

**Editorial Notes****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”.

**Statutory Notes and Related Subsidiaries****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.)

**Editorial Notes****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.

**Statutory Notes and Related Subsidiaries****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 BLENDSOCKS.—

(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 reformu-

lated 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.

<sup>1</sup> So in original. Probably should be "the".

<sup>2</sup> So in original. Par. (1) does not contain a cl. (A).

(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 public 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 Adminis-

<sup>3</sup> So in original. Two cls. (v) have been enacted.

trator 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 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. Notwithstanding the preceding sentence, the Administrator may impose a Reid vapor pressure requirement lower than 9.0 pounds per square inch (psi) in any area, formerly an ozone non-attainment area, which has been redesignated as an attainment area.

**(3) Effective date; enforcement**

The regulations under this subsection shall provide that the requirements of this subsection shall take effect not later than the high ozone season for 1992, and shall include such provisions as the Administrator determines are necessary to implement and enforce the requirements of this subsection.

**(4) Ethanol waiver**

For fuel blends containing gasoline and 10 percent denatured anhydrous ethanol, the Reid vapor pressure limitation under this subsection shall be one pound per square inch (psi) greater than the applicable Reid vapor pressure limitations established under paragraph (1); *Provided, however,* That a distributor, blender, marketer, reseller, carrier, retailer, or wholesale purchaser-consumer shall be deemed to be in full compliance with the provisions of this subsection and the regulations promulgated thereunder if it can demonstrate (by showing receipt of a certification or other evidence acceptable to the Administrator) that—

(A) the gasoline portion of the blend complies with the Reid vapor pressure limitations promulgated pursuant to this subsection;

(B) the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4); and

(C) no additional alcohol or other additive has been added to increase the Reid Vapor Pressure of the ethanol portion of the blend.

**(5) Exclusion from ethanol waiver**

**(A) Promulgation of regulations**

Upon notification, accompanied by supporting documentation, from the Governor of a State that the Reid vapor pressure limitation established by paragraph (4) will increase emissions that contribute to air pollution in any area in the State, the Administrator shall, by regulation, apply, in lieu of the Reid vapor pressure limitation established by paragraph (4), the Reid vapor pressure limitation established by paragraph (1) to all fuel blends containing gasoline and 10 percent denatured anhydrous ethanol that are sold, offered for sale, dispensed, supplied, offered for supply, transported, or introduced into commerce in the area during the high ozone season.

**(B) Deadline for promulgation**

The Administrator shall promulgate regulations under subparagraph (A) not later than 90 days after the date of receipt of a notification from a Governor under that subparagraph.

**(C) Effective date**

**(i) In general**

With respect to an area in a State for which the Governor submits a notification under subparagraph (A), the regulations under that subparagraph shall take effect on the later of—

(I) the first day of the first high ozone season for the area that begins after the date of receipt of the notification; or

(II) 1 year after the date of receipt of the notification.

**(ii) Extension of effective date based on determination of insufficient supply**

**(I) In general**

If, after receipt of a notification with respect to an area from a Governor of a State under subparagraph (A), the Administrator determines, on the Administrator's own motion or on petition of any person and after consultation with the Secretary of Energy, that the promulgation of regulations described in subparagraph (A) would result in an insufficient supply of gasoline in the State, the Administrator, by regulation—

(aa) shall extend the effective date of the regulations under clause (i) with respect to the area for not more than 1 year; and

(bb) may renew the extension under item (aa) for two additional periods, each of which shall not exceed 1 year.

**(II) Deadline for action on petitions**

The Administrator shall act on any petition submitted under subclause (I) not later than 180 days after the date of receipt of the petition.

**(6) Areas covered**

The provisions of this subsection shall apply only to the 48 contiguous States and the District of Columbia.

**(i) Sulfur content requirements for diesel fuel**

(1) Effective October 1, 1993, no person shall manufacture, sell, supply, offer for sale or supply, dispense, transport, or introduce into commerce motor vehicle diesel fuel which contains a concentration of sulfur in excess of 0.05 percent (by weight) or which fails to meet a cetane index minimum of 40.

(2) Not later than 12 months after November 15, 1990, the Administrator shall promulgate regulations to implement and enforce the requirements of paragraph (1). The Administrator may require manufacturers and importers of diesel fuel not intended for use in motor vehicles to dye such fuel in a particular manner in order to segregate it from motor vehicle diesel fuel. The Administrator may establish an equivalent alternative aromatic level to the cetane index specification in paragraph (1).

(3) The sulfur content of fuel required to be used in the certification of 1991 through 1993 model year heavy-duty diesel vehicles and engines shall be 0.10 percent (by weight). The sulfur content and cetane index minimum of fuel

required to be used in the certification of 1994 and later model year heavy-duty diesel vehicles and engines shall comply with the regulations promulgated under paragraph (2).

(4) The States of Alaska and Hawaii may be exempted from the requirements of this subsection in the same manner as provided in section 7625<sup>4</sup> of this title. The Administrator shall take final action on any petition filed under section 7625<sup>4</sup> of this title or this paragraph for an exemption from the requirements of this subsection, within 12 months from the date of the petition.

**(j) Lead substitute gasoline additives**

(1) After November 15, 1990, any person proposing to register any gasoline additive under subsection (a) or to use any previously registered additive as a lead substitute may also elect to register the additive as a lead substitute gasoline additive for reducing valve seat wear by providing the Administrator with such relevant information regarding product identity and composition as the Administrator deems necessary for carrying out the responsibilities of paragraph (2) of this subsection (in addition to other information which may be required under subsection (b)).

(2) In addition to the other testing which may be required under subsection (b), in the case of the lead substitute gasoline additives referred to in paragraph (1), the Administrator shall develop and publish a test procedure to determine the additives' effectiveness in reducing valve seat wear and the additives' tendencies to produce engine deposits and other adverse side effects. The test procedures shall be developed in cooperation with the Secretary of Agriculture and with the input of additive manufacturers, engine and engine components manufacturers, and other interested persons. The Administrator shall enter into arrangements with an independent laboratory to conduct tests of each additive using the test procedures developed and published pursuant to this paragraph. The Administrator shall publish the results of the tests by company and additive name in the Federal Register along with, for comparison purposes, the results of applying the same test procedures to gasoline containing 0.1 gram of lead per gallon in lieu of the lead substitute gasoline additive. The Administrator shall not rank or otherwise rate the lead substitute additives. Test procedures shall be established within 1 year after November 15, 1990. Additives shall be tested within 18 months of November 15, 1990, or 6 months after the lead substitute additives are identified to the Administrator, whichever is later.

(3) The Administrator may impose a user fee to recover the costs of testing of any fuel additive referred to in this subsection. The fee shall be paid by the person proposing to register the fuel additive concerned. Such fee shall not exceed \$20,000 for a single fuel additive.

(4) There are authorized to be appropriated to the Administrator not more than \$1,000,000 for the second full fiscal year after November 15, 1990, to establish test procedures and conduct

engine tests as provided in this subsection. Not more than \$500,000 per year is authorized to be appropriated for each of the 5 subsequent fiscal years.

(5) Any fees collected under this subsection shall be deposited in a special fund in the United States Treasury for licensing and other services which thereafter shall be available for appropriation, to remain available until expended, to carry out the Agency's activities for which the fees were collected.

**(k) Reformulated gasoline for conventional vehicles**

**(1) EPA regulations**

**(A) In general**

Not later than November 15, 1991, the Administrator shall promulgate regulations under this section establishing requirements for reformulated gasoline to be used in gasoline-fueled vehicles in specified nonattainment areas. Such regulations shall require the greatest reduction in emissions of ozone forming volatile organic compounds (during the high ozone season) and emissions of toxic air pollutants (during the entire year) achievable through the reformulation of conventional gasoline, taking into consideration the cost of achieving such emission reductions, any nonair-quality and other air-quality related health and environmental impacts and energy requirements.

**(B) Maintenance of toxic air pollutant emissions reductions from reformulated gasoline**

**(i) Definition of PADD**

In this subparagraph the term "PADD" means a Petroleum Administration for Defense District.

**(ii) Regulations concerning emissions of toxic air pollutants**

Not later than 270 days after August 8, 2005, the Administrator shall establish by regulation, for each refinery or importer (other than a refiner or importer in a State that has received a waiver under section 7543(b) of this title with respect to gasoline produced for use in that State), standards for toxic air pollutants from use of the reformulated gasoline produced or distributed by the refiner or importer that maintain the reduction of the average annual aggregate emissions of toxic air pollutants for reformulated gasoline produced or distributed by the refiner or importer during calendar years 2001 and 2002 (as determined on the basis of data collected by the Administrator with respect to the refiner or importer).

**(iii) Standards applicable to specific refineries or importers**

**(I) Applicability of standards**

For any calendar year, the standards applicable to a refiner or importer under clause (ii) shall apply to the quantity of gasoline produced or distributed by the refiner or importer in the calendar year only to the extent that the quantity is

<sup>4</sup> So in original. Probably should be section "7625-1".

less than or equal to the average annual quantity of reformulated gasoline produced or distributed by the refiner or importer during calendar years 2001 and 2002.

**(II) Applicability of other standards**

For any calendar year, the quantity of gasoline produced or distributed by a refiner or importer that is in excess of the quantity subject to subclause (I) shall be subject to standards for emissions of toxic air pollutants promulgated under subparagraph (A) and paragraph (3)(B).

**(iv) Credit program**

The Administrator shall provide for the granting and use of credits for emissions of toxic air pollutants in the same manner as provided in paragraph (7).

**(v) Regional protection of toxics reduction baselines**

**(I) In general**

Not later than 60 days after August 8, 2005, and not later than April 1 of each calendar year that begins after August 8, 2005, the Administrator shall publish in the Federal Register a report that specifies, with respect to the previous calendar year—

(aa) the quantity of reformulated gasoline produced that is in excess of the average annual quantity of reformulated gasoline produced in 2001 and 2002; and

(bb) the reduction of the average annual aggregate emissions of toxic air pollutants in each PADD, based on retail survey data or data from other appropriate sources.

**(II) Effect of failure to maintain aggregate toxics reductions**

If, in any calendar year, the reduction of the average annual aggregate emissions of toxic air pollutants in a PADD fails to meet or exceed the reduction of the average annual aggregate emissions of toxic air pollutants in the PADD in calendar years 2001 and 2002, the Administrator, not later than 90 days after the date of publication of the report for the calendar year under subclause (I), shall—

(aa) identify, to the maximum extent practicable, the reasons for the failure, including the sources, volumes, and characteristics of reformulated gasoline that contributed to the failure; and

(bb) promulgate revisions to the regulations promulgated under clause (ii), to take effect not earlier than 180 days but not later than 270 days after the date of promulgation, to provide that, notwithstanding clause (iii)(II), all reformulated gasoline produced or distributed at each refiner or importer shall meet the standards applicable under clause (iii)(I) beginning not later than April 1 of the calendar year following publication of the report under

subclause (I) and in each calendar year thereafter.

(vi) Not later than July 1, 2007, the Administrator shall promulgate final regulations to control hazardous air pollutants from motor vehicles and motor vehicle fuels, as provided for in section 80.1045 of title 40, Code of Federal Regulations (as in effect on August 8, 2005), and as authorized under section 7521(l)<sup>5</sup> of this title. If the Administrator promulgates by such date, final regulations to control hazardous air pollutants from motor vehicles and motor vehicle fuels that achieve and maintain greater overall reductions in emissions of air toxics from reformulated gasoline than the reductions that would be achieved under subsection (k)(1)(B) as amended by this clause, then subsections (k)(1)(B)(i) through (k)(1)(B)(v) shall be null and void and regulations promulgated thereunder shall be rescinded and have no further effect.

**(2) General requirements**

The regulations referred to in paragraph (1) shall require that reformulated gasoline comply with paragraph (3) and with each of the following requirements (subject to paragraph (7)):

**(A) NO<sub>x</sub> emissions**

The emissions of oxides of nitrogen (NO<sub>x</sub>) from baseline vehicles when using the reformulated gasoline shall be no greater than the level of such emissions from such vehicles when using baseline gasoline. If the Administrator determines that compliance with the limitation on emissions of oxides of nitrogen under the preceding sentence is technically infeasible, considering the other requirements applicable under this subsection to such gasoline, the Administrator may, as appropriate to ensure compliance with this subparagraph, adjust (or waive entirely), any other requirements of this paragraph or any requirements applicable under paragraph (3)(A).

**(B) Benzene content**

The benzene content of the gasoline shall not exceed 1.0 percent by volume.

**(C) Heavy metals**

The gasoline shall have no heavy metals, including lead or manganese. The Administrator may waive the prohibition contained in this subparagraph for a heavy metal (other than lead) if the Administrator determines that addition of the heavy metal to the gasoline will not increase, on an aggregate mass or cancer-risk basis, toxic air pollutant emissions from motor vehicles.

**(3) More stringent of formula or performance standards**

The regulations referred to in paragraph (1) shall require compliance with the more stringent of either the requirements set forth in subparagraph (A) or the requirements of sub-

<sup>5</sup> So in original. See References in Text note below.



paragraph (B) of this paragraph. For purposes of determining the more stringent provision, clause (i) and clause (ii) of subparagraph (B) shall be considered independently.

**(A) Formula**

**(i) Benzene**

The benzene content of the reformulated gasoline shall not exceed 1.0 percent by volume.

**(ii) Aromatics**

The aromatic hydrocarbon content of the reformulated gasoline shall not exceed 25 percent by volume.

**(iii) Lead**

The reformulated gasoline shall have no lead content.

**(iv) Detergents**

The reformulated gasoline shall contain additives to prevent the accumulation of deposits in engines or vehicle fuel supply systems.

**(B) Performance standard**

**(i) VOC emissions**

During the high ozone season (as defined by the Administrator), the aggregate emissions of ozone forming volatile organic compounds from baseline vehicles when using the reformulated gasoline shall be 15 percent below the aggregate emissions of ozone forming volatile organic compounds from such vehicles when using baseline gasoline. Effective in calendar year 2000 and thereafter, 25 percent shall be substituted for 15 percent in applying this clause, except that the Administrator may adjust such 25 percent requirement to provide for a lesser or greater reduction based on technological feasibility, considering the cost of achieving such reductions in VOC emissions. No such adjustment shall provide for less than a 20 percent reduction below the aggregate emissions of such air pollutants from such vehicles when using baseline gasoline. The reductions required under this clause shall be on a mass basis.

**(ii) Toxics**

During the entire year, the aggregate emissions of toxic air pollutants from baseline vehicles when using the reformulated gasoline shall be 15 percent below the aggregate emissions of toxic air pollutants from such vehicles when using baseline gasoline. Effective in calendar year 2000 and thereafter, 25 percent shall be substituted for 15 percent in applying this clause, except that the Administrator may adjust such 25 percent requirement to provide for a lesser or greater reduction based on technological feasibility, considering the cost of achieving such reductions in toxic air pollutants. No such adjustment shall provide for less than a 20 percent reduction below the aggregate emissions of such air pollutants from such vehicles when using baseline gasoline. The reductions required under this clause shall be on a mass basis.

Any reduction greater than a specific percentage reduction required under this subparagraph shall be treated as satisfying such percentage reduction requirement.

**(4) Certification procedures**

**(A) Regulations**

The regulations under this subsection shall include procedures under which the Administrator shall certify reformulated gasoline as complying with the requirements established pursuant to this subsection. Under such regulations, the Administrator shall establish procedures for any person to petition the Administrator to certify a fuel formulation, or slate of fuel formulations. Such procedures shall further require that the Administrator shall approve or deny such petition within 180 days of receipt. If the Administrator fails to act within such 180-day period, the fuel shall be deemed certified until the Administrator completes action on the petition.

**(B) Certification; equivalency**

The Administrator shall certify a fuel formulation or slate of fuel formulations as complying with this subsection if such fuel or fuels—

(i) comply with the requirements of paragraph (2), and

(ii) achieve equivalent or greater reductions in emissions of ozone forming volatile organic compounds and emissions of toxic air pollutants than are achieved by a reformulated gasoline meeting the applicable requirements of paragraph (3).

**(C) EPA determination of emissions level**

Within 1 year after November 15, 1990, the Administrator shall determine the level of emissions of ozone forming volatile organic compounds and emissions of toxic air pollutants emitted by baseline vehicles when operating on baseline gasoline. For purposes of this subsection, within 1 year after November 15, 1990, the Administrator shall, by rule, determine appropriate measures of, and methodology for, ascertaining the emissions of air pollutants (including calculations, equipment, and testing tolerances).

**(5) Prohibition**

Effective beginning January 1, 1995, each of the following shall be a violation of this subsection:

(A) The sale or dispensing by any person of conventional gasoline to ultimate consumers in any covered area.

(B) The sale or dispensing by any refiner, blender, importer, or marketer of conventional gasoline for resale in any covered area, without (i) segregating such gasoline from reformulated gasoline, and (ii) clearly marking such conventional gasoline as “conventional gasoline, not for sale to ultimate consumer in a covered area”.

Any refiner, blender, importer or marketer who purchases property<sup>6</sup> segregated and marked conventional gasoline, and thereafter

<sup>6</sup> So in original. Probably should be “properly”.

labels, represents, or wholesales such gasoline as reformulated gasoline shall also be in violation of this subsection. The Administrator may impose sampling, testing, and record-keeping requirements upon any refiner, blender, importer, or marketer to prevent violations of this section.

**(6) Opt-in areas**

**(A) Classified areas**

**(i) In general**

Upon the application of the Governor of a State, the Administrator shall apply the prohibition set forth in paragraph (5) in any area in the State classified under subpart 2 of part D of subchapter I as a Marginal, Moderate, Serious, or Severe Area (without regard to whether or not the 1980 population of the area exceeds 250,000). In any such case, the Administrator shall establish an effective date for such prohibition as he deems appropriate, not later than January 1, 1995, or 1 year after such application is received, whichever is later. The Administrator shall publish such application in the Federal Register upon receipt.

**(ii) Effect of insufficient domestic capacity to produce reformulated gasoline**

If the Administrator determines, on the Administrator's own motion or on petition of any person, after consultation with the Secretary of Energy, that there is insufficient domestic capacity to produce gasoline certified under this subsection, the Administrator shall, by rule, extend the effective date of such prohibition in Marginal, Moderate, Serious, or Severe Areas referred to in clause (i) for one additional year, and may, by rule, renew such extension for 2 additional one-year periods. The Administrator shall act on any petition submitted under this subparagraph within 6 months after receipt of the petition. The Administrator shall issue such extensions for areas with a lower ozone classification before issuing any such extension for areas with a higher classification.

**(B) Ozone transport region**

**(i) Application of prohibition**

**(I) In general**

On application of the Governor of a State in the ozone transport region established by section 7511c(a) of this title, the Administrator, not later than 180 days after the date of receipt of the application, shall apply the prohibition specified in paragraph (5) to any area in the State (other than an area classified as a marginal, moderate, serious, or severe ozone nonattainment area under subpart 2 of part D of subchapter I) unless the Administrator determines under clause (iii) that there is insufficient capacity to supply reformulated gasoline.

**(II) Publication of application**

As soon as practicable after the date of receipt of an application under subclause

(I), the Administrator shall publish the application in the Federal Register.

**(ii) Period of applicability**

Under clause (i), the prohibition specified in paragraph (5) shall apply in a State—

(I) commencing as soon as practicable but not later than 2 years after the date of approval by the Administrator of the application of the Governor of the State; and

(II) ending not earlier than 4 years after the commencement date determined under subclause (I).

**(iii) Extension of commencement date based on insufficient capacity**

**(I) In general**

If, after receipt of an application from a Governor of a State under clause (i), the Administrator determines, on the Administrator's own motion or on petition of any person, after consultation with the Secretary of Energy, that there is insufficient capacity to supply reformulated gasoline, the Administrator, by regulation—

(aa) shall extend the commencement date with respect to the State under clause (ii)(I) for not more than 1 year; and

(bb) may renew the extension under item (aa) for 2 additional periods, each of which shall not exceed 1 year.

**(II) Deadline for action on petitions**

The Administrator shall act on any petition submitted under subclause (I) not later than 180 days after the date of receipt of the petition.

**(7) Credits**

(A) The regulations promulgated under this subsection shall provide for the granting of an appropriate amount of credits to a person who refines, blends, or imports and certifies a gasoline or slate of gasoline that—

(i) has an aromatic hydrocarbon content (by volume) that is less than the maximum aromatic hydrocarbon content required to comply with paragraph (3); or

(ii) has a benzene content (by volume) that is less than the maximum benzene content specified in paragraph (2).

(B) The regulations described in subparagraph (A) shall also provide that a person who is granted credits may use such credits, or transfer all or a portion of such credits to another person for use within the same nonattainment area, for the purpose of complying with this subsection.

(C) The regulations promulgated under subparagraphs (A) and (B) shall ensure the enforcement of the requirements for the issuance, application, and transfer of the credits. Such regulations shall prohibit the granting or transfer of such credits for use with respect to any gasoline in a nonattainment area, to the extent the use of such credits would result in any of the following:

(i) An average gasoline aromatic hydrocarbon content (by volume) for the non-

attainment (taking into account all gasoline sold for use in conventional gasoline-fueled vehicles in the nonattainment area) higher than the average fuel aromatic hydrocarbon content (by volume) that would occur in the absence of using any such credits.

(ii) An average benzene content (by volume) for the nonattainment area (taking into account all gasoline sold for use in conventional gasoline-fueled vehicles in the nonattainment area) higher than the average benzene content (by volume) that would occur in the absence of using any such credits.

**(8) Anti-dumping rules**

**(A) In general**

Within 1 year after November 15, 1990, the Administrator shall promulgate regulations applicable to each refiner, blender, or importer of gasoline ensuring that gasoline sold or introduced into commerce by such refiner, blender, or importer (other than reformulated gasoline subject to the requirements of paragraph (1)) does not result in average per gallon emissions (measured on a mass basis) of (i) volatile organic compounds, (ii) oxides of nitrogen, (iii) carbon monoxide, and (iv) toxic air pollutants in excess of such emissions of such pollutants attributable to gasoline sold or introduced into commerce in calendar year 1990 by that refiner, blender, or importer. Such regulations shall take effect beginning January 1, 1995.

**(B) Adjustments**

In evaluating compliance with the requirements of subparagraph (A), the Administrator shall make appropriate adjustments to insure that no credit is provided for improvement in motor vehicle emissions control in motor vehicles sold after the calendar year 1990.

**(C) Compliance determined for each pollutant independently**

In determining whether there is an increase in emissions in violation of the prohibition contained in subparagraph (A) the Administrator shall consider an increase in each air pollutant referred to in clauses (i) through (iv) as a separate violation of such prohibition, except that the Administrator shall promulgate regulations to provide that any increase in emissions of oxides of nitrogen resulting from adding oxygenates to gasoline may be offset by an equivalent or greater reduction (on a mass basis) in emissions of volatile organic compounds, carbon monoxide, or toxic air pollutants, or any combination of the foregoing.

**(D) Compliance period**

The Administrator shall promulgate an appropriate compliance period or appropriate compliance periods to be used for assessing compliance with the prohibition contained in subparagraph (A).

**(E) Baseline for determining compliance**

If the Administrator determines that no adequate and reliable data exists regarding

the composition of gasoline sold or introduced into commerce by a refiner, blender, or importer in calendar year 1990, for such refiner, blender, or importer, baseline gasoline shall be substituted for such 1990 gasoline in determining compliance with subparagraph (A).

**(9) Emissions from entire vehicle**

In applying the requirements of this subsection, the Administrator shall take into account emissions from the entire motor vehicle, including evaporative, running, refueling, and exhaust emissions.

**(10) Definitions**

For purposes of this subsection—

**(A) Baseline vehicles**

The term “baseline vehicles” mean representative model year 1990 vehicles.

**(B) Baseline gasoline**

**(i) Summertime**

The term “baseline gasoline” means in the case of gasoline sold during the high ozone period (as defined by the Administrator) a gasoline which meets the following specifications:

**BASELINE GASOLINE FUEL PROPERTIES**

|                     |      |
|---------------------|------|
| API Gravity .....   | 57.4 |
| Sulfur, ppm .....   | 339  |
| Benzene, % .....    | 1.53 |
| RVP, psi .....      | 8.7  |
| Octane, R+M/2 ..... | 87.3 |
| IBP, F .....        | 91   |
| 10%, F .....        | 128  |
| 50%, F .....        | 218  |
| 90%, F .....        | 330  |
| End Point, F .....  | 415  |
| Aromatics, % .....  | 32.0 |
| Olefins, % .....    | 9.2  |
| Saturates, % .....  | 58.8 |

**(ii) Wintertime**

The Administrator shall establish the specifications of “baseline gasoline” for gasoline sold at times other than the high ozone period (as defined by the Administrator). Such specifications shall be the specifications of 1990 industry average gasoline sold during such period.

**(C) Toxic air pollutants**

The term “toxic air pollutants” means the aggregate emissions of the following:

- Benzene
- 1,3 Butadiene
- Polycyclic organic matter (POM)
- Acetaldehyde
- Formaldehyde.

**(D) Covered area**

The 9 ozone nonattainment areas having a 1980 population in excess of 250,000 and having the highest ozone design value during the period 1987 through 1989 shall be “covered areas” for purposes of this subsection. Effective one year after the reclassification of any ozone nonattainment area as a Severe ozone nonattainment area under section 7511(b) of this title, such Severe area shall also be a “covered area” for purposes of this subsection.

**(E) Reformulated gasoline**

The term “reformulated gasoline” means any gasoline which is certified by the Administrator under this section as complying with this subsection.

**(F) Conventional gasoline**

The term “conventional gasoline” means any gasoline which does not meet specifications set by a certification under this subsection.

**(I) Detergents**

Effective beginning January 1, 1995, no person may sell or dispense to an ultimate consumer in the United States, and no refiner or marketer may directly or indirectly sell or dispense to persons who sell or dispense to ultimate consumers in the United States any gasoline which does not contain additives to prevent the accumulation of deposits in engines or fuel supply systems. Not later than 2 years after November 15, 1990, the Administrator shall promulgate a rule establishing specifications for such additives.

**(m) Oxygenated fuels****(1) Plan revisions for CO nonattainment areas**

(A) Each State in which there is located all or part of an area which is designated under subchapter I as a nonattainment area for carbon monoxide and which has a carbon monoxide design value of 9.5 parts per million (ppm) or above based on data for the 2-year period of 1988 and 1989 and calculated according to the most recent interpretation methodology issued by the Administrator prior to November 15, 1990, shall submit to the Administrator a State implementation plan revision under section 7410 of this title and part D of subchapter I for such area which shall contain the provisions specified under this subsection regarding oxygenated gasoline.

(B) A plan revision which contains such provisions shall also be submitted by each State in which there is located any area which, for any 2-year period after 1989 has a carbon monoxide design value of 9.5 ppm or above. The revision shall be submitted within 18 months after such 2-year period.

**(2) Oxygenated gasoline in CO nonattainment areas**

Each plan revision under this subsection shall contain provisions to require that any gasoline sold, or dispensed, to the ultimate consumer in the carbon monoxide nonattainment area or sold or dispensed directly or indirectly by fuel refiners or marketers to persons who sell or dispense to ultimate consumers, in the larger of—

(A) the Consolidated Metropolitan Statistical Area (CMSA) in which the area is located, or

(B) if the area is not located in a CMSA, the Metropolitan Statistical Area in which the area is located,

be blended, during the portion of the year in which the area is prone to high ambient concentrations of carbon monoxide to contain not less than 2.7 percent oxygen by weight (subject

to a testing tolerance established by the Administrator). The portion of the year in which the area is prone to high ambient concentrations of carbon monoxide shall be as determined by the Administrator, but shall not be less than 4 months. At the request of a State with respect to any area designated as nonattainment for carbon monoxide, the Administrator may reduce the period specified in the preceding sentence if the State can demonstrate that because of meteorological conditions, a reduced period will assure that there will be no exceedances of the carbon monoxide standard outside of such reduced period. For areas with a carbon monoxide design value of 9.5 ppm or more of<sup>7</sup> November 15, 1990, the revision shall provide that such requirement shall take effect no later than November 1, 1992 (or at such other date during 1992 as the Administrator establishes under the preceding provisions of this paragraph). For other areas, the revision shall provide that such requirement shall take effect no later than November 1 of the third year after the last year of the applicable 2-year period referred to in paragraph (1) (or at such other date during such third year as the Administrator establishes under the preceding provisions of this paragraph) and shall include a program for implementation and enforcement of the requirement consistent with guidance to be issued by the Administrator.

**(3) Waivers**

(A) The Administrator shall waive, in whole or in part, the requirements of paragraph (2) upon a demonstration by the State to the satisfaction of the Administrator that the use of oxygenated gasoline would prevent or interfere with the attainment by the area of a national primary ambient air quality standard (or a State or local ambient air quality standard) for any air pollutant other than carbon monoxide.

(B) The Administrator shall, upon demonstration by the State satisfactory to the Administrator, waive the requirement of paragraph (2) where the Administrator determines that mobile sources of carbon monoxide do not contribute significantly to carbon monoxide levels in an area.

(C)(i) Any person may petition the Administrator to make a finding that there is, or is likely to be, for any area, an inadequate domestic supply of, or distribution capacity for, oxygenated gasoline meeting the requirements of paragraph (2) or fuel additives (oxygenates) necessary to meet such requirements. The Administrator shall act on such petition within 6 months after receipt of the petition.

(ii) If the Administrator determines, in response to a petition under clause (i), that there is an inadequate supply or capacity described in clause (i), the Administrator shall delay the effective date of paragraph (2) for 1 year. Upon petition, the Administrator may extend such effective date for one additional year. No partial delay or lesser waiver may be granted under this clause.

<sup>7</sup> So in original. Probably should be “as of”.

(iii) In granting waivers under this subparagraph the Administrator shall consider distribution capacity separately from the adequacy of domestic supply and shall grant such waivers in such manner as will assure that, if supplies of oxygenated gasoline are limited, areas having the highest design value for carbon monoxide will have a priority in obtaining oxygenated gasoline which meets the requirements of paragraph (2).

(iv) As used in this subparagraph, the term distribution capacity includes capacity for transportation, storage, and blending.

**(4) Fuel dispensing systems**

Any person selling oxygenated gasoline at retail pursuant to this subsection shall be required under regulations promulgated by the Administrator to label the fuel dispensing system with a notice that the gasoline is oxygenated and will reduce the carbon monoxide emissions from the motor vehicle.

**(5) Guidelines for credit**

The Administrator shall promulgate guidelines, within 9 months after November 15, 1990, allowing the use of marketable oxygen credits from gasolines during that portion of the year specified in paragraph (2) with higher oxygen content than required to offset the sale or use of gasoline with a lower oxygen content than required. No credits may be transferred between nonattainment areas.

**(6) Attainment areas**

Nothing in this subsection shall be interpreted as requiring an oxygenated gasoline program in an area which is in attainment for carbon monoxide, except that in a carbon monoxide nonattainment area which is redesignated as attainment for carbon monoxide, the requirements of this subsection shall remain in effect to the extent such program is necessary to maintain such standard thereafter in the area.

**(7) Failure to attain CO standard**

If the Administrator determines under section 7512(b)(2) of this title that the national primary ambient air quality standard for carbon monoxide has not been attained in a Serious Area by the applicable attainment date, the State shall submit a plan revision for the area within 9 months after the date of such determination. The plan revision shall provide that the minimum oxygen content of gasoline referred to in paragraph (2) shall be 3.1 percent by weight unless such requirement is waived in accordance with the provisions of this subsection.

**(n) Prohibition on leaded gasoline for highway use**

After December 31, 1995, it shall be unlawful for any person to sell, offer for sale, supply, offer for supply, dispense, transport, or introduce into commerce, for use as fuel in any motor vehicle (as defined in section 7554(2)<sup>8</sup> of this title) any gasoline which contains lead or lead additives.

**(o) Renewable fuel program**

**(1) Definitions**

In this section:

**(A) Additional renewable fuel**

The term “additional renewable fuel” means fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in home heating oil or jet fuel.

**(B) Advanced biofuel**

**(i) In general**

The term “advanced biofuel” means renewable fuel, other than ethanol derived from corn starch, that has lifecycle greenhouse gas emissions, as determined by the Administrator, after notice and opportunity for comment, that are at least 50 percent less than baseline lifecycle greenhouse gas emissions.

**(ii) Inclusions**

The types of fuels eligible for consideration as “advanced biofuel” may include any of the following:

(I) Ethanol derived from cellulose, hemicellulose, or lignin.

(II) Ethanol derived from sugar or starch (other than corn starch).

(III) Ethanol derived from waste material, including crop residue, other vegetative waste material, animal waste, and food waste and yard waste.

(IV) Biomass-based diesel.

(V) Biogas (including landfill gas and sewage waste treatment gas) produced through the conversion of organic matter from renewable biomass.

(VI) Butanol or other alcohols produced through the conversion of organic matter from renewable biomass.

(VII) Other fuel derived from cellulosic biomass.

**(C) Baseline lifecycle greenhouse gas emissions**

The term “baseline lifecycle greenhouse gas emissions” means the average lifecycle greenhouse gas emissions, as determined by the Administrator, after notice and opportunity for comment, for gasoline or diesel (whichever is being replaced by the renewable fuel) sold or distributed as transportation fuel in 2005.

**(D) Biomass-based diesel**

The term “biomass-based diesel” means renewable fuel that is biodiesel as defined in section 13220(f) of this title and that has lifecycle greenhouse gas emissions, as determined by the Administrator, after notice and opportunity for comment, that are at least 50 percent less than the baseline lifecycle greenhouse gas emissions. Notwithstanding the preceding sentence, renewable fuel derived from co-processing biomass with a petroleum feedstock shall be advanced biofuel if it meets the requirements of subparagraph (B), but is not biomass-based diesel.

**(E) Cellulosic biofuel**

The term “cellulosic biofuel” means renewable fuel derived from any cellulose, hemicellulose, or lignin that is derived from

<sup>8</sup> So in original. Probably should be section “7550(2)”.

renewable biomass and that has lifecycle greenhouse gas emissions, as determined by the Administrator, that are at least 60 percent less than the baseline lifecycle greenhouse gas emissions.

**(F) Conventional biofuel**

The term “conventional biofuel” means renewable fuel that is ethanol derived from corn starch.

**(G) Greenhouse gas**

The term “greenhouse gas” means carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons,<sup>9</sup> sulfur hexafluoride. The Administrator may include any other anthropogenically-emitted gas that is determined by the Administrator, after notice and comment, to contribute to global warming.

**(H) Lifecycle greenhouse gas emissions**

The term “lifecycle greenhouse gas emissions” means the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the Administrator, related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.

**(I) Renewable biomass**

The term “renewable biomass” means each of the following:

(i) Planted crops and crop residue harvested from agricultural land cleared or cultivated at any time prior to December 19, 2007, that is either actively managed or fallow, and nonforested.

(ii) Planted trees and tree residue from actively managed tree plantations on non-federal<sup>10</sup> land cleared at any time prior to December 19, 2007, including land belonging to an Indian tribe or an Indian individual, that is held in trust by the United States or subject to a restriction against alienation imposed by the United States.

(iii) Animal waste material and animal byproducts.

(iv) Slash and pre-commercial thinnings that are from non-federal<sup>10</sup> forestlands, including forestlands belonging to an Indian tribe or an Indian individual, that are held in trust by the United States or subject to a restriction against alienation imposed by the United States, but not forests or forestlands that are ecological communities with a global or State ranking of critically imperiled, imperiled, or rare pursuant to a State Natural Heritage Program, old growth forest, or late successional forest.

(v) Biomass obtained from the immediate vicinity of buildings and other areas regularly occupied by people, or of public infrastructure, at risk from wildfire.

(vi) Algae.

(vii) Separated yard waste or food waste, including recycled cooking and trap grease.

**(J) Renewable fuel**

The term “renewable fuel” means fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel.

**(K) Small refinery**

The term “small refinery” means a refinery for which the average aggregate daily crude oil throughput for a calendar year (as determined by dividing the aggregate throughput for the calendar year by the number of days in the calendar year) does not exceed 75,000 barrels.

**(L) Transportation fuel**

The term “transportation fuel” means fuel for use in motor vehicles, motor vehicle engines, nonroad vehicles, or nonroad engines (except for ocean-going vessels).

**(2) Renewable fuel program**

**(A) Regulations**

**(i) In general**

Not later than 1 year after August 8, 2005, the Administrator shall promulgate regulations to ensure that gasoline sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains the applicable volume of renewable fuel determined in accordance with subparagraph (B). Not later than 1 year after December 19, 2007, the Administrator shall revise the regulations under this paragraph to ensure that transportation fuel sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains at least the applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel, determined in accordance with subparagraph (B) and, in the case of any such renewable fuel produced from new facilities that commence construction after December 19, 2007, achieves at least a 20 percent reduction in lifecycle greenhouse gas emissions compared to baseline lifecycle greenhouse gas emissions.

**(ii) Noncontiguous State opt-in**

**(I) In general**

On the petition of a noncontiguous State or territory, the Administrator may allow the renewable fuel program established under this subsection to apply in the noncontiguous State or territory at the same time or any time after the Administrator promulgates regulations under this subparagraph.

**(II) Other actions**

In carrying out this clause, the Administrator may—

<sup>9</sup>So in original. The word “and” probably should appear.

<sup>10</sup>So in original. Probably should be “non-Federal”.

- (aa) issue or revise regulations under this paragraph;
- (bb) establish applicable percentages under paragraph (3);
- (cc) provide for the generation of credits under paragraph (5); and
- (dd) take such other actions as are necessary to allow for the application of the renewable fuels program in a noncontiguous State or territory.

**(iii) Provisions of regulations**

Regardless of the date of promulgation, the regulations promulgated under clause (i)—

- (I) shall contain compliance provisions applicable to refineries, blenders, distributors, and importers, as appropriate, to ensure that the requirements of this paragraph are met; but
- (II) shall not—
  - (aa) restrict geographic areas in which renewable fuel may be used; or
  - (bb) impose any per-gallon obligation for the use of renewable fuel.

**(iv) Requirement in case of failure to promulgate regulations**

If the Administrator does not promulgate regulations under clause (i), the percentage of renewable fuel in gasoline sold or dispensed to consumers in the United States, on a volume basis, shall be 2.78 percent for calendar year 2006.

**(B) Applicable volumes**

**(i) Calendar years after 2005**

**(I) Renewable fuel**

For the purpose of subparagraph (A), the applicable volume of renewable fuel for the calendar years 2006 through 2022 shall be determined in accordance with the following table:

| Calendar year: | Applicable volume of renewable fuel (in billions of gallons): |
|----------------|---------------------------------------------------------------|
| 2006           | 4.0                                                           |
| 2007           | 4.7                                                           |
| 2008           | 9.0                                                           |
| 2009           | 11.1                                                          |
| 2010           | 12.95                                                         |
| 2011           | 13.95                                                         |
| 2012           | 15.2                                                          |
| 2013           | 16.55                                                         |
| 2014           | 18.15                                                         |
| 2015           | 20.5                                                          |
| 2016           | 22.25                                                         |
| 2017           | 24.0                                                          |
| 2018           | 26.0                                                          |
| 2019           | 28.0                                                          |
| 2020           | 30.0                                                          |
| 2021           | 33.0                                                          |
| 2022           | 36.0                                                          |

**(II) Advanced biofuel**

For the purpose of subparagraph (A), of the volume of renewable fuel required under subclause (I), the applicable volume of advanced biofuel for the calendar years 2009 through 2022 shall be deter-

mined in accordance with the following table:

| Calendar year: | Applicable volume of advanced biofuel (in billions of gallons): |
|----------------|-----------------------------------------------------------------|
| 2009           | 0.6                                                             |
| 2010           | 0.95                                                            |
| 2011           | 1.35                                                            |
| 2012           | 2.0                                                             |
| 2013           | 2.75                                                            |
| 2014           | 3.75                                                            |
| 2015           | 5.5                                                             |
| 2016           | 7.25                                                            |
| 2017           | 9.0                                                             |
| 2018           | 11.0                                                            |
| 2019           | 13.0                                                            |
| 2020           | 15.0                                                            |
| 2021           | 18.0                                                            |
| 2022           | 21.0                                                            |

**(III) Cellulosic biofuel**

For the purpose of subparagraph (A), of the volume of advanced biofuel required under subclause (II), the applicable volume of cellulosic biofuel for the calendar years 2010 through 2022 shall be determined in accordance with the following table:

| Calendar year: | Applicable volume of cellulosic biofuel (in billions of gallons): |
|----------------|-------------------------------------------------------------------|
| 2010           | 0.1                                                               |
| 2011           | 0.25                                                              |
| 2012           | 0.5                                                               |
| 2013           | 1.0                                                               |
| 2014           | 1.75                                                              |
| 2015           | 3.0                                                               |
| 2016           | 4.25                                                              |
| 2017           | 5.5                                                               |
| 2018           | 7.0                                                               |
| 2019           | 8.5                                                               |
| 2020           | 10.5                                                              |
| 2021           | 13.5                                                              |
| 2022           | 16.0                                                              |

**(IV) Biomass-based diesel**

For the purpose of subparagraph (A), of the volume of advanced biofuel required under subclause (II), the applicable volume of biomass-based diesel for the calendar years 2009 through 2012 shall be determined in accordance with the following table:

| Calendar year: | Applicable volume of biomass-based diesel (in billions of gallons): |
|----------------|---------------------------------------------------------------------|
| 2009           | 0.5                                                                 |
| 2010           | 0.65                                                                |
| 2011           | 0.80                                                                |
| 2012           | 1.0                                                                 |

**(ii) Other calendar years**

For the purposes of subparagraph (A), the applicable volumes of each fuel specified in the tables in clause (i) for calendar

years after the calendar years specified in the tables shall be determined by the Administrator, in coordination with the Secretary of Energy and the Secretary of Agriculture, based on a review of the implementation of the program during calendar years specified in the tables, and an analysis of—

(I) the impact of the production and use of renewable fuels on the environment, including on air quality, climate change, conversion of wetlands, ecosystems, wildlife habitat, water quality, and water supply;

(II) the impact of renewable fuels on the energy security of the United States;

(III) the expected annual rate of future commercial production of renewable fuels, including advanced biofuels in each category (cellulosic biofuel and biomass-based diesel);

(IV) the impact of renewable fuels on the infrastructure of the United States, including deliverability of materials, goods, and products other than renewable fuel, and the sufficiency of infrastructure to deliver and use renewable fuel;

(V) the impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to transport goods; and

(VI) the impact of the use of renewable fuels on other factors, including job creation, the price and supply of agricultural commodities, rural economic development, and food prices.

The Administrator shall promulgate rules establishing the applicable volumes under this clause no later than 14 months before the first year for which such applicable volume will apply.

**(iii) Applicable volume of advanced biofuel**

For the purpose of making the determinations in clause (ii), for each calendar year, the applicable volume of advanced biofuel shall be at least the same percentage of the applicable volume of renewable fuel as in calendar year 2022.

**(iv) Applicable volume of cellulosic biofuel**

For the purpose of making the determinations in clause (ii), for each calendar year, the applicable volume of cellulosic biofuel established by the Administrator shall be based on the assumption that the Administrator will not need to issue a waiver for such years under paragraph (7)(D).

**(v) Minimum applicable volume of biomass-based diesel**

For the purpose of making the determinations in clause (ii), the applicable volume of biomass-based diesel shall not be less than the applicable volume listed in clause (i)(IV) for calendar year 2012.

**(3) Applicable percentages**

**(A) Provision of estimate of volumes of gasoline sales**

Not later than October 31 of each of calendar years 2005 through 2021, the Adminis-

trator of the Energy Information Administration shall provide to the Administrator of the Environmental Protection Agency an estimate, with respect to the following calendar year, of the volumes of transportation fuel, biomass-based diesel, and cellulosic biofuel projected to be sold or introduced into commerce in the United States.

**(B) Determination of applicable percentages**

**(i) In general**

Not later than November 30 of each of calendar years 2005 through 2021, based on the estimate provided under subparagraph (A), the Administrator of the Environmental Protection Agency shall determine and publish in the Federal Register, with respect to the following calendar year, the renewable fuel obligation that ensures that the requirements of paragraph (2) are met.

**(ii) Required elements**

The renewable fuel obligation determined for a calendar year under clause (i) shall—

(I) be applicable to refineries, blenders, and importers, as appropriate;

(II) be expressed in terms of a volume percentage of transportation fuel sold or introduced into commerce in the United States; and

(III) subject to subparagraph (C)(i), consist of a single applicable percentage that applies to all categories of persons specified in subclause (I).

**(C) Adjustments**

In determining the applicable percentage for a calendar year, the Administrator shall make adjustments—

(i) to prevent the imposition of redundant obligations on any person specified in subparagraph (B)(ii)(I); and

(ii) to account for the use of renewable fuel during the previous calendar year by small refineries that are exempt under paragraph (9).

**(4) Modification of greenhouse gas reduction percentages**

**(A) In general**

The Administrator may, in the regulations under the last sentence of paragraph (2)(A)(i), adjust the 20 percent, 50 percent, and 60 percent reductions in lifecycle greenhouse gas emissions specified in paragraphs (2)(A)(i) (relating to renewable fuel), (1)(D) (relating to biomass-based diesel), (1)(B)(i) (relating to advanced biofuel), and (1)(E) (relating to cellulosic biofuel) to a lower percentage. For the 50 and 60 percent reductions, the Administrator may make such an adjustment only if he determines that generally such reduction is not commercially feasible for fuels made using a variety of feedstocks, technologies, and processes to meet the applicable reduction.

**(B) Amount of adjustment**

In promulgating regulations under this paragraph, the specified 50 percent reduction



in greenhouse gas emissions from advanced biofuel and in biomass-based diesel may not be reduced below 40 percent. The specified 20 percent reduction in greenhouse gas emissions from renewable fuel may not be reduced below 10 percent, and the specified 60 percent reduction in greenhouse gas emissions from cellulosic biofuel may not be reduced below 50 percent.

**(C) Adjusted reduction levels**

An adjustment under this paragraph to a percent less than the specified 20 percent greenhouse gas reduction for renewable fuel shall be the minimum possible adjustment, and the adjusted greenhouse gas reduction shall be established by the Administrator at the maximum achievable level, taking cost in consideration, for natural gas fired corn-based ethanol plants, allowing for the use of a variety of technologies and processes. An adjustment in the 50 or 60 percent greenhouse gas levels shall be the minimum possible adjustment for the fuel or fuels concerned, and the adjusted greenhouse gas reduction shall be established at the maximum achievable level, taking cost in consideration, allowing for the use of a variety of feedstocks, technologies, and processes.

**(D) 5-year review**

Whenever the Administrator makes any adjustment under this paragraph, not later than 5 years thereafter he shall review and revise (based upon the same criteria and standards as required for the initial adjustment) the regulations establishing the adjusted level.

**(E) Subsequent adjustments**

After the Administrator has promulgated a final rule under the last sentence of paragraph (2)(A)(i) with respect to the method of determining lifecycle greenhouse gas emissions, except as provided in subparagraph (D), the Administrator may not adjust the percent greenhouse gas reduction levels unless he determines that there has been a significant change in the analytical methodology used for determining the lifecycle greenhouse gas emissions. If he makes such determination, he may adjust the 20, 50, or 60 percent reduction levels through rule-making using the criteria and standards set forth in this paragraph.

**(F) Limit on upward adjustments**

If, under subparagraph (D) or (E), the Administrator revises a percent level adjusted as provided in subparagraphs (A), (B), and (C) to a higher percent, such higher percent may not exceed the applicable percent specified in paragraph (2)(A)(i), (1)(D), (1)(B)(i), or (1)(E).

**(G) Applicability of adjustments**

If the Administrator adjusts, or revises, a percent level referred to in this paragraph or makes a change in the analytical methodology used for determining the lifecycle greenhouse gas emissions, such adjustment, revision, or change (or any combination thereof) shall only apply to renewable fuel

from new facilities that commence construction after the effective date of such adjustment, revision, or change.

**(5) Credit program**

**(A) In general**

The regulations promulgated under paragraph (2)(A) shall provide—

(i) for the generation of an appropriate amount of credits by any person that refines, blends, or imports gasoline that contains a quantity of renewable fuel that is greater than the quantity required under paragraph (2);

(ii) for the generation of an appropriate amount of credits for biodiesel; and

(iii) for the generation of credits by small refineries in accordance with paragraph (9)(C).

**(B) Use of credits**

A person that generates credits under subparagraph (A) may use the credits, or transfer all or a portion of the credits to another person, for the purpose of complying with paragraph (2).

**(C) Duration of credits**

A credit generated under this paragraph shall be valid to show compliance for the 12 months as of the date of generation.

**(D) Inability to generate or purchase sufficient credits**

The regulations promulgated under paragraph (2)(A) shall include provisions allowing any person that is unable to generate or purchase sufficient credits to meet the requirements of paragraph (2) to carry forward a renewable fuel deficit on condition that the person, in the calendar year following the year in which the renewable fuel deficit is created—

(i) achieves compliance with the renewable fuel requirement under paragraph (2); and

(ii) generates or purchases additional renewable fuel credits to offset the renewable fuel deficit of the previous year.

**(E) Credits for additional renewable fuel**

The Administrator may issue regulations providing: (i) for the generation of an appropriate amount of credits by any person that refines, blends, or imports additional renewable fuels specified by the Administrator; and (ii) for the use of such credits by the generator, or the transfer of all or a portion of the credits to another person, for the purpose of complying with paragraph (2).

**(6) Seasonal variations in renewable fuel use**

**(A) Study**

For each of calendar years 2006 through 2012, the Administrator of the Energy Information Administration shall conduct a study of renewable fuel blending to determine whether there are excessive seasonal variations in the use of renewable fuel.

**(B) Regulation of excessive seasonal variations**

If, for any calendar year, the Administrator of the Energy Information Adminis-

tration, based on the study under subparagraph (A), makes the determinations specified in subparagraph (C), the Administrator of the Environmental Protection Agency shall promulgate regulations to ensure that 25 percent or more of the quantity of renewable fuel necessary to meet the requirements of paragraph (2) is used during each of the 2 periods specified in subparagraph (D) of each subsequent calendar year.

**(C) Determinations**

The determinations referred to in subparagraph (B) are that—

- (i) less than 25 percent of the quantity of renewable fuel necessary to meet the requirements of paragraph (2) has been used during 1 of the 2 periods specified in subparagraph (D) of the calendar year;
- (ii) a pattern of excessive seasonal variation described in clause (i) will continue in subsequent calendar years; and
- (iii) promulgating regulations or other requirements to impose a 25 percent or more seasonal use of renewable fuels will not prevent or interfere with the attainment of national ambient air quality standards or significantly increase the price of motor fuels to the consumer.

**(D) Periods**

The 2 periods referred to in this paragraph are—

- (i) April through September; and
- (ii) January through March and October through December.

**(E) Exclusion**

Renewable fuel blended or consumed in calendar year 2006 in a State that has received a waiver under section 7543(b) of this title shall not be included in the study under subparagraph (A).

**(F) State exemption from seasonality requirements**

Notwithstanding any other provision of law, the seasonality requirement relating to renewable fuel use established by this paragraph shall not apply to any State that has received a waiver under section 7543(b) of this title or any State dependent on refineries in such State for gasoline supplies.

**(7) Waivers**

**(A) In general**

The Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, may waive the requirements of paragraph (2) in whole or in part on petition by one or more States, by any person subject to the requirements of this subsection, or by the Administrator on his own motion by reducing the national quantity of renewable fuel required under paragraph (2)—

- (i) based on a determination by the Administrator, after public notice and opportunity for comment, that implementation of the requirement would severely harm the economy or environment of a State, a region, or the United States; or

- (ii) based on a determination by the Administrator, after public notice and opportunity for comment, that there is an inadequate domestic supply.

**(B) Petitions for waivers**

The Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall approve or disapprove a petition for a waiver of the requirements of paragraph (2) within 90 days after the date on which the petition is received by the Administrator.

**(C) Termination of waivers**

A waiver granted under subparagraph (A) shall terminate after 1 year, but may be renewed by the Administrator after consultation with the Secretary of Agriculture and the Secretary of Energy.

**(D) Cellulosic biofuel**

(i) For any calendar year for which the projected volume of cellulosic biofuel production is less than the minimum applicable volume established under paragraph (2)(B), as determined by the Administrator based on the estimate provided under paragraph (3)(A), not later than November 30 of the preceding calendar year, the Administrator shall reduce the applicable volume of cellulosic biofuel required under paragraph (2)(B) to the projected volume available during that calendar year. For any calendar year in which the Administrator makes such a reduction, the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B) by the same or a lesser volume.

(ii) Whenever the Administrator reduces the minimum cellulosic biofuel volume under this subparagraph, the Administrator shall make available for sale cellulosic biofuel credits at the higher of \$0.25 per gallon or the amount by which \$3.00 per gallon exceeds the average wholesale price of a gallon of gasoline in the United States. Such amounts shall be adjusted for inflation by the Administrator for years after 2008.

(iii) Eighteen months after December 19, 2007, the Administrator shall promulgate regulations to govern the issuance of credits under this subparagraph. The regulations shall set forth the method for determining the exact price of credits in the event of a waiver. The price of such credits shall not be changed more frequently than once each quarter. These regulations shall include such provisions, including limiting the credits' uses and useful life, as the Administrator deems appropriate to assist market liquidity and transparency, to provide appropriate certainty for regulated entities and renewable fuel producers, and to limit any potential misuse of cellulosic biofuel credits to reduce the use of other renewable fuels, and for such other purposes as the Administrator determines will help achieve the goals of this subsection. The regulations shall limit the number of cellulosic biofuel credits for any calendar year to the minimum appli-

cable volume (as reduced under this subparagraph) of cellulosic biofuel for that year.

**(E) Biomass-based diesel**

**(i) Market evaluation**

The Administrator, in consultation with the Secretary of Energy and the Secretary of Agriculture, shall periodically evaluate the impact of the biomass-based diesel requirements established under this paragraph on the price of diesel fuel.

**(ii) Waiver**

If the Administrator determines that there is a significant renewable feedstock disruption or other market circumstances that would make the price of biomass-based diesel fuel increase significantly, the Administrator, in consultation with the Secretary of Energy and the Secretary of Agriculture, shall issue an order to reduce, for up to a 60-day period, the quantity of biomass-based diesel required under subparagraph (A) by an appropriate quantity that does not exceed 15 percent of the applicable annual requirement for biomass-based diesel. For any calendar year in which the Administrator makes a reduction under this subparagraph, the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B) by the same or a lesser volume.

**(iii) Extensions**

If the Administrator determines that the feedstock disruption or circumstances described in clause (ii) is continuing beyond the 60-day period described in clause (ii) or this clause, the Administrator, in consultation with the Secretary of Energy and the Secretary of Agriculture, may issue an order to reduce, for up to an additional 60-day period, the quantity of biomass-based diesel required under subparagraph (A) by an appropriate quantity that does not exceed an additional 15 percent of the applicable annual requirement for biomass-based diesel.

**(F) Modification of applicable volumes**

For any of the tables in paragraph (2)(B), if the Administrator waives—

- (i) at least 20 percent of the applicable volume requirement set forth in any such table for 2 consecutive years; or
- (ii) at least 50 percent of such volume requirement for a single year,

the Administrator shall promulgate a rule (within 1 year after issuing such waiver) that modifies the applicable volumes set forth in the table concerned for all years following the final year to which the waiver applies, except that no such modification in applicable volumes shall be made for any year before 2016. In promulgating such a rule, the Administrator shall comply with the processes, criteria, and standards set forth in paragraph (2)(B)(ii).

**(8) Study and waiver for initial year of program**

**(A) In general**

Not later than 180 days after August 8, 2005, the Secretary of Energy shall conduct for the Administrator a study assessing whether the renewable fuel requirement under paragraph (2) will likely result in significant adverse impacts on consumers in 2006, on a national, regional, or State basis.

**(B) Required evaluations**

The study shall evaluate renewable fuel—

- (i) supplies and prices;
- (ii) blendstock supplies; and
- (iii) supply and distribution system capabilities.

**(C) Recommendations by the Secretary**

Based on the results of the study, the Secretary of Energy shall make specific recommendations to the Administrator concerning waiver of the requirements of paragraph (2), in whole or in part, to prevent any adverse impacts described in subparagraph (A).

**(D) Waiver**

**(i) In general**

Not later than 270 days after August 8, 2005, the Administrator shall, if and to the extent recommended by the Secretary of Energy under subparagraph (C), waive, in whole or in part, the renewable fuel requirement under paragraph (2) by reducing the national quantity of renewable fuel required under paragraph (2) in calendar year 2006.

**(ii) No effect on waiver authority**

Clause (i) does not limit the authority of the Administrator to waive the requirements of paragraph (2) in whole, or in part, under paragraph (7).

**(9) Small refineries**

**(A) Temporary exemption**

**(i) In general**

The requirements of paragraph (2) shall not apply to small refineries until calendar year 2011.

**(ii) Extension of exemption**

**(I) Study by Secretary of Energy**

Not later than December 31, 2008, the Secretary of Energy shall conduct for the Administrator a study to determine whether compliance with the requirements of paragraph (2) would impose a disproportionate economic hardship on small refineries.

**(II) Extension of exemption**

In the case of a small refinery that the Secretary of Energy determines under subclause (I) would be subject to a disproportionate economic hardship if required to comply with paragraph (2), the Administrator shall extend the exemption under clause (i) for the small refinery for a period of not less than 2 additional years.

**(B) Petitions based on disproportionate economic hardship**

**(i) Extension of exemption**

A small refinery may at any time petition the Administrator for an extension of the exemption under subparagraph (A) for the reason of disproportionate economic hardship.

**(ii) Evaluation of petitions**

In evaluating a petition under clause (i), the Administrator, in consultation with the Secretary of Energy, shall consider the findings of the study under subparagraph (A)(ii) and other economic factors.

**(iii) Deadline for action on petitions**

The Administrator shall act on any petition submitted by a small refinery for a hardship exemption not later than 90 days after the date of receipt of the petition.

**(C) Credit program**

If a small refinery notifies the Administrator that the small refinery waives the exemption under subparagraph (A), the regulations promulgated under paragraph (2)(A) shall provide for the generation of credits by the small refinery under paragraph (5) beginning in the calendar year following the date of notification.

**(D) Opt-in for small refineries**

A small refinery shall be subject to the requirements of paragraph (2) if the small refinery notifies the Administrator that the small refinery waives the exemption under subparagraph (A).

**(10) Ethanol market concentration analysis**

**(A) Analysis**

**(i) In general**

Not later than 180 days after August 8, 2005, and annually thereafter, the Federal Trade Commission shall perform a market concentration analysis of the ethanol production industry using the Herfindahl-Hirschman Index to determine whether there is sufficient competition among industry participants to avoid price-setting and other anticompetitive behavior.

**(ii) Scoring**

For the purpose of scoring under clause (i) using the Herfindahl-Hirschman Index, all marketing arrangements among industry participants shall be considered.

**(B) Report**

Not later than December 1, 2005, and annually thereafter, the Federal Trade Commission shall submit to Congress and the Administrator a report on the results of the market concentration analysis performed under subparagraph (A)(i).

**(11) Periodic reviews**

To allow for the appropriate adjustment of the requirements described in subparagraph (B) of paragraph (2), the Administrator shall conduct periodic reviews of—

(A) existing technologies;

(B) the feasibility of achieving compliance with the requirements; and

(C) the impacts of the requirements described in subsection (a)(2)<sup>11</sup> on each individual and entity described in paragraph (2).

**(12) Effect on other provisions**

Nothing in this subsection, or regulations issued pursuant to this subsection, shall affect or be construed to affect the regulatory status of carbon dioxide or any other greenhouse gas, or to expand or limit regulatory authority regarding carbon dioxide or any other greenhouse gas, for purposes of other provisions (including section 7475) of this chapter. The previous sentence shall not affect implementation and enforcement of this subsection.

**(q)<sup>12</sup> Analyses of motor vehicle fuel changes and emissions model**

**(1) Anti-backsliding analysis**

**(A) Draft analysis**

Not later than 4 years after August 8, 2005, the Administrator shall publish for public comment a draft analysis of the changes in emissions of air pollutants and air quality due to the use of motor vehicle fuel and fuel additives resulting from implementation of the amendments made by the Energy Policy Act of 2005.

**(B) Final analysis**

After providing a reasonable opportunity for comment but not later than 5 years after August 8, 2005, the Administrator shall publish the analysis in final form.

**(2) Emissions model**

For the purposes of this section, not later than 4 years after August 8, 2005, the Administrator shall develop and finalize an emissions model that reflects, to the maximum extent practicable, the effects of gasoline characteristics or components on emissions from vehicles in the motor vehicle fleet during calendar year 2007.

**(3) Permeation effects study**

**(A) In general**

Not later than 1 year after August 8, 2005, the Administrator shall conduct a study, and report to Congress the results of the study, on the effects of ethanol content in gasoline on permeation, the process by which fuel molecules migrate through the elastomeric materials (rubber and plastic parts) that make up the fuel and fuel vapor systems of a motor vehicle.

**(B) Evaporative emissions**

The study shall include estimates of the increase in total evaporative emissions likely to result from the use of gasoline with ethanol content in a motor vehicle, and the fleet of motor vehicles, due to permeation.

**(r) Fuel and fuel additive importers and importation**

For the purposes of this section, the term “manufacturer” includes an importer and the term “manufacture” includes importation.

<sup>11</sup> So in original. Subsection (a) does not contain a par. (2).

<sup>12</sup> So in original. No subsec. (p) has been enacted.

**(s) Conversion assistance for cellulosic biomass, waste-derived ethanol, approved renewable fuels**

**(1) In general**

The Secretary of Energy may provide grants to merchant producers of cellulosic biomass ethanol, waste-derived ethanol, and approved renewable fuels in the United States to assist the producers in building eligible production facilities described in paragraph (2) for the production of ethanol or approved renewable fuels.

**(2) Eligible production facilities**

A production facility shall be eligible to receive a grant under this subsection if the production facility—

(A) is located in the United States; and

(B) uses cellulosic or renewable biomass or waste-derived feedstocks derived from agricultural residues, wood residues, municipal solid waste, or agricultural byproducts.

**(3) Authorization of appropriations**

There are authorized to be appropriated the following amounts to carry out this subsection:

(A) \$100,000,000 for fiscal year 2006.

(B) \$250,000,000 for fiscal year 2007.

(C) \$400,000,000 for fiscal year 2008.

**(4) Definitions**

For the purposes of this subsection:

(A) The term “approved renewable fuels” are fuels and components of fuels that have been approved by the Department of Energy, as defined in section 13211 of this title, which have been made from renewable biomass.

(B) The term “renewable biomass” is, as defined in Presidential Executive Order 13134, published in the Federal Register on August 16, 1999, any organic matter that is available on a renewable or recurring basis (excluding old-growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, animal wastes, wood and wood residues, paper and paper residues, and other vegetative waste materials. Old-growth timber means timber of a forest from the late successional stage of forest development.

**(t) Blending of compliant reformulated gasolines**

**(1) In general**

Notwithstanding subsections (h) and (k) and subject to the limitations in paragraph (2) of this subsection, it shall not be a violation of this part<sup>13</sup> for a gasoline retailer, during any month of the year, to blend at a retail location batches of ethanol-blended and non-ethanol-blended reformulated gasoline, provided that—

(A) each batch of gasoline to be blended has been individually certified as in compliance with subsections (h) and (k) prior to being blended;

(B) the retailer notifies the Administrator prior to such blending, and identifies the exact location of the retail station and the

specific tank in which such blending will take place;

(C) the retailer retains and, as requested by the Administrator or the Administrator’s designee, makes available for inspection such certifications accounting for all gasoline at the retail outlet; and

(D) the retailer does not, between June 1 and September 15 of each year, blend a batch of VOC-controlled, or “summer”, gasoline with a batch of non-VOC-controlled, or “winter”, gasoline (as these terms are defined under subsections (h) and (k)).

**(2) Limitations**

**(A) Frequency limitation**

A retailer shall only be permitted to blend batches of compliant reformulated gasoline under this subsection a maximum of two blending periods between May 1 and September 15 of each calendar year.

**(B) Duration of blending period**

Each blending period authorized under subparagraph (A) shall extend for a period of no more than 10 consecutive calendar days.

**(3) Surveys**

A sample of gasoline taken from a retail location that has blended gasoline within the past 30 days and is in compliance with subparagraphs (A), (B), (C), and (D) of paragraph (1) shall not be used in a VOC survey mandated by 40 CFR Part 80.

**(4) State implementation plans**

A State shall be held harmless and shall not be required to revise its State implementation plan under section 7410 of this title to account for the emissions from blended gasoline authorized under paragraph (1).

**(5) Preservation of State law**

Nothing in this subsection shall—

(A) preempt existing State laws or regulations regulating the blending of compliant gasolines; or

(B) prohibit a State from adopting such restrictions in the future.

**(6) Regulations**

The Administrator shall promulgate, after notice and comment, regulations implementing this subsection within 1 year after August 8, 2005.

**(7) Effective date**

This subsection shall become effective 15 months after August 8, 2005, and shall apply to blended batches of reformulated gasoline on or after that date, regardless of whether the implementing regulations required by paragraph (6) have been promulgated by the Administrator by that date.

**(8) Liability**

No person other than the person responsible for blending under this subsection shall be subject to an enforcement action or penalties under subsection (d) solely arising from the blending of compliant reformulated gasolines by the retailers.

**(9) Formulation of gasoline**

This subsection does not grant authority to the Administrator or any State (or any sub-

<sup>13</sup> See References in Text note below.

division thereof) to require reformulation of gasoline at the refinery to adjust for potential or actual emissions increases due to the blending authorized by this subsection.

**(u) Standard specifications for biodiesel**

(1) Unless the American Society for Testing and Materials has adopted a standard for diesel fuel containing 20 percent biodiesel (commonly known as “B20”) within 1 year after December 19, 2007, the Administrator shall initiate a rule-making to establish a uniform per gallon fuel standard for such fuel and designate an identification number so that vehicle manufacturers are able to design engines to use fuel meeting such standard.

(2) Unless the American Society for Testing and Materials has adopted a standard for diesel fuel containing 5 percent biodiesel (commonly known as “B5”) within 1 year after December 19, 2007, the Administrator shall initiate a rule-making to establish a uniform per gallon fuel standard for such fuel and designate an identification so that vehicle manufacturers are able to design engines to use fuel meeting such standard.

(3) Whenever the Administrator is required to initiate a rulemaking under paragraph (1) or (2), the Administrator shall promulgate a final rule within 18 months after December 19, 2007.

(4) Not later than 180 days after December 19, 2007, the Administrator shall establish an annual inspection and enforcement program to ensure that diesel fuel containing biodiesel sold or distributed in interstate commerce meets the standards established under regulations under this section, including testing and certification for compliance with applicable standards of the American Society for Testing and Materials. There are authorized to be appropriated to carry out the inspection and enforcement program under this paragraph \$3,000,000 for each of fiscal years 2008 through 2010.

(5) For purposes of this subsection, the term “biodiesel” has the meaning provided by section 13220(f) of this title.

**(v) Prevention of air quality deterioration**

**(1) Study**

**(A) In general**

Not later than 18 months after December 19, 2007, the Administrator shall complete a study to determine whether the renewable fuel volumes required by this section will adversely impact air quality as a result of changes in vehicle and engine emissions of air pollutants regulated under this chapter.

**(B) Considerations**

The study shall include consideration of—

(i) different blend levels, types of renewable fuels, and available vehicle technologies; and

(ii) appropriate national, regional, and local air quality control measures.

**(2) Regulations**

Not later than 3 years after December 19, 2007, the Administrator shall—

(A) promulgate fuel regulations to implement appropriate measures to mitigate, to the greatest extent achievable, considering

the results of the study under paragraph (1), any adverse impacts on air quality, as the result of the renewable volumes required by this section; or

(B) make a determination that no such measures are necessary.

(July 14, 1955, ch. 360, title II, §211, formerly §210, as added Pub. L. 90-148, §2, Nov. 21, 1967, 81 Stat. 502; renumbered and amended Pub. L. 91-604, §§8(a), 9(a), Dec. 31, 1970, 84 Stat. 1694, 1698; Pub. L. 92-157, title III, §302(d), (e), Nov. 18, 1971, 85 Stat. 464; Pub. L. 95-95, title II, §§222, 223, title IV, §401(e), Aug. 7, 1977, 91 Stat. 762, 764, 791; Pub. L. 95-190, §14(a)(73), (74), Nov. 16, 1977, 91 Stat. 1403, 1404; Pub. L. 101-549, title II, §§212-221, 228(d), Nov. 15, 1990, 104 Stat. 2488-2500, 2510; Pub. L. 109-58, title XV, §§1501(a)-(c), 1504(a)(1), (b), 1505-1507, 1512, 1513, 1541(a), (b), Aug. 8, 2005, 119 Stat. 1067-1074, 1076, 1077, 1080, 1081, 1088, 1089, 1106, 1107; Pub. L. 110-140, title II, §§201, 202, 203(f), 208, 209, 210(b), 247, 251, Dec. 19, 2007, 121 Stat. 1519, 1521, 1529, 1531, 1532, 1547, 1548.)

**Editorial Notes**

REFERENCES IN TEXT

August 8, 2005, referred to in subsec. (c)(4)(C)(v)(II), was in the original “enactment”, which was translated as meaning the date of enactment of Pub. L. 109-58, which enacted subsec. (c)(4)(C)(v), to reflect the probable intent of Congress.

Section 7521(l) of this title, referred to in subsec. (k)(1)(B)(vi), was in the original “section 202(1) of the Clean Air Act”, which was translated as meaning section 202(l) of the Clean Air Act, to reflect the probable intent of Congress.

The Energy Policy Act of 2005, referred to in subsec. (q)(1)(A), is Pub. L. 109-58, Aug. 8, 2005, 119 Stat. 594. For complete classification of this Act to the Code, see Short Title note set out under section 15801 of this title and Tables.

Executive Order 13134, referred to in subsec. (s)(4)(B), which was set out as a note under section 8601 of Title 7, Agriculture, was revoked by Ex. Ord. No. 13423, §11(a)(iii), Jan. 24, 2007, 72 F.R. 3923.

This part, referred to in subsec. (t)(1), was in the original “this subtitle” which was translated as “this part”, meaning part A of title II of act July 14, 1955, as the probable intent of Congress, because title II of act July 14, 1955, does not contain subtitles.

CODIFICATION

Section was formerly classified to section 1857f-6c of this title.

PRIOR PROVISIONS

A prior section 211 of act July 14, 1955, as added Nov. 21, 1967, Pub. L. 90-148, §2, 81 Stat. 503, provided for a national emissions standards study and was classified to section 1857f-6d of this title, prior to repeal by section 8(a) of Pub. L. 91-604.

AMENDMENTS

2007—Subsec. (c)(1). Pub. L. 110-140, §208, substituted “nonroad vehicle if, in the judgment of the Administrator, any fuel or fuel additive or” for “nonroad vehicle (A) if in the judgment of the Administrator” and “air pollution or water pollution (including any degradation in the quality of groundwater) that” for “air pollution which”.

Subsec. (f)(4). Pub. L. 110-140, §251, amended par. (4) generally. Prior to amendment, par. (4) read as follows: “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 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 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 pursuant to section 7525 of this title. If the Administrator has not acted to grant or deny an application under this paragraph within one hundred and eighty days of receipt of such application, the waiver authorized by this paragraph shall be treated as granted."

Subsec. (o)(1). Pub. L. 110-140, § 201, amended par. (1) generally. Prior to amendment, par. (1) defined "cellulosic biomass ethanol", "waste derived ethanol", "renewable fuel", and "small refinery".

Subsec. (o)(2)(A)(i). Pub. L. 110-140, § 202(a)(1), inserted at end "Not later than 1 year after December 19, 2007, the Administrator shall revise the regulations under this paragraph to ensure that transportation fuel sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains at least the applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel, determined in accordance with subparagraph (B) and, in the case of any such renewable fuel produced from new facilities that commence construction after December 19, 2007, achieves at least a 20 percent reduction in lifecycle greenhouse gas emissions compared to baseline lifecycle greenhouse gas emissions."

Subsec. (o)(2)(B). Pub. L. 110-140, § 202(a)(2), amended subpar. (B) generally. Prior to amendment, subpar. (B) set forth table of applicable volumes for renewable fuel and related to determination of applicable volumes after the years addressed by the table, including the minimum quantity of renewable fuel to be derived from cellulosic biomass and the method of calculating the minimum applicable volume.

Subsec. (o)(3)(A). Pub. L. 110-140, § 202(b)(1), (2), substituted "2021" for "2011" and "transportation fuel, biomass-based diesel, and cellulosic biofuel" for "gasoline".

Subsec. (o)(3)(B)(i). Pub. L. 110-140, § 202(b)(3), substituted "2021" for "2012".

Subsec. (o)(3)(B)(ii)(II). Pub. L. 110-140, § 202(b)(4), substituted "transportation fuel" for "gasoline".

Subsec. (o)(4). Pub. L. 110-140, § 202(c), amended par. (4) generally. Prior to amendment, text read as follows: "For the purpose of paragraph (2), 1 gallon of cellulosic biomass ethanol or waste derived ethanol shall be considered to be the equivalent of 2.5 gallons of renewable fuel."

Subsec. (o)(5)(E). Pub. L. 110-140, § 202(d), added subpar. (E).

Subsec. (o)(7)(A). Pub. L. 110-140, § 202(e)(1), inserted ", by any person subject to the requirements of this subsection, or by the Administrator on his own motion" after "one or more States" in introductory provisions.

Subsec. (o)(7)(B). Pub. L. 110-140, § 202(e)(1), struck out "State" before "petition for a waiver".

Subsec. (o)(7)(D) to (F). Pub. L. 110-140, § 202(e)(2), (3), added subpars. (D) to (F).

Subsec. (o)(11). Pub. L. 110-140, § 203(f), added par. (11).

Subsec. (o)(12). Pub. L. 110-140, § 210(b), added par. (12).

Subsecs. (r), (s). Pub. L. 110-140, § 247, redesignated subsecs. (r), relating to conversion assistance for cellulosic biomass, waste-derived ethanol, approved renewable fuels, and (s) as (s) and (t), respectively.

Subsec. (u). Pub. L. 110-140, § 247, which directed amendment of this section by adding subsec. (u) at the end, was executed by adding subsec. (u) after subsec. (t) to reflect the probable intent of Congress.

Subsec. (v). Pub. L. 110-140, § 209, added subsec. (v).

2005—Subsec. (b)(2). Pub. L. 109-58, § 1505(1)(A), substituted "shall, on a regular basis," for "may also" in introductory provisions.

Subsec. (b)(2)(A). Pub. L. 109-58, § 1505(1)(B), added subpar. (A) and struck out former subpar. (A) which read as follows: "to conduct tests to determine potential public health effects of such fuel or additive (including, but not limited to, carcinogenic, teratogenic, or mutagenic effects), and".

Subsec. (b)(4). Pub. L. 109-58, § 1505(2), added par. (4).

Subsec. (c)(4)(C). Pub. L. 109-58, § 1541(a), designated existing provisions as cl. (i) and added cls. (ii) to (iv) and (v) relating to waiver authority.

Subsec. (c)(4)(C)(v). Pub. L. 109-58, § 1541(b), added cl. (v) relating to approval of fuels.

Subsec. (d)(1). Pub. L. 109-58, § 1501(b)(1), substituted "(n), or (o)" for "or (n)" in two places in first sentence and "(m), or (o)" for "or (m)" in second sentence.

Subsec. (d)(2). Pub. L. 109-58, § 1501(b)(2), substituted "(n), and (o)" for "and (n)" in two places in first sentence.

Subsec. (h)(5), (6). Pub. L. 109-58, § 1501(c), added par. (5) and redesignated former par. (5) as (6).

Subsec. (k)(1). Pub. L. 109-58, § 1504(b), designated existing provisions as subpar. (A), inserted heading, substituted "Not later than November 15, 1991," for "Within 1 year after November 15, 1990," and added subpar. (B).

Subsec. (k)(2)(A). Pub. L. 109-58, § 1504(a)(1)(A)(i), struck out "(including the oxygen content requirement contained in subparagraph (B))" after "requirements of this paragraph".

Subsec. (k)(2)(B) to (D). Pub. L. 109-58, § 1504(a)(1)(A)(ii), (iii), redesignated subpars. (C) and (D) as (B) and (C), respectively, and struck out heading and text of former subpar. (B). Text read as follows: "The oxygen content of the gasoline shall equal or exceed 2.0 percent by weight (subject to a testing tolerance established by the Administrator) except as otherwise required by this chapter. The Administrator may waive, in whole or in part, the application of this subparagraph for any ozone nonattainment area upon a determination by the Administrator that compliance with such requirement would prevent or interfere with the attainment by the area of a national primary ambient air quality standard."

Subsec. (k)(3)(A)(v). Pub. L. 109-58, § 1504(a)(1)(B), struck out heading and text of cl. (v). Text read as follows: "The oxygen content of the reformulated gasoline shall equal or exceed 2.0 percent by weight (subject to a testing tolerance established by the Administrator) except as otherwise required by this chapter."

Subsec. (k)(6). Pub. L. 109-58, § 1507, redesignated subpars. (A) and (B) as cls. (i) and (ii), respectively, of subpar. (A), inserted subpar. and cl. headings, in cl. (ii) substituted "clause (i)" for "subparagraph (A)" and "this subparagraph" for "this paragraph", and added subpar. (B).

Subsec. (k)(7)(A). Pub. L. 109-58, § 1504(a)(1)(C)(i), redesignated cls. (ii) and (iii) as (i) and (ii), respectively, and struck out former cl. (i) which read as follows: "has an oxygen content (by weight) that exceeds the minimum oxygen content specified in paragraph (2);"

Subsec. (k)(7)(C)(ii), (iii). Pub. L. 109-58, § 1504(a)(1)(C)(ii), redesignated cl. (iii) as (ii) and struck out former cl. (ii) which read as follows: "An average gasoline oxygen content (by weight) for the nonattainment area (taking into account all gasoline sold for use in conventional gasoline-fueled vehicles in the nonattainment area) lower than the average gasoline oxygen content (by weight) that would occur in the absence of using any such credits."

Subsec. (o). Pub. L. 109-58, § 1501(a)(2), added subsec. (o). Former subsec. (o) redesignated (r) relating to fuel and fuel additive importers and importation.

Subsec. (q). Pub. L. 109-58, § 1506, which directed amendment of this section by adding subsec. (q) after subsec. (p), was executed by making the addition after subsec. (o) to reflect the probable intent of Congress.

Subsec. (r). Pub. L. 109-58, § 1512, added subsec. (r) relating to conversion assistance for cellulosic biomass, waste-derived ethanol, approved renewable fuels.

Pub. L. 109-58, § 1501(a)(1), redesignated subsec. (o) as (r) relating to fuel and fuel additive importers and importation.

Subsec. (s). Pub. L. 109-58, §1513, added subsec. (s).  
 1990—Subsec. (a). Pub. L. 101-549, §212, inserted “(including any fuel or fuel additive used exclusively in nonroad engines or nonroad vehicles)” after “fuel or fuel additive”.

Subsecs. (b)(2)(B), (c)(1). Pub. L. 101-549, §212(b), (c), inserted reference to nonroad engine or nonroad vehicle.

Subsec. (c)(4)(A). Pub. L. 101-549, §213(a), substituted “any characteristic or component of a” for “use of a”, inserted “of the characteristic or component of a fuel or fuel additive” after “control or prohibition” in cl. (i), and inserted “characteristic or component of a” after “such” in cl. (ii).

Subsec. (c)(4)(C). Pub. L. 101-549, §213(b), inserted last two sentences, authorizing Administrator to make a finding that State control or prohibition is necessary to achieve the standard.

Subsec. (d). Pub. L. 101-549, §228(d), amended subsec. (d) generally. Prior to amendment, subsec. (d) read as follows: “Any person who violates subsection (a) or (f) or the regulations prescribed under subsection (c) or who fails to furnish any information required by the Administrator under subsection (b) shall forfeit and pay to the United States a civil penalty of \$10,000 for each and every day of the continuance of such violation, which shall accrue to the United States and be recovered in a civil suit in the name of the United States, brought in the district where such person has his principal office or in any district in which he does business. The Administrator may, upon application therefor, remit or mitigate any forfeiture provided for in this subsection and he shall have authority to determine the facts upon all such applications.”

Subsec. (f)(1). Pub. L. 101-549, §214(a), designated existing provisions as subpar. (A) and added subpar. (B).

Subsec. (f)(3). Pub. L. 101-549, §214(b), substituted reference to paragraph (1)(A) for reference to paragraph (1).

Subsec. (g). Pub. L. 101-549, §215, amended subsec. (g) generally, substituting present provisions for provisions which defined “gasoline”, “refinery”, and “small refinery” and which limited Administrator’s authority to require small refineries to reduce average lead content per gallon of gasoline.

Subsec. (h). Pub. L. 101-549, §216, added subsec. (h).

Subsec. (i). Pub. L. 101-549, §217, added subsec. (i).

Subsec. (j). Pub. L. 101-549, §218(a), added subsec. (j).

Subsecs. (k) to (m). Pub. L. 101-549, §219, added subsecs. (k) to (m).

Subsec. (n). Pub. L. 101-549, §220, added subsec. (n).

Subsec. (o). Pub. L. 101-549, §221, added subsec. (o).

1977—Subsec. (c)(1)(A). Pub. L. 95-95, §401(e), substituted “if in the judgment of the Administrator any emission product of such fuel or fuel additive causes, or contributes, to air pollution which may reasonably be anticipated to endanger” for “if any emission products of such fuel or fuel additive will endanger”.

Subsec. (d). Pub. L. 95-95, §222(b), inserted “or (f)” after “Any person who violates subsection (a)”.

Subsecs. (e), (f). Pub. L. 95-95, §222(a), added subsecs. (e) and (f).

Subsec. (f)(2). Pub. L. 95-190, §14(a)(73), inserted provision relating to waiver under par. (4) of this subsec., and struck out “first” before “introduce”.

Subsec. (f)(4). Pub. L. 95-190, §14(a)(74), inserted provision relating to applicability of limitation specified under par. (2) of this subsection.

Subsec. (g). Pub. L. 95-95, §223, added subsec. (g).

1971—Subsec. (c)(3)(A). Pub. L. 92-157, §302(d), substituted “purpose of obtaining” for “purpose of”.

Subsec. (d). Pub. L. 92-157, §302(e), substituted “subsection (b)” for “subsection (c)” where appearing the second time.

1970—Subsec. (a). Pub. L. 91-604, §9(a), substituted “Administrator” for “Secretary” as the registering authority, inserted references to fuel additives, and substituted the selling, offering for sale, and introduction into commerce of fuel or fuel additives, for the delivery for introduction into interstate commerce or delivery

to another person who can reasonably be expected to deliver fuel into interstate commerce.

Subsec. (b). Pub. L. 91-604, §9(a), designated existing provisions as pars. (1) and (3), added par. (2), and substituted “Administrator” for “Secretary” wherever appearing.

Subsec. (c). Pub. L. 91-604, §9(a), substituted provisions covering the control or prohibition of offending fuels and fuel additives, for provisions covering trade secrets and substituted “Administrator” for “Secretary” wherever appearing.

Subsec. (d). Pub. L. 91-604, §9(a), inserted references to failure to obey regulations prescribed under subsec. (c) and failure to furnish information required by the Administrator under subsec. (c), increased the daily civil penalty from \$1,000 to \$10,000 and substituted “Administrator” for “Secretary”.

Subsec. (e). Pub. L. 91-604, §9(a), struck out subsec. (e) which directed the various United States Attorneys to prosecute for the recovery of forfeitures.

### Statutory Notes and Related Subsidiaries

#### EFFECTIVE DATE OF 2007 AMENDMENT

Pub. L. 110-140, title II, §210(c), Dec. 19, 2007, 121 Stat. 1532, provided that: “The amendments made by this title to section 211(o) of the Clean Air Act [42 U.S.C. 7545(o)] shall take effect January 1, 2009, except that the Administrator [of the Environmental Protection Agency] shall promulgate regulations to carry out such amendments not later than 1 year after the enactment of this Act [Dec. 19, 2007].”

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.

#### EFFECTIVE DATE OF 2005 AMENDMENT

Pub. L. 109-58, title XV, §1504(a)(2), Aug. 8, 2005, 119 Stat. 1077, provided that: “The amendments made by paragraph (1) [amending this section] apply—

“(A) in the case of a State that has received a waiver under section 209(b) of the Clean Air Act (42 U.S.C. 7543(b)), beginning on the date of enactment of this Act [Aug. 8, 2005]; and

“(B) in the case of any other State, beginning 270 days after the date of enactment of this Act [Aug. 8, 2005].”

#### 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.

#### SAVINGS

Pub. L. 109-58, title XV, §1504(d), Aug. 8, 2005, 119 Stat. 1079, provided that:

“(1) IN GENERAL.—Nothing in this section [amending this section and enacting provisions set out as notes under this section] or any amendment made by this section affects or prejudices any legal claim or action with respect to regulations promulgated by the Administrator [of the Environmental Protection Agency] before the date of enactment of this Act [Aug. 8, 2005] regarding—

“(A) emissions of toxic air pollutants from motor vehicles; or

“(B) the adjustment of standards applicable to a specific refinery or importer made under those regulations.

“(2) ADJUSTMENT OF STANDARDS.—

“(A) APPLICABILITY.—The Administrator may apply any adjustments to the standards applicable to a refinery or importer under subparagraph (B)(iii)(I) of section 211(k)(1) of the Clean Air Act [42 U.S.C. 7545(k)(1)(B)(iii)(I)] (as added by subsection (b)(2)), except that—

“(i) the Administrator shall revise the adjustments to be based only on calendar years 1999 and 2000;



“(ii) any such adjustment shall not be made at a level below the average percentage of reductions of emissions of toxic air pollutants for reformulated gasoline supplied to PADD I during calendar years 1999 and 2000; and

“(iii) in the case of an adjustment based on toxic air pollutant emissions from reformulated gasoline significantly below the national annual average emissions of toxic air pollutants from all reformulated gasoline—

“(I) the Administrator may revise the adjustment to take account of the scope of the prohibition on methyl tertiary butyl ether imposed by a State; and

“(II) any such adjustment shall require the refiner or importer, to the maximum extent practicable, to maintain the reduction achieved during calendar years 1999 and 2000 in the average annual aggregate emissions of toxic air pollutants from reformulated gasoline produced or distributed by the refiner or importer.”

#### ENVIRONMENTAL AND RESOURCE CONSERVATION IMPACTS

Pub. L. 110-140, title II, §204, Dec. 19, 2007, 121 Stat. 1529, provided that:

“(a) IN GENERAL.—Not later than 3 years after the enactment of this section [Dec. 19, 2007] and every 3 years thereafter, the Administrator of the Environmental Protection Agency, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall assess and report to Congress on the impacts to date and likely future impacts of the requirements of section 211(o) of the Clean Air Act [42 U.S.C. 7545(o)] on the following:

“(1) Environmental issues, including air quality, effects on hypoxia, pesticides, sediment, nutrient and pathogen levels in waters, acreage and function of waters, and soil environmental quality.

“(2) Resource conservation issues, including soil conservation, water availability, and ecosystem health and biodiversity, including impacts on forests, grasslands, and wetlands.

“(3) The growth and use of cultivated invasive or noxious plants and their impacts on the environment and agriculture.

In advance of preparing the report required by this subsection, the Administrator may seek the views of the National Academy of Sciences or another appropriate independent research institute. The report shall include the annual volume of imported renewable fuels and feedstocks for renewable fuels, and the environmental impacts outside the United States of producing such fuels and feedstocks. The report required by this subsection shall include recommendations for actions to address any adverse impacts found.

“(b) EFFECT ON AIR QUALITY AND OTHER ENVIRONMENTAL REQUIREMENTS.—Except as provided in section 211(o)(12) of the Clean Air Act [42 U.S.C. 7545(o)(12)], nothing in the amendments made by this title to section 211(o) of the Clean Air Act shall be construed as superseding, or limiting, any more environmentally protective requirement under the Clean Air Act [42 U.S.C. 7401 et seq.], or under any other provision of State or Federal law or regulation, including any environmental law or regulation.”

#### TRANSITION RULES

Pub. L. 110-140, title II, §210(a), Dec. 19, 2007, 121 Stat. 1532, provided that:

“(1) For calendar year 2008, transportation fuel sold or introduced into commerce in the United States (except in noncontiguous States or territories), that is produced from facilities that commence construction after the date of enactment of this Act [Dec. 19, 2007] shall be treated as renewable fuel within the meaning of section 211(o) of the Clean Air Act [42 U.S.C. 7545(o)] only if it achieves at least a 20 percent reduction in lifecycle greenhouse gas emissions compared to baseline lifecycle greenhouse gas emissions. For calendar years 2008 and 2009, any ethanol plant that is fired with

natural gas, biomass, or any combination thereof is deemed to be in compliance with such 20 percent reduction requirement and with the 20 percent reduction requirement of section 211(o)(1) of the Clean Air Act. The terms used in this subsection shall have the same meaning as provided in the amendment made by this Act to section 211(o) of the Clean Air Act.

“(2) Until January 1, 2009, the Administrator of the Environmental Protection Agency shall implement section 211(o) of the Clean Air Act and the rules promulgated under that section in accordance with the provisions of that section as in effect before the enactment of this Act and in accordance with the rules promulgated before the enactment of this Act, except that for calendar year 2008, the number ‘9.0’ shall be substituted for the number ‘5.4’ in the table in section 211(o)(2)(B) and in the corresponding rules promulgated to carry out those provisions. The Administrator is authorized to take such other actions as may be necessary to carry out this paragraph notwithstanding any other provision of law.”

#### SURVEY OF RENEWABLE FUEL MARKET

Pub. L. 109-58, title XV, §1501(d), Aug. 8, 2005, 119 Stat. 1075, provided that:

“(1) SURVEY AND REPORT.—Not later than December 1, 2006, and annually thereafter, the Administrator of the Environmental Protection Agency (in consultation with the Secretary [of Energy] acting through the Administrator of the Energy Information Administration) shall—

“(A) conduct, with respect to each conventional gasoline use area and each reformulated gasoline use area in each State, a survey to determine the market shares of—

“(i) conventional gasoline containing ethanol;

“(ii) reformulated gasoline containing ethanol;

“(iii) conventional gasoline containing renewable fuel; and

“(iv) reformulated gasoline containing renewable fuel; and

“(B) submit to Congress, and make publicly available, a report on the results of the survey under subparagraph (A).

“(2) RECORDKEEPING AND REPORTING REQUIREMENTS.—The Administrator of the Environmental Protection Agency (hereinafter in this subsection referred to as the ‘Administrator’) may require any refiner, blender, or importer to keep such records and make such reports as are necessary to ensure that the survey conducted under paragraph (1) is accurate. The Administrator, to avoid duplicative requirements, shall rely, to the extent practicable, on existing reporting and recordkeeping requirements and other information available to the Administrator including gasoline distribution patterns that include multistate use areas.

“(3) APPLICABLE LAW.—Activities carried out under this subsection shall be conducted in a manner designed to protect confidentiality of individual responses.”

#### FINDINGS

Pub. L. 109-58, title XV, §1502, Aug. 8, 2005, 119 Stat. 1076, provided that: “Congress finds that—

“(1) since 1979, methyl tertiary butyl ether (hereinafter in this section referred to as ‘MTBE’) has been used nationwide at low levels in gasoline to replace lead as an octane booster or anti-knocking agent;

“(2) Public Law 101-549 (commonly known as the ‘Clean Air Act Amendments of 1990’) (42 U.S.C. 7401 et seq.) [see Tables for classification] established a fuel oxygenate standard under which reformulated gasoline must contain at least 2 percent oxygen by weight; and

“(3) the fuel industry responded to the fuel oxygenate standard established by Public Law 101-549 by making substantial investments in—

“(A) MTBE production capacity; and

“(B) systems to deliver MTBE-containing gasoline to the marketplace.”

## CLAIMS FILED AFTER AUGUST 8, 2005

Pub. L. 109-58, title XV, §1503, Aug. 8, 2005, 119 Stat. 1076, provided that: “Claims and legal actions filed after the date of enactment of this Act [Aug. 8, 2005] related to allegations involving actual or threatened contamination of methyl tertiary butyl ether (MTBE) may be removed to the appropriate United States district court.”

## FINDINGS AND SENSE OF CONGRESS ON ETHANOL USAGE

Pub. L. 100-203, title I, §1508, Dec. 22, 1987, 101 Stat. 1330-29, provided that:

“(a) FINDINGS.—Congress finds that—

“(1) the United States is dependent for a large and growing share of its energy needs on the Middle East at a time when world petroleum reserves are declining;

“(2) the burning of gasoline causes pollution;

“(3) ethanol can be blended with gasoline to produce a cleaner source of fuel;

“(4) ethanol can be produced from grain, a renewable resource that is in considerable surplus in the United States;

“(5) the conversion of grain into ethanol would reduce farm program costs and grain surpluses; and

“(6) increasing the quantity of motor fuels that contain at least 10 percent ethanol from current levels to 50 percent by 1992 would create thousands of new jobs in ethanol production facilities.

“(b) SENSE OF CONGRESS.—It is the sense of Congress that the Administrator of the Environmental Protection Agency should use authority provided under the Clean Air Act (42 U.S.C. 7401 et seq.) to require greater use of ethanol as motor fuel.”

## AGRICULTURAL MACHINERY: STUDY OF UNLEADED FUEL

Pub. L. 99-198, title XVII, §1765, Dec. 23, 1985, 99 Stat. 1653, directed Administrator of EPA and Secretary of Agriculture jointly to conduct a study of use of fuel containing lead additives, and alternative lubricating additives, in gasoline engines that are used in agricultural machinery, and designed to combust fuel containing such additives, study to analyze potential for mechanical problems (including but not limited to valve recession) that may be associated with use of other fuels in such engines, and not later than Jan. 1, 1987, Administrator and Secretary to publish results of the study, with Administrator to publish in Federal Register notice of publication of such study and a summary thereof; directed Administrator, after notice and opportunity for hearing, but not later than 6 months after publication of the study, to make findings and recommendations on need for lead additives in gasoline to be used on a farm for farming purposes, including a determination of whether a modification of regulations limiting lead content of gasoline would be appropriate in the case of gasoline used on a farm for farming purposes, and submit to President and Congress a report containing the study, a summary of comments received during public hearing (including comments of Secretary), and findings and recommendations of Administrator made in accordance with clause (1), such report to be transmitted named congressional committees; directed Administrator between Jan. 1, 1986, and Dec. 31, 1987, to monitor actual lead content of leaded gasoline sold in the United States, with Administrator to determine average lead content of such gasoline for each 3-month period between Jan. 1, 1986, and Dec. 31, 1987, and if actual lead content falls below an average of 0.2 of a gram of lead per gallon in any such 3-month period, to report to Congress, and publish a notice thereof in Federal Register; provided that until Jan. 1, 1988, no regulation of Administrator issued under this section 211 could require an average lead content per gallon that is

less than 0.1 of a gram per gallon; and authorized an appropriation.

## 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.

## § 7546. Renewable fuel

## (a) Definitions

In this section:

## (1) Municipal solid waste

The term “municipal solid waste” has the meaning given the term “solid waste” in section 6903 of this title.

## (2) RFG State

The term “RFG State” means a State in which is located one or more covered areas (as defined in section 7545(k)(10)(D) of this title).

## (3) Secretary

The term “Secretary” means the Secretary of Energy.

## (b) Cellulosic biomass ethanol and municipal solid waste loan guarantee program

## (1) In general

Funds may be provided for the cost (as defined in the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.)) of loan guarantees issued under title XIV of the Energy Policy Act<sup>1</sup> to carry out commercial demonstration projects for cellulosic<sup>2</sup> biomass and sucrose-derived ethanol.

## (2) Demonstration projects

## (A) In general

The Secretary shall issue loan guarantees under this section to carry out not more than 4 projects to commercially demonstrate the feasibility and viability of producing cellulosic biomass ethanol or sucrose-derived ethanol, including at least 1 project that uses cereal straw as a feedstock and 1 project that uses municipal solid waste as a feedstock.

## (B) Design capacity

Each project shall have a design capacity to produce at least 30,000,000 gallons of cellulosic biomass ethanol each year.

## (3) Applicant assurances

An applicant for a loan guarantee under this section shall provide assurances, satisfactory to the Secretary, that—

(A) the project design has been validated through the operation of a continuous proc-

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

<sup>2</sup> So in original.