respiratory infection, we typically keep him at home. We essentially replicate hospital care in our own home, maintaining a hospital-like setting with medical prescriptions and intensive care. This treatment comes at great disruption to our lives. Either my husband or I will stay up all night with my son managing his care, which can be a great disturbance as we both work.

9. Because these respiratory infections are potentially life-threatening and at minimum very disruptive to our family's day-to-day life, my family and I work very hard to reduce my younger son's exposure to factors that increase his likelihood of respiratory infections.

10. I have been told by my son's doctor that exposure to air pollution is one factor that will exacerbate his underlying health conditions, including his risk of developing a respiratory infection.

11. Many people may be less aware of the day-to-day air quality conditions where they live, but air quality and air pollution have an immediate impact on every aspect of my family's life. My family and I change our lifestyle and take a wide range of measures to reduce my younger son's exposure to air pollution and protect him from harm.

### **Wildfire Smoke**

12. I understand from the Fourth National Climate Assessment that wildfires are expected to increase in the Northwest as a result of climate change.

13. I have noticed an increase in wildfire smoke impacting the Seattle-area over the past two to three years. Over these years, wildfire smoke reaching the Seattle area has been a regular occurrence in the summer months.

14. Wildfires cause serious air pollution issues that threaten my younger son's health, even when the site of the fire is far away from our home. For example, even when the wildfires are miles away in Canada, the smoke can reach the Seattle area.

15. As mentioned above, exposure to this smoke heightens my younger son's risk of a dangerous respiratory infection.

16. When wildfire smoke impacts the Seattle region, my family takes a wide range of efforts to protect my younger son's health by minimizing his exposure to the smoke. These efforts disrupt and harm my family's day-to-day and overall well-being.

17. When Seattle is afflicted with wildfire smoke, people who are respiratory-compromised, like my younger son, must stay inside. To keep my son safe, we never open our windows during these periods and we keep our house sealed up; it is stuffy and miserable.

18. In the summer of 2018, the wildfire smoke was so pervasive that my family installed an air filtration system in our home that we run constantly to help protect my son. When wildfire smoke reaches Seattle, we also continuously check our home's air ducts and make sure they are clean to maintain our indoor air quality.

19. We always keep my younger son indoors during these episodes when Seattle is impacted by wildfire smoke. This means that someone needs to stay home with him at all times; either my entire family must stay at home or we must split up for activities that involve going outside.

20. We avoid going to the park, or to the beach, to name a few of the activities we have to forego. My older son, in particular, often wants to engage in these activities. Either he must abstain, or my husband and I are forced to split up. For example, if my older son has a sports game, one of us will go with him and one of



us will stay at home with my younger son. As a result, we are less able to spend time engaging in the activities we would otherwise enjoy and less able to spend time together as a family.

21. My husband and I own a cabin more than two hours east of Seattle, east of the Cascades. We purchased this home in large part because the area typically has better air quality as compared to where we live in Seattle, such that the air is safer for our younger son to breathe. When we are at our cabin, because of the (usually) better air quality, we are able to relax and spend more time outdoors doing activities as a family, without constantly having to worry about keeping my younger son protected from air pollution.

22. We typically visit our cabin every weekend in the summer and whenever the weather is nice during the rest of the year. We intend to continue doing so in the future.

23. Whenever our cabin's air is impacted by wildfire smoke—as has become increasingly frequent in the last two to three years—we forego any visits to the cabin and miss out on this opportunity to relax and spend time together as a family. We instead stay in Seattle where we can keep our younger son inside with our home's air filtration system, which better protects him from poor air quality.

24. In the summer of 2018, we planned to vacation together as a family for five days at a lake in the mountains east of Seattle. Unfortunately, wildfire smoke

began impacting the area during our vacation. Due to the hazard that this smoke posed for my younger son's health, we ended up cutting our vacation short and returning two days early to Seattle.

25. Even for the generally healthy members of my family, all activity can be impacted during fire season because of the poor air quality. When wildfire smoke is particularly severe, I stop jogging, an activity that I enjoy, and my older son's sports practices are often cancelled. This can limit our whole family's activities during Seattle's summer, which otherwise is typically the nicest season of the year.

### **Worsening Air Quality**

26. I understand from the Fourth National Climate Assessment that climate change will also worsen existing air pollution levels, in particular because increasing temperatures will lead to an increase in ground-level ozone or "smog" formation.

27. I also understand that heavy-duty diesel freight trucks transport gasoline and that diesel exhaust includes ozone-forming volatile organic compounds (VOCs).

28. Elevated smog levels also increase the risk that my son will develop a respiratory infection.

29. Because smoggy air increases his risk of a respiratory infection, my family and I similarly take extensive measures to minimize and protect him when Seattle smog levels rise.

30. As with our efforts to protect my younger son from the impacts of wildfire-induced poor air quality, these efforts are disruptive and affect our whole family.

31. When air quality is poor, we keep my younger son inside as much as possible, with the windows and doors shut.

32. As described above, we all forego outdoor activities, or are forced to split up as a family.

33. When we are on the road, we can get stuck in traffic either next to or behind a freight truck. Sometimes my younger son will be in the car as we are in close proximity to or trapped behind a heavy-duty truck with particularly high diesel exhaust emissions. I can smell this exhaust as it permeates our car. At times like these I am terrified for his health. I take immediate steps to get out of the traffic as quickly as possible, move away from the truck, get off the road, and get fresh air into the car.

### **Healthcare Disruption**

34. Poor air quality from wildfire smoke and smog has impacts beyond just increasing my son's risk of a dangerous respiratory infection and disrupting my family's activities.

35. My younger son's condition requires serious healthcare interventions on an occasional but regular basis. For example, in the next year he needs to have major

surgery to address his worsening sleep apnea by improving his airway. This surgery is vital because his apnea leads him to experience long pauses in his breathing that cause his oxygen saturation levels to drop, which affects his ability to concentrate and his sleepiness during the day. Moreover, I am aware from scientific literature that over the long term these impacts are linked to pulmonary hypertension and symptoms of Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder.

36. Due to my son's heightened risk of respiratory complications, his surgery must be scheduled during the summer, when cold and flu season is over. And because of complex nature of his surgery and his condition generally, the surgery will need to be scheduled at least two months in advance. My husband and I will have to make plans to miss work to ensure that we can care for him for several days afterwards, when his health will be particularly precarious.

37. I am deeply concerned that whenever this upcoming surgery is scheduled, it may ultimately be scuttled if Seattle experiences poor air quality due to wildfire smoke or elevated smog levels. It will be too risky for my son's health to go ahead with major surgery if Seattle's air quality is too poor, even with all the steps we take to minimize our son's exposure to poor air quality. If his surgery is cancelled, it will likely mean that this important and needed surgery is delayed for a full year

until the following summer because of the need to schedule his surgery during the summer and months in advance.

38. It is likely that my son will need to have further surgeries in the future to manage his condition and that they will similarly need to be scheduled during the summer. I am deeply concerned that worsening impacts of climate change will increase the likelihood of summertime wildfire smoke and/or smog, further complicating and disrupting our ability to manage and carry out any future surgeries.

39. More generally, I worry about my son's healthcare as my husband and I age. As described above, my husband and I together implement an extensive range of measures to protect our son and minimize his exposure to air pollution. These measures will be harder to implement as we get older, especially if we ultimately need to place our son in a care facility. I am deeply concerned that climate change will worsen Seattle's air quality in the future, when my husband and I may be less able to protect our son from poor air quality.

### **Heat**

40. Heat is another factor that can significantly affect my younger son's health.

41. I understand from the Fourth National Climate Assessment that average temperatures in the Northwest are predicted to increase with climate change and, in

addition, heat waves are expected to become longer, more frequent, and more severe.

42. When temperatures are elevated in Seattle, my family takes additional precautions to protect my younger son's health. We pay careful attention to his hydration levels on hot days and have to make sure to calibrate his tube-feeding regime, since that is his only source of fluids.

43. When the heat is accompanied by dryness—which is typical in Seattle—the weather exacerbates his eczema and we have to take careful measures and apply specific lotions to help combat this condition.

44. Typically, we will keep my younger son inside when it is particularly hot out, and my husband or I will take our older son to do activities outside while the other will stay inside with our younger son, again splitting our family up. When we do take our younger son outside, we have to take extra precautions to make sure that we keep him shaded and he does not get overheated.

## **Conclusion**

45. I understand that the National Highway Traffic Safety Administration and Environmental Protection Agency recently finalized rules that dramatically weaken federal clean car standards and that declare state greenhouse gas standards for vehicles and state zero-emission vehicle standards unlawful. I am deeply concerned that these new rules will lead to increased greenhouse gas emissions

from passenger cars and trucks, and increased diesel exhaust emissions from the freight trucks that carry gasoline.

46. Increased greenhouse gas emissions will lead to increased likelihood of wildfires, increased temperatures and likelihood of heatwaves, and poorer air quality. Increased diesel exhaust emissions also contribute to poorer air quality. As a direct result, my younger son's fragile health will be put at risk, and my family and I will have to take even more steps to protect him from poor air quality and heat.

I declare that the foregoing is true and correct.

Executed on: May 25, 2020



Shana Reidy

## DECLARATION OF KATE ZALZAL

I, Kate Zalzal, declare as follows:

1. I am a member of the Environmental Defense Fund (EDF) and have been a member since 2012.
2. I reside in the town of Lyons, Colorado, with my husband and three children.
3. We recently welcomed our youngest child to the family in January 2018, and as a mother of three, I need a car that will fit myself, my husband, and all of our children. I also use my vehicle for a variety of purposes that often require me to transport multiple passengers. One of my children has attended dance classes, another plays on a soccer team and goes to practices, and in the summer both of my older children often participate in summer camps. I drive our kids to these activities and often participate in carpools with other families who likewise have children in these activities.
4. My family also travels around the Colorado mountains in the summertime and wintertime for camping trips and other activities. We regularly visit my parents, who live in the mountains between Lyons and Estes Park. Driving to these places makes four-wheel drive, all-wheel drive, or other similar features valuable during both the summer and winter.



5. Within the last two years, we replaced our four-wheel drive vehicle, which had broken down, with a vehicle with similar capabilities that is lower polluting and more fuel efficient. We use this vehicle for family trips to the mountains in the summer and the winter. Our family also has a second vehicle, purchased before we had children, that no longer fits our whole family and so we are planning to replace it within the next five years.

6. One of my highest priorities in shopping for a new car is high fuel efficiency. Because I often have to drive to surrounding towns, it is important for me to save on fuel costs by driving a car that gets better mileage than my current vehicle.

7. I am also very concerned about the climate pollution emitted by passenger vehicles, and it is important to me to own a car that releases fewer of these harmful emissions.

8. When we replace our smaller vehicle, we intend to purchase an electric vehicle that will fit our family and that we will use primarily for transportation around town and for the frequent trips we take to surrounding communities. Accordingly, I am planning to purchase an electric minivan, SUV or similar vehicle. I intend to purchase an electric vehicle because it has zero tailpipe emissions, it is substantially less costly to operate than a gasoline powered vehicle and likewise has fewer maintenance and other associated costs. Colorado has also

recently extended its state tax incentives for electric vehicles purchases through 2025, which, coupled with federal incentives, makes the financial savings associated with purchasing an electric vehicle even more attractive for me and my family.

9. Since I started shopping for a new car, I have realized that there are currently not many options for electric minivans or SUVs. For instance, there is only one plug-in hybrid minivan currently available on the market—the Chrysler Pacifica—and there are currently no, similar all-electric vehicles available for purchase. In addition, I am aware that the electric vehicle offerings for sale in other states are not always available in Colorado, further limiting electric vehicle options for me and other Colorado consumers.

10. At the same time, I am aware that a substantially greater number of electric vehicles will be available for purchase over the course of the next 5 years, when we intend to purchase a new car. These include some all electric minivans, like the VW ID Buzz and other all electric vehicles that would fit my family and meet our needs.

11. I understand that this rapid expansion of electric vehicle model availability is being driven by changing market dynamics and reduced battery prices in combination with policies, most notably the state of California's standards for zero emission vehicles ("State Zev Standards"), which are part of the

California Advanced Clean Car Program (“State Clean Car Standards”). These State ZEV Standards require automakers to generate a certain number of credits, driven by their sales of electric vehicles in California and other states that have adopted the State ZEV Standards.

12. I am also aware that Colorado has recently adopted the State ZEV Standards and that automakers would have to begin complying with those requirements for model year 2023 vehicles. When it adopted the State ZEV Standards, Colorado found that these Standards would require that automakers make additional electric vehicles available for sale in Colorado, beyond those that would be available absent the Standards. I understand that automakers supported adoption of State ZEV Standards in Colorado and indicated their view that the Standards would result in accelerated EV model availability in the state.

13. I am aware that the Environmental Protection Agency and the National Highway Traffic Safety Administration previously adopted Clean Car Standards, which require automakers to reduce greenhouse gas emissions and improve the fuel efficiency of new vehicles sold in the United States. I understand that these standards are based on a vehicle’s “footprint,” meaning that for each class of vehicles—including those we are considering purchasing—the standards require emission reductions and improvements in fuel economy over time.

14. I am aware that in a recent joint rulemaking, NHTSA finalized a regulation stating that California is preempted from exercising its unique authority under the Clean Air Act to set more-protective vehicle emission standards through a waiver issued by EPA.<sup>1</sup> Furthermore, I am aware that in the same joint rulemaking, EPA withdrew the Clean Air Act waiver granted to California that allows the state to set protective vehicle emission standards. I understand that the combined effect of these EPA and NHTSA actions would be to invalidate the State Clean Cars Program, including the State ZEV Standards. This, in turn would prevent Colorado from implementing these standards that are distinct from and more protective than the federal rule.

15. I am also familiar with the recent joint EPA and NHTSA rule that dramatically weakens the federal greenhouse and fuel economy standards for passenger cars.<sup>2</sup>

16. As a Colorado resident who intends to purchase a new electric vehicle in the next 5 years, I am concerned that these actions will harm me by limiting the availability of electric vehicles that meet my and my family's needs. Specifically, I am concerned that eliminating these standards will limit my ability to purchase an EV by removing important drivers supporting increased EV model availability in

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<sup>1</sup> 84 Fed. Reg. 51,310 (Sept. 27, 2019).

<sup>2</sup> 85 Fed. Reg. 24,174 (April 30, 2020).

the coming years. Also, by blocking Colorado's ability to implement State ZEV Standards, the NHTSA and EPA actions will likely return the state to a place where Colorado consumers do not have access to EVs that might otherwise be available in different states across the country.

17. I declare that the foregoing is true and correct.

Executed May 28, 2020

  
Kate Zalzal

**Declaration of Douglas Snower**

I, Douglas Snower, state and declare as follows:

1. This declaration is based on my personal knowledge, information, and belief. I am over the age of eighteen years and suffer from no legal incapacity. Statements in this declaration expressing an opinion reflect my personal opinion and judgment on the matter.

2. I am a resident of Chicago, Illinois.

3. I am currently a member of the Environmental Law and Policy Center (“ELPC”). I first became an ELPC member in 2011.

4. I am the President and Founder of Green Wheels Inc. (“Green Wheels”), which is located in Chicago and incorporated in Illinois. Green Wheels is licensed as an auto dealer by the state of Illinois. I founded Green Wheels in 2011.

5. Green Wheels is an environmentally conscious auto dealership and service business located near downtown Chicago. Green Wheels specializes in selling, servicing, repairing, and renting electric, hybrid, and environmentally friendly vehicles. Green Wheels also installs and operates electric vehicle charging stations in and around Chicago. Green Wheels’ customers include individuals, businesses, schools, religious institutions, and governmental entities. All of Green Wheels’ services and products are geared toward the goal of promoting clean and efficient transportation.

6. The success of Green Wheels’ business has been premised on the increasing availability of, and demand for, electric and hybrid vehicles, as well as the steady improvement in clean car technology and products. I believe that these improvements have been driven in substantial part by governmental standards requiring reduction of vehicle greenhouse gas (“GHG”) emissions and mandating production of zero-emission vehicles (“ZEVs”), which can include battery

electric, plug-in hybrid, and hydrogen fuel cell vehicles. I understand that the State of California has led this regulatory effort, based on its waiver under the federal Clean Air Act to set its own emissions standards, which ten other states plus the District of Columbia have elected to follow under Section 177 of the Clean Air Act.

7. Because California and these other states represent such a large part of the national market, the California GHG and ZEV standards have made more and better electric, hybrid and environmentally friendly vehicles and associated technology available in all states, including Illinois. The California standards have thus expanded and improved the national market for the types of vehicles Green Wheels sells, rents, and services in Illinois and have bolstered Green Wheels' business.

8. I am familiar with the Trump administration's SAFE Vehicles Rule ("SAFE Rule"), which the Environmental Protection Agency ("EPA") and the National Highway Traffic Safety Administration ("NHTSA") recently finalized in two parts. I understand that among other things, Part One of the SAFE Rule states that NHTSA is declaring the California waiver to be preempted by federal law. This part of the SAFE Rule also purports to block other states from following California's regulations. Part Two finalizes new and amended GHG and Corporate Average Fuel Economy ("CAFE") standards for cars and light duty trucks that are far weaker than current standards.

9. Part One of the SAFE Rule promises to have a direct and detrimental effect on Green Wheels' business. Without the state ZEV mandates, automakers can be expected to manufacture far fewer and less varied types of electric, hybrid, and environmentally friendly vehicles, which would slow the technological progress that has made them increasingly attractive to consumers. Automakers will also have less incentive to market and educate customers about electric, hybrid,

and environmentally friendly vehicles, which would disincentivize them from working with Green Wheels to promote ZEV sales.

10. As a result of these changes that will naturally flow from Part One of the SAFE Rule, Green Wheels will have fewer and less varied types of vehicles to offer customers and fewer customers will seek to buy or rent vehicles from us, which would depress the company's sales and rental business. This would, in turn, depress Green Wheels' service and repair business. It would also reduce the demand for new charging stations and reduce the revenue Green Wheels can earn from existing charging stations.

11. I understand that California and a number of other states have filed their own lawsuit challenging Part One of the SAFE Rule. These states include not only the current Section 177 states but also numerous others, including Illinois. This indicates that Illinois has an interest in becoming a Section 177 state if Part One of the SAFE Rule is invalidated. If that occurred, it could significantly boost Green Wheels' business by increasing the demand for, and publicity around, electric, hybrid and environmentally friendly vehicles in the Chicago region. By the same token, if Part One of the SAFE Rule survived legal challenge, the harm to Green Wheels' business would be even greater given Illinois' apparent interest in becoming a Section 177 state.

12. As the owner of Green Wheels, I stand to lose money if, as I expect, my company loses business due to Part One of the SAFE Rule. The threat to Green Wheels' business, and to my financial stake in the company, would be averted if Part One of the SAFE Rule is declared invalid so that California and other states can continue to enforce their ZEV mandates, which will continue to expand and improve the national market for the types of vehicles Green Wheels sells, rents, and services.



I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on May 12, 2020

  
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Douglas Snower

**Declaration of Laurence B. Stanton**

I, Laurence B. Stanton, state and declare as follows:

1. This declaration is based on my personal knowledge, information, and belief. I suffer from no legal incapacity. Statements in this declaration expressing an opinion reflect my personal opinion and judgment on the matter.

2. I am a member of the Environmental Law and Policy Center, and have been a member since 2008.

3. I live at 515 Myrtle in Beverly Shores, Indiana. I live approximately one block away from the Lake Michigan beach. Beverly Shores is surrounded by Indiana Dunes National Park, which contains a variety of different ecosystems and extensive plant and animal biodiversity. My wife lives with me. We are both 66 years old. We have lived in Beverly Shores for 30 years.

4. I have a consulting business and work out of my home.

5. I spend a lot of time outdoors. Among other things, I garden, run, visit the beach a block from my house, sail on Lake Michigan, kayak, and cross-country ski.

6. I am concerned about the impacts that climate change is having and will have on the area in Northwest Indiana where I live and recreate. I try to keep up on news and science related to climate change. I've read the Environmental Law and Policy Center's report, *An Assessment of the Impacts of Climate Change on the Great Lakes*, which discusses climate change's impact on regional precipitation, invasive species, and extreme weather, among other things. What I've read about climate change confirms my worries that climate change is already negatively affecting the area in which I live and that if climate change increases, there will be even more harms to the environment in my area.

7. Climate change leads to warmer winters, which means that there are fewer big snows that create good conditions for cross-country skiing. It seems to me that recently there are a lot fewer good days each winter to cross-country ski in Indiana Dunes than there once were.

8. I am the immediate past president of the Beverly Shores Environmental Restoration Group. I've been on the board for 5 years. One focus of the Environmental Restoration Group is to remove invasive species and encourage people to plant native species. The Environmental Restoration Group recently published an updated edition of a book, *A Beginner's Guide to the Plants of the Indiana Dunes*, which educates people on the native and invasive species of the region in an effort to encourage them to plant native species. This recent edition was an update to the 2008 edition of the book. We've also recently produced a Dune Plants app that provides information on both native and invasive plants found in the Indiana Dunes.

9. The Environmental Restoration Group has removed numerous invasive species over the years, including Oriental Bittersweet and Burning Bush. The Group spends approximately \$3,000 dollars each year removing the invasive Tree of Heaven.

10. The Environmental Restoration Group recently found invasive kudzu growing on private property in Beverly Shores, and paid to have it removed. Kudzu has overrun parts of the southern United States, devastating local plant communities, and the restoration group and local environmental experts we talked to were stunned that we found kudzu growing here.

11. Climate change increases the spread of invasive species and makes native species more vulnerable to being crowded out by invasives. When invasive species become a monoculture, they kill the native species. I am worried that as climate change increases, new invasive species will spread into Northwest Indiana, and existing invasive species will gain a stronger foothold,

harming the native biodiversity of the unique Indiana Dunes area. If this happens, the Environmental Restoration Group will need to spend even more money fighting invasive species.

12. Many of the invasive species in the area are also “deer candy,” and contribute to the spread of deer in the area, which is a major concern. The Environmental Restoration Group used to perform a deer cull, which the National Park now performs. Before these deer were effectively managed, the understory of the woods was essentially all gone because it was eaten by the excessive deer population.

13. The Shirley Heinze Land Trust recently installed kayak launches on the east branch of the Little Calumet River. These launches were unusable for much of summer 2019 and early spring 2020 because the Little Calumet River has been so high. I’m aware of the high water levels because I follow the Northwest Indiana Paddling Association’s Facebook page, which has been documenting the high water levels and the problems for paddlers on the Little Calumet, and because I often drive by the Little Calumet and have seen the high water levels myself.

14. I own a kayak, and looked forward to using it on the Little Calumet in summer 2020. High water levels, however, prevented me from doing so many days last summer and this spring that I intended to go kayaking.

15. Climate change is causing increased heavy precipitation in the Midwest. I believe that the recent high river levels in Northwest Indiana are partially attributable to increased precipitation caused by climate change. I am concerned that climate change will increase threats to water quality in the area because warmer water temperatures and increased run off from more frequent heavy storms caused by climate change will degrade water quality.

16. Lake Michigan water levels have increased to record levels. A section of Lake Front Drive, which runs along Lake Michigan shoreline in Beverly Shores, has been closed because it

is literally falling into the lake and the town of Beverly Shores just completed a \$5 million bond sale to fund erosion protection. The beaches in Beverly Shores are gone. My property taxes will increase for the next 20 years as a result of the bond issue and the value of my home could decline because of loss of the beach.

17. I sail on Lake Michigan and the high water levels are also limiting sailing opportunities. The harbor in South Haven is closed for summer 2020 and docks at other harbors are underwater, making it impossible to use them.

18. As climate change accelerates, high water levels and impaired water quality will diminish my opportunities for recreation on the rivers and lakes in Northwest Indiana.

19. The Beverly Shores area's biodiversity and its proximity to the beach and to outdoor recreation opportunities area is why we live here. If climate change increases the spread of invasive species, decreases water quality, decreases biodiversity, and diminishes the recreational opportunities in the area, the value of my property will decrease because the area will no longer be such a desirable place to live.

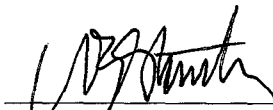
20. I am concerned that the regulatory actions recently taken by the National Highway Transportation Safety Administration (NHTSA) and the Environmental Protection Agency (EPA), which purport to prevent states from setting vehicle greenhouse gas emissions standards and imposing zero-emission vehicle mandates (Part One of the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule"), will contribute to increased greenhouse gas emissions and increased climate change. I am also concerned that regulatory actions weakening the federal vehicle fuel efficiency standards and greenhouse gas emissions standards (Part Two of the SAFE Rule) will similarly contribute to climate change.

21. Because of our concerns about climate change and the environment, my wife and I have decided that in the future we will buy only electric or hybrid cars. We plan to buy our next car in 2020, to replace our current car, and anticipate buying another car in 2023.

22. I am concerned that the NHTSA and EPA actions in the Part One and Part Two SAFE Rules weakening federal emissions standards and purporting to revoke state authority to set stricter emissions standards or mandate zero emissions vehicles will lead to decreased availability of electric and low-emission cars and increase prices for such cars that are still available. This would hurt me as a consumer by decreasing the range of cars my wife and I will have to choose from and by increasing the price we will have to pay for a car.

23. I support the Environmental Law and Policy Center's efforts to ensure that the federal government does not improperly revoke states' ability to set greenhouse gas emission standards and zero-emissions vehicle mandates and does not weaken the federal vehicle emissions and fuel efficiency standards.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief. Executed in Beverly Shores, Indiana on May 21, 2020.



Laurence B. Stanton

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

UNION OF CONCERNED  
SCIENTISTS,

Petitioner,

v.

NATIONAL HIGHWAY TRAFFIC  
SAFETY ADMINISTRATION,

Respondent.

No. 19-1230  
(and consolidated cases)

**DECLARATION OF RONALD ROTHSCHILD**

I, Ronald Rothschild, state and declare as follows:

1. I am a member of the Natural Resources Defense Council (NRDC). I joined the organization as a member in October 2016 to support its work protecting the environment and public health and reducing our dependence on fossil fuels.

2. I live in Greenwich, Connecticut, in Fairfield County in the southwestern corner of the state. Air quality is poor and violates federal ozone standards throughout Connecticut, but the southwestern portion of the state where I live suffers from an even more severe ozone problem. The American Lung Association rates Fairfield County an “F” for ozone pollution, and the county is within the New York City metropolitan area, which the Association regularly ranks as one of the most ozone-polluted regions in the country. Ozone can create and exacerbate respiratory problems.

3. Because cars and other motor vehicles emit ozone precursors, they are a major contributor to ground level ozone formation. Their emissions contain other harmful pollutants as well, such as greenhouse gases that are a major contributor to climate change. Climate change causes many harmful human health impacts, including making dangerous ozone smog conditions worse, because ground level ozone forms more easily when air temperatures are higher.



4. My home is about a quarter mile from the Merritt Parkway, a heavily travelled state highway. Tens of thousands of vehicles travel this stretch each day. I have lived in my house for the past seven years. I am close enough to the Merritt Parkway to hear the traffic if I am outside my house.

5. About three years ago, I was diagnosed with throat cancer. I had a golf-ball sized tumor removed from my tonsil and went through months of radiation therapy afterwards. It was a very difficult treatment process, physically and emotionally. Although I survived the throat cancer, I still suffer from the physical effects of radiation treatment. I have scarring and muscle stiffness in my neck, xerostomia (lack of saliva), and I find it harder to enjoy the food and drinks I love, like red wine and chocolate.

6. The experience has made me think more about the potential health risks of living close to a busy highway. I have become wary of the health risks from exposure to air pollution caused by fuel combustion in automobiles.

7. I have also long been concerned with the dangers posed by climate change, which I view as the number one issue facing society. Further, I recently became a new grandfather and am increasingly worried about the harmful effects that climate change will visit upon me and my family.

8. Even before my illness, I was passionate about clean cars and cleaning up our country's driving habits. I strongly support government policies—such as emission standards, fuel economy standards, and mandates to

sell electric vehicles—that encourage automakers to implement technology that reduces the combustion of fuel and associated emissions of dangerous air pollutants. These standards incentivize automakers to innovate and develop cleaner cars and trucks, as well as to try to sell cleaner cars to consumers.

9. I purchased my first Honda Civic hybrid in 2003. In 2006, I upgraded to another Honda Civic hybrid, and I purchased a third Honda Civic hybrid for my daughter in 2011.

10. My 2006 hybrid was one the best cars I've ever owned. It now has 187,000 miles on it, and still runs like a top. When I drive, I can get around 40 miles to the gallon.

11. Although I liked my hybrid Civics, I promised myself that I would never buy another fuel-combustion vehicle (or internal combustion engine of any type) for as long as I breathe. And so, at the beginning of this year, I purchased a Tesla Model 3 electric car.

12. The Tesla was one of the few full battery-electric vehicles available on the market with a “rated” travel range of at least 250 miles. I ultimately chose the Tesla from among the limited options because of its size, range, and U.S.-based manufacturing, but I had to forego characteristics and features commonly available to choose from in the combustion-powered vehicle market. Things as simple as a hatchback with decent cargo space (for

letting my two large dogs in and out of the car) are hard to come by in the battery electric vehicle market.

13. It is important to me, personally, that government policies continue to promote the development and marketing of improved electric vehicles. An expanded electric vehicle market will also help broaden electric car offerings (more hatchbacks, for example) and bring down their purchase price. I would personally benefit from such policies and developments. I intend to replace my wife's current vehicle with a long-range electric vehicle with a useful hatchback as soon as an affordable and acceptable model becomes available. And when it is time to replace my current vehicle, I intend to again purchase an electric vehicle and it is important to have a wider range of options to choose from.

14. I understand that the EPA sets federal emission standards for new vehicles and that the National Highway Transportation Safety Administration also sets federal fuel economy (CAFE) standards for new vehicles. Until recently, these agencies' standards required automakers to make meaningful improvements to the average greenhouse gas emissions and fuel economy of the new vehicles they bring to market each year. I further understand that California has set stronger state standards, and that other states, like my home state of Connecticut, have adopted California's standards. I understand, for example, that many of these states require automakers to offer for sale a

minimum number of zero emission vehicles, like battery-electric vehicles, each year. I strongly support all these standards.

15. It is apparent to me that stronger emission and fuel economy standards logically will lead automakers to develop and sell cleaner cars and trucks than they otherwise would. In turn, those cleaner vehicles emit less of the harmful air pollution that leads to health problems, ozone formation and climate change.

16. I also understand that automakers who fail to meet EPA and NHTSA standards can buy credits from other automakers who exceed those standards, and that credits become more valuable when standards are tougher, which helps incentivize the introduction of new electric vehicles into the market. Electric vehicle manufacturers have said that they rely on strong standards and credit sales as part of their business plans for developing and introducing new electric vehicles.

17. I understand that EPA and NHTSA have recently issued rules that would roll back and weaken preexisting federal greenhouse gas emission standards and fuel economy standards for new vehicles. I also understand that these agencies have issued rules that seek to block California from maintaining stronger standards, including requirements for zero emission vehicle availability, which would in turn prevent Connecticut and other states from following suit. I strongly oppose all of these efforts. The agencies are bizarrely out of sync

with scientific data and public opinion on our environmental crisis and our desires for innovative and ecological vehicles.

18. Unless and until the agencies' actions are reversed, they will result in increased emissions of air pollutants from the vehicles that travel the highway near my home. They will also result in increased emissions of greenhouse gases from vehicles across the country that all contribute to climate change. And, by reducing the incentives for automakers to invest in fuel-efficient technology and introduce new electric vehicles, they will reduce my options when I and my family search for electric vehicles to purchase in the coming years.

19. By contrast, if the stronger federal standards are reinstated, and/or if California and Connecticut are able to set stronger standards, automakers will once again have greater incentive to invest in fuel-efficient technology and introduce new electric vehicles onto the U.S. market.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief. Executed on May 27, 2020, in Greenwich, Connecticut.



Ronald Rothschild

## DECLARATION OF ANN LEONARD

1. My name is Ann Leonard. I live in Berkeley, California.
2. I am a member of Public Citizen, Inc., and a member of the Board of Directors of Public Citizen Foundation, Inc. I am also the Executive Director of Greenpeace USA, and an author and filmmaker.
3. I am committed to attempting to transform our society from one focused on wasteful consumption to one that emphasizes sustainability and protection of the environment. Increasing the availability of consumer products with reduced impacts on the environment—including climate-change impacts—is critically important to the achievement of that objective. I am a member of Public Citizen because it seeks to advance my goals and pursue consumer and environmental interests through its advocacy efforts.
4. I currently own a 2012 model-year automobile, one of two cars that I have purchased in my lifetime. I intend to replace it sometime in the next five to six years, preferably in the next year or two if I am able to find the right car. I plan to purchase an electric vehicle and have installed a rooftop solar system on my house that produces 150% of the electricity needed to operate my home so that it will also

support an electric car's charging needs. However, in two years of searching, I have not yet found the right electric car for my needs, which include space for my dog and for climbing gear, long-distance range, and four-wheel drive. I frequently consult with EV experts and research available vehicles on the internet, but I am still looking for one that meets our needs.

5. For these reasons, I have a strong interest in initiatives that increase the availability of electric vehicles to consumers like me and foster a greater range of choices of such vehicles in the marketplace. Government actions that reduce or eliminate requirements that manufacturers include electric vehicles in their fleets will harm me by limiting my options to choose the most appropriate electric car for my needs.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 15, 2020.



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Ann Leonard

## DECLARATION OF ROBERT WEISSMAN

1. My name is Robert Weissman. I am President of Public Citizen, Inc.

2. Public Citizen is a non-profit consumer advocacy group that represents the interests of its members on a wide range of issues before administrative agencies, courts and legislatures. Public Citizen has long been involved in regulatory issues involving the automobile industry, including issues related to emissions standards regulated by the Environmental Protection Agency (EPA) and the State of California, as well as matters falling within the regulatory authority of the National Highway Traffic Safety Administration (NHTSA), such as fuel economy and motor vehicle safety. Public Citizen's organizational mission includes advocating for the interests of its members in the availability of clean, safe, and economical motor vehicles.

3. Public Citizen has tens of thousands of members nationwide, and a great many of them purchase new automobiles in any given year.

4. California's automobile emissions standards require substantial year-over-year decreases in greenhouse gas emissions for automobiles produced in model years 2021 to 2025 and thus would



require automakers to provide a wider range of lower-emission vehicles than they would without those standards in place. California also requires automakers to include zero-emission vehicles, including electric cars, in their fleets, and its standards thus enhance the availability and range of choice of electric vehicles in the marketplace. These standards protect the interests of consumers in California and other states that have adopted them, including thousands of Public Citizen members, in the availability of a broad selection of low- and zero-emission vehicles. Such vehicles are important to consumers, including Public Citizen members, who wish to purchase vehicles that will contribute less to global warming than higher-emission vehicles.

5. EPA's and NHTSA's actions declaring the California standards to be preempted by federal law threaten consumer interests, including the interests of Public Citizen's members, protected by the California standards. EPA's and NHTSA's actions will allow automakers to produce a mix of vehicles including more higher-emission and correspondingly fewer lower-emission and zero-emission vehicles to serve the market in California and other states. That result directly affects interests of Public Citizen members and other consumers, and causes

them injury, by reducing their ability to choose from among a broad range of low-emission and zero-emission vehicles when purchasing a new car.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 15, 2020.



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Robert Weissman

**DECLARATION OF KIM FLOYD**

I, Kim Floyd, declare as follows:

1. I am over 18 years of age and competent to give this declaration. I have personal knowledge of the following facts, and if called as a witness could testify competently to them.

As to those matters which reflect an opinion, they reflect my personal experience, opinion and judgment on the matter.

2. I live in Palm Desert, California, in Riverside County.

3. I am a member of the Sierra Club and have been for 30 years. I joined the Sierra Club to protect the environment, plant and animal species. I am currently the Conservation Chair for the San Geronio Chapter which covers Riverside and San Bernardino counties, and have served in that position for eight years. As Conservation Chair, I address a myriad of issues, including these two counties' bad air quality and environmental issues in the Salton Sea. I am also part of the Sierra Club Desert Committee which focuses on protecting desert areas in Southern California. Air quality is a significant issue for our chapter.

4. I am concerned about climate change for many reasons. Climate change is altering the living environment for humans and species that I am working to protect here in the desert. The species I watch in particular include the desert tortoise, the horned toad lizard, the Joshua tree and many other plant species, some not yet even catalogued, and I have observed and studied them for many years. I frequently go hiking to visit, observe and enjoy these species in Joshua Tree National Park, the Chocolate Mountains and the Mojave Preserve, all in the vicinity of where I live. These activities give me great aesthetic enjoyment, and I have firm plans to continue my visits, observations and studies throughout this year and hopefully for many years to come. The science is clear that these and other species are being directly and negatively affected

by climate change. The Joshua tree itself is projected to become extinct in the Joshua Tree National Park within the next 30 to 40 years through extreme weather conditions unless greenhouse gas emissions are reduced. The impact of climate change on this natural environment and its many species makes me anxious, and I fear that I will soon be unable to enjoy observing and studying them.

5. Climate change is also exacerbating the poor air quality where I live. Greenhouse gases help form ground-level ozone, brings increased temperatures and is now causing very cyclical and atypical rain events. The patterns for rain in the desert have changed significantly over recent years; we now have heavy rainfall all at once, instead of small amounts of rain multiple times during the year. These large rain events cause dangerous floods in our area once or twice a year. Though some flooding is normal in desert, the heavy rainfall we now experience causes much more damage and can severely erode the land and harm plant species.

6. The poor air quality in our area is in large part the result of emissions from the heavy traffic on our roads. Fossil fuel-driven vehicles emit large and fine particulate matter, nitrous oxides and sulfur dioxides, along with greenhouse gases; they foul the air and are terrible for the health of our communities, especially those with asthma.

7. I am particularly concerned about the role of the transportation sector in causing climate change and unhealthful air. In California, we already have significant air quality problems, including where I live and in adjacent areas, much of it caused by vehicle emissions. The pollution from vehicles has gotten worse over time and is exacerbating air quality issues, including ozone and particulate matter pollution. Riverside County is listed as a nonattainment area for these pollutants under the National Ambient Air Quality Standards, meaning that ozone and particulate matter levels here are unhealthy.

8. The poor air quality in Riverside County impairs my enjoyment of outdoor recreational activities. I have been hang gliding twice a week between the months of May and November since 1992 and have firm plans to continue to do so for as many years as possible. The poor air quality is obvious from high in the air. While hang gliding, I can see the darkness from the large amounts of pollution in the air, and it obscures the views. This haze is visible up to about 5,000 feet above sea level. The aesthetics of hang gliding are significantly affected by air pollution, and I am very concerned and troubled that things will only get worse if pollution from vehicles isn't significantly controlled, and that I may have to stop this activity in the future because the air quality will not improve or get even worse.

9. I also feel a tightness in my lungs while breathing in the afternoons and evenings near the City of San Bernardino. When I can see and feel that the air quality is bad here in the desert, I stay indoors in order to avoid triggering tightness in my lungs, but I cannot always prevent this from happening. I am also concerned about my grandchildren, and future generations broadly, because they have been living with poor air quality their whole lives. I worry that they will continue having to live with poor air quality and poor health outcomes unless we make drastic changes to reduce emissions from the transportation sector by cleaning up emissions from automobiles and light trucks.

10. I am very interested in making electric vehicles more widely and readily available for purchase so that both greenhouse gas and other harmful pollution from vehicles will be reduced and eventually stopped. I know that California has set a mandate for automakers to sell a certain percentage of zero emission vehicles (ZEV) per year, and I was very pleased that California has done so. Growing sales of EVs will begin to displace fossil fuels and lead to much better air quality as long as the program remains in place.

11. I am aware that the National Highway Traffic and Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) have issued a rule declaring that California is preempted from setting ZEV mandates and its own greenhouse gas standards, and that has also revoked California's Clean Air Act waiver which permitted these regulations. The rule also prohibits other states from adopting California's standards for themselves. I am extremely concerned about this. California has always led the nation on air quality matters, and other states have been able to follow California's example and bring the same measures to their own states. But NHTSA's and EPA's rule also prevent other states from taking those actions. Undoing California's and other states' ability to set ZEV mandates and greenhouse gas standards will increase greenhouse gas emissions, levels of ozone, particulate matter, and other harmful pollutants, which will only make my area's air quality worse than it otherwise would be. In turn, that will interfere with my enjoyment of hang gliding and continue or create even greater reductions in visibility because of vehicle pollution, and it may make me quit altogether. The roadside pollution will affect the species I care for and study as well. I am additionally concerned that stopping California's ZEV mandate and greenhouse gas standards will result in fewer electric vehicles coming to market. If that happens, I worry that the air quality where I live will get worse.

12. I am also aware that recently, NHTSA and EPA have revoked current fuel efficiency and greenhouse gas standards for the entire nation's passenger cars and light trucks, and have supplanted them with very weak standards that allow an enormous amount of additional fuel consumption and the harmful pollution that comes from it. This will exacerbate the poor air quality that causes me tightness in my lungs and interfere with my enjoyment of the desert and its species and my hang gliding activities. The environmental degradation and all the

effect it has on my health and my environment will become that much worse. Such weak standards also provide no incentives for the development of more and better EVs, which will become even less available than they are now.

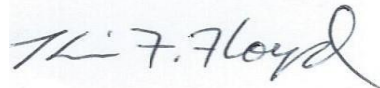
13. I understand that NHTSA did not prepare an environmental impact assessment for the rule prohibiting California's ZEV mandate and greenhouse gases, and that the impact statement for the weakened rule for national standards failed to consider and evaluate any alternatives that would actually lessen the environmental burdens caused by fossil fuel vehicles. These failures deprived me and others of important information about how to reduce the harms vehicle pollution causes me, as I have described, and prevented Sierra Club and others from commenting on them.

14. I support Sierra Club's lawsuit to overturn the rule declaring that California may not set ZEV or greenhouse gas standards and that its waiver to do so is revoked, and that other states may no longer follow California's rules. I also support the lawsuit seeking to overturn the new, much weaker fuel efficiency and greenhouse gas rule for the entire national vehicle fleet. If the court overturns either of these rules, I would directly benefit from improved air quality because reduced vehicle pollution would allow me to continue and enjoy hang gliding, and would improve my enjoyment of the aesthetics of what I can see from high in the air and slow the dangers facing the desert species I care for and enjoy. I also believe that the tightness I feel in my lungs would begin to lessen. Striking down the rule preventing California's ZEV mandate and separate vehicle greenhouse gas standards would assist the continued proliferation of electric vehicles and would have a significant positive impact on air quality and greenhouse gas emissions where I live, in California and elsewhere; it would help us mitigate the terrible climate disaster we are all facing. An order by the court striking down either of these rulemakings and

requiring NHTSA to prepare proper environmental assessments would give me the information I need and am entitled to. And restoration of California's ability to issue ZEV mandates and its own greenhouse gas standards would increase the availability of electric vehicles where I live and reduce emissions.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: May 18, 2020, at Palm Desert, California.

A handwritten signature in black ink that reads "Kim F. Floyd". The signature is written in a cursive style and is positioned above a horizontal line.

Kim Floyd



**DECLARATION OF VICENTE PEREZ MARTINEZ**

I, Vicente Perez Martinez, declare as follows:

1. I am over 18 years of age and competent to give this declaration. I have personal knowledge of the following facts, and if called as a witness could testify competently to them. As to those matters which reflect an opinion, they reflect my personal experience, opinion and judgment on the matter.

2. I live in Los Angeles, California, and have lived there since 2013. I am a film editor. I edit commercials, trailers for movies, and movies.

3. I am a member of the Sierra Club and have been for almost three years. I joined the Sierra Club because I became very concerned about environmental protection after the 2016 presidential election. I am a film editor, so I thought the best way to get involved was to become a member of a non-profit that knows how to do this work, rather than attempting to do the work myself. As a member of the local Angeles Chapter, I have attended some rallies and keep abreast of environmental issues.

4. I am aware that Los Angeles County is in nonattainment for ozone and particulate matter under the National Ambient Air Quality Standards, and I am worried about the poor quality of the air all around my home. I live about 500 feet from La Brea Avenue and less than a mile from La Cienega Boulevard, both of which are major traffic arteries and carry very heavy traffic. During the prolonged rush hours, cars sit bumper to bumper for extended periods of time, releasing harmful emissions. Our backyard is so close to La Brea Avenue that the soot and grime from vehicle traffic gets all over the backyard: a nasty, gray dust lies on top of everything. We no longer use the backyard more than a few days a month, restricting my use and enjoyment

of my property, and we have to clean the surfaces of furniture and other objects thoroughly before we do.

5. I track the air quality index daily through an app on my iPhone. I like to run outside every day, but, when the air quality is poor, I have to forgo that pleasure and run at my gym instead. I also monitor how much time my five-year old daughter spends outside during poor air quality days because I don't want her to breathe the unhealthy air and develop respiratory problems.

6. I am also very concerned about climate change. I try to follow climate science closely and I am aware that we are approaching a tipping point in which we have a narrow timeframe to turn things around if we truly want to tackle the climate problem. We are running out of time to take serious action to mitigate the impacts of climate change, but unfortunately, we are doing the opposite and exacerbate the current and coming damage by producing more greenhouse gases. I am particularly concerned about the role of the transportation sector in causing climate change, as I am aware that the transportation sector is the biggest emitter of greenhouse gases in the U.S. and is a major cause of climate change. I also know that greenhouse gases lead to the ground-level ozone that causes terrible health effects.

7. When my wife and I had a baby, my perspective on things changed. My daughter will live to see the 22nd century, and I often think about how my decisions will affect her and the world. As a parent, it is very important for me to do my part to leave behind a world that gives my daughter and other people of future generations a healthy environment and a chance to thrive. My desire to breathe cleaner air, to stop vehicle emissions of particulate matter, other dangerous pollutants and greenhouse gases, and to protect my and family's health are among the reasons

why I own electric vehicles, since I must have a car as it is very difficult to live and get to work without one in my neighborhood.

8. My wife and I currently own two used electric vehicles, a 2014 BMWI3 and a Tesla Model S. We drive them because they do not emit any tailpipe pollutants at all. We plan to replace at least one of them soon with another electric vehicle, when there are hopefully more options to choose from that are cheaper and have a larger array of features than currently available models. We will most likely replace our BMW, as it only has 65-70 miles of range. We use our BMW for shorter trips around downtown LA, but we are counting on further technology development and deployment so we can get a new electric vehicle with a better range. The electric vehicle options that are currently available are limited, have short ranges, and are sold at relatively high prices. For example, the used Tesla Model S is the cheapest model available that has at least close to 200 miles of range.

9. I believe that there are more electric vehicles available in California compared to most other states because of California's zero emissions vehicle (ZEV) mandate, which requires that car makers sell a certain number of new electric vehicles every year. I am aware that the National Highway Transportation and Safety Administration (NHTSA) and the EPA have issued a rule declaring that California's ZEV mandate is preempted by federal law, and that California may no longer set greenhouse gas standards for vehicles. I also know that the federal EPA has revoked a waiver California possessed which permitted California's ZEV mandate and the setting of greenhouse gas standards, and that many prior waivers have allowed California to set vehicle emissions standards that are more stringent than federal law. Other states that have adopted California's measures are now also precluded from doing so, and these actions therefore have effects on the entire national vehicle market.

10. I am very concerned that these actions will result in fewer electric vehicle options and fewer electric vehicles for sale here in California and elsewhere. That will drive prices up for whatever EVs may still be available, making it much harder to buy them. And it will stop or delay the technical innovation we need to get improved EVs on the market. The cancellation of the ZEV mandate directly affects me and my ability to buy another electric vehicle at better prices, better range, and to have other consumer choices in buying these vehicles.

11. Additionally, I invested a lot of money in a charger and solar panels in order to set up my home for electric vehicles. Because the ZEV mandate has been preempted and the waiver revoked, I am afraid that my investments in EV charging infrastructure will also be affected and that the expansion of available charging stations will considerably slow down or even stop. So, not only will I have fewer choices to replace my electric vehicle, but it will also become more difficult to operate my current ones due to limited infrastructure. Slowing down the drive for more electric vehicles will also decrease the value of the charging infrastructure in my home.

12. I am extremely concerned that declaring the ZEV mandate and California's ability to set greenhouse gas standards at levels more stringent than federal law, or at all, and the revocation of the waivers that allowed California to take these actions, will increase greenhouse gas emissions and levels of ozone and particulate matter, which will make my area's air quality even worse than it will be with these protections in place and negatively affect my outdoor activities. If that happens, I fear that I will need to further limit running outdoors and using my backyard. I also believe that these rollbacks will result in fewer electric vehicles on the market and impair my ability to purchase new electric vehicles and operate the ones I have.


13. I have learned that NHTSA and EPA also issued another final rule that makes greenhouse gas and fuel efficiency standards much weaker for all of the vehicles in the United

States. If that rule stays in place, a vast amounts of additional oil will be combusted and greenhouse gases emitted, all making the air quality much worse and climate change damage ever more devastating. Weakened national standards will also affect the availability of EVs, as automakers will have much less incentive to build them. That, again, will affect my ability to purchase the EV I want and diminish the value of my EV infrastructure investments.

14. I support Sierra Club's lawsuit challenging both of these rules. If the court overturns either of them, I would directly and personally benefit in many ways: I would be able to breathe cleaner air, be able to expand my outdoor physical activities, and use my backyard more often. I would also know that the air quality where I live will improve. I would know that greenhouse gas emissions are being reduced and the damage of climate change abated. Additionally, I would have more choices for a new electric vehicle and I could operate my used electric vehicles with the support of more infrastructure, and not lose the value of my investments in EV infrastructure at my house. All of these effects would improve my quality of life because I live in a really congested and polluted area. Finally, I will sleep better at night knowing that we are creating a more healthy future for my daughter.

I declare, under penalty of perjury, that the foregoing is true and correct.

Dated: May 20, 2020.



Vicente Perez Martinez

**DECLARATION OF IGOR TREGUB**

I, Igor Tregub, declare as follows:

1. I am over 18 years of age and competent to give this declaration. I have personal knowledge of the following facts, and if called as a witness could testify competently to them.

As to those matters which reflect an opinion they reflect my personal experience, opinion and judgment on the matter.

2. I live in Berkeley, California, in Alameda County, and have lived here since 2003.

3. I have been a member of the Sierra Club since 2008. Getting involved in Sierra Club has been an excellent vehicle for advocacy and success on good policies on the issues of transportation and air quality, among other things. I am very involved in the Sierra Club San Francisco Bay Chapter and am part of its Transportation and Compact Growth Committee. I am also a member of the East Bay Chapter of the League of Conservation Voters, Indivisible Berkeley and its Science and Environment Team, California Young Democrats and its Environmental Caucus, and the California Democratic Party Environmental Caucus. I am currently an elected Commissioner on the City of Berkeley Rent Stabilization Board.

4. I am very concerned about the poor air quality in the Bay Area. West Berkeley and West Oakland tend to have some of the worst air quality of the nine counties in the Bay Area region, with high readings for particulate matter and ground-level ozone. My housing complex is in an air pollution and climate hotspot here in the Bay Area. I live about a half mile from the I-80 freeway, which – pre-COVID-19 – carried extremely heavy vehicle traffic, and around 7 miles away from the Richmond Chevron refinery, which refines gas and diesel that these vehicles burn. Both of those activities cause air pollution where I live, including particulate matter, ground-

level ozone and other noxious gases. I have seen firsthand how this has affected air quality in my area and the health of my constituents.

5. Because the area where I live is so close to the sources of harmful air pollution from tailpipes and oil refining, I know that my own life span will likely be shortened. This knowledge makes me anxious, but I am most upset about and fear for my neighbors, some of whom suffer respiratory conditions. I represent nearly 120,000 residents on the Berkeley Rent Stabilization Board, and I worry about how poor air quality affects them. I see firsthand how air pollution impacts the behavior of folks who have sensitive health receptors and how this can completely disable them for hours or even days. I run several times a week and I try to hike as often as I can on a loop parallel to I-80, and I intend to continue to do so as long as the air quality is improving. But I do not exercise outside on bad air quality advisory days and instead remain indoors. On bad air quality days I also try to minimize the use of my vehicle, but I currently work 40 miles away from home, which makes this difficult (the Bay Area's current shelter-in-place order notwithstanding). I hate it when I have to drive, especially on bad air quality days, because I do not want to contribute to the problem. These concerns are the reasons why I am trying to invest in an electric vehicle as it emits no tailpipe pollutants.

6. I am currently in the market for an electric vehicle and am fully committed to get out of my gasoline-powered vehicle in about three months. I will likely get a plug-in hybrid if I can get charging infrastructure in my multifamily housing complex. I think a lot about the harmful pollutants my conventional car emits that make people sick, and also about my carbon footprint and the fact that we have ten years to make dramatic changes to prevent the worst effects of climate change. I know that any changes I make at a micro level will not have the great impact that a broad policy change would, but I feel that I need to lead by example. My biggest

effort has been to craft a model local policy for electric vehicle sharing agreements with landlords that would result in the installation of charging infrastructure in multifamily housing, which will make it easier for me and others to buy and charge electric vehicles.

7. I know that California has led the nation for decades in setting more stringent emission standards for vehicle pollution, and also that California has had zero emission vehicles mandates and its own greenhouse gas emission standards for some time. California's regulations have caused electric vehicle sales to go up, helping to make the air cleaner. Other states have adopted California's standards, which has helped push the development of EVs and the necessary infrastructure nationwide.

8. I am aware that the National Highway Traffic and Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) have issued a rule in which NHTSA finds that federal law preempts California's zero emission mandate and greenhouse gas emission standards, and they are no longer in effect. EPA has cancelled a waiver under which California, until now, could set ZEV standards and its own greenhouse gas emission standards. I am also aware that other states have been able to follow California's example, but that EPA's and NHTSA's rule have cancelled the right of these other states to do what California does.

9. Because California's ZEV mandate no longer exists, automakers no longer have to sell ZEV vehicles. This means that the number of EVs available for sale and on the streets will diminish, and harmful pollution where I live will increase. It also means that more fossil fuel cars will be built and sold, which means they will consume more fuel and harmful emissions from the Richmond refinery are likely to increase as well, harming air pollution from both traffic and refining activities.



10. I am aware that NHTSA and EPA also have issued a rule that will significantly lower the stringency of the federal fuel efficiency and greenhouse gas standards for the light duty vehicle fleet, causing the combustion of huge amounts of additional fuel and increased emissions of ozone-forming greenhouse gases, particulate matter and other noxious air pollution. I am extremely concerned because taking away California's ability to issue these regulations will have an effect on automakers' incentive to build and sell zero emissions vehicles, which in turn will increase ozone and other pollution and make the Bay Area's air quality worse. I am additionally concerned that these rollbacks will result in more barriers to purchasing electric vehicles due to a lack of rebates and lack of investment in electric vehicle infrastructure. I worry that losing the ZEV mandate and the much more stringent federal fuel efficiency and greenhouse standards will make it more difficult for myself and others to purchase electric vehicles and will jeopardize incentives for consumers to do so, such as rebates. I fear that there will be fewer such vehicles to purchase, that they will be more expensive, and that I will have much less choice in which electric vehicle to buy.

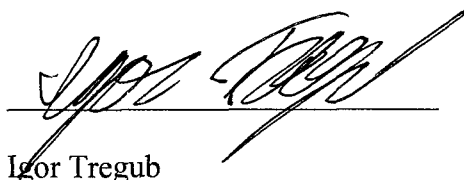
11. I am also very concerned about climate change. Climate change obviously affects everything that we do, especially since I am a millennial and will likely have to deal with climate change for the rest of my life. I am extremely concerned that that science tells us that we only have about ten years to make dramatic shifts, and it is disheartening that we have the technology to do it, but lack the necessary will. The transportation sector plays an outsized role in causing climate change, as it is the biggest emitter of greenhouse gases in the U.S., and rolling back regulations that reduce the sector's emissions sets us back when we cannot afford to lose time.

12. I support Sierra Club's lawsuit challenging NHTSA's and EPA's rule stating that federal law preempts California's right to set zero emission vehicle sales mandates and its own

greenhouse gas vehicle standards, that EPA's waiver for California has been withdrawn, and that other states can no longer follow California's example. I also support the lawsuit trying to reverse the rollback of federal fuel efficiency and greenhouse gas standards for the national light duty vehicle fleet. If the court reverses either of these rollbacks, I would personally and directly benefit from cleaner air and fewer climate-disrupting and ground-level ozone causing greenhouse gas emissions. I will be able to pursue my outdoor physical recreational activities more often because there will be fewer bad air days because harmful pollution from vehicles and refining activities will be reduced. Additionally, I will have more choices for a new electric vehicle within my budget range. Keeping the ZEV mandate in place will also drive my ability as a policymaker to get more electric vehicle infrastructure for folks who are renters like I am. The lack of electric vehicle infrastructure is a significant barrier, and success in this litigation will provide more incentive for the government and the private sector to invest in this infrastructure, so that I and others can charge our electric vehicles at home.

I declare, under penalty of perjury, that the foregoing is true and correct.

Dated: May 20, 2020.



Igor Tregub

## DECLARATION OF GERALD MALCZEWSKI

I, Gerald Malczewski, declare as follows:

1. My name is Gerald Malczewski. I am over eighteen years of age, of sound mind, and fully competent to make this declaration. I also have personal knowledge of the factual statements contained herein.

2. I have been a member of the Union of Concerned Scientists since January 2017. I have participated in climate change awareness and policy initiatives through state and local working groups, such as the One Region Forward Initiative, which develops climate mitigation and infrastructure resiliency in the Buffalo Niagara region. I have also been an active participant in the Transportation and Climate Initiative (a multistate northeast corridor effort focused on reducing transportation related carbon emissions), participating in webcasts and a local workshop.

3. I am a veteran, and served in the United States Naval Reserve from 1963 to 1969, including active sea duty from 1965 to 1967.

4. I received a Bachelor's degree in Mathematics from State University College at Buffalo in 1971 and a Master's degree in Mathematics from Indiana University Bloomington in 1973. I was employed as an information technology professional for over 30 years, primarily at M&T Bank and HSBC Bank, as a

systems analyst and project manager. I also was an adjunct mathematics instructor for 14 years, teaching at Erie Community College and Medaille College.

5. I have been an avid alpine skier for 35 years, and have skied both at local ski areas and in New England, Utah, and Wyoming. I enjoy skiing for the continuous challenges it presents (even to experienced skiers), its proximity to beautiful outdoor scenery, its social dimension, and its lessons for balancing physical risks against their rewards.

6. I was a ski instructor in Kissing Bridge Ski Resort in Glenwood, New York, for 28 years, and I estimate that I have instructed thousands of skiers. It was immensely rewarding to watch my students grow more comfortable in their skills and physical capabilities.

7. I am a volunteer mentor for a physics course offered by Coursera, an online learning platform. I have some familiarity with climate change models and the factors that drive global warming.

8. I have serious concerns about the impact of climate change on future generations. I worry about my generation's failure to safeguard natural resources for future generations, particularly my grandchildren. Unless this country's government—and particularly the federal government—accelerate efforts to combat climate change, I fear my grandchildren will conclude that we failed, through lack of will and willful ignorance, and in spite of overwhelming scientific evidence, to take the difficult but necessary action to save the planet.

9. I am particularly concerned about the effects of climate change on the ski and snow sports industries. In my three decades as a ski instructor, I witnessed the ski season shorten and winter weather destabilize, with fewer periods of prolonged snow cover. Ski resorts have closed or invested in expensive snowmaking upgrades to mitigate the loss of customers. As ski seasons contract (or disappear completely), I will be further deprived of one of my most beloved hobbies.

10. I live in Lancaster, New York, about seventeen miles east of Buffalo. The region lacks well-developed rail networks and bus lines.

11. Driving a car is therefore my normal means of transportation. Collectively, my wife and I drive roughly 13,000 miles per year, primarily for medical and dental appointments, shopping, recreation, volunteering, miscellaneous errands, vacations, and periodic road trips to see family.

12. My wife and I lease two vehicles: a 2017 Toyota RAV4 and a 2019 Honda Insight (a gas/electric hybrid vehicle). We drive both vehicles regularly for each of the above purposes.

13. We would like to replace the RAV4 with a comparable but cleaner lease if the option was available and affordable. Eventually we would like to drive fully electric vehicles, but the lack of charging infrastructure in our area and the cost of electric vehicles makes ownership in the near term difficult.

14. If cleaner, more affordable options to lease or buy were available, we would replace one or both cars as soon as possible.

15. When we look to replace the RAV4, our priorities will be to minimize our carbon footprint, reduce emissions of other pollutants, and find an automobile that is safe, reliable, and relatively inexpensive.

16. My choice of clean cars and my skiing depends in part on the federal government's vigorous regulation of fuel economy and greenhouse gas ("GHG") standards for passenger vehicles, which collectively force the development of cleaner cars and drastically drive down global greenhouse gas emissions. The emissions reductions, in turn, slow global climate change and help preserve the ski season.

17. Conversely, loosening fuel economy and greenhouse standards will reduce the pressure on the automobile industry to ramp up production of hybrids, electric vehicles, and more efficient conventional vehicles, and will exacerbate climate change and its effects on local ski resorts.

18. I am aware that, in 2013, EPA provided California with waivers under the Clean Air Act, which allowed California to set its own GHG standards for light duty vehicles and to create a program to incentivize the purchase of "Zero Emission Vehicles," or "ZEVs." I am also aware that, under the Clean Air Act, other states could and did adopt California's programs. One of these states is New York.

19. Because of the widespread adoption of these programs, availability of low or zero emission vehicles—and related infrastructure—has increased nationwide, and particularly in states that have adopted California’s standards.

20. If the standards remain effective, I will have greater access to such vehicles, since the trends related to California’s standards will continue or accelerate. Likewise, New York’s maintenance of California’s standards will trim GHG emissions and thereby help to protect downhill skiing and other winter sports.

21. I am aware that EPA has finalized an unprecedented decision to revoke California’s waiver and to prohibit other states from enforcing the California standards they have relied on for the better part of a decade. I am also aware that the Department of Transportation has suddenly decided that its regulatory authority prevents EPA from issuing these waivers in the first instance, thereby barring EPA from enforcing any waivers it has granted and not withdrawn.

22. If the federal government consummates these actions—or lowers federal GHG or fuel economy standards—it will meaningfully undo and foreclose nationwide progress towards a wider availability of low or zero emissions vehicles. In so doing, it will curtail my access to the types of vehicles I most want to

purchase when replacing the cars I currently drive. Lower state and federal standards would also accelerate the regional effects of climate change, including the adverse effects in snow sports.

I declare under penalty of perjury that the forgoing is true and correct.

Executed in Lancaster, New York on MAY 27, 2020.

  
Gerald Malczewski



## DECLARATION OF SAMRAT PATHANIA

I, Samrat Pathania, declare as follows:

1. My name is Samrat Pathania. I am over eighteen years of age, of sound mind, and fully competent to make this declaration. I also have personal knowledge of the factual statements contained herein.

2. I have been a member of the Union of Concerned Scientists (“UCS”) since August 2016 and a member of its Science Network since October 2018. I am a former chair and coordinator of the New Paltz Climate Action Coalition, which educates the public about climate change science and supports short and long-range planning to deal with the local environmental and social consequences of climate change.

3. I received a Bachelor’s degree in Mechanical Engineering in 2002 from the National Institute of Technology in Jamshedpur, India. I received a Bachelor’s degree in Mathematics and Secondary Education Physics in 2013 and a Master’s degree in Secondary Education Mathematics in 2018 from the State University of New York at New Paltz. I was formally employed as a software engineer with multinational corporations. I currently teach physics, mathematics, and software programming at Wallkill Senior High School in Wallkill, New York.

4. I live in New Paltz, New York, about six miles from the Shawangunk Mountains. Many visitors come to the region each weekend to enjoy the natural beauty.

5. This tourism means constant convoy of cars, trucks, and motorcycles bringing noise and air pollution to our community. The worst of this pollution is on the Main Street of New Paltz, which on weekdays is a beautiful place to walk with lots of small local businesses. I have to avoid this part of town during the weekends, since the increased traffic and pollution exacerbates sinus related health issues.

6. Beyond local pollution, I am concerned about global climate change. The primary driver of this change is our modern economy's reliance on fossil fuels to generate electricity, power our vehicles, and heat our homes. If we continue business as usual with respect to our use of and reliance on fossil fuels, then as per the Fourth National Climate Assessment, we will certainly face more frequent and intense extreme weather events, as well as changes in average climate conditions, both of which will damage infrastructure, ecosystems, and social systems that provide essential benefits to communities.

7. If left unchecked, climate change will injure me and my community. In 2012, Superstorm Sandy ravaged parts of New York and New Jersey. Many families of the students at my alma mater (SUNY New Paltz) were affected by the

flooding caused by Sandy. The loss and damage experienced by these families and friends was traumatic and interrupted the pursuit of attending college for some students. It is precisely this flooding damage that can be attributed to climate change. The Hudson Valley is expected to have more intense precipitation events in the coming years. This is clearly bad news for the thriving agriculture in our community, as flooding can adversely affect ecosystem function, farm economic viability, and land use. Small, multigenerational, owner-operated businesses (including farms) and natural resources form the core of our community's identity. These attributes of the local economy and community are what convinced many families, including mine, to make this part of New York home.

8. One way I and my neighbors can help ameliorate local pollution is by driving more zero emission vehicles, which are quieter and emit no exhaust.

9. Zero emission vehicles also address climate change. Every time we make a trip in our gasoline cars (whether to drive a loved one to the emergency room or to a soccer game) we make the problem of climate change just a tiny little bit worse.

10. I bought my first electric vehicle almost five years ago to do my part to address local pollution and climate change. I chose a Chevy Volt (a plug-in hybrid) because it fit my financial circumstances and driving needs.

11. At the time, the public charging infrastructure in my area was sparse and it was difficult to find information about electric vehicles. Fortunately, UCS published their comprehensive “Cleaner Cars from Cradle to Grave” report that answered many of my questions. Since then, I have helped fifteen friends purchase electric cars.

12. Given the clear benefits of electric vehicles—like greater fuel efficiency that doesn’t sacrifice performance and an opportunity to reduce air pollution caused by vehicle exhaust—I believe more Americans would choose to purchase electric vehicles if cleaner, more affordable options to lease or buy were available, along with the necessary infrastructure.

13. The availability of clean cars and electric vehicles infrastructure depends in part on the federal government’s vigorous regulation of fuel economy and greenhouse gas standards for passenger vehicles, which collectively force the development of cleaner cars and drastically drive down local pollution and global greenhouse gas emissions. The emissions reductions, in turn, slow global climate change and help reduce flooding and other natural disasters.

14. Conversely, loosening fuel economy and greenhouse standards will reduce the pressure on the automobile industry to ramp up production of hybrids, electric vehicles, and more efficient conventional vehicles, and will exacerbate climate change and its effects on communities like mine.

15. I am aware that, in 2013, EPA provided California with waivers under the Clean Air Act, which allowed California to set its own greenhouse gas (“GHG”) standards for light duty vehicles and to create a program to incentivize the purchase of zero emission vehicles. I am also aware that, under the Clean Air Act, other states could and did adopt California’s programs. One of these states is New York.

16. Because of the widespread adoption of these programs, availability of low or zero emission vehicles—and related infrastructure—has increased nationwide, and particularly in states that have adopted California’s standards. Partially as a result of these standards, the public charging infrastructure in our area has expanded considerably, and the number of electric vehicles in the community has grown by a factor of 10. Yet electric vehicles owners remain a minority.

17. If the standards remain effective, I expect great penetration of electric vehicles and electric vehicle infrastructure, since the trends related to California’s new standards will continue or accelerate. Likewise, New York’s maintenance of California’s standards will trim GHG emissions and thereby help to protect communities from the increasing severity of natural disasters.

18. Conversely, continued expansion of low emissions vehicles and infrastructure is unlikely if California's efforts to set higher emission standards are thwarted.

19. I am aware that EPA has finalized an unprecedented decision to revoke California's waiver and to prohibit other states from enforcing the California standards they have relied on for the better part of a decade. I am also aware that the Department of Transportation has suddenly decided that its regulatory authority prevents EPA from issuing these waivers in the first instance, thereby barring EPA from enforcing any waivers it has granted and not withdrawn.

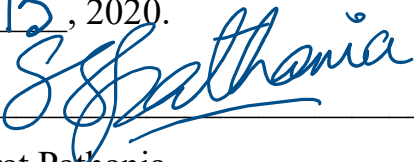
20. If the federal government consummates these actions—or if it imposes less stringent federal standard for fuel economy and greenhouse gas emissions—it will begin undoing nationwide progress towards a wider availability of low or zero emissions vehicles. In so doing, it will impair the Hudson Valley's progress towards widespread and abundant electric vehicle infrastructure, which will in turn slow progress in reducing local pollution. The agencies' decisions would also accelerate the regional effects of climate change.

21. An order from this Court striking down the government's orders would redress my injuries by leaving stronger standards in place in New York and nationwide. The maintenance of more stringent standards would result in greater

consumer choice, more widespread electric vehicle infrastructure, reduced local pollution, and a reduction in the devastating effects of climate change.

22. I declare under penalty of perjury that the forgoing is true and correct.

Executed in New Paltz, New York on June 15, 2020.

  
\_\_\_\_\_  
Samrat Pathania

## DECLARATION OF JOHN STEEL

I, John Steel, declare as follows:

1. My name is John Steel. I am over eighteen years of age, of sound mind, and fully competent to make this declaration. I also have personal knowledge of the factual statements contained herein.
2. I am a member of the Union of Concerned Scientists and was a member at the time this litigation commenced.
3. I graduated Princeton University in 1956 with a Bachelor of Science in Engineering, Columbia University Law School in 1959 and New York University Law School with a graduate degree in Taxation. I was elected to the Town Counsel of Telluride, Colorado in 1994, became Mayor in 1999 and served in that capacity until 2006. As Mayor I dealt with several environmental issues of vital concern to our community ranging from compliance with standards for PM10 particles in the air to condemnation of a large landholdings for environmental and recreational purposes. Additionally, the Council confronted problems related to forest fires, mining waste removal, re-opening of uranium mines, green construction standards, water use for snow making, all of which presented environmental issues.
4. Not only was our community's economy dependent on the environment, I too was an avid hiker and cross-country skier.



5. I have been concerned for many years with environmental issues. My impetus for seeking election to the Telluride Town Counsel was entirely prompted by my concern for the delicate environment of Telluride. Now, as a parent and grandparent, and with increased knowledge and sensitivity to environmental degradation, my concern and my activism has deepened.

6. I live in Santa Barbara, California. For many years I was skeptical of Californians for their dependence on personal automobiles. However, once I moved here to be closer to my children and grandchildren and for medical reasons, I realized that automobiles were not only a personal necessity, but also essential for the economy. I constantly use my cars for doctor and dental visits (both here and in Los Angeles), for business, to offices and the airport, to go to the gym, for shopping, to visit my children and grandchildren, for short vacations nearby, and for easy access to the movies, theatres, and concerts. Despite the availability of public transportation, an active person my age (85) cannot satisfactorily do without a car.

7. Two years ago I traded in my Toyota Highlander for a far more efficient Lexus Hybrid. It achieves nearly twice the miles per gallon my Highlander did, without any compromise in size, power or comfort. I was told at the car agency that Lexus undertook to develop this vehicle to comply with governmental requirements and because of its concerns for the environment. I also

learned that hybrid vehicles were strong sellers and had higher resale values. I intend to replace or supplement my hybrid Lexus with a small, zero emission vehicle within the next few years. Most of my trips are local, and I can charge it at home. I hope with sufficient incentive car makers will produce what I want at a reasonable price.

8. As a car dependent person in a location crowded with other car dependent residents, it is painfully obvious on our crowded, sometimes congested roads, what we are doing to the air we breathe because of the vehicles we drive. And we drive these vehicles because they are the ones car manufacturers produce in the price range we can afford. Like so much else, necessity—and that means governmental requirements—will force car manufacturers to engage in research to develop more efficient affordable vehicles. We have seen this work in the past when car manufacturers have their feet to the fire. My hybrid is proof. So too is the smog reduction in many cities, Los Angeles being a prime example. There is no reason to remove the pressure to reduce dependence on expensive fossil fuel that pollutes the air with unhealthy particles and adds to the greenhouse gases. The technology already exists, if not the economic incentive.

9. My ability to purchase an affordable clean car depends in large part on the federal government's vigorous regulation of fuel economy and greenhouse gas standards for passenger vehicles, which collectively force the development of

cleaner cars available at affordable prices to the public. With widespread conversion of vehicle to more efficient ones, global greenhouse gas emissions will be drastically reduced. The emissions reductions, in turn, slow global climate change.

10. Conversely, loosening fuel economy and greenhouse gas (“GHG”) standards will reduce the pressure on the automobile industry to do the necessary product development for increased production of economical hybrids, electric vehicles, and even more efficient conventional vehicles.

11. I am aware that, in 2013, EPA provided California with waivers under the Clean Air Act, which allowed California to set its own greenhouse gas standards for light duty vehicles and to create a program to incentivize the purchase of “Zero Emission Vehicles,” or “ZEVs.”

12. California (and the federal GHG standards) are good examples of the power of government regulation. Higher standards, and, in particular, the California waiver force car makers who wish to sell their vehicles here, in this most lucrative market, to comply with more stringent requirements.

13. California made this choice to protect its citizens and to provide them with wider choices for vehicles they—and I—could feel good about driving. That trend must continue as global warming continues to increase.

14. If the standards remain effective, I will have greater access to low emissions and more efficient vehicles, since the trends related to California's standards will continue or accelerate.

15. I am aware that EPA has finalized an unprecedented decision to revoke California's waiver and to prohibit other states from enforcing the California standards they have relied on for the better part of a decade. I am also aware that the Department of Transportation has suddenly decided that its regulatory authority prevents EPA from issuing these waivers in the first instance, thereby barring EPA from enforcing ant waivers it has granted and not withdrawn.

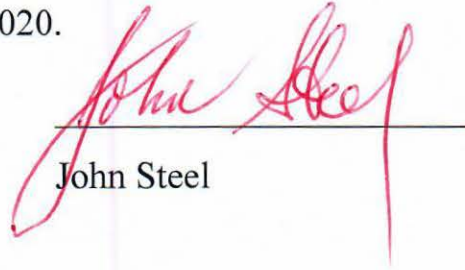
16. If the federal government consummates these actions, or if it lowers federal emissions and fuel economy standards, it will begin undoing nationwide progress towards a wider availability of low or zero emissions vehicles. In so doing, it will curtail my access to the types of vehicles I most want to purchase when replacing the cars I currently own. The agencies' decisions would also accelerate the regional effects of climate change.

17. An order from this Court striking down the government's orders would redress my lack of consumer choice by leaving intact more stringent

standards. The maintenance of more stringent standards would result in greater consumer choice.

18. I declare under penalty of perjury that the forgoing is true and correct.

Executed in Santa Barbara, CA., on June 01 2020.



John Steel

## DECLARATION OF ADAM LEE

I, Adam Lee, declare as follows:

1. I am the chairman of Lee Auto Malls in Maine. My family has been in the car business for over 80 years. My partners and I manage 19 dealerships in eight cities across the state. We are the largest volume car dealer – and the largest hybrid dealer – in Maine, selling 10,000 cars and trucks in 2019.

2. At my dealerships, we sell vehicles manufactured by General Motors, Fiat Chrysler, Toyota, Honda, and Nissan.

3. I understand that the state of Maine adopted state clean car standards in 2005, and that beginning in 2009, automakers' fleets in Maine have been required to satisfy the same greenhouse gas and other air pollution standards that have been enacted in California. Maine updated its rules in December 2012 to reflect California's adoption of the Advanced Clean Cars program for Model Year 2017-2025 vehicles, including the Zero Emission Vehicle (ZEV) program. For these years, automakers are required to include Maine among the states where they sell ZEVs to satisfy requirements under the program.

4. Manufacturers develop and carry out campaigns to boost sales of a particular model vehicle, working with and relying on dealers like myself to help promote certain vehicles. While marketing plans are developed far in advance, they

can be modified on a quarterly, and at times even a monthly basis. Dealers receive daily communications from manufacturers about marketing plans and the vehicles that the manufacturer would like dealers to promote during a given month. Dealers place orders for vehicles with manufacturers on a monthly basis, and receive vehicles every week, as they become available.

5. Changes in the laws regulating emissions and fuel economy can have a dramatic impact on a manufacturer's desired product mix. When such changes occur, manufacturers and dealers respond with changes to their marketing and sales efforts.

6. Manufacturers incentivize the sale of certain vehicles in a variety of ways including through advertising; setting quotas for dealers for selling a certain number of vehicles and offering bonus payments to dealers who meet a quota; and utilizing dynamic pricing by offering rebates, discounts, reduced finance rates, and other special pricing and lease programs for consumers.

7. I am aware that the National Highway Traffic Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) have issued a regulation that purports to invalidate state clean car standards including Maine's ZEV program, and purports to revoke California's authority (and thus Maine's authority as well) to adopt and enforce state greenhouse gas and ZEV regulations.

8. While many factors influence the number and variety of ZEVs available to consumers in Maine, the state's adoption of ZEV standards has increased ZEV availability. Since model year 2009, manufacturers have made ZEVs available to

dealers like myself in Maine at higher volume, and they have made a greater effort to market their ZEVs. This in turn enables dealers to sell ZEVs to a wider range of consumers. I expect this trend to continue in Maine in the coming years if the ZEV program is upheld.

9. At my dealerships, we have sold zero emission vehicles, including the Chrysler Pacifica Hybrid, the Nissan Leaf, and the Prius Prime. I do not believe these vehicles would be available in Maine if the state had not adopted the ZEV program.

10. With ZEV standards in effect, states like Maine also adopt associated policies to support implementation of the standards and encourage greater penetration of electric vehicles, such as tax incentives and charging infrastructure. I am concerned that EPA and NHTSA's new rule will handicap these broader efforts by eliminating the key driver: the ZEV standards.

11. National greenhouse gas and fuel economy standards likewise incentivize manufacturers to make cleaner and more fuel efficient vehicles available to consumers. I am aware that NHTSA and EPA recently issued another rule, which dramatically weakens the nation's greenhouse gas and fuel economy standards for passenger cars and trucks.

12. There is significant consumer interest in low and zero emission vehicles, but the range of available hybrid and ZEV options is still limited. For example, I was only able to get a small number of model year 2019 Nissan Leafs despite consumer demand for more. Additionally, many consumers want larger vehicles like



crossovers, minivans, SUVs, and trucks, but the hybrid offerings for these types of vehicles are still limited, and the ZEV offerings for these types of vehicles are just beginning to emerge.

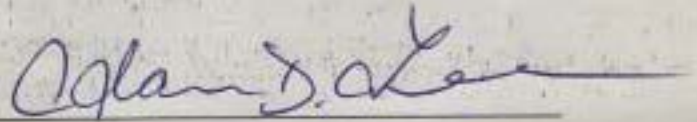
13. EPA and NHTSA's recent actions will only make it more difficult for dealers like myself to meet consumer demand for low and zero emission vehicles.

14. Regulations like the ZEV program as well as state and national greenhouse gas and fuel economy standards are crucial drivers not only in the development of new technologies that improve consumer choice, but in manufacturers' use of the marketing tools I described above to promote and make more widely available the cleaner, more fuel-efficient cars that already make up part of their fleets. Without strong state and national standards, manufacturers will allocate fewer resources toward selling low and zero emission vehicles in Maine and elsewhere, favoring their more profitable, higher-emitting vehicles and limiting the variety and quantity of lower-emission options available to dealers like myself and to our customers this year and going forward.

15. NHTSA and EPA's recent actions will severely limit the choices that Maine consumers have and reduce my sales, hurting my employees. For example, I anticipate that Nissan will reduce the availability of model year (MY) 2021 and 2022 Leafs without ZEV standards in place and under weakened federal standards for those years.

16. Emission standards like Maine's ZEV program and strong greenhouse gas and fuel economy standards have helped push automakers to produce and sell cleaner, more fuel-efficient cars. I am concerned that EPA and NHTSA's recent actions will hurt my ability to meet customer demand and offer a variety of low and zero emission model cars for sale at my dealerships.

I declare under penalty of perjury that the foregoing is true and correct.



Adam Lee

Executed on June 1, 2020

**CERTIFICATE OF SERVICE**

I hereby certify that I served the PROOF BRIEF OF STATE AND LOCAL GOVERNMENT PETITIONERS AND PUBLIC INTEREST PETITIONERS and accompanying ADDENDUM by email on all parties in these consolidated cases (at the email addresses listed below) on **Friday, June 26, 2020**, pursuant to the court-ordered schedule. I did so because this Court's CM/ECF system was off-line for maintenance starting from 6:00 Pacific/9:00 p.m. Eastern Time on that date. In accordance with the Court's email notice of June 22, 2020, at 8:19 p.m. Eastern Time, I will file these documents via the CM/ECF system on the next business day after that system becomes available again, which I anticipate will be **Monday, June 29, 2020**. All parties are represented by counsel that are registered CM/ECF users and will be served, again, by the CM/ECF system on that date.

/s/ M. Elaine Meckenstock

M. ELAINE MECKENSTOCK

Deputy Attorney General

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