118TH CONGRESS
1ST SESSION

S. _____

To promote low-carbon, high-octane fuels, to protect public health, and to improve vehicle efficiency and performance, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. GRASSLEY (for himself, Ms. KLOBUCHAR, Ms. ERNST, and Ms. DUCKWORTH) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To promote low-carbon, high-octane fuels, to protect public health, and to improve vehicle efficiency and performance, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Next Generation Fuels Act of 2023''.

SEC. 2. FINDINGS.

Congress finds that—

(1) continued increases in new automobile efficiency are needed to improve consumer welfare and reduce carbon emissions;

(2) the widespread availability of low-carbon, high-octane fuel will allow continued cost-effective improvements in automobile efficiency by enabling increased engine compression ratios;

(3) high-octane automobiles and low-carbon fuels are readily available to consumers at little incremental cost;

(4) ethanol is a cost-effective and low-carbon octane enhancer;

(5) the widespread adoption of climate-smart practices and precision technologies by United States corn producers over the past decade have further reduced the carbon intensity of conventional ethanol;

(6) on average, ethanol has been estimated to have lifecycle greenhouse gas emissions that are 46 percent lower than average gasoline, with some corn ethanol achieving a 61-percent reduction compared to gasoline; and

(7) ethanol has one of the highest blending octane values available in the marketplace.

SEC. 3. HIGH-OCTANE VEHICLES.

Title II of the Clean Air Act (42 U.S.C. 7521 et seq.) is amended by adding at the end the following:

"PART D—HIGH-OCTANE VEHICLES

"SEC. 261. DEFINITIONS; APPLICABILITY.

''(a) DEFINITIONS.—In this part:

''(1) AUTOMOBILE.—The term 'automobile' has the meaning given to the term in section 32901(a)(3) of title 49, United States Code.

''(2) MANUFACTURER.—The term 'manufacturer' has the meaning given the term in section 216.

''(3) RESEARCH OCTANE NUMBER.—The term 'research octane number' has the meaning given the term in section 201 of the Petroleum Marketing Practices Act (15 U.S.C. 2821).

''(b) APPLICABILITY.—This part applies with respect to any motor vehicle that is introduced into commerce that—

''(1) is an automobile;

''(2) uses gasoline for propulsion or any other operation of the motor vehicle, including the engine thereof; and

''(3) is a model year 2028 or later motor vehicle.

"SEC. 262. HIGH-OCTANE TEST FUELS.

"(a) E20 CERTIFICATION FUEL.—Except as provided in subsections (b) and (c), manufacturers producing motor vehicles described in section 261(b) shall use a test fuel consisting of gasoline and 19.4 to 20 volume percent ethanol with a minimum 95 research octane number in—

"(1) emissions testing and certification under section 206(a); and

"(2) fuel economy testing and calculation procedures under section 32904(c) of title 49, United States Code.

"(b) E25 TO E30 CERTIFICATION FUEL.—As an alternative to the test fuel described in subsection (a), manufacturers producing motor vehicles described in section 261(b) may use a test fuel consisting of gasoline and 24.3 to 30 volume percent ethanol with a minimum 98 research octane number in—

"(1) emissions testing and certification under section 206(a); and

"(2) fuel economy testing and calculation procedures under section 32904(c) of title 49, United States Code.

"(c) MODEL YEAR 2033 AND LATER MODEL YEARS.—Notwithstanding subsections (a) and (b), beginning in model year 2033, manufacturers of motor vehicles

described in section 261(b) shall use the gasoline test fuel described in subsection (b) in—

''(1) emissions testing and certification under section 206(a); and

''(2) fuel economy testing and calculation procedures under section 32904(c) of title 49, United States Code.

''(d) FORMULATION.—The test fuels described in subsections (a) and (b) shall be produced by adding neat or denatured fuel ethanol to the gasoline criteria emissions test fuel required for use in model year 2022 and later motor vehicles.

''(e) TEST FUEL EQUATIONS.—For purposes of—

''(1) testing and calculation procedures under section 206(a), the emissions of motor vehicles using the test fuels described in subsection (a) or (b) shall be based exclusively on actual measured emissions; and

''(2) fuel economy testing and calculation procedures under section 32904(c) of title 49, United States Code, the fuel economy of motor vehicles using the test fuels described in subsection (a) or (b) shall be determined on an energy-equivalent basis, which shall be equal to the product obtained by multiplying—

''(A) the measured fuel economy; and

''(B) the quotient obtained by dividing—

''(i) 114,086 British thermal units per gallon; by

''(ii) the volumetric energy density of the test fuel.

''SEC. 263. HIGH-OCTANE VEHICLES.

''(a) WARRANTY REQUIREMENTS.—Manufacturers of motor vehicles described in section 261(b) shall warrant to the ultimate purchaser and each subsequent purchaser that each such motor vehicle is designed—

''(1) for model years 2028 through 2032—

''(A) to operate with gasoline containing 10 and up to and including 25 percent ethanol by volume; and

''(B) to meet the design requirements under subsection (b)(1); and

''(2) for model year 2033 and later model years—

''(A) to operate with gasoline containing 10 and up to and including 30 percent ethanol by volume; and

''(B) to meet the design requirements under subsections (b)(1) and (c)(1).

''(b) DESIGN REQUIREMENTS BEFORE MODEL YEAR 2033.—

''(1) MANUFACTURERS.—The manufacturer of a motor vehicle described in section 261(b) shall design each such motor vehicle—

''(A) to use gasoline with a 95 research octane number or higher; and

''(B) to incorporate such devices or elements of design (including physical or other barriers, devices, or technological systems) as are determined by the Administrator to be—

''(i) necessary to prevent the introduction of gasoline with a research octane number that is lower than 95 into that motor vehicle; and

''(ii) technically and economically feasible.

''(2) FUEL RETAILERS.—Any fuel retailer selling gasoline for use in a motor vehicle described in section 261(b) shall incorporate into the dispensing equipment of the fuel retailer such devices or elements of design (including physical or other barriers, devices, or technological systems) as are determined by the Administrator to be—

"(A) necessary to ensure compatibility with the motor vehicle design requirements under paragraph (1); and

"(B) technically and economically feasible.

"(c) DESIGN REQUIREMENTS FOR MODEL YEAR 2033.—

"(1) MANUFACTURERS.—Subject to paragraph (3)(B), beginning in model year 2033, the manufacturer of a motor vehicle described in section 261(b) shall design each such motor vehicle—

"(A) to use gasoline with a 98 research octane number or higher; and

"(B) to incorporate such devices or elements of design (including physical or other barriers, devices, or technological systems) as are determined by the Administrator to be—

"(i) necessary to prevent the introduction of gasoline with a research octane number that is lower than 98 into that motor vehicle; and

"(ii) technically and economically feasible.

"(2) FUEL RETAILER.—Subject to paragraph (3)(B), any fuel retailer selling gasoline for use in a motor vehicle described in section 261(b) that is

model year 2033 or later shall incorporate into the dispensing equipment of the fuel retailer such devices or elements of design (including physical or other barriers, devices, or technological systems) as are determined by the Administrator to be—

"(A) necessary to ensure compatibility with the motor vehicle design requirements under paragraph (1); and

"(B) technically and economically feasible.

"(3) EPA DETERMINATION OF NATIONWIDE AVAILABILITY.—

"(A) DETERMINATION REQUIRED.—Not later than December 31, 2031, and not later than each December 31 thereafter until the Administrator determines that 98 research octane number gasoline can be made readily available nationwide, the Administrator shall—

"(i) determine whether 98 research octane number gasoline can be made readily available nationwide; and

"(ii) publish that determination in the Federal Register.

"(B) EFFECT.—The requirements of this subsection shall not take effect until the date on which the Administrator—

"(i) determines under subparagraph (A)(i) that 98 research octane number gasoline can be made readily available nationwide; and

"(ii) publishes that determination under subparagraph (A)(ii).

"(C) FAILURE TO MAKE DETERMINATION.—If the Administrator fails to make a determination under subparagraph (A) by the applicable date under that subparagraph, the Administrator shall be deemed to have determined that 98 research octane number gasoline can be made readily available nationwide for purposes of subparagraph (B).

"(d) VIOLATIONS.—

"(1) MANUFACTURERS.—

"(A) IN GENERAL.—Any manufacturer who violates subsection (b)(1) or (c)(1) shall be subject to a civil penalty of not more than $5,000 for each offense.

"(B) SEPARATE OFFENSES.—Any violation described in subparagraph (A) shall constitute a separate offense with respect to each motor vehicle.

"(2) FUEL RETAILER.—

''(A) IN GENERAL.—Any fuel retailer who violates subsection (b)(2) or (c)(2) shall be subject to a civil penalty of not more than $2,500 for each offense.

''(B) SEPARATE OFFENSE.—Any violation described in subparagraph (A) with respect to dispensing equipment shall constitute a separate offense with respect to each unit of dispensing equipment in violation of the applicable subsection described in that subparagraph.

''SEC. 264. MISFUELING.

''(a) PROHIBITIONS AGAINST TAMPERING AND DEFEAT DEVICES FOR MOTOR VEHICLES.—In lieu of applying section 203(a)(3) with respect to the requirements of this part, the following shall apply:

''(1) No person shall—

''(A) remove or render inoperative any device or element of design installed on or in a motor vehicle pursuant to subsection (b)(1) or (c)(1) of section 263 prior to its sale and delivery to the ultimate purchaser; or

''(B) knowingly remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.

''(2) No person shall manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle, where—

''(A) a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle pursuant to subsection (b)(1) or (c)(1) of section 263; and

''(B) the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.

''(b) PROHIBITIONS AGAINST TAMPERING AND DEFEAT DEVICES FOR DISPENSING EQUIPMENT.—No person shall—

''(1) remove or render inoperative any device or element of design installed pursuant to subsection (b)(2) or (c)(2) of section 263; or

''(2) sell, or offer to sell, or incorporate into, any part or component intended for use with, or as part of, any dispensing equipment, where—

''(A) a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design incor-

porated into dispensing equipment pursuant to subsection (b)(2) or (c)(2) of section 263; and

''(B) the person knows or should know that such part or component is being offered for sale or incorporated for such use or put to such use.

''(c) VIOLATIONS.—

''(1) IN GENERAL.—Any person who violates this section shall be subject to a civil penalty of not more than $2,500.

''(2) SEPARATE OFFENSES.—Any violation described in paragraph (1) shall constitute a separate offense with respect to—

''(A) each motor vehicle or unit of dispensing equipment, for purposes of subsections (a)(1) and (b)(1); and

''(B) each part or component, for purposes of subsections (a)(2) and (b)(2).

''SEC. 265. OCTANE STANDARD.

''(a) OCTANE STANDARD.—

''(1) PROHIBITION.—

''(A) 95 RESEARCH OCTANE NUMBER MARKETING.—No person shall sell motor vehicle gasoline marketed as 95 research octane num-

ber unless that gasoline has a research octane number of 95 or greater.

''(B) 98 RESEARCH OCTANE NUMBER MARKETING.—No person shall sell motor vehicle gasoline marketed as 98 research octane number unless that gasoline has a research octane number of 98 or greater.

''(C) DEEMED COMPLIANCE.—A person, including any distributor, blender, marketer, reseller, carrier, retailer, or wholesaler, shall be deemed to be in full compliance with this paragraph if the person can demonstrate, through evidence deemed acceptable by the Administrator, that the person had reason to believe in good faith that the motor vehicle gasoline complied with subparagraph (A) or (B).

''(2) CONTROLS.—

''(A) 95 RESEARCH OCTANE NUMBER AVAILABILITY.—Effective January 1, 2027, any person that owns, leases, operates, controls, or supervises—

''(i) a retail outlet at which 200,000 or more gallons of gasoline were sold during calendar year 2024 or any subsequent calendar year, shall offer for sale motor ve-

hicle gasoline of not less than 95 research octane number at that retail outlet; or

''(ii) 6 or more retail outlets offering motor vehicle gasoline for sale, shall offer for sale motor vehicle gasoline of not less than 95 research octane number at not fewer than 60 percent of those retail outlets.

''(B) 98 RESEARCH OCTANE NUMBER AVAILABILITY.—Effective January 1, 2032, any person that owns, leases, operates, controls, or supervises—

''(i) a retail outlet at which 200,000 or more gallons of gasoline were sold during calendar year 2030 or any subsequent calendar year, shall offer for sale motor vehicle gasoline of not less than 98 research octane number at that retail outlet; or

''(ii) 6 or more retail outlets offering motor vehicle fuel for sale, shall offer for sale motor vehicle gasoline of not less than 98 research octane number at no fewer than 60 percent of those retail outlets.

''(b) VIOLATIONS.—Any person that violates—

''(1) subsection (a)(1), (a)(2)(A)(i), or (a)(2)(B)(i) shall be subject to a civil penalty of not more than $25,000 for each day on which the violation continues; and

''(2) subsection (a)(2)(A)(ii) or (a)(2)(B)(ii) shall be subject to a civil penalty of not more than $2,500 per day for each retail outlet owned, leased, operated, controlled, or supervised by that person.

''SEC. 266. REGULATIONS.

''The Administrator shall—

''(1) not later than 1 year after the date of enactment of the Next Generation Fuels Act of 2023, propose regulations to carry out this part; and

''(2) not later than 2 years after that date of enactment, finalize regulations to carry out this part.

''SEC. 267. LIABILITY LIMITATION AND PREEMPTION.

''(a) LIMITATION OF LIABILITY.—A manufacturer of a motor vehicle, or a gasoline retailer, that is in compliance with the requirements of this part and the requirements of sections 203(e) and 206 of the Petroleum Marketing Practices Act, shall not be liable under any provision of this Act or any other Federal, State, or local law, including common law, for damages—

''(1) to or caused by a motor vehicle described in section 261(b); and

''(2) that would not have occurred but for the introduction of gasoline with a research octane number required by this part.

''(b) PREEMPTION.—No State or any political subdivision of a State may adopt, continue in effect, or enforce, any provision of law or regulation—

''(1) requiring motor vehicles to operate using gasoline with a certain octane content, or the corresponding design of equipment for dispensing such gasoline into such motor vehicles, unless the provision of that law or regulation is the same as the corresponding provision under this part; or

''(2) limiting the concentration of ethanol in motor vehicle gasoline.

''SEC. 268. CIVIL ACTIONS; ADMINISTRATIVE ASSESSMENT OF CERTAIN PENALTIES.

''The provisions of subsections (b) and (c) of section 205 shall apply with respect to a violation of section 263 or 264 to the same extent and in the same manner as such provisions apply with respect to a violation of section 203(a)(3).''.

SEC. 4. OCTANE DISCLOSURE.

(a) HIGH-EFFICIENCY FUELS.—Title II of the Petroleum Marketing Practices Act (15 U.S.C. 2821 et seq.) is amended by adding at the end the following:

"SEC. 206. HIGH-EFFICIENCY FUEL AND VEHICLE MARKETING REQUIREMENTS.

''(a) RULE.—The Federal Trade Commission shall, by rule, and in consultation with persons to be regulated under this section, consumer advocates, and other stakeholders, as appropriate—

''(1) prescribe or revise requirements under this title relating to the certification, display, and representation of the automotive fuel rating of an automotive fuel as necessary to carry out—

''(A) the requirement under subsection (b); and

''(B) any determination made under subsection (c);

''(2) make the determination required under subsection (c); and

''(3) prescribe requirements under subsection (d).

''(b) REQUIREMENT.—The Federal Trade Commission shall require that, for purposes of this title, beginning on the date that is 180 days after the date on which the Federal Trade Commission issues a final rule under sub-

section (a), the automotive fuel rating of an automotive fuel with a research octane number of 95 or higher be determined only by the research octane number of such automotive fuel.

"(c) LABELING.—

"(1) IN GENERAL.—The Federal Trade Commission shall prescribe requirements—

"(A) as the Federal Trade Commission determines necessary with respect to a display at the point of sale to ultimate purchasers of automotive fuel and a display on a motor vehicle to—

"(i) inform such ultimate purchaser of such automotive fuel and any purchaser or user of such motor vehicle that—

"(I) a model year 2028 or later motor vehicle is only warrantied to use automotive fuel with a research octane number of 95 or higher; and

"(II) a model year 2033 or later motor vehicle is only warrantied to use automotive fuel with a research octane number of 98 or higher;

"(ii) provide a warning to such ultimate purchaser of such automotive fuel

and any such purchaser or user of such motor vehicle, that the use of automotive fuel with a research octane number that—

''(I) is lower than 95 in a model year 2028 or later motor vehicle will result in reduced fuel economy, increased exhaust emissions, and possibly engine damage; and

''(II) is lower than 98 in a model year 2033 or later motor vehicle will result in reduced fuel economy, increased exhaust emissions, and possibly engine damage; and

''(iii) inform such ultimate purchaser of such automotive fuel and any purchaser or user of such motor vehicle that—

''(I) a model year 2028 or later motor vehicle is warrantied to use gasoline containing up to and including 25 percent ethanol by volume; and

''(II) a model year 2033 or later motor vehicle is warrantied to use gasoline containing up to and including 30 percent ethanol by volume; and

''(B) that are applicable to—

"(i) a manufacturer of a new motor vehicle (or an entity making a representation in connection with the sale of such motor vehicle) with respect to a display on such motor vehicle; and

"(ii) an automotive fuel retailer, with respect to a display at the point of sale to an ultimate purchaser of automotive fuel.

"(2) CONSIDERATIONS.—In prescribing requirements under paragraph (1), the Federal Trade Commission shall ensure that such requirements are designed to be—

"(A) understandable to—

"(i) the ultimate purchaser of automotive fuel; and

"(ii) any purchaser or user of a model year 2028 or later motor vehicle; and

"(B) cost effective for automotive fuel retailers.

"(d) DEADLINES.—The Federal Trade Commission shall—

"(1) not later than January 1, 2026, issue a proposed rule under subsection (a); and

"(2) not later than July 1, 2027, issue a final rule under subsection (a).".

(b) ENFORCEMENT.—Section 203(e) of the Petroleum Marketing Practices Act (15 U.S.C. 2823(e)) is amended—

(1) by striking ''or a rule prescribed'' and inserting ''a rule prescribed''; and

(2) by striking ''of such section.'' and inserting ''of section 202, or a rule prescribed under section 206.''.

(c) TABLE OF CONTENTS AMENDMENT.—The table of contents for the Petroleum Marketing Practices Act (15 U.S.C. 2801 et seq.) is amended by inserting after the item relating to section 205 the following:

''Sec. 206. High-efficiency fuel and vehicle marketing requirements.''.

SEC. 5. ADVERTISEMENT OF PRICE OF HIGH-OCTANE AUTOMOTIVE FUEL.

(a) IN GENERAL.—It shall be unlawful for any person to sell or offer for sale, at retail, automotive fuel with a research octane number (as such terms are defined in section 201 of the Petroleum Marketing Practices Act (15 U.S.C. 2821)) of 95 or greater unless such person displays, in a manner specified in the rules promulgated under subsection (b), the total price per gallon of such fuel on any sign on which such person displays the price of the most-sold grade of automotive fuel of such person.

(b) RULEMAKING.—

(1) IN GENERAL.—Not later than 24 months after the date of enactment of this Act, the Federal Trade Commission shall promulgate, in accordance with section 553 of title 5, United States Code, any rules necessary for the implementation and enforcement of this section.

(2) CONTENTS.—Such rules—

(A) shall define ''retail'' and ''most-sold'' for the purposes of this section;

(B) shall specify the manner in which the price of automotive fuel with a research octane number of 95 or greater must be displayed in order to comply with subsection (a); and

(C) shall be consistent with the requirements for declaring unfair acts or practices in section 5(n) of the Federal Trade Commission Act (15 U.S.C. 45(n)).

(c) ENFORCEMENT.—A violation of subsection (a) shall be treated as a violation of a rule defining an unfair or deceptive act or practice prescribed under section 18(a)(1)(B) of the Federal Trade Commission Act (15 U.S.C. 57a(a)(1)(B)). The Federal Trade Commission shall enforce this section in the same manner, by the same means, and with the same jurisdiction, powers, and duties as though all applicable terms and provisions of the Fed-

eral Trade Commission Act (15 U.S.C. 41 et seq.) were incorporated into and made part of this section.

SEC. 6. E40 RETAIL INFRASTRUCTURE STANDARD.

Section 9003 of the Solid Waste Disposal Act (42 U.S.C. 6991b) is amended by adding at the end the following:

''(k) E40-COMPATIBLE RETAIL INFRASTRUCTURE SYSTEMS.—

''(1) DEFINITIONS.—In this subsection:

''(A) AUTOMOTIVE FUEL.—The term 'automotive fuel' has the meaning given the term in section 201 of the Petroleum Marketing Practices Act (15 U.S.C. 2821).

''(B) COMPATIBLE.—The term 'compatible' means, to the extent feasible, certified by a nationally recognized testing laboratory recognized by the Occupational Safety and Health Administration in accordance with section 1910.7 of title 29, Code of Federal Regulations (or any successor regulations) to maintain system performance throughout the operational life of the dispenser system.

''(C) DISPENSER SYSTEM.—The term 'dispenser system' has the meaning given the term in section 280.12 of title 40, Code of Federal

Regulations (as in effect on the date of enactment of this subsection).

''(2) PERFORMANCE STANDARDS.—The Administrator shall, not later than January 1, 2026, issue or revise, as necessary, performance standards for underground storage tank systems and dispenser systems that are brought into use on or after January 1, 2026, to require that those systems be compatible with automotive fuel consisting of gasoline and at least 40 percent ethanol by volume.

''(3) COMPATIBILITY.—An owner or operator may demonstrate the compatibility of an underground storage tank system with automotive fuel containing any concentration of ethanol through the use of a secondary containment system that is able—

''(A) to contain regulated substances leaked from the primary containment system until the regulated substances are detected and removed; and

''(B) to prevent the release of regulated substances to the environment at any time during the operational life of the underground storage tank system.''.

SEC. 7. REGISTRATION TESTING, REID VAPOR PRESSURE, AND SUBSTANTIALLY SIMILAR WAIVERS.

(a) REGISTRATION TESTING WAIVER.—Section 211(e) of the Clean Air Act (42 U.S.C. 7545(e)) is amended by adding at the end the following:

''(4) Fuels consisting of gasoline and no more than 30 percent ethanol by volume that meet the requirements of subsection (f)(3) shall be deemed—

''(A) to have satisfied any testing regulations promulgated under this subsection; and

''(B) to be immediately eligible for registration under subsection (b) without further testing.''.

(b) REID VAPOR PRESSURE WAIVER.—

(1) EXISTING WAIVERS.—Section 211(f)(4) of the Clean Air Act (42 U.S.C. 7545(f)(4)) is amended—

(A) by striking ''(4) The Administrator, upon'' and inserting the following:

''(4) WAIVERS.—

''(A) IN GENERAL.—The Administrator, on'';

(B) in subparagraph (A) (as so designated)—

(i) in the first sentence—

(I) by striking ''of this subsection'' each place it appears; and

(II) by striking ''if he determines'' and inserting ''if the Administrator determines''; and

(ii) in the second sentence—

(I) by striking ''such an application'' and inserting ''an application described in subparagraph (A)''; and

(II) by striking ''The Administrator'' and inserting the following:

''(B) FINAL ACTION.—The Administrator''; and

(C) by adding at the end the following:

''(C) REID VAPOR PRESSURE.—A fuel or fuel additive may be introduced into commerce if—

''(i)(I) the Administrator determines that the fuel or fuel additive is substantially similar to a fuel or fuel additive utilized in the certification of any model year vehicle pursuant to paragraph (1)(A); or

''(II) the fuel or fuel additive has been granted a waiver under subparagraph (A) and meets all of the conditions of that waiver other than any limitation of the waiver with respect

to the Reid Vapor Pressure of the fuel or fuel additive; and

''(ii) the fuel or fuel additive meets all other applicable Reid Vapor Pressure requirements under subsection (h).''.

(2) REID VAPOR PRESSURE LIMITATION.—Section 211(h) of the Clean Air Act (42 U.S.C. 7545(h)) is amended—

(A) by striking ''vapor pressure'' each place it appears and inserting ''Vapor Pressure'';

(B) in paragraph (4), in the matter preceding subparagraph (A), by inserting ''or more'' after ''10 percent''; and

(C) in paragraph (5)(A)—

(i) by striking ''Upon notification, accompanied by'' and inserting ''On receipt of a notification that is submitted before January 1, 2022, or after the date of enactment of the Next Generation Fuels Act of 2023, and is accompanied by appropriate''; and

(ii) by inserting ''or more'' after ''10 percent''.

(c) SUBSTANTIALLY SIMILAR WAIVER.—Section 211(f) of the Clean Air Act (42 U.S.C. 7545(f)) is amended—

(1) by striking the subsection designation and all that follows through ''Effective upon'' in subparagraph (B) and inserting the following:

''(f)(1) Effective upon'';

(2) by striking paragraph (3) and inserting the following:

''(3) Fuels consisting of gasoline and ethanol may be introduced into commerce under this subsection for use in motor vehicles described in section 261(b), provided that the finished fuel—

''(A) does not exceed the warranted ethanol levels described in section 263(a);

''(B) meets the physical and chemical criteria specified by ASTM International Standard D4814–20 for gasoline with 15 percent ethanol; and

''(C) consists solely of carbon, hydrogen, oxygen, and sulfur, excepting any impurities present at trace levels that are gaseous upon combustion.''; and

(3) in subparagraph (A) of paragraph (4) (as designated by subsection (b)(1)(A)), in the first sentence, by striking ''or (3)''.

SEC. 8. CLEAN OCTANE STANDARD.

Section 211 of the Clean Air Act (42 U.S.C. 7545) is amended—

(1) in subsection (d)—

(A) in paragraph (1), by striking ''or (o)'' each place it appears and inserting ''(o), or (w)''; and

(B) in paragraph (2), by striking ''and (o)'' each place it appears and inserting ''(o), and (w)''; and

(2) by adding at the end the following:

''(w) CLEAN OCTANE STANDARD.—

''(1) DEFINITIONS.—In this subsection:

''(A) BASELINE LIFECYCLE GREENHOUSE GAS EMISSIONS.—The term 'baseline lifecycle greenhouse gas emissions' means the average lifecycle greenhouse gas emissions, as determined by the Administrator, in consultation with the Director of the Argonne National Laboratory, for unblended gasoline sold or distributed as transportation fuel in 2023.

''(B) LIFECYCLE GREENHOUSE GAS EMISSIONS.—The term 'lifecycle greenhouse gas emissions' means the aggregate quantity of greenhouse gas emissions as determined by the Secretary of Energy using the most recent

version of the Argonne National Laboratory Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) model.

''(C) RESEARCH OCTANE NUMBER.—The term 'research octane number' has the meaning given the term in section 201 of the Petroleum Marketing Practices Act (15 U.S.C. 2821).

''(2) AROMATICS.—

''(A) ANNUAL AVERAGE LIMITATION.—Effective beginning on January 1, 2027, it shall be unlawful for refiners or importers to sell motor vehicle gasoline that contains, on an average annual basis, an aromatic hydrocarbon concentration in excess of 17.5 percent by volume.

''(B) 2027 CAP.—Effective beginning on January 1, 2027, it shall be unlawful for refiners or importers to sell motor vehicle gasoline that contains an aromatic hydrocarbon concentration in excess of 30 percent by volume.

''(C) 2032 CAP.—Effective beginning on January 1, 2032, it shall be unlawful for refiners or importers to sell motor vehicle gasoline that contains an aromatic hydrocarbon content in excess of 25 percent by volume.

"(D) OXYGENATE ADJUSTMENT FOR GASOLINE BLENDSTOCK.—

"(i) IN GENERAL.—For purposes of compliance with this paragraph, the aromatics volume of motor vehicle gasoline produced as blendstock for oxygenate blending may be adjusted based on the specified type and amount of oxygenate required to be added downstream.

"(ii) REQUIREMENTS.—Any adjustment under clause (i) shall be made through—

"(I) the preparation of a hand blend containing oxygenate; or

"(II) any other method deemed acceptable to the Administrator.

"(E) REGULATIONS.—

"(i) IN GENERAL.—The Administrator shall promulgate regulations to implement this paragraph.

"(ii) CONTENTS.—Regulations promulgated under clause (i) shall allow for the generation of tradeable credits to meet the requirement of subparagraph (A), but

any credits shall expire after not more than 5 years.

''(iii) INITIAL REGULATIONS.—Not later than January 1, 2027, the Administrator shall promulgate final regulations under clause (i).

''(3) LOW-CARBON OCTANE.—

''(A) PROHIBITION.—Effective beginning on January 1, 2027, no refiner or importer shall introduce into commerce motor vehicle gasoline with a research octane number of 95 or higher except through the use of a fuel additive that has average lifecycle greenhouse gas emissions that (as determined by the Secretary of Energy using the most recent version of the Argonne National Laboratory Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) model) are at least 40 percent less than baseline lifecycle greenhouse gas emissions.

''(B) REGULATIONS.—

''(i) IN GENERAL.—The Administrator shall promulgate regulations to implement this paragraph.

"(ii) CONTENTS.—Regulations promulgated under clause (i) shall—

"(I) determine the baseline lifecycle greenhouse gas emissions for purposes of this paragraph;

"(II) determine the average lifecycle greenhouse gas emissions of sources of octane value for purposes of this paragraph; and

"(III) ensure that the requirements of this paragraph are met.

"(iii) INITIAL REGULATIONS.—Not later than January 1, 2026, the Administrator shall promulgate final regulations under clause (i).".

SEC. 9. NEW FUEL EFFECTS STUDY.

(a) FUEL EFFECTS STUDY.—

(1) STUDY REQUIRED.—Subject to subsection (b), the Administrator of the Environmental Protection Agency (referred to in this section as the "Administrator") shall carry out a study of the emissions effects of ethanol-blended fuels in light-duty vehicles and light-duty trucks, for the purpose of updating the Motor Vehicle Emission Simulator modeling system.

(2) REQUIREMENTS.—In designing and conducting the study under paragraph (1), the Administrator shall—

(A) select test fuels that—

(i) reflect a range of ethanol concentrations between 0 and at least 25 percent by volume; and

(ii) are representative of fuels that are widely available on the date of enactment of this Act or reasonably could be available regionally or nationally, taking into account fuel refinery operations and economics, including the cost of reformate;

(B) select test vehicles that are representative of vehicles of recent model years as of the date of enactment of this Act that include relevant technologies that are, or reasonably may come to be, in widespread use;

(C) measure emission products of combustion including, at a minimum—

(i) particulate matter of 2.5 micrometers in diameter or less;

(ii) ultrafine particulate matter of 0.1 micrometers in diameter or less;

(iii) nitrogen oxides;

(iv) total hydrocarbons;

(v) nonmethane organic gas;

(vi) carbon monoxide;

(vii) benzene;

(viii) toluene;

(ix) ethylbenzene;

(x) xylene;

(xi) 1,3-butadiene;

(xii) ethanol; and

(xiii) polycyclic aromatic hydrocarbons, including at a minimum benzo(a)pyrene;

(D) measure the tendency of measured emissions to form secondary organic aerosols and any other relevant secondary air pollution; and

(E) consult with the Secretary of Energy, the Secretary of Agriculture, and the Secretary of Transportation (or their delegates).

(b) CERTIFICATION BY SECRETARY OF ENERGY.—The Administrator shall—

(1) provide the proposed design of the study under subsection (a) to the Secretary of Energy for review; and

(2) not commence the study under subsection (a) until the Secretary of Energy certifies in writing that the design of the study complies with the requirements of subsection (a).

SEC. 10. DUAL-FUELED AUTOMOBILE DEFAULT UTILIZATION FACTOR.

(a) IN GENERAL.—Section 32905 of title 49, United States Code, is amended by striking subsection (b) and inserting the following:

''(b) DUAL-FUELED AUTOMOBILES.—

''(1) FUEL ECONOMY.—Except as provided in subsection (d) or section 32904(a)(2)—

''(A) for any model of dual-fueled automobile manufactured by a manufacturer in model years 1993 through 2020, the Administrator of the Environmental Protection Agency shall measure the fuel economy for that model by dividing 1.0 by the sum of—

''(i) 0.5 divided by the fuel economy measured under section 32904(c) when operating the model on gasoline or diesel fuel; and

''(ii) 0.5 divided by the fuel economy—

"(I) measured under subsection (a) when operating the model on alternative fuel; or

"(II) measured based on the fuel content of B20 when operating the model on B20, which is deemed to contain 0.15 gallon of fuel; and

"(B) subject to paragraph (3), for any model of dual-fueled automobile manufactured by a manufacturer in model year 2025 or later, the Administrator of the Environmental Protection Agency shall measure the fuel economy for that model by dividing 1.0 by the sum of—

"(i) 0.79 divided by the fuel economy measured under section 32904(c) when operating the model on gasoline or diesel fuel; and

"(ii) 0.21 divided by the fuel economy measured under subsection (a) when operating the model on alternative fuel, which is deemed to contain 0.15 gallon of fuel.

"(2) GREENHOUSE GAS EMISSIONS.—For any model of dual-fueled automobile manufactured by a manufacturer in model year 2025 or later, the Administrator of the Environmental Protection Agency

shall measure the greenhouse gas emissions for that model, which shall be the sum obtained by adding—

"(A) the product obtained by multiplying—

"(i) the measured greenhouse gas emissions on the alternative fuel;

"(ii) the fuel content of the alternative fuel, which is deemed to be 0.15; and

"(iii) 0.21; and

"(B) the product obtained by multiplying 0.79 and the measured greenhouse gas emissions on gasoline or diesel fuel, as applicable.

"(3) HIGHER UTILIZATION FACTOR FOR NEW MODELS.—A manufacturer may demonstrate that a higher utilization factor applies to any model of dual-fueled automobile manufactured by the manufacturer in model year 2025 or later.".

(b) TESTING PROCEDURES.—Section 206 of the Clean Air Act (42 U.S.C. 7525) is amended by adding at the end the following:

"(i) REQUIREMENT TO UPDATE TEST PROCEDURES.—Not later than July 1, 2024, the Administrator shall amend the test procedures promulgated under this section to be in accordance with section 32905(b)(1)(B) of title 49, United States Code.".

SEC. 11. TRANSFERS OF CREDITS FOR EXCEEDING AVERAGE FUEL ECONOMY STANDARDS.

Section 32903(g) of title 49, United States Code, is amended by striking paragraph (3) and inserting the following:

''(3) MAXIMUM INCREASE.—The maximum increase in any compliance category attributable to transferred credits is—

''(A) for model year 2023, 4.0 miles per gallon; and

''(B) for model year 2024 and subsequent model years, 6.0 miles per gallon.''.