Fuels Regulatory Streamlining - Discussion Draft Regulations, July 2018

Assessment and Standards Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency
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Subpart A—General Provisions

§1090.1 Applicability and relationship to other parts.

(a) This part specifies requirements intended to ensure a suitable fuel quality for the gasoline and diesel fuel used by a wide range of engines, vehicles, and equipment throughout the United States. Additional requirements apply for residual fuel used in certain marine applications, as specified in paragraph (b) of this section.

(1) The regulations include standards for fuel parameters that directly or indirectly affect emissions, air quality, and public health. There are also standards and blending requirements for fuel additives and regulated blendstocks that are part of the final fuel dispensed to provide power for engines, vehicles, and equipment.

(2) This part also includes requirements for parties involved in the production and distribution of fuels, such as collecting and testing samples of fuels for regulated parameters, reporting information to EPA to demonstrate compliance with fuel quality requirements, and other compliance measures to implement the standards.

(b) International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 Annex VI (“MARPOL Annex VI”) is an international treaty that sets maximum fuel sulfur levels for fuel used in vessels, including separate standards for vessels navigating in a designated Emission Control Area (ECA). These usage standards and related recordkeeping requirements are specified in 40 CFR part 1043. This part sets corresponding sulfur standards that apply to any person who produces or handles IMO marine fuel.

(c) This part uses the term “fuels” to refer to the fuels regulated under this part, including gasoline, diesel fuel, and International Maritime Organization (“IMO”) marine fuel. Each of these is defined in §1090.80. Special provisions apply in the following instances for products that are not originally subject to standards:

(1) Heating oil, jet fuel, and kerosene are not diesel fuel unless they meet the criteria of paragraph (1) or (2) of the definition of “diesel fuel” in §1090.80, such as, but not limited to, being used as a motor fuel. Similarly, heating oil, jet fuel, and kerosene become diesel fuel if they are intended or used for blending with diesel fuel and the blended product meets the definition of diesel fuel.

(2) Imported gasoline and diesel fuel must meet the standards set forth in this part. However, imported gasoline and diesel fuel that do not meet the standards of this part may instead be treated as blendstock as specified in §§1090.1720 and 1090.1730, respectively.

(3) Fuels not qualifying as gasoline, diesel fuel, or IMO marine fuel may need to meet certain reporting, recordkeeping, labeling, or other requirements of this part even though they are not subject to standards.
(d) 40 CFR part 79 specifies the requirements for the registration of fuel and fuel additives pursuant to 42 U.S.C. § 7545(a), (b), and (e). Parties that have requirements of this part may also need to comply with the requirements for the registration of fuel and fuel additives under 40 CFR part 79.

(e) 40 CFR part 80, subpart M, specifies the program requirements for the Renewable Fuels Standard (RFS). Parties that have requirements of this part may also need to comply with the requirements for the RFS program under 40 CFR part 80.

§1090.5 Implementation dates.

(a) The provisions of this part apply beginning January 1, 2020, unless otherwise specified.

(b) The following provisions of 40 CFR part 80 continue to apply after January 1, 2020:

(1) Positive credit balances and deficits from 2019 carry forward for demonstrating compliance with requirements of this part. Any restrictions that apply under 40 CFR part 80, such as a maximum credit life of five years, continue to apply under this part.

(2) Unless otherwise specified, any approvals granted under 40 CFR part 80 continue to apply under this part. For example, if EPA approved the use of in-line blending measurements or alternate labeling under 40 CFR part 80, that approval continues to be valid under this part, subject to any conditions specified for the approval. Note that a more restrictive transition applies for measurement procedures for gasoline detergent as specified in §1090.XXX.

(3) Unless otherwise specified, regulated parties must use the provisions of 40 CFR part 80 in 2020 to demonstrate compliance with regulatory requirements for the 2019 calendar year. This applies for calculating credits for the 2019 compliance period, and for any sampling, testing, reporting, and auditing related to fuels, fuel additives, and regulated blendstocks produced or imported in 2019.

(4) Any testing to establish the precision and accuracy of alternative test procedures under 40 CFR part 80 continues to be valid under this part.

(5) Requirements to keep records and retain fuel samples related to actions taken before January 1, 2020, continue to apply after that date, as specified in 40 CFR part 80.

§1090.10 Contacting EPA.

[NOTE TO READER: EPA is considering how best to receive electronic submissions for all information collected under this part. This section will convey EPA’s proposed approach after we decide how best to implement electronic submissions.]

§1090.15 Confidential information.

(a) The submitter must clearly identify what information is considered confidential by marking, circling, bracketing, stamping, or similar form of indication. EPA will establish formats
and procedures to permit identification of materials claimed as confidential that are submitted electronically via registration and reporting systems.

(b) EPA will store confidential information as specified in 40 CFR part 2, and will disclose it only as specified in 40 CFR part 2. This applies both to any information sent to EPA and to any information EPA collects from inspections, audits, or other site visits.

(c) If information is submitted to EPA without claiming it is confidential, EPA may make it available to the public without further notice, as specified in 40 CFR 2.204.

(d) The information submitted under §1090.8XX as part of registration may not be claimed as confidential and EPA may publish such information.

(e) EPA may publish information claimed as confidential in an aggregated format, provided that all the following conditions are met:

1. The aggregated information to be published or disclosed comes from at least three separate facilities that have no common owner or operator.

2. No single facility contributes more than x percent to any aggregated value, where x [is a value established by EPA].

3. No two facilities contribute more than y percent to any aggregated value, where y [is a value established by EPA].

4. No underlying information claimed as confidential may be back-calculated using an aggregated value in combination with any other publicly available data.

§1090.45 Batch numbering.

Every batch of fuel, fuel additive, or regulated blendstock produced or imported must be assigned a number (the “batch number”), consisting of the EPA-assigned company registration number of the party that produced or imported the fuel, fuel additive, or regulated blendstock, the EPA facility registration number where the fuel, fuel additive, or regulated blendstock was produced, the last two digits of the year in which the batch was produced, and a unique number for the batch, beginning with the number one (1) for the first batch produced or imported each calendar year and each subsequent batch during the calendar year being assigned the next sequential number (e.g., 4321-54321-95-000001, 4321-54321-95-000002, etc.). EPA assigns company and facility registration numbers as specified in subpart I of this part.

§1090.50 Rounding.

(a) Complying with this part requires rounding final values, such as sulfur test results and volume of gasoline. Intermediate values may be rounded when transferring data only if at least six significant digits are maintained (which requires more than six decimal places for values less than 0.1), or all significant digits are maintained if fewer than six digits are available.
(b) Unless otherwise specified, round values to the number of significant digits necessary to match the number of decimal places of the applicable standard or specification as specified in 40 CFR 1065.20(e)(1) through (6). This convention is consistent with ASTM E29 and NIST SP 811.

(c) When calculating a specified percentage of a given value, the specified percentage is understood to have infinite precision. For example, if an allowable limit is specified as a fuel volume representing 1 percent of total volume produced, calculate the allowable volume by multiplying total volume by exactly 0.01.

(d) Measurement devices that incorporate internal rounding may be used, consistent with the following provisions:

(1) Devices may use any rounding convention if they report six or more significant digits.

(2) Devices that report fewer than six digits may be used, consistent with the accuracy, repeatability, and noise specifications of the procedures referenced in subpart M this part.

(e) Identify batch volume in gallons to the nearest whole gallon, or rounded to the nearest 10 gallons for batch volumes between 1,000 and 10,000 gallons, and to the nearest 100 gallons for batch volumes above 10,000 gallons. Use a consistent rounding convention for all batch volumes in a given calendar year, and for all reporting under this part.

§1090.80 Definitions.

500 ppm LM diesel fuel means diesel fuel subject to the alternative sulfur standards of §1090.520 for fuel produced by transmix processors that may only be used in locomotive and marine engines that do not require the use of ULSD.

Additization means the addition of detergent to gasoline to create detergent-additized gasoline.

Automated detergent blending facility means any facility (including, but not limited to, a truck or individual storage tank) at which detergent is blended with gasoline by means of an injector system calibrated to automatically deliver a prescribed amount of detergent.

Average standard means a fuel standard that involves demonstrating compliance over a compliance period.

Batch means a quantity of fuel, fuel additive, or regulated blendstock that is homogenous with regard to a specified set of parameters.

Blender pump means any fuel dispenser where PCG is blended with a fuel that contains ethanol (including DFE) to produce gasoline that has an ethanol content greater than that of the PCG.

Blender-grade butane means butane that meets the requirements of §1090.XXX and is combined with PCG by a butane blender to produce gasoline.
Blender-grade pentane means pentane that meets the requirements of §1090.XXX and is combined with PCG by a pentane blender to produce gasoline.

Blendstock means any liquid compound or mixture of compounds (not including fuel additives) that is used or intended for use as a component of a fuel.

Business day means Monday through Friday, except the legal public holidays specified in 5 U.S.C § 6103 or any other day declared to be a holiday by federal statute or executive order.

Butane blender means a refiner that produces gasoline by blending blender-grade butane into PCG, and that uses the provisions of §1090.XXX to meet the applicable sampling and testing requirements.

Butane blending facility means a refinery where butane is blended into PCG.

California detergent means detergent that is used only in California gasoline.

California diesel means diesel fuel designated by a refiner or importer as for use in California and is used in California.

California gasoline means gasoline designated by a refiner or importer as for use in California and is used in California.

Carrier means any distributor who transports or stores or causes the transportation or storage of fuel, fuel additive, or regulated blendstock without taking title to or otherwise having any ownership of the fuel, fuel additive, or regulated blendstock, and without altering either the quality or quantity of the fuel, fuel additive, or regulated blendstock.

Category 1 (C1) marine vessel means a vessel that is propelled by an engine(s) meeting the definition of “Category 1” in 40 CFR part 1042.901.

Category 2 (C2) marine vessel means a vessel that is propelled by an engine(s) meeting the definition of “Category 2” in 40 CFR part 1042.901.

Category 3 (C3) marine vessel means a vessel that is propelled by an engine(s) meeting the definition of “Category 3” in 40 CFR part 1042.901.

Certified ethanol denaturant means ethanol denaturant designated as meeting the requirements of §1090.XXX.

Compliance period means the calendar year (January 1 through December 31), unless otherwise specified.

Conventional gasoline or CG means gasoline that is not certified to meet the requirements for RFG in §1090.345.

Days means calendar days, including weekends and holidays.

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Denatured fuel ethanol or DFE means an alcohol of the chemical formula C₂H₅OH that contains a denaturant to make it unfit for human consumption as required and defined in 27 CFR parts 19 through 21, and that is produced or imported for blending into gasoline.

Deposit control effectiveness and efficiency means the ability of a detergent additive package to prevent the formation of deposits in gasoline engines, and the degree to which a detergent additive package at a given concentration in gasoline is effective in limiting the formation of deposits. The addition of inactive ingredients to a detergent additive package, to the extent that this addition dilutes the concentration of the detergent-active components, reduces the deposit control efficiency of the package.

Detergent means any chemical compound or combination of chemical compounds that may be added to gasoline to control deposit formation. Detergents may be contained as part of a detergent additive package.

Detergent additive package means an additive package containing detergents and may also contain carrier oils and non-detergent-active components such as corrosion inhibitors, antioxidants, metal deactivators, and handling solvents.

Detergent blender means any person who owns, leases, operates, controls, or supervises the blending operation of a detergent blending facility, or imports detergent-additized gasoline.

Detergent blending facility means any facility (including, but not limited to, a truck or individual storage tank) at which detergent is blended with gasoline.

Detergent carrier oil means an oil that may be added to the package to mediate or otherwise enhance the detergent chemical’s ability to control deposits.

Detergent manufacturer means any person who owns, leases, operates, controls, or supervises a facility that manufactures detergent. Pursuant to 40 CFR 79.2(f), a manufacturer of detergent is also a fuel additive manufacturer.

Detergent up-treated BOB means BOB that contains detergent at a concentration that is sufficient to ensure that the concentration of the detergent in the finished gasoline after the oxygenate is added is at least as high as the lowest additive concentration established by the fuel additive manufacturer in compliance with the gasoline deposit control standards of §1090.340.

Detergent-active components means the components of a detergent additive package that act to prevent the formation of deposits, including, but not necessarily limited to, the actual detergent chemical and any carrier oil (if present) that acts to enhance the detergent’s ability to control deposits.

Detergent-additized gasoline or detergent gasoline means any gasoline that contains a detergent that meets the requirements of §1090.340.

Diesel fuel means any of the following:

(1) Any fuel commonly or commercially known as diesel fuel.
(2) Any fuel that is intended or used to power an engine that is designed to operate using diesel fuel, except for residual or gaseous fuel.

(3) Any fuel other than heating oil, jet fuel, and kerosene is diesel fuel if it conforms to the specifications of ASTM D975 (incorporated by reference in §1090.95).

**Diesel treated as blendstock** or **DTAB** means imported diesel fuel that is treated as blendstock by a refinery and used to make diesel fuel pursuant to §1090.XXX.

**Distillate fuel** means diesel fuel and other petroleum fuels that can be used in engines that are designed for diesel fuel. For example, diesel fuel, jet fuel, heating oil, kerosene, No. 4 fuel, DMX, DMA, DMB, and DMC are distillate fuels. Natural gas, LPG, and gasoline are not distillate fuels. Residual fuel is not distillate fuel, but blends containing residual fuel may be distillate fuels. Distillate fuel grades are specified in ASTM D975 and ISO 8217.

**Distributor** means any person who transports, stores, or causes the transportation or storage of fuel, fuel additive, or regulated blendstock at any point between any refinery, importer facility, or production facility and any retail outlet or wholesale purchaser-consumer’s facility.

**Downstream location** means any point in the fuel distribution system through which the fuel passes after it leaves the refinery gate (e.g., diesel fuel at facilities of distributors, pipelines, terminals, carriers, retailers, kerosene blenders, and wholesale purchaser-consumers).

**E0** means a gasoline that contains no ethanol. This is also known as neat gasoline.

**E10** means gasoline that contains at least 9 and no more than 10 volume percent ethanol.

**E15** means gasoline that contains greater than 10 and no more than 15 volume percent ethanol.

**ECA marine fuel** means diesel, distillate, or residual fuel used, intended for use, or made available for use in C3 marine vessels while the vessels are operating within an Emission Control Area (ECA), or an ECA associated area.

**Ethanol denaturant** means PCG, regulated gasoline blendstocks, or natural gasoline liquids that are added to neat (un-denatured) ethanol to make it unfit for human consumption as required and defined in 27 CFR parts 19 through 21.

**Flex-fuel engine** has the same meaning as **flexible-fuel engine** in 40 CFR 1054.801.

**Flex-fuel vehicle** has the same meaning as **flexible-fuel vehicle** in 40 CFR 86.1803-01.

**Fuel** means only the fuels regulated under this part, including gasoline, diesel fuel, and IMO marine fuel.

**Fuel additive** means a substance that is registered under 40 CFR part 79 and is one of the following:
(1) A liquid that is added to fuel that amounts to less than 1.0 volume percent of the finished fuel. Examples include detergents for preventing engine deposits, dyes, odorants, octane enhancers for gasoline, and cetane enhancers for diesel fuel.

(2) A nonliquid that is added to fuel that amounts to less than 1.0 mass percent of the finished fuel.

(3) An oxygenate. Examples include DFE and isobutanol.

**Fuel additive blender** means any person who blends additive into fuel in the United States, or any person who owns, leases, operates, controls, or supervises such an operation in the United States.

**Fuel additive manufacturer** means any person who produces additive in the United States, or imports additive into the United States.

**Fuel dispenser** means the apparatus used to dispense fuel into motor vehicles or nonroad vehicles, engines, or equipment, or into a portable fuel container.

**Gasoline** means any of the following:

(1) Any fuel commonly or commercially known as gasoline.

(2) Any fuel intended or used to power a gasoline-fueled vehicle or engine, except for gaseous fuel.

(3) Any fuel that conforms to the specifications of ASTM D4814 (incorporated by reference in §1090.95), excluding alkylates and reformates used as blendstocks.

**Gasoline before oxygenate blending or BOB** means gasoline that may be blended with oxygenate before being dispensed into a vehicle or engine’s fuel tank.

**Gasoline treated as blendstock or GTAB** means imported gasoline that is excluded from the importer’s compliance calculations, but is treated as blendstock in a related refinery that includes the GTAB in a refiner’s compliance calculations for the refinery pursuant to §1090.XXX.

**Global marine fuel** means all diesel fuel, other distillate fuel, or residual fuel used, intended for use, or made available for use in steamships or C3 marine vessels while the vessels are operating in international waters or in any waters outside the boundaries of an ECA.

**Hand blending detergent facility** means any facility (including, but not limited to, a truck or individual storage tank) at which detergent is blended into gasoline by the manual addition of detergent, or at which detergent is blended with these substances by any means that is not automated.
Heating oil means a combustible product that is commonly or commercially known as heating oil and is intended for use in furnaces, boilers, or similar applications. Kerosene and jet fuel are not heating oil.

IMO marine fuel means fuel that is ECA marine fuel or global marine fuel.

Importer means any person who imports fuel, fuel additive, or regulated blendstock into the United States. This applies regardless of any past or future fuel modification with a blendstock, oxygenate, or additive.

Intake valve deposits or IVD means the deposits formed on the intake valve(s) during operation of a gasoline engine, as evaluated by weight.

Jet fuel means any distillate fuel used, intended for use, or made available for use in aircraft.

Kerosene means any No.1 distillate fuel commonly or commercially sold as kerosene.

Liquefied petroleum gas or LPG means a liquid hydrocarbon fuel that is stored under pressure and is composed primarily of compounds that are gases at atmospheric conditions (temperature = 25 °C and pressure = 1 atm), excluding natural gas.

Locomotive engine means an engine used in a locomotive as defined in 40 CFR 92.2.

Marine diesel engine means a diesel engine installed on a C1 or C2 marine vessel.

Methanol means any fuel sold for use in motor vehicles and commonly known or commercially sold as methanol or MXX, where XX is the percent methanol (CH$_3$OH) by volume.

Natural gas means a fuel that is primarily composed of methane.

Natural gas liquids or NGL means the hydrocarbons (primarily propane, butane, pentane, hexane, and heptane) that are separated from the gaseous state of natural gas in the form of liquids at a facility such as a natural gas production facility, a gas processing plant, a natural gas pipeline, or a refinery or similar facility. The higher temperature boiling components of NGL are sometimes referred to as “natural gasoline.”

Oxygenate means a liquid compound that consists of one or more oxygenated compounds. Examples include DFE and isobutanol.

Oxygenate blender means any person who adds oxygenate to gasoline in the United States, or any person who owns, leases, operates, controls, or supervises such an operation in the United States.

Oxygenate blending facility means any facility (including a truck) at which oxygenate is added to gasoline, and at which the quality or quantity of gasoline is not altered in any other manner except for the addition of deposit control additives.

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Oxygenate import facility means any facility where oxygenate, including DFE designated as transportation fuel, is imported into the United States.

Oxygenate importer means any person who imports oxygenate from a foreign country into the United States.

Oxygenate producer means any person who produces oxygenate for gasoline in the United States, or any person who owns, leases, operates, controls, or supervises such an operation in the United States.

Oxygenate production facility means any facility where oxygenate is produced, including DFE designated as transportation fuel.

Oxygenated compound means an oxygen-containing, ashless organic compound, such as an alcohol or ether, which may be used as a fuel, as oxygenate for gasoline, or as a blendstock or additive for gasoline, diesel fuel, or any other fuel.

PADD means the Petroleum Administration for Defense Districts. The States within each of the PADDs are listed in §1090.2035.

Pentane blender means a refiner that produces gasoline by blending blender-grade pentane into PCG and that uses the provisions of §1090.135 to meet the applicable sampling and testing requirements.

Pentane blending facility means a refinery where pentane is blended into PCG.

Per-gallon means relating to a standard that specifies a maximum or minimum value for any physical parameter that applies to every unit volume of a specified fuel, fuel additive, or regulated blendstock.

Pipeline interface means the mixture between different fuels that abut each other during shipment by pipeline.

Pipeline operator means any person who operates a refined petroleum product pipeline in the United States, or any person who owns, leases, operates, controls, or supervises such a pipeline in the United States.

Previously certified gasoline or PCG means gasoline that has been included in a batch by a refiner or importer for purposes of complying with the standards of this part.

Product transfer documents or PTDs mean copies of documents represented by the refiner, importer, or oxygenate blender as having been provided to the transferee, and that reflect the transfer of ownership or physical custody of gasoline or blendstock (e.g., invoices, receipts, bills of lading, manifests, pipeline tickets).

Refiner means any person who owns, leases, operates, controls, or supervises a refinery.
Refinery means any facility, including but not limited to, a plant, tanker truck, retail station, or vessel where fuels are produced, including any facility at which blendstocks are combined to produce gasoline or diesel fuel, or at which blendstock is added to gasoline or diesel fuel.

Refinery gate or importer gate means the location at which a fuel leaves the refinery or import facility.

Reformulated gasoline or RFG means summer gasoline that is certified to meet the requirements for reformulated gasoline in §1090.345.

Regulated blendstock means blender-grade butane, blender-grade pentane, TGP, TDP, GTAB, and DTAB.

Renewable diesel fuel means a type of diesel fuel made from renewable (nonpetroleum) feedstocks.

Reseller means any person who purchases fuel identified by the corporate, trade, or brand name of a refiner from such refiner or a distributor and resells or transfers it to retailers or wholesale purchaser-consumers, and whose assets or facilities are not substantially owned, leased, or controlled by such refiner.

Residual fuel means a petroleum fuel that can only be used in diesel engines if it is heated before injection. For example, No. 5 fuels and No. 6 fuels are residual fuels. Note that residual fuels might not need heating for storage or pumping. Residual fuel grades are specified in ASTM D396 and ISO 8217.

Responsible Corporate Officer or RCO means a person who is an officer of the corporation under the laws of incorporation of the State in which the company is incorporated, and who in the corporate structure is the person ultimately responsible for the activity regulated under this part (e.g. refining, importing, blending). An RCO may name a delegate in its registration, consistent with the requirements and procedures of subpart I of this part.

Retail outlet means any establishment at which gasoline, diesel fuel, methanol, natural gas, or LPG is sold or offered for sale for use in motor vehicles or nonroad engines, including locomotive engines or marine engines.

Retailer means any person who owns, leases, operates, controls, or supervises a retail outlet.

RFG covered area means the geographic areas specified in §1090.XXX in which only RFG may be sold or dispensed to ultimate consumers during the summer season.

RFG opt-in area means an area that becomes a covered area under §1090.XXX pursuant to 42 U.S.C. § 7545(k)(6).

Round (rounded, rounding) has the meaning given in §1090.50.

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Statistical quality control or SQC means a planned system of activities whose purpose is to provide a level of quality that meets the needs of compliance with the standards of this part. This subpart prescribes specific SQC requirements for both absolute and method driven fuel parameters for both voluntary and nonvoluntary consensus-based standards bodies.

Summer gasoline means gasoline that is subject to the volatility standards of §1090.315.

Summer season means the period from June 1 to September 15 for retail outlets and wholesale purchaser consumers, and May 1 to September 15 for all other facilities of any calendar year, or a period in any State Implementation Plan (SIP) approved or promulgated under 42 U.S.C. § 7410 or § 7502, whichever is longer.

Tank truck means a truck with a trailer used for transporting fuel, fuel additive, or regulated blendstock.

Transmix means any of the following mixtures of fuels, which no longer meet the specifications for a fuel that can be used or sold without further processing or handling:

1. Pipeline interface.

2. Mixtures produced by unintentionally combining gasoline and distillate fuels in a storage tank.

3. Mixtures produced from normal business operations at terminals or pipelines, such as gasoline or distillate fuel drained from a tank, or drained from piping or hoses used to transfer gasoline or distillate fuel to tanks or trucks, or gasoline or distillate fuel discharged from a safety relief valve.

Transmix blender means any person who owns, leases, operates, controls, or supervises a transmix blending facility.

Transmix blending facility means any facility that produces gasoline by blending transmix into PCG.

Transmix distillate product or TDP means the diesel fuel blendstock that is produced when transmix is separated into blendstocks at a transmix processing facility.

Transmix gasoline product or TGP means the regulated gasoline blendstock that is produced when transmix is separated into blendstocks at a transmix processing facility.

Transmix processing facility means any refinery that produces TGP and/or TDP from transmix by distillation or other refining processes, but does not produce gasoline or diesel fuel by processing crude oil.

Transmix processor means any person who owns, leases, operates, controls, or supervises a transmix processing facility.
Ultra low-sulfur diesel or ULSD means diesel fuel certified to meet the standards specified in §1090.405.

United States means, in a geographic sense, the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, and the U.S. Virgin Islands.

Wholesale purchaser-consumer means any person that is an ultimate consumer of fuels, additives, oxygenates, or blendstocks regulated under this part and which purchases or obtains fuels, additives, oxygenates, or blendstocks regulated under this part from a supplier for use in motor vehicles or nonroad engines, including locomotive engines or marine engines and, in the case of liquid fuels, receives delivery of that product into a storage tank of at least 550-gallon capacity substantially under the control of that person.

Winter gasoline means gasoline that is not subject to volatility standards of §1090.315.

Winter season means any time outside of the summer season.

§1090.95 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. § 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Environmental Protection Agency must publish a document in the Federal Register and the material must be available to the public. All approved material is available for inspection at U.S. EPA, Air and Radiation Docket and Information Center, 1301 Constitution Ave. NW., Room B102, EPA West Building, Washington, DC 20460, (202) 566-1744, and is available from the sources listed in this section. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) The Institute of Internal Auditors, 1035 Greenwood Blvd, Suite 401, Lake Mary, FL 32746, or www.theiia.org or (407) 937-1111.

(1) International Standards for the Professional Practice of Internal Auditing (Standards), Revised October 2016; IBR approved for §1090.1901.

(2) [Reserved]

(c) American Institute of Certified Public Accountants, 220 Leigh Farm Rd, Durham, NC 27707-8110, or www.aicpa.org, or (888) 777-7077.

(1) Codification of Statements on Auditing Standards, Revised 2017; IBR approved for §1090.1901.

(2) [Reserved]
(d) National Institute of Standards and Technology, 100 Bureau Dr., Stop 1070, Gaithersburg, MD 20899-1070, (301) 975-6478, or www.nist.gov.


(2) [Reserved]

(e) ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428-2959, (877) 909-2786, or www.astm.org.


(2) ASTM D86-17, Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure, approved May 1, 2017 (“ASTM D86”); IBR approved for §1090.XXX.


(4) ASTM D975-18, Standard Specification for Diesel Fuel Oils, approved April 1, 2018 (“ASTM D975”); IBR approved for §1090.XXX.

(5) ASTM D976-06 (Reapproved 2016), Standard Test Method for Calculated Cetane Index of Distillate Fuels, approved April 1, 2016 (“ASTM D976”); IBR approved for §1090.XXX.


This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(10) ASTM D3231-18, Standard Test Method for Phosphorus in Gasoline, approved April 1, 2018 (“ASTM D3231”); IBR approved for §1090.XXX.

(11) ASTM D3237-17, Standard Test Method for Lead in Gasoline by Atomic Absorption Spectroscopy, approved June 1, 2017 (“ASTM D3237”); IBR approved for §1090.XXX.


(15) ASTM D4177-16e1 Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved October 1, 2016 (“ASTM D4177”); IBR approved for §1090.XXX.

(16) ASTM D4737-10 (Reapproved 2016), Standard Test Method for Calculated Cetane Index by Four Variable Equation, approved July 1, 2016 (“ASTM D4737”); IBR approved for §1090.1350(c).


(22) ASTM D5599-17, Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection, approved May 1, 2017 (“ASTM D5599”); IBR approved for §1090.XXX.


(24) ASTM D5842-17, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement, approved July 1, 2017 (“ASTM D5842”); IBR approved for §1090.XXX.

(25) ASTM D5854-96 (Reapproved 2015), Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products, approved April 1, 2015 (“ASTM D5854”); IBR approved for §1090.XXX.


(27) ASTM D6299-18, Standard Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance, approved April 1, 2018 (“ASTM D6299”); IBR approved for §1090.XXX.


(30) ASTM D6708-18, Standard Practice for Statistical Assessment and Improvement of Expected Agreement Between Two Test Methods that Purport to Measure the Same Property of a Material, approved April 1, 2018 (“ASTM D6708”); IBR approved for §1090.XXX.


Wavelength Dispersive X-ray Fluorescence Spectrometry, approved July 1, 2015 ("ASTM D7039"); IBR approved for §1090.XXX.

(34) ASTM D7717-11 (Reapproved 2017), Standard Practice for Preparing Volumetric Blends of Denatured Fuel Ethanol and Gasoline Blendstocks for Laboratory Analysis, approved May 1, 2017 ("ASTM D7717"); IBR approved for §1090.XXX.
Subpart B—General Requirements and Provisions for Regulated Parties

§1090.100 General provisions.

This subpart is designed to provide general guidance regarding certain requirements and provisions for parties regulated under this part. Regulated parties are required to comply with all applicable requirements of this part, regardless of whether they are identified in this subpart. The following requirements apply to all parties in the fuel, fuel additive, or regulated blendstock distribution chain:

(a) Recordkeeping. All parties regulated under this part must comply with the recordkeeping requirements of subpart L of this part.

(b) Compliance and enforcement. All parties regulated under this part are subject to the compliance and enforcement provisions of subpart S of this part.

(c) Hardships and exemptions. Some parties regulated under this part may be eligible, or eligible to petition, for a hardship or exemption as specified in subpart G of this part.

§1090.105 Refiners and importers.

This section outlines requirements applicable to refiners and importers of fuels under this part. Gasoline refiners and importers must comply with the requirements of paragraph (a) of this section and diesel fuel and IMO marine fuel refiners and importers must comply with the requirements of paragraph (b) of this section.

(a) Gasoline refiners and importers. Except as specified otherwise in this subpart, all gasoline refiners and importers must comply with the following requirements:

(1) Producing compliant gasoline. Gasoline refiners and importers must produce gasoline according to the requirements of subpart C of this part.

(2) Registration. Gasoline refiners and importers must register with EPA according to the requirements of subpart I of this part.

(3) PTDs. On each occasion when a gasoline refiner or importer transfers custody or title to any gasoline, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(4) Reporting. Gasoline refiners and importers must submit reports to EPA pursuant to subpart J of this part.

(5) Sampling, testing, and sample retention. Gasoline refiners and importers must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

(6) Surveys. Gasoline refiners and importers may participate in the applicable fuel surveys of subpart N of this part.
(7) **Annual attest engagement.** Gasoline refiners and importers must submit annual attest engagement reports to EPA according to the requirements of subpart T of this part.

(b) **Diesel fuel and IMO marine fuel refiners and importers.** Refiners and importers of diesel fuel and IMO marine fuel must comply with the following requirements, as applicable:

(1) **Producing compliant diesel fuel and IMO marine fuel.** Refiners and importers of diesel fuel and IMO marine fuel must produce diesel fuel and IMO marine fuel according to the requirements of subpart D of this part.

(2) **Registration.** Diesel fuel refiners and importers must register with EPA according to the requirements of subpart I of this part.

(3) **PTDs.** On each occasion when a diesel fuel refiner or importer transfers custody or title to any diesel fuel, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(4) **Sampling, testing, and retention requirements.** Diesel fuel refiners and importers must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

(5) **Surveys.** Diesel fuel refiners and importers may participate in the applicable fuel surveys of subpart N of this part.

§1090.110 **Importers.**

In addition to the requirements of §§1090.100 and 1090.105 that apply to importers based on the fuel, fuel additive, or regulated blendstock being imported, importers must also comply with the requirements of subpart R of this part.

§1090.115 **Detergent blenders.**

Detergent blenders must comply with the following requirements:

(a) **Gasoline standards.** Detergent blenders must comply with the applicable requirements of subpart C of this part.

(b) **PTDs.** On each occasion when a detergent blender transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

§1090.120 **Oxygenate blenders.**

Oxygenate blenders must comply with the following requirements:

(a) **Gasoline standard.** Oxygenate blenders must comply with the applicable requirements of subpart C of this part.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(b) **Registration.** Oxygenate blenders must register with EPA according to the requirements of subpart I of this part.

(c) **PTDs.** On each occasion when an oxygenate blender transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(d) **Oxygenate blending requirements.** Oxygenate blenders must follow blending instructions as specified for gasoline refiners and importers in §1090.XXX.

§1090.125 *Oxygenate producers and importers.*

This section outlines requirements applicable to oxygenate producers and importers (e.g., DFE producers, producers of isobutanol). DFE producers must comply with all requirements for oxygenate producers and have additional requirements specified in paragraph (f) of this section based on the requirements for ethanol denaturant. Oxygenate producers and importers must comply with the following requirements:

(a) **Gasoline standards.** Oxygenate producers and importers must comply with the applicable requirements of subpart C of this part.

(b) **Registration.** Oxygenate producers and importers must register with EPA according to the requirements of subpart I of this part.

(c) **Reporting.** Oxygenate producers and importers must submit reports to EPA pursuant to subpart J of this part.

(d) **PTDs.** On each occasion when an oxygenate producer or importer transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(e) **Sampling, testing, and retention requirements.** Oxygenate producers and importers must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

(f) **Additional requirements for DFE producers.** In addition to the requirements and provisions specified in paragraphs (a) through (g) of this section, DFE producers must meet all the following requirements:

(1) Use denaturant that complies with the requirements specified in §1090.XXX.

(2) Participate in a survey program conducted by an independent surveyor pursuant to subpart N of this part if the DFE producer produces DFE made available for use in the production of E15.

§1090.130 *Blender-grade butane producers.*

Blender-grade butane producers must comply with the following requirements:

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This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(a) **Gasoline standards.** Blender-grade butane producers must comply with the applicable requirements of subpart C of this part.

(b) **PTDs.** On each occasion when a blender-grade butane producer transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(c) **Sampling, testing, and retention requirements.** Blender-grade butane producers must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

§1090.135 Butane blenders.

Butane blenders that blend blender-grade butane into PCG are gasoline refiners and may comply with the following requirements in lieu of the requirements for gasoline refiners in §1090.105:

(a) **Gasoline standards.** Butane blenders must comply with the applicable requirements of subpart C of this part.

(b) **Registration.** Butane blenders must register with EPA according to the requirements of subpart I of this part.

(c) **Reporting.** Butane blenders must submit reports to EPA pursuant to subpart L of this part.

(d) **Sampling, testing, and retention requirements.** Butane blenders must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

(e) **PTDs.** When blender-grade butane is blended with PCG, PTDs that accompany the gasoline blended with butane must comply with all appropriate requirements of subpart K of this part.

(f) **Survey.** Butane blenders may participate in the applicable fuel surveys of subpart N of this part.

(g) **Annual attest engagement.** Butane blenders must submit annual attest engagement reports to EPA according to the requirements of subpart T of this part.

§1090.140 Blender-grade pentane producers.

Blender-grade pentane producers must comply with the following requirements:

(a) **Gasoline standards.** Blender-grade pentane producers must comply with the applicable requirements of subpart C of this part.

(b) **Registration.** Blender-grade pentane producers must register with EPA according to the requirements of subpart I of this part.
(c) **Reporting.** Blender-grade pentane producers must submit reports to EPA pursuant to subpart J of this part.

(d) **PTDs.** On each occasion when a blender-grade pentane producer transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(e) **Sampling, testing, and retention requirements.** Blender-grade pentane producers must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

§1090.145 **Pentane blenders.**

Pentane blenders that blend blender-grade pentane into PCG are gasoline refiners and may comply with the following requirements in lieu of the requirements for gasoline refiners in §1090.105:

(a) **Gasoline standards.** Pentane blenders must comply with the applicable requirements of subpart C of this part.

(b) **Registration.** Pentane blenders must register with EPA according to the requirements of subpart I of this part.

(c) **Reporting.** Pentane blenders must submit reports to EPA pursuant to subpart L of this part.

(d) **Sampling, testing, and retention requirements.** Pentane blenders must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

(e) **PTDs.** When blender-grade pentane is blended with PCG, PTDs that accompany the gasoline blended with pentane must comply with all appropriate requirements of subpart K of this part.

(f) **Survey.** Pentane blenders may participate in the applicable fuel surveys of subpart N of this part.

(g) **Annual attest engagement.** Pentane blenders must submit annual attest engagement reports to EPA according to the requirements of subpart T of this part.

§1090.150 **Transmix processors.**

Transmix processors may comply with the following requirements in lieu of the requirements for refiners in §1090.105:

(a) **Transmix requirements.** Transmix processors must comply with the transmix requirements of subpart E of this part.

(b) **Registration.** Transmix processors must register with EPA according to the requirements of subpart I of this part.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(c) **PTDs.** On each occasion when a transmix processor transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transforee PTDs according to the requirements of subpart K of this part.

(d) **Sampling, testing, and retention requirements.** Transmix processors must conduct sampling, testing, and sample retention pursuant to subparts E and M of this part.

(e) **Reporting.** Transmix processors must submit reports to EPA pursuant to subpart L of this part.

§1090.155 Transmix blenders.

Transmix blenders may comply with the following requirements in lieu of the requirements for refiners in §1090.105:

(a) **Transmix requirements.** Transmix blenders must comply with the transmix requirements of subpart E of this part.

(b) **PTDs.** On each occasion when a transmix blender transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transforee PTDs according to the requirements of subpart K of this part.

(c) **Sampling, testing, and retention requirements.** Transmix blenders must conduct sampling, testing, and sample retention pursuant to subparts E and M of this part.

(d) **Reporting.** Transmix blenders must submit reports to EPA pursuant to subpart L of this part.

§1090.160 Fuel additive manufacturers.

Gasoline additive manufacturers must comply with the requirements of paragraph (a) of this section, diesel fuel additive manufacturers must comply with the requirements of paragraph (b) of this section, and certified ethanol denaturant producers must comply with the requirements of paragraph (c) of this section.

(a) **Gasoline additive manufacturers.** Gasoline additive manufacturers that produce additives with a maximum allowed treatment rate of less than 1.0 volume percent must meet the following requirements:

(1) **Gasoline standards.** Gasoline additive manufacturers must produce gasoline additives in compliance with the applicable standards of subpart C of this part.

(2) **PTDs.** On each occasion when a gasoline additive manufacturer transfers custody or title to any gasoline additive, the transferor must provide to the transforee PTDs according to the requirements of subpart K of this part.

(3) **Gasoline detergent manufacturers.** Gasoline detergent manufacturers must comply with the following:
(i) Part 79 registration and LAC determination. Gasoline detergent manufacturers must register gasoline detergent(s) under 40 CFR 79.21 at a concentration that is equal or greater to the lowest additive concentration (LAC) reported by the gasoline detergent manufacturer pursuant to 40 CFR 79.21(j). Note that EPA provides a list of detergents that have been certified by the gasoline detergent manufacturer as meeting the deposit control requirement on the EPA website (Search for “List of Certified Detergent Additives”).

(ii) Gasoline standards. Report the LAC that is compliant with the gasoline deposit control requirements of §1090.340 and provide specific composition information as part of the gasoline detergent manufacturer’s registration of the detergent pursuant to the requirements of 40 CFR 79.21(j).

(iii) PTDs. On each occasion when a gasoline detergent manufacturer transfers custody or title to any gasoline detergent, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(iv) Sampling, testing, and retention requirements. In order to certify new gasoline detergents, gasoline detergent manufacturers must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

(b) Diesel fuel additive manufacturers. Diesel fuel additive manufacturers that produce additives with a maximum allowed treatment rate of less than 1.0 volume percent must meet the following requirements:

(1) Diesel fuel standards. Diesel fuel additive manufacturers must produce gasoline additives in compliance with the applicable standards of subpart D of this part.

(2) PTDs. On each occasion when a diesel fuel additive manufacturer transfers custody or title to any diesel additive, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

(c) Certified ethanol denaturant producers. Certified ethanol denaturant producers must meet the following requirements:

(1) Certification of certified ethanol denaturant. Certified ethanol denaturant producers must certify that certified ethanol denaturant meets the requirements of §1090.XXX.

(2) Registration. Certified ethanol denaturant producers must register with EPA according to the requirements of subpart I of this part.

(3) PTDs. On each occasion when a certified ethanol denaturant producer transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs according to the requirements of subpart K of this part.

§1090.165 Distributors, carriers, and resellers.

Retailers and wholesale purchaser-consumers must comply with the following requirements:

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(1) Registration. Distributors, carriers, and resellers must register with EPA according to the requirements of subpart I of this part if they are part of the 500 ppm LM diesel fuel distribution chain under a compliance plan submitted under §1090.XXX.

(2) PTDs. Distributors, carriers, and resellers may have specific PTD requirements of subpart K of this part. For example, a distributor that adds diluent to a gasoline detergent may have to modify the PTD for the gasoline detergent to prescribe a new treatment rate under §1090.XXX.

§1090.170 Retailers and wholesale purchaser-consumers.

Retailers and wholesale purchaser-consumers must comply with the following requirements:

(a) Labeling. Retailers and wholesale purchaser-consumers that dispense fuels requiring a label under this part must display fuel labels pursuant to subpart O of this part.

(b) Refiner activities. Retailers and wholesale purchaser consumers that engage in refiner activities become refiners and subject themselves to the refiner requirements of §1090.105.

§1090.175 Independent surveyors.

Independent surveyors that conduct fuel surveys must comply with the following requirements:

(a) Survey provisions. Independent surveyors must conduct fuel surveys as specified in subpart N of this part.

(b) Registration. Independent surveyors must register with EPA according to the requirements of subpart I of this part.

(c) Sampling, testing, and retention requirements. Independent surveyors must conduct sampling, testing, and sample retention pursuant to subpart M of this part.

(d) Reporting. Independent surveyors must submit reports to EPA pursuant to subpart J of this part.

(e) Independence requirements. In order to perform a survey program specified in subpart N of this part, independent surveyors must meet the independence requirements of §1090.20XX.

§1090.180 Independent auditors.

Independent auditors that conduct attest engagements for responsible parties under this part must comply with the following requirements:

(a) Registration. Independent auditors must register with EPA according to the requirements of subpart I of this part.
(b) Reporting. Independent auditors must submit reports to EPA pursuant to subpart J of this part.

(c) Attest engagement. Independent auditors must conduct the annual attest engagements according to the requirements of subpart T of this part.

(d) Independence requirements. In order to perform an annual attest engagement required by subpart T of this part, independent auditors must meet the independence requirements of §1090.20XX.

§1090.185 Pipeline operators.

Pipeline operators must comply with the following requirements:

(a) PTDs. Pipeline operators must maintain PTDs for the fuel, fuel additive, or regulated blendstock that they take custody of that are subject to the standards of subparts C or D of this part and for heating oil.

(b) [Reserved]
Subpart C—Gasoline Standards

§1090.300 Overview and general requirements.

(a) Except as specified in subpart G of this part, gasoline, gasoline additives, and regulated gasoline blendstocks are subject to the standards of this subpart.

(b) Except for the annual average sulfur content standard of §1090.305(a) and the annual average benzene content standards of §1090.310(a) and (b), the standards of this part apply to gasoline, gasoline additives, oxygenates, and regulated gasoline blendstocks on a per-gallon basis. Gasoline refiners, gasoline importers, gasoline additive manufacturers (including oxygenate producers), certified ethanol denaturant producers, and regulated gasoline blendstock producers (e.g., blender-grade butane and pentane producers) must demonstrate compliance with the per-gallon standards of this subpart by measuring fuel parameters as specified in subpart M of this part.

(c) The annual average sulfur content standard of §1090.305(a) and the annual average benzene content standards of §1090.310(a) and (b) are average standards that apply to all gasoline produced at a refinery or imported by an importer during a compliance period. Gasoline refiners and importers must demonstrate compliance with average standards by measuring fuel parameters as specified in subpart M of this part and by determining compliance pursuant to subpart H of this part.

(d) No person may produce, import, sell, offer for sale, distribute, offer to distribute, supply, offer for supply, dispense, store, transport, or introduce into commerce any gasoline, gasoline additive, regulated gasoline blendstock, oxygenate, or certified ethanol denaturant that exceeds any per-gallon standard set forth in this subpart.

§1090.301 Lead and phosphorous limits.

Except as specified in subpart G of this part, all gasoline is subject to the following per-gallon standards:

(a) Lead content. 0.05 grams maximum.

(b) Phosphorus content. 0.005 grams maximum.

§1090.305 Sulfur standards.

Except as specified in subpart G of this part, all gasoline is subject to the following sulfur standards:

(a) Refiner and importer annual average sulfur standard.

(1) Refiners and importers must meet an annual average sulfur standard of 10.00 ppm.

(2) The compliance period is a calendar year (January 1 through December 31).
(b) Refinery and importer gate per-gallon sulfur standard. Gasoline at any refinery or importer gate is subject to a maximum per-gallon sulfur standard of 80 ppm.

(c) Downstream per-gallon sulfur standard. Gasoline at any location downstream of a refinery or import facility is subject to a maximum per-gallon sulfur standard of 95 ppm.

(d) Sulfur standard for importers that import gasoline by truck or rail. Importers that import gasoline by truck must comply with a maximum per-gallon sulfur standard of 10 ppm instead of the 10.00 ppm average standard of paragraph (a) of this section and the 80 ppm per-gallon sulfur standard of paragraph (b) of this section.

§1090.310 Benzene standards.

Except as specified in subpart G of this part, all gasoline is subject to the following benzene standards:

(a) Refiner and importer annual average benzene standard.

(1) Refiners and importers must meet an annual average benzene standard of 0.62 volume percent.

(2) The compliance period is a calendar year (January 1 through December 31).

(b) Maximum average benzene standard.

(1) Refiners and importers must meet a maximum average benzene standard of 1.30 volume percent without the use of credits.

(2) The compliance period is a calendar year (January 1 through December 31).

(c) Benzene standard for importers that import gasoline by truck and rail. Importers that import gasoline by truck must comply with a 0.62 volume percent benzene per-gallon standard instead of the average standard of paragraph (a) of this section and the maximum average standard of paragraph (b) of this section.

§1090.315 Gasoline volatility standards.

(a) Except as specified in subpart G of this part, all gasoline at any location during the summer season and all gasoline designated as summer gasoline is subject to a maximum per-gallon RVP standard of this section, unless a party can demonstrate one of the following:

(1) That the gasoline was designated as winter gasoline and was not sold, offered for sale, supplied, offered for supply, dispensed, or introduced into commerce during the summer season.

(2) That the gasoline was designated for use in a different area and the gasoline was not sold, offered for sale, supplied, offered for supply, dispensed, or introduced into commerce in the area in which the gasoline is located.
(b) **Federal 9.0 psi maximum per-gallon RVP standard.** All gasoline must meet a maximum per-gallon RVP standard of 9.0 psi unless the gasoline is subject to one of the following lower maximum per-gallon RVP standards:

1. Gasoline in RFG areas defined in §1090.2015 must meet the maximum per-gallon RVP standard set forth in paragraph (d) of this section.

2. Gasoline in areas subject to a SIP-approved State fuel rule that requires an RVP of less than 9.0 psi must meet the requirements of the federally approved SIP.

3. Gasoline in areas subject to California RFG regulations must comply with those regulations.

4. Gasoline in areas defined in paragraph (c) of this section must meet a 7.8 psi RVP maximum per-gallon standard.

(c) **Federal 7.8 psi standard.** Gasoline designated as 7.8 psi gasoline or located in the following areas must meet a maximum per-gallon RVP standard of 7.8 psi:

- **Colorado.** Denver: Adams; Arapahoe; Boulder; Broomfield, Denver; Douglas; Jefferson; Larimer (part)\(^1\); and Weld (part)\(^2\) Counties.

- **Georgia.** Atlanta: Cherokee; Clayton; Cobb; Coweta; Dekalb; Douglas; Fayette; Forsyth; Fulton; Gwinnett; Henry; Paulding; and Rockdale Counties.

- **Louisiana.** Baton Rouge: Ascension; East Baton Rouge; Iberville; Livingston; and West Baton Rouge Parishes. [NOTE TO READER: EPA has proposed to relax the RVP standard in the Baton Rouge area.]

- **Nevada.** Reno: Washoe County.

- **Oregon.** Portland: Clackamas (part)\(^3\); Multnomah (part)\(^4\); and Washington (part)\(^5\) Counties.

\(^1\) (Includes part of Rocky Mtn. Nat. Park). That portion of the county that lies south of a line described as follows: Beginning at a point on Larimer County’s eastern boundary and Weld County’s western boundary intersected by 40 degrees, 42 minutes, and 47.1 seconds north latitude, proceed west to a point defined by the intersection of 40 degrees, 42 minutes, 47.1 seconds north latitude and 105 degrees, 29 minutes, and 40.0 seconds west longitude, thence proceed south on 105 degrees, 29 minutes, 40.0 seconds west longitude to the intersection with 40 degrees, 42 minutes, and 17.4 seconds north latitude, thence proceed west on 40 degrees, 42 minutes, 47.1 seconds north latitude until this line intersects Larimer County’s western boundary and Grand County’s eastern boundary.

\(^2\) That portion of the county that lies south of a line described as follows: Beginning at a point on Weld County’s eastern boundary and Logan County’s western boundary intersected by 40 degrees, 42 minutes, 47.1 seconds north latitude, proceed west on 40 degrees, 42 minutes, 47.1 seconds north latitude until this line intersects Weld County’s western boundary and Larimer County’s eastern boundary.

\(^3\) Air Quality Maintenance Area.

\(^4\) Air Quality Maintenance Area.

\(^5\) Air Quality Maintenance Area.
Oregon. Salem: Marion (part)\(^6\); and Polk Counties (part)\(^7\).

Texas. Beaumont: Hardin; Jefferson; and Orange Counties.

Utah. Salt Lake City: Salt Lake; and Davis Counties.

(d) **RFG RVP maximum per-gallon standard.** Gasoline designated as 7.4 summer gasoline or located in RFG areas defined in §1090.2015 must meet an RVP maximum per-gallon standard of 7.4 psi.

(e) **Ethanol 1.0 psi waiver.**

(1) Any gasoline subject to a federal RVP requirement of paragraph (b) or (c) of this section that meets the requirements of paragraph (e)(2) of this section is not in violation of this section if its RVP does not exceed the applicable standard of paragraph (b) or (c) of this section by more than 1.0 psi.

(2) In order to qualify for the special regulatory treatment specified in paragraph (e)(1) of this section, gasoline must meet the applicable per-gallon RVP standard of paragraph (b) or (c) of this section prior to the addition of ethanol, and must contain ethanol at a concentration of at least 9 volume percent and no more than 10 volume percent.

§1090.320 **Blender-grade butane standards.**

Butane designated as blender-grade butane pursuant to the butane blending provisions of §1090.1320 must meet the following per-gallon standards:

(a) **Butane content.** Minimum 92 volume percent.

(b) **Benzene content.** Maximum 0.03 volume percent.

(c) **Sulfur content.** Maximum 10 ppm.

(d) **Chemical composition.** Be composed solely of carbon, hydrogen, oxygen, nitrogen, and sulfur.

§1090.325 **Blender-grade pentane standards.**

Pentane designated as blender-grade pentane pursuant to the pentane blending provisions of §1090.1320 must meet the following per-gallon standards:

(a) **Pentane content.** Minimum 95 volume percent.

(b) **Benzene content.** Maximum 0.03 volume percent.

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\(^6\) Salem Area Transportation Study.

\(^7\) Salem Area Transportation Study.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(c) **Sulfur content.** Maximum 10 ppm.

(d) **Chemical composition.** Be composed solely of carbon, hydrogen, oxygen, nitrogen, and sulfur.

§1090.330 Gasoline oxygenate certification and designation.

(a) Producers and importers of gasoline oxygenate must certify and designate the oxygenate prior to the oxygenate leaving the refinery or import facility pursuant to the requirements of this part. Oxygenate that complies with the applicable standards specified in this subpart and that meets all other relevant requirements of this part is deemed certified oxygenate.

(b) All oxygenates designated for blending with gasoline must meet the following per-gallon standards:

1. **Sulfur content.** Maximum 10 ppm.
2. **Chemical composition.** Be composed solely of carbon, hydrogen, oxygen, nitrogen, and sulfur.

(c) DFE designated for blending into gasoline must meet the following additional requirements:

1. **Denaturant type.** Only PCG, regulated gasoline blendstocks, or natural gas liquids may be used as denaturants.
2. **Denaturant concentration.** The concentration of all denaturants used in DFE is limited to a maximum of 3.0 volume percent.

§1090.335 Ethanol denaturant certification and designation.

(a) Any denaturant used to produce DFE, be it certified ethanol denaturant or uncertified ethanol denaturant, must be composed solely of carbon, hydrogen, nitrogen, oxygen and sulfur.

(b) Producers and importers of certified ethanol denaturant must certify and designate the certified ethanol denaturant prior to the certified ethanol denaturant leaving the production or import facility pursuant to the requirements of this part. Certified ethanol denaturant that complies with the applicable standards specified in this subpart and that meets all other relevant requirements of this part is deemed certified ethanol denaturant.

(c) Denaturant designated as certified ethanol denaturant by the certified ethanol denaturant manufacturer or importer must meet the following requirements:

1. **Sulfur content.** The sulfur content must not be greater than 330 ppm as determined by §1090.XXX. If the certified ethanol denaturant manufacturer or importer represents a batch of denaturant as having a maximum sulfur content lower than 330 ppm in the PTD (for example, no greater than 120 ppm), then the actual sulfur content must be no greater than the stated value as determined by §1090.XXX.
(2) Denaturant type. Only regulated gasoline blendstocks or natural gas liquids may be used to manufacture certified ethanol denaturant.

§1090.340 Gasoline deposit control standards.

[NOTE TO READER: EPA is considering a more streamlined approach to that contained in this draft under which intake valve deposit control test data collected under a variety of industry consensus tests such as the BMW test including the California variant, Ford dynamometer test used under the Top Tier program, and the potential IVD test currently under development by the CRC could be used to demonstrate compliance. Under this approach, EPA would issue guidance on what tests would be acceptable and it would not be necessary to codify the acceptable test procedures in the CFR. Similar to the approach in this draft, EPA could request the test data for review as needed.]

(a) Except as specified in subpart G of this part, all gasoline that is sold, offered for sale, dispensed, supplied, offered for supply, or transported to the ultimate consumer for use in motor vehicles or in any off-road engines, or that is transported to a gasoline retailer or wholesale purchaser-consumer must contain a detergent at a concentration least as high as the lowest additive concentration (LAC) demonstrated to meet one the deposit control requirements of paragraphs (b)(1) through (4) of this section.

(b) Detergents must be certified by a gasoline detergent manufacturer using one of the following methods:

1. The detergent must comply with the deposit control standard and test procedure requirements specified in §1090.1375.

2. The detergent must comply with the requirements of the California Air Resources Board (CARB) for use in the State of California pursuant to Title 13, section 2257 of the California Code of Regulations, under the following restrictions and conditions:

   (i) A detergent certified under this option may be used at the LAC specified for use in the State of California pursuant to Title 13, Chapter 5, Article 1 section 2257 of the California Code of Regulations, only in gasoline that meets the requirements for California reformulated gasoline pursuant to Title 13, Chapter 5, Article 1, California Code of Regulations, Standards for Gasoline.

   (ii) The gasoline must meet one of the following requirements:

   (A) Be additized in California.

   (B) Be sold or dispensed to the ultimate consumer in California or to parties that sell or dispense to the ultimate consumer in California.

[NOTE TO READER: EPA is considering allowing gasoline additized with a California detergent to be used outside of California to facilitate the response to supply disruptions.]
(iii) A certification under this option will continue to be valid only as long as the CARB certification remains valid. The gasoline detergent manufacturer must cease selling a detergent immediately upon being notified by CARB that the CARB certification for this detergent has been invalidated, and must notify EPA pursuant to the requirements of 40 CFR 79.21.

(3) Detergent manufacturers may comply with the requirements of 40 CFR 80.161(a)(1), provided that detergent certification materials specified in 40 CFR 80.161 were submitted to EPA by the effective date of this rule and was subsequently approved by EPA.

[NOTE TO READER: The requirements of the national generic detergent certification option are currently located in 40 CFR 80.161(a)(1). EPA is considering whether §80.161(a)(1) should be ported over to Part 1090 and whether new detergent certifications should be allowed under these provisions after the effective date of the streamlining rule. EPA would consider adopting the replacement IVD test currently under development by the Coordinating Research Council when it becomes available pursuant to §1090.340(b)(4). If such a replacement test is adopted, EPA would also consider retiring the BMW test procedure used in §80.161(a)(1).]

(4) Parties may submit a petition to EPA to accept alternative deposit control test procedures and standards that have been demonstrated to be equivalent to one of the procedures and standards specified in paragraphs (b)(1) through (3) in this section. EPA will publish a list of alternative procedures and standards that have been approved on the internet at www.epa.gov/transportation-air-pollution-and-climate-change, and periodically in the Federal Register.

§1090.345 RFG standards.

The standards of this section apply to gasoline that is used in the RFG areas defined in §1090.2015. Gasoline that meets the requirements of this section is deemed to be in compliance with the requirements of 42 U.S.C. § 7545(k).

(a) Sulfur standards. RFG must comply with the sulfur standards of §1090.305.

(b) Benzene standards. RFG must comply with the benzene standards of §1090.310.

(c) Volatility standard. RFG volatility may not have an RVP greater than 7.4 psi on a per-gallon basis during the summer season.

(d) Heavy metals standard. On a per-gallon basis, RFG may contain no heavy metals, including, but not limited to, lead or manganese. EPA may waive this prohibition for a heavy metal (other than lead) if EPA 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.

§1090.350 Anti-dumping standards.

Gasoline that meets all applicable standards of this subpart is deemed to be in compliance with the anti-dumping requirements of 42 U.S.C. § 7545(k)(8).
§1090.355 Gasoline additive standards.

(a) Any gasoline additive that is added to, intended for adding to, used in, or offered for use in gasoline at any downstream location must meet all the following requirements:

(1) The gasoline additive must be registered by a gasoline additive manufacturer under 40 CFR part 79.

(2) The gasoline additive must contribute no more than 3 ppm on a per-gallon basis to the sulfur content of gasoline when used at the maximum recommended treatment rate.

(3) The gasoline additive must be used at a maximum treatment rate of no more than 1.0 volume percent.

(b) Any person who blends a gasoline additive(s) that meets the requirements of paragraph (a) of this section into gasoline is not subject to any requirement of this part, except the downstream gasoline sulfur standard of §1090.XXX and the prohibition in §1090.XXX, if all the following conditions are met:

(1) The person blends the gasoline additive to gasoline at a concentration of no more than 1.0 volume percent.

(2) The person does not add any other blendstock or fuel additive except for oxygenates meeting the requirements of §1090.XXX.

(c) Any person who blends any fuel additive that does not meet the requirements of paragraphs (a) and (b) of this section is a gasoline refiner and must comply with all requirements applicable to gasoline refiners in this part.

(d) Any gasoline additive that is represented as being suitable for use to comply with the gasoline deposit control standards of §1090.340(a) must have been certified by the gasoline detergent manufacturer pursuant to §1090.340(b).

§1090.360 Gasoline substantially similar provisions.

Gasoline and gasoline additives (including oxygenates) are subject to the substantially similar requirement of 42 U.S.C. § 7545(f) unless waived under 42 U.S.C. § 7545(f)(4). No fuel or fuel additive manufacturer may introduce into commerce gasoline and gasoline additives (including oxygenates) that violates any conditions set forth in a waiver under 42 U.S.C. § 7545(f)(4).

§1090.365 Requirements for E15.

In addition to the other standards and provisions of this subpart, E15 must comply with the following requirements:

(a)(1) Gasoline containing greater than 10 volume percent ethanol (i.e., greater than E10) may not be used in any model year 2000 or older light-duty gasoline motor vehicle, any heavy-
duty gasoline motor vehicle or engine, any highway or off-highway motorcycle, or any gasoline-powered nonroad engines, vehicles, or equipment.

(2) A survey for the area where the E15 will be used must be approved pursuant to subpart N of this part and implemented in a timely fashion.

(3) Notwithstanding paragraphs (a)(1) and (a)(2) of this section, gasoline containing greater than 10 volume percent ethanol may be used in any flex-fuel vehicle or flex-fuel engine.

(b) E15 dispensers must be labeled pursuant to §1090.1505.

(c) PTDs that accurately reflect the type of product, ethanol content, maximum RVP, and other information required by subpart K of this part must be generated, used, transferred, and maintained pursuant to the requirements of this part.

(d)(1) Ethanol blending into BOB, gasoline, or gasoline already containing ethanol must be conducted consistent with the information on the blending instructions as specified on the PTDs.

(2) Gasoline designated as E15 may not contain less than 10.0 volume percent ethanol or more than 15.0 volume percent ethanol.

(e)(1) E15 subject to the 9.0 psi standard of §1090.315(b) may not have an RVP greater than 9.0 psi.

(2) E15 subject to the 7.8 psi standard of §1090.315(c) may not have an RVP greater than 7.8 psi.
Subpart D—Diesel Fuel and IMO Marine Fuel Standards

§1090.400 Overview and general requirements.

(a) Diesel fuel is subject to the standards of §1090.405 for ULSD, except as follows:

(1) Alternative sulfur standards apply for 500 ppm LM diesel fuel and IMO marine fuel as specified in §§1090.420 and 1090.425, respectively.

(2) Exemption provisions apply as specified in subpart G of this part.

(b) Diesel fuel additives must meet the requirements specified in §1090.410.

(c) Refiners, importers, and diesel fuel additive manufacturers must demonstrate compliance with the standards of this subpart by measuring fuel parameters as specified in subpart M of this part.

(d) All the standards of this part apply to diesel fuel and diesel fuel additives on a per-gallon basis.

(e) No person may produce, import, sell, offer for sale, distribute, offer to distribute, supply, offer for supply, dispense, store, transport, or introduce into commerce any diesel fuel, IMO marine fuel, diesel fuel additive, or regulated diesel fuel blendstock that exceeds any per-gallon standard set forth in this subpart.

§1090.405 ULSD standards.

(a) Except as specified in §1090.400(a), diesel fuel must meet the following ULSD standards on a per-gallon basis:

(1) Sulfur standard. Maximum sulfur content of 15 ppm.

(2) Centane index or aromatic content. Diesel fuel must meet one of the following standards:

(i) Minimum cetane index of 40.

(ii) Maximum aromatic content 35 volume percent.

(b) [Reserved]

§1090.410 Diesel fuel additives standards.

(a) This section specifies how the ULSD sulfur standard applies to additives used to modify a diesel fuel that is subject to the standards of §1090.405. The provisions of this section do not apply to additives used with 500 ppm LM diesel fuel or IMO marine fuel.
(b) Diesel fuel additives must have a sulfur concentration at or below 15 ppm. However, this standard does not apply to a diesel fuel additive if the following conditions are met:

(1) The PTD specified in subpart K of this part must identify the fuel additive’s sulfur concentration and give instructions for meeting the ULSD sulfur standard with the finished fuel. In no case may the instructions call for an additive concentration greater than 1.0 volume percent of the finished fuel.

(2) The additive must not be commercially available as a retail product for ultimate consumers.

§1090.415 Heating oil, kerosene, and jet fuel provisions.

[NOTE TO READER: EPA believes this section would help make distillate fuels and products that meet the ULSD standards fungible based on fuel quality. However, several stakeholders submitted feedback suggesting that these fuels and products would not be fungible due to considerations for how they would be included or excluded from renewable volume obligations under 40 CFR part 80. EPA recognizes this limitation and notes that providing such an allowance is contingent upon addressing the issue independent of streamlining.]

(a) Heating oil, kerosene, and jet fuel are not subject to the ULSD standards of §1090.405.

(b) Parties may redesignate heating oil, kerosene, and jet fuel as diesel fuel if the party can demonstrate the redesignated fuel meets the ULSD standards of §1090.405 and does one of the following:

(1) The party certifies the batch of diesel fuel and fulfills all the requirements that apply to a diesel fuel refiner in this part.

(2) The party relies on information supplied from the producers of the heating oil, kerosene, or jet fuel as follows:

(i) Registers as a diesel fuel refiner pursuant to subpart I of this part.

(ii) Only stores together heating oil, kerosene, jet fuel, and/or ULSD from producers registered as diesel fuel refiners pursuant to subpart I of this part.

(iii) Obtains and keeps records of the producers of the heating oil, kerosene, jet fuel, and/or ULSD or pipeline operators demonstrating that the heating oil, kerosene, and/or jet fuel meets the ULSD standards of §1090.405.

(iv) Complies with the PTD requirements for ULSD in subpart K of this part.

§1090.420 500 ppm LM diesel fuel standards.

(a) Instead of the standards of §1090.405, 500 ppm LM diesel fuel produced by transmix processors and distributed pursuant to subpart E of this part for use only in the eligible
locomotives and marine engines as specified in paragraph (b) of this section must meet the following standards on a per-gallon basis:

(1) **Sulfur standard.** Maximum sulfur content of 500 ppm.

(2) **Centane index or aromatic content.** The standard for cetane index or aromatic content in §1090.405(a)(2) applies to 500 ppm LM diesel fuel.

(b) 500 ppm LM diesel fuel may only be used in locomotive and marine engines that do not use sulfur-sensitive technologies. Such fuel is considered noncompliant if it is used in locomotive or marine engines with sulfur-sensitive technologies, in any other nonroad engines, or in any motor vehicles or stationary engines, unless it meets the standards specified in §1090.405.

§1090.425 IMO marine fuel standards.

(a) The standards of this section apply to IMO marine fuel. The standards of paragraph (c) of this section do not apply to residual fuel made available for use in a steamship or C3 marine vessel if the U.S. government allows the vessel to be exempt or excluded from MARPOL Annex VI fuel standards. However, diesel fuel and other distillate fuel used on such vessels continue to be subject to the standards of this section instead of the standards of §1090.405 or §1090.420.

(b) IMO marine fuel may not contain added substances or chemical waste that would contribute to additional air pollution. For example, this applies for substances or chemical wastes that would increase the concentration of heavy metals or halogenated compounds.

(c) **Sulfur standards.**

(1) The maximum sulfur content of global marine fuel is 5,000 ppm.

(2) The maximum sulfur content of ECA marine fuel is 1,000 ppm.

(d) ULSD and 500 ppm LM diesel fuel may be used for blending with IMO marine fuel. Once blended to produce IMO marine fuel, the diesel fuel is no longer subject to the standards specified in §1090.405 or §1090.420.

(e) Pursuant to 40 CFR 1043.80, fuel suppliers must provide bunker delivery notes to vessel operators in addition to the PTD requirements of subpart K of this part.
Subpart E—Transmix Provisions

§1090.500 Scope.

(a) This subpart provides alternative standards and provisions for gasoline and diesel fuel produced from the mixtures specified in paragraph (b) of this section by transmix processors, pipeline operators, and transmix blenders that do not produce fuel by processing crude oil.

(b) The provisions of this subpart apply to transmix from pipeline interface and transmix from the following mixtures of gasoline and distillate fuels:

(1) Mixtures produced by unintentionally combining gasoline and distillate fuel in a tank.

(2) Mixtures produced from normal business operations at terminals or pipelines, such as gasoline or distillate fuel drained from a tank, or drained from piping or hoses used to transfer gasoline or distillate fuel, or gasoline or distillate fuel discharged from a safety relief valve.

(c) Refiners that process crude oil to produce gasoline and diesel fuel may not use the alternative provisions of this subpart and are subject to all the requirements that apply to refiners in this part.

(d) Parties that use the provisions of this subpart must be registered with EPA pursuant to subpart I of this part.

(e) Parties that produce ULSD or IMO marine fuel using transmix distillate product must comply with all the requirements applicable to refiners that process crude oil in this part.

§1090.505 Fuel mixing from normal pipeline and terminal operations.

(a) Pipeline operators may cut pipeline interface generated between two fuels shipped adjacent to each other into these fuels provided that this action does not cause or contribute to a violation of the gasoline standards of subpart C of this part or the diesel fuel or IMO marine fuel standards of subpart D of this part. The pipeline interface cut refers the point between two fuels shipped adjacent to each other in a pipeline that is selected by the pipeline operator to reintroduce physical segregation between these fuels.

(b) Trace volumes of the transmix specified in §1090.500(b) may be mixed into fuels that are subject to the gasoline standards of subpart C of this part or the diesel fuel or IMO marine fuel standards of subpart D of this part as a result of normal pipeline or terminal operation provided that this mixing does not cause or contribute to a violation of the gasoline standards of subpart C of this part or the diesel fuel or IMO marine fuel standards of subpart D of this part.

§1090.510 Blending transmix into PCG in a storage tank.

As an alternative to demonstrating compliance with the gasoline sulfur, benzene, and RVP standards through the sampling and testing requirements that would otherwise be applicable to a refiner under this part, transmix blenders that blend transmix into a storage tank that contains PCG may comply with the requirements of this section.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(a) Transmix may be blended into any PCG, provided that all the following requirements are met:

(1) The resultant transmix-blended gasoline does not exceed a distillation end-point of 437 degrees Fahrenheit.

(2) Determine the following distillation parameters: T10, T50, T90, and distillation residue.

(3) The resultant transmix-blended gasoline meets all the gasoline standards of subpart C of this part.

(4) The transmix blender complies with the recordkeeping requirements of subpart L of this part.

(b) The transmix blender must maintain and follow a written quality assurance program designed to assure that the type and amount of transmix blended into PCG will not cause violations of the applicable fuel quality standards.

(c) Except as specified in paragraph (c)(3) of this section, as a part of the quality assurance program, transmix blenders must collect samples of gasoline after blending transmix and test the samples to ensure the end-point temperature of the final transmix-blended gasoline does not exceed 437 degrees Fahrenheit, pursuant to the following requirements.

(1) In the case of transmix that is blended in a tank, collect a sample of the final transmix-blended gasoline following each occasion transmix is blended.

(2) In the case of transmix that is blended by a computer controlled in-line blending system, the transmix blender must collect composite samples of the final transmix-blended gasoline at least twice each calendar month during which transmix is blended.

(3) Any transmix blender may petition EPA for approval of a quality assurance program that does not include the minimum sampling and testing requirements of paragraphs (b)(1) and (2) of this section. To seek approval for such an alternative quality assurance program, the transmix blender must submit a petition to EPA that includes all the following:

(i) A detailed description of the quality assurance procedures to be carried out at each location where transmix is blended into PCG, including a description of how the transmix blender proposes to determine the ratio of transmix that can be blended with PCG without violating any of the applicable standards of this part, and a description of how the transmix blender proposes to determine that the gasoline produced by the transmix blending operation meets the applicable standards.

(ii) If the transmix is blended by a computer controlled in-line blending system, the transmix blender must also include the information required for refiners related to the approval by EPA of the use of an in-line blending system under this part.
(iii) A letter signed by the RCO or their delegate stating that the information contained in the submission is true to the best of their belief must accompany the petition.

(iv) Transmix blenders that petition EPA to use an alternative quality assurance program must comply with any request by EPA for additional information or any other requirements that EPA includes as part of EPA’s evaluation of the petition. However, the transmix blender may withdraw their petition or approved use of an alternative quality assurance program at any time, upon notice to EPA.

(v) EPA reserves the right to modify the requirements of an approved alternative quality assurance program, in whole or in part, at any time, or withdraw approval of such an alternative quality assurance program if EPA determines that the transmix blender’s operation does not effectively or adequately control, monitor, or document the end-point temperature of the gasoline produced, or if EPA determines that any other circumstance exists that merits modification of the requirements of an approved alternative quality assurance program. If EPA finds that a transmix blender provided false or inaccurate information in any submission required under this section, upon notification from EPA, the transmix blender’s approval of an alternative quality assurance program will be void ab initio.

(4) In the event that the test results for any sample collected pursuant to a quality assurance program indicate that the gasoline does not comply with any of the applicable fuel quality standards of this part, the transmix blender must do all the following:

(i) Immediately take steps to stop the sale of the gasoline that was sampled.

(ii) Take steps that are reasonably calculated to determine the cause of the noncompliance and to prevent future instances of noncompliance.

(iii) Notify EPA of the noncompliance.

(iv) If the transmix was blended by a computer controlled in-line blending system, increase the rate of sampling and testing to a rate of not less than once per week and not more frequent that once per day and continue the increased frequency of sampling and testing until the results of ten consecutive samples and tests indicate that the gasoline complies with applicable standards, at which time the sampling and testing may be conducted at the original frequency.

(5) Any transmix blender that blends transmix into PCG and does not meet the requirements under this section must meet all requirements and standards that apply to a refiner under this part.

§1090.515 Gasoline produced from transmix gasoline product by transmix processors.

Transmix processors that produce gasoline using TGP may comply with the provisions of this section in lieu of the requirements that would otherwise apply to a refiner to demonstrate compliance with the sulfur, benzene, RVP, and oxygenate requirements under this part.
(a) **Sulfur standard.** Demonstrate compliance of the gasoline with a 95 ppm downstream sulfur cap by measuring the sulfur content as specified in subpart M of this part.

(b) **Volutility standard.** Demonstrate compliance of the gasoline with the applicable RVP standard of §1090.315 by measuring the RVP as specified in subpart M of this part.

(c) **Oxygenate content.** In lieu of determining the oxygenate content of the gasoline as specified in subpart M of this part, the transmix processor may demonstrate that the gasoline contains no oxygenate using records for all the feedstocks specified §1090.500(b) that demonstrate that these feedstocks did not contain oxygenate.

(d) **Distillation point.** Determine the following distillation parameters: T10, T50, T90, end point, and distillation residue.

(e) **Demonstration of compliance with annual average sulfur and benzene standards.**

(1) The transmix processor must exclude TGP used to produce gasoline pursuant to the provisions of this section from their compliance calculations to demonstrate compliance with the annual average sulfur and benzene standards of §§1090.305 and 1090.310, respectively.

(2) The transmix processor must include blendstocks other than TGP used to produce gasoline pursuant to the provisions of this section in calculations to demonstrate compliance with the annual average sulfur and benzene standards of §§1090.305 and 1090.310, respectively.

§1090.520 **Locomotive and marine diesel fuel produced from transmix distillate product.**

The alternative sulfur standard of this section applies to transmix processors and pipeline operators that produce 500 ppm LM diesel fuel from TDP and ULSD and no other blendstocks in lieu of the 15 ppm sulfur standard that would otherwise be applicable to a refiner under this part. The following conditions must be satisfied to allow the production of 500 ppm LM diesel fuel under this section:

(a) **Sulfur standard.** 500 ppm LM diesel fuel produced by a transmix processor or a pipeline facility from transmix is subject to the sulfur standard of §1090.420.

(b) **Blend components.** The blend components used to produce 500 ppm LM diesel fuel are limited to the following:

(1) Transmix.

(2) ULSD.

(3) Diesel fuel additives that comply with the requirements of §1090.410.

(c) **Compliance plan.** A facility producing 500 ppm LM diesel fuel must obtain approval from EPA for a compliance plan at least 60 days prior to producing 500 ppm LM diesel fuel. The compliance plan must meet all the following requirements:

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(1) Demonstrate how the 500 ppm LM diesel fuel will be segregated by the producer through to the ultimate consumer from fuel having other designations, except as follows:

(i) Pipeline operators may ship 500 ppm LM diesel fuel by pipeline provided that the 500 ppm LM does not come into physical contact in the pipeline with batches of other distillate fuel that has a sulfur content greater than 15 ppm.

(ii) Wholesale purchaser consumers and retailers of 500 ppm LM diesel fuel may introduce ULSD into a storage tank that contains 500 ppm LM diesel fuel, provided that the other requirements of this section are satisfied. The resulting mixture must be designated as 500 ppm LM diesel fuel.

(2) Demonstrate that the end users of 500 ppm LM diesel fuel will also have access to ULSD for use in those engines that require the use of ULSD.

(3) Identify the parties that handle the 500 ppm LM diesel fuel through to the ultimate consumer. No more than four (4) separate parties may handle the 500 ppm LM diesel fuel between the producer and the ultimate consumer.

(4) Identify all ultimate consumers that are supplied with the 500 ppm LM diesel fuel.

(5) Demonstrate how misfueling of 500 ppm LM diesel fuel into vehicles, engines, or equipment that require the use of ULSD will be mitigated.

(6) Include an EPA registration number.

(d) Volume. Parties that handle 500 ppm LM diesel fuel must calculate the volume of 500 ppm LM diesel fuel received versus the volume delivered and used on an annual basis. An increase in the volume of 500 ppm LM diesel fuel delivered compared the volume received must be due solely to one or more of the following:

(1) Normal pipeline interface cutting practices pursuant to the pipeline product sequencing requirements of paragraph (c)(1)(i) of this section.

(2) Thermal expansion due to a difference in temperature between the time when the received and delivered volumes were measured.

(3) The addition of ULSD to a retail or wholesale purchaser consumer 500 ppm LM diesel fuel storage tank pursuant to paragraph (c)(1)(ii) of this section.

(e) Redesignation. 500 ppm LM diesel fuel may be redesignated as IMO marine fuel, heating oil, or blendstock. The party doing the redesignation must maintain records from the producer of the 500 ppm LM diesel fuel (i.e., PTDs accompanying the fuel as required by subpart K of this part) to demonstrate compliance with the 500 ppm maximum sulfur standard of §1090.420.
Subpart F—Reserved

§1090.600 National security and military use exemptions.

(a) The fuel standards specified in this part do not apply to fuel that is produced, imported, sold, offered for sale, supplied, offered for supply, stored, dispensed, or transported for use in any of the following:

(1) Tactical military vehicles, engines, or equipment, including locomotive and marine, having an EPA national security exemption from the motor vehicle emission standards under 40 CFR parts 85 or 86, or from the nonroad engine emission standards under 40 CFR parts 89, 92, 94, 1042, or 1068.

(2) Tactical military vehicles, engines, or equipment, including locomotive and marine, which are not subject to a national security exemption from vehicle or engine emissions standards specified in paragraph (a)(1) of this section but, for national security purposes (e.g., for purposes of readiness, including training, for deployment overseas), need to be fueled on the same fuel as the vehicles, engines, or equipment that EPA has granted such a national security exemption.

(b) The exempt fuel must meet all the following requirements:

(1) It must be accompanied by PTDs as required by subpart K of this part.

(2) It must be segregated from non-exempt fuel at all points in the distribution system.

(3) It must be dispensed from a fuel pump stand, fueling truck, or tank that is labeled with the appropriate designation of the fuel.

(4) It may not be used in any vehicles, engines, or equipment, including locomotive and marine, other than the vehicles, engines, and equipment referred to in paragraph (a) of this section.

(c) Any national security exemptions approved under 40 CFR part 80 will remain in place under this part.

§1090.605 Temporary research, development, and testing exemptions.

(a) Requests for a research and development exemption. Any person may receive an exemption from the provisions of this part for fuel used for research, development, or testing (“R&D”) purposes by submitting the information specified in paragraph (c) of this section to the address in §1090.10.

(b) Criteria for a research and development exemption. For an R&D exemption to be granted, the person requesting an exemption must meet all the following conditions:

(1) Demonstrate a purpose that constitutes an appropriate basis for exemption.
(2) Demonstrate that an exemption is necessary.

(3) Design an R&D program that is reasonable in scope.

(4) Have a degree of control consistent with the purpose of the program and EPA’s monitoring requirements.

(c) Information required to be submitted. To demonstrate each of the elements in paragraph (b) of this section, the person requesting an exemption must include all the following information:

(1) A concise statement of the purpose of the program demonstrating that the program has an appropriate R&D purpose.

(2) An explanation of why the stated purpose of the program cannot be achieved in a practicable manner without performing one or more of the prohibited acts under this part.

(3) A demonstration of the reasonableness of the scope of the program, including all the following:

(i) An estimate of the program’s duration in time (including beginning and ending dates).

(ii) An estimate of the maximum number of vehicles, engines, or equipment involved in the program, and the number of miles and engine hours that will be accumulated on each.

(iii) The manner in which the information on vehicles, engines, or equipment used in the program will be recorded and made available to EPA upon request.

(iv) The quantity of the fuel that does not comply with the requirements of this part, as applicable.

(v) The specific applicable standard(s) of this part that would apply to the fuel expected to be used in the program.

(4) With regard to control, a demonstration that the program affords EPA a monitoring capability, including all the following:

(i) A description of the technical and operational aspects of the program.

(ii) The site(s) of the program (including facility name, street address, city, county, state, and zip code).

(iii) The manner in which information on vehicles, engines, and equipment used in the program will be recorded and made available to EPA upon request.

(iv) The manner in which information on the fuel used in the program (including quantity, fuel properties, name, address, telephone number, and contact person of the supplier,
and the date received from the supplier), will be recorded and made available to EPA upon request.

(v) The manner in which the party will ensure that the R&D fuel will be segregated from fuel meeting the requirements of subparts C and D of this part, as applicable, and how fuel pumps will be labeled to ensure proper use of the R&D fuel.

(vi) The name, business address, telephone number, and title of the person(s) in the organization requesting an exemption from whom further information on the application may be obtained.

(vii) The name, business address, telephone number and title of the person(s) in the organization requesting an exemption who is responsible for recording and making available the information specified in this paragraph, and the location where such information will be maintained.

(d) Additional requirements.

(1) The PTDs associated with R&D fuel must comply with the requirements of subpart K of this part.

(2) The R&D fuel must be designated by the refiner or supplier, as applicable, as exempt R&D fuel.

(3) The R&D fuel must be kept segregated from non-exempt fuel at all points in the distribution system.

(4) The R&D fuel must not be sold, distributed, offered for sale or distribution, dispensed, supplied, offered for supply, transported to or from, or stored by a fuel retail outlet, or by a wholesale purchaser-consumer facility, unless the wholesale purchaser-consumer facility is associated with the R&D program that uses the fuel.

(5) At the completion of the program, any emission control systems or elements of design that are damaged or rendered inoperative must be replaced on vehicles remaining in service, or the responsible person will be liable for a violation of 42 U.S.C. § 7522(a)(3) unless sufficient evidence is supplied that the emission controls or elements of design were not damaged.

(e) Memorandum of exemption. EPA may grant an R&D exemption upon a demonstration that the requirements of this section have been met. The R&D exemption will be granted in the form of a memorandum of exemption and may include such terms and conditions as EPA determines necessary to monitor the exemption and to carry out the purposes of this section, including restoration of emission control systems.

(1) The volume of fuel subject to the approval may not exceed the estimated amount in paragraph (c)(3)(iv) of this section, unless EPA grants a greater amount in writing.
(2) Any exemption granted under this section will expire at the completion of the test program or one year from the date of approval, whichever occurs first, and may only be extended upon re-application consistent will all requirements of this section.

(3) EPA may elect at any time to review the information contained in the request, and where appropriate may notify the responsible person of disapproval of the exemption.

(4) In granting an exemption, EPA may include terms and conditions, including replacement of emission control devices or elements of design, which EPA determines are necessary for monitoring the exemption and for assuring that the purposes of this subpart are met.

(5) Any violation of a term or condition of the exemption, or of any requirement of this section, will cause the exemption to be void ab initio.

(6) If any information required by paragraph (c) of this section should change after approval of the exemption, the responsible person must notify EPA in writing immediately. Failure to do so may result in disapproval of the exemption or make it void ab initio, and may make the party liable for a violation of this part.

(f) Effects of exemption. Gasoline, diesel fuel, or IMO marine fuel that is subject to an R&D exemption under this section is exempt from other provisions of this part, unless otherwise stated, provided that the fuel is used in a manner that complies with the purpose of the program in paragraph (c) of this section and all other requirements of this section.

(g) Notification of completion. The party must notify EPA in writing within 30 days after completion of the R&D program.

§1090.610 Racing and aviation fuel exemptions.

Gasoline or diesel fuel that is used to fuel aircraft, or racing vehicles or racing boats that are used only in sanctioned racing events, is not subject to the standards of subparts C and D of this part, as applicable, provided all the following requirements are met:

(a) PTDs associated with such fuel, and any fuel dispenser from which such fuel is dispensed, identify the fuel as restricted for use either in aircraft, or in racing motor vehicles or racing boats that are used only in sanctioned racing events.

(b) The fuel is completely segregated from all other non-exempt fuel throughout production, distribution, and sale to the ultimate consumer.

(c) The fuel is not made available for use as gasoline or diesel fuel subject to the standards of subparts C and D of this part, as applicable, or dispensed for use in motor vehicles or nonroad engines, vehicles or equipment, including locomotive and marine, except for those used only in sanctioned racing events.
§1090.615 Special provisions for American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

The gasoline standards of subpart C of this part and the diesel fuel and IMO marine fuel standards of subpart D of this part do not apply to fuel that is produced, imported, sold, offered for sale, supplied, offered for supply, stored, dispensed, or transported for use in the Territories of Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands, provided that such fuel meets all the following requirements:

(a) The fuel is designated by the refiner or importer as gasoline, diesel fuel, or IMO marine fuel only for use in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands.

(b) The fuel is used only in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands.

(c) The fuel is accompanied by PTDs that comply with the requirements of subpart K of this part.

(d) The fuel is completely segregated from non-exempt gasoline, diesel fuel, and IMO marine fuel at all points throughout production, distribution, and sale to the ultimate consumer from the point the fuel is designated as exempt fuel only for use in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands, while the exempt fuel is in the United States (including an ECA or an ECA associated area pursuant to 40 CFR 1043.20) but outside these Territories.

§1090.620 California gasoline and diesel fuel requirements.

[NOTE TO READER: EPA is considering allowing gasoline and diesel fuel to be “imported” into the rest of the United States without recertification. Refiners would have the option to treat California gasoline as an import or distribute the California gasoline without recertification. EPA seeks feedback on this approach.]

(a) California gasoline and diesel fuel exemption. California gasoline and diesel fuel that complies with all the requirements of this section is exempt from all other provisions of this part.

(b) Requirements for California gasoline and diesel fuel.

(1) Each batch of California gasoline or diesel fuel must be designated as such by its refiner or importer.

(2) Designated California gasoline and diesel fuel must be kept segregated from fuel that is not California gasoline or diesel fuel at all points in the distribution system.

(3) Designated California gasoline and diesel fuel must ultimately be used in the State of California and not used elsewhere.
(4) For California gasoline and diesel fuel produced outside the State of California, the transferors and transferees must meet the PTD requirements of subpart K of this part.

(5)(i) Any refiner that operates a refinery located outside the State of California at which California gasoline or diesel fuel is produced must provide to any person to whom custody or title of such gasoline or diesel fuel has transferred, and each transferee must provide to any subsequent transferee, documents that include all the following information:

(A) The name and address of the transferor.

(B) The name and address of the transferee.

(C) The volume of gasoline or diesel fuel being transferred.

(D) The location of the gasoline or diesel fuel at the time of the transfer.

(E) The date and time of the transfer.

(F) The identification of the fuel as California gasoline or California diesel fuel, as applicable.

(ii) Each refiner and transferee of California gasoline or diesel fuel must maintain copies of the PTDs required by subpart K of this part for a period of five years from the date of creation and must deliver such documents to EPA upon request.

(6) Fuel that is ultimately used in any part of the United States outside of the State of California must comply with the standards and requirements of this part, regardless of any designation as California gasoline or diesel fuel.

(c) Use of California test methods and offsite sampling procedures. In the case of any gasoline or diesel fuel that is not California gasoline or diesel fuel and that is either produced at a refinery located in the State of California or is imported from outside the United States into the State of California, the refiner or importer may do any of the following:

(1) Use the sampling and testing methods approved in Title 13 of the California Code of Regulations instead of the sampling and testing methods required by subpart M of this part.

(2) For California gasoline only, determine the sulfur content of gasoline at offsite tankage (which would otherwise be prohibited by 40 CFR 80.65(e)(1)). Note that the requirements of 40 CFR 80.65(e)(1) (regarding when the properties of a batch of RFG must be determined) specify that the properties of a batch of gasoline must be determined prior to the gasoline leaving the refinery or import facility. However, under this part, a refiner of California gasoline may determine the properties of gasoline as specified in 40 CFR 80.65(e)(1) at offsite tankage provided that the following requirements are met:

(i) The samples are properly collected under the terms of a current and valid protocol agreement between the refiner and the California Air Resources Board with regard to sampling at
the offsite tankage and consistent with the requirements specified in Title 13, California Code of Regulations, section 2250 et seq. (May 1, 2003).

(ii) The refiner provides a copy of the protocol agreement to EPA upon request.

§1090.625 Special provisions for Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands summer gasoline.

The gasoline volatility standards of §1090.315 do not apply to summer gasoline that is produced, imported, sold, offered for sale, supplied, offered for supply, stored, dispensed, or transported for use in the Alaska, Hawaii, Puerto Rico, or the U.S. Virgin Islands, provided that such fuel meets all the following requirements:

(a) The summer gasoline is designated by the refiner or importer as summer gasoline only for use in Alaska, Hawaii, Puerto Rico, or the U.S. Virgin Islands.

(b) The summer gasoline is used only in Alaska, Hawaii, Puerto Rico, or the U.S. Virgin Islands.

(c) The summer gasoline is accompanied by PTDs that comply with the requirements of subpart K of this part.

(d) The summer gasoline is completely segregated from non-exempt gasoline at all points throughout production, distribution, and sale to the ultimate consumer from the point the summer gasoline is designated as exempt fuel only for use in Alaska, Hawaii, Puerto Rico, or the U.S. Virgin Islands, while the exempt summer gasoline is in the United States but outside these States or Territories.

§1090.630 Refinery extreme unforeseen hardship circumstances.

(a) In appropriate extreme, unusual, and unforeseen circumstances (e.g., circumstances like a natural disaster or refinery fire, not financial or supplier difficulties) that are clearly outside the control of the refiner or importer and that could not have been avoided by the exercise of prudence, diligence, and due care, EPA may permit a refiner or importer, for a brief period, to distribute fuel that does not meet the requirements of subparts C and D of this part if all the following requirements are met:

(1) It is in the public interest to do so (e.g., distribution of the nonconforming fuel will not damage vehicles or engines and is necessary to meet projected shortfalls that cannot otherwise be compensated for).

(2) The refiner or importer exercised prudent planning and was not able to avoid the violation and has taken all reasonable steps to minimize the extent of the nonconformity.

(3) The refiner or importer can show how the requirements for making compliant fuel, and/or purchasing credits to partially or completely offset the nonconformity, will be expeditiously achieved.

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(4) The refiner or importer agrees to make up any air quality detriment associated with the nonconforming fuel, where practicable.

(5) The refiner or importer pays to the U.S. Treasury an amount equal to the economic benefit of the nonconformity minus the amount expended pursuant to paragraph (a)(4) of this section, in making up the air quality detriment.

(b) Hardship applications under this section must be submitted in writing to EPA at the address specified in §1090.10, and must contain a letter signed by the president or the chief operating officer or chief executive officer of the company, or their designee, stating that the information contained in the application is true to the best of their knowledge.
Subpart H—Averaging, Banking, and Trading Provisions

§1090.700 Compliance with average standards.

(a) Compliance with the annual average sulfur standard. Gasoline refiners and importers must demonstrate compliance with the annual average sulfur standard of §1090.XXX by using the equation in paragraph (a)(2) of this section. Compliance is determined by taking the compliance sulfur value calculated in paragraph (a)(1) of this section (which is the total amount of sulfur ppm-gallons for a gasoline refiner or importer’s annual production), adjusting for any deficit from a previous compliance period (as allowed in §1090.XXX), and using any needed credits as allowed in this subpart. Gasoline refiners and importers must also calculate and report annual average sulfur levels as specified in paragraph (a)(3) of this section.

1 Compliance sulfur value calculation. Compliance by a refiner or importer for each of its facilities with the annual average sulfur standard of §1090.XXX is achieved if, for calendar year y, the compliance sulfur value is less than or equal to 10 ppm times the total gasoline volume produced or imported, as determined by the following equation:

\[
CSV_y = \sum_{i=1}^{n} (V_i \cdot S_i) + D_{(y-1)} + D_{S,Oxy} - C
\]

Where:

\(CSV_y\) = Compliance sulfur value for year y, in ppm-gallons. Fractional values must be rounded pursuant to §1090.XXX.

\(V_i\) = The volume of gasoline produced or imported in batch i, in gallons.

\(S_i\) = The sulfur content of batch i, per §1090.XXX, in ppm.

\(n\) = The number of batches of gasoline produced or imported during the compliance period.

\(i\) = Individual batch of gasoline produced or imported during the compliance period.

\(D_{(y-1)}\) = Sulfur deficit from the previous compliance period, per §1090.XXX, in ppm-gallons.

\(D_{S,Oxy}\) = Sulfur deficit from BOB recertification, per §1090.740(b), in ppm-gallons.

\(C\) = Sulfur credits used by the refinery or importer, per §1090.XXX, in ppm-gallons.

(2) Compliance with the annual average sulfur standard of §1090.XXX is not achieved, and a deficit is created pursuant to §1090.XXX, if for calendar year y, the compliance sulfur value is greater than 10 times the total gasoline volume produced or imported. The deficit value to be included in the following year’s compliance calculation pursuant to paragraph (f) of this section is calculated as follows:
\[ D_y = \text{CSV}_y - \left( \sum_{i=1}^{n} V_i \cdot 10 \right) \]

Where:

- \( D_y \) = Sulfur deficit created in compliance period \( y \), in ppm-gallons.

(3) Reporting annual average sulfur levels. (i) Gasoline refiners and importers must calculate and report annual average sulfur levels as follows:

\[ S_a = \frac{\sum_{i=1}^{n} (V_i \cdot S_i)}{\sum_{i=1}^{n} V_i} \]

Where:

- \( S_a \) = The refinery or importer annual average sulfur level, in ppm.

(ii) Gasoline refiners and importers must calculate and report net annual sulfur levels as follows:

\[ S_{\text{NET}} = \frac{\text{CSV}_y}{\sum_{i=1}^{n} V_i} \]

Where:

- \( S_{\text{NET}} \) = The refinery or importer net annual average sulfur level, in ppm. The net annual average sulfur level is the average sulfur level for gasoline produced at a refinery or by an importer after adjusting for credits and deficits as allowed under this subpart.

(iii) Calculations under this paragraph are rounded and reported to two decimal places pursuant to §1090.50.

(b) Compliance with the annual average benzene standards. Gasoline refiners and importers must demonstrate compliance with the annual average benzene standard of §1090.XXX by using the equation in paragraph (b)(2) of this section and with the maximum average benzene standard of §1090.XXX by using equation in paragraph (b)(3) of this section. Compliance with the annual average benzene standard is determined by taking the compliance benzene value calculated in paragraph (b)(1) of this section (which is the total amount of benzene gallons for a gasoline refiner or importer’s annual production), adjusting for any deficit from a previous compliance period (as allowed in §1090.XXX), and using any needed credits as allowed in this subpart. Compliance with the maximum average benzene standard is determined by calculating for each facility the annual average benzene level in volume percent as specified in paragraph (b)(3) of this section. Gasoline refiners and importers must also calculate and report adjusted annual average benzene levels as specified in paragraph (b)(4) of this section.

(1) Compliance benzene value calculation. A refiner or importer’s annual average benzene value is determined as follows:

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\[ CBV_y = \sum_{i=1}^{n} \left( \frac{V_i \cdot B_i}{100} \right) + D_{(y-1)} + D_{Bz, oxy} - C \]

Where:

- \( CBV_y \) = Compliance benzene value for year \( y \), in benzene gallons. Fractional values must be rounded pursuant to §1090.50.
- \( V_i \) = The volume of gasoline produced or imported in batch \( i \), in gallons.
- \( B_i \) = The benzene content of batch \( i \), per §1090.XXX, in volume percent.
- \( n \) = The number of batches of gasoline produced or imported during the compliance period.
- \( i \) = Individual batch of gasoline produced or imported during the compliance period.
- \( D_{(y-1)} \) = Benzene deficit from the previous compliance period, per §1090.XXX, in benzene gallons.
- \( D_{Bz, oxy} \) = Benzene deficit from BOB recertification, per §1090.740(a), in benzene gallons.
- \( C \) = Benzene credits used by the refinery or importer, per §1090.XXX, in benzene gallons.

(2) Benzene compliance calculation. (i) Compliance with the benzene requirement of §1090.XXX is achieved for calendar year \( y \) if:

\[ CBV_y \leq \sum_{i=1}^{n} V_i \cdot 0.0062 \]

(ii) Compliance with the benzene requirement of §1090.XXX is not achieved for calendar year \( y \) if:

\[ CBV_y > \sum_{i=1}^{n} V_i \cdot 0.0062 \]

(iii) The deficit value to be included in the following year’s compliance calculation is calculated as follows:

\[ D_y = CBV_y - \left( \sum_{i=1}^{n} V_i \cdot 0.0062 \right) \]

Where:

- \( D_y \) = Benzene deficit created in compliance period \( y \), in benzene gallons.
(3) **Annual average benzene concentration calculation.** (i) The annual average benzene concentration of gasoline produced at a refinery or imported by an importer for an applicable compliance period is calculated according to the following equation:

\[
B_a = \frac{\sum_{i=1}^{n} (V_i \cdot B_i)}{\sum_{i=1}^{n} V_i}
\]

Where:

\(B_a\) = Annual average benzene concentration for the applicable compliance period, in volume percent benzene.

(ii) Compliance with the maximum average benzene standard of §1090.XXX is achieved by a refinery or importer if the value of \(B_a\) calculated in paragraph (b)(3)(i) of this section is no greater than 1.30 volume percent for an applicable compliance period pursuant to §1090.XXX.

(4) **Reporting net annual average benzene levels.** (i) Gasoline refiners and importers must calculate and report net annual average benzene levels as follows:

\[
B_{NET} = \frac{CBV_y}{\sum_{i=1}^{n} V_i}
\]

Where:

\(B_{NET}\) = The refinery or importer net annual average benzene level, in volume percent benzene. The net average benzene level is the average benzene level for gasoline produced at a refinery or by an importer after adjusting for credits and deficits under this subpart.

(5) The annual average benzene concentrations calculated in paragraphs (b)(3) and (4) of this section must be conducted to two decimal places using the rounding procedure specified in §1090.50.

(c) **Accounting for oxygenate added downstream of a refinery.** A gasoline refiner or importer may include the volume of oxygenate added downstream from the refinery or import facility and the estimated effects of such blending on sulfur and benzene content in compliance calculations under this subpart, provided that the gasoline refiner or importer complies with the requirements of §1090.710.

(d) **Exclusions.** Refiners and importers must exclude all the following from compliance calculations:

1. Gasoline that was not produced at the gasoline refinery or imported by the importer.

2. Blendstocks transferred to others as provided in §1090.XXX.

3. PCG.
(4) Gasoline exempted from the standards of subpart P of this part.

§1090.705 Annual average facility level compliance.

(a) Gasoline refiners and importers must comply with annual average standards at a facility level.

(b) Gasoline refiners and importers must achieve compliance at the individual facility level for the maximum average benzene standard of §1090.310(c).

(c) Gasoline importers may aggregate all import facilities within a PADD as a single facility to comply with annual average standards.

§1090.710 Downstream oxygenate accounting.

The requirements of this section apply to BOB for which the gasoline refiner or importer is accounting for the effects of the oxygenate blending that occurs downstream of the refinery or import facility in the refiner or importer’s annual average standard compliance calculations of this subpart. This section includes requirements on parties in the distribution chain to ensure that oxygenate is added pursuant to the blending instructions specified by the refiner or importer in order to ensure fuel quality standards are met.

(a) Provisions for gasoline refiners and importers. In order to account for the effects of oxygenate blending downstream, a gasoline refiner or importer of BOB must meet all the following requirements:

(1) Produce or import the BOB such that, when blended with a specified type and percentage of oxygenate, the finished gasoline meets the applicable gasoline standards of subpart C of this part.

(2) Conduct tests on each batch of BOB produced or imported that represents the finished gasoline after the specified type and amount of each oxygenate is added to the batch of the BOB by creating a hand blend pursuant to §1090.1342 and determine the properties of the hand blend using methods specified in subpart M of this part.

(3) Participate in the independent sampling oversight program specified in §1090.1440.

(4) Transfer ownership of the BOB only to an oxygenate blender that is registered with EPA pursuant to subpart I of this part or to an intermediate owner with the restriction that it only be transferred to a registered oxygenate blender.

(5) Specify each oxygenate type and amount (or range of amounts) that the gasoline refiner or importer tested for compliance of the hand blend in the PTD for the BOB, as specified in §1090.XXX.

(6) Participate in the national fuels survey program specified in subpart N of this part.
(b) Requirements for oxygenate blenders. For all BOBs received by any oxygenate blender, the oxygenate blender must add oxygenate of the type(s) and amount (or within the range of amounts) as specified on the PTDs for the BOB, except as specified in paragraph (d)(2) of this section.

(c) Provisions for downstream parties. No person may distribute a BOB to any person other than a registered oxygenate blender or to an intermediate owner with the restriction that the BOB is only transferred to a registered oxygenate blender. Any person who distributes BOB must obtain the company and facility identification number of the oxygenate blender that adds oxygenate to the BOB and must keep records relating to these transactions pursuant to subpart L of this part.

(d) Limitations. (1) Only the gasoline refiner or importer that first certifies the BOB may account for the downstream addition of oxygenate pursuant to the requirements of this section. On any occasion where any person downstream of the refinery or importer that produced or imported gasoline or BOB adds oxygenate to such product, it may not include the volume, benzene content, and sulfur content of the oxygenate in any compliance calculations or for credit generation under this subpart.

(2) A party downstream of the refiner may redesignate BOBs for use as gasoline without the addition of the specified type and amount of oxygenate if the provisions of §1090.740 are met. Parties that redesignate BOBs for use as gasoline without the addition of the specified type and amount of oxygenate are gasoline refiners and must meet all applicable requirements for gasoline refiners specified in §1090.105(a).

[NOTE TO READER: EPA is considering ways to minimize burdens associated with these recertification procedures. EPA is considering establishing a de minimus amount of credits (or volume) a party would need to retire to trigger this requirement. Another option under consideration is to not require attest engagements or other compliance provisions of this part to reduce burden. EPA continues to seek feedback on ways to reduce burden on recertifying E0 while ensuring that parties can provide fuels the market demands.]

§1090.715 Deficit carryforward.

(a) A gasoline refiner or importer may exceed an annual average standard specified in subpart C of this part for a given calendar year, creating a compliance deficit, provided that, in the calendar year following the year the deficit is created, the gasoline refiner or importer meets all the following requirements:

(1) The gasoline refiner or importer achieves compliance with the applicable annual average standard of subpart C of this part.

(2) The gasoline refiner or importer uses additional credits sufficient to offset the compliance deficit of the previous year.

(b) The compliance deficit value must be determined by §1090.XXX for sulfur and §1090.XXX for benzene.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(c) Gasoline refiners and importers must use any previously generated or obtained credits to achieve compliance with an annual average standard specified in subpart C of this part before creating a deficit.

(d) EPA may allow an extended period of deficit carryforward if it grants hardship relief under the provisions of subpart G of this part from an annual average standard specified in subpart C of this part.

§1090.720 Credit use.

(a) General credit use provisions. Only gasoline refiners and importers may generate, use, transfer, or own credits generated under this subpart. Credits may be used by a gasoline refiner or importer to comply with the gasoline annual average standards specified in subpart C of this part. Gasoline refiners and importers may also bank credits for future use, transfer credits to another gasoline refinery or importer within a company (intracompany trading), or transfer credits to another gasoline refiner or importer, if all applicable requirements of this subpart are met.

(b) Part 80 credit use. Credits generated under 40 CFR 80.1615 and 80.1290 may be used by gasoline refiners and importers to comply with the annual average standards of subpart C of this part, subject to the provisions of this subpart.

(c) Credit life. Credits are valid for use for five years after the year in which they are generated.

(d) Limitations on credit use. (1) Credits that have expired may not be used for demonstrating compliance with the annual average standards specified in subpart C of this part or be used to replace invalid credits specified in §1090.XXX.

(2) A gasoline refiner or importer possessing credits must use all credits prior to falling into compliance deficit pursuant to §1090.XXX.

(3) Credits may not be used to meet per-gallon standards.

(4) Credits may not be used to meet the maximum average benzene standard of §1090.XXX.

(e) Gasoline refiners and importers that generate, transact, or use credits under this subpart must report to EPA all information specified in subpart J of this part using forms and procedures specified by EPA.

§1090.725 Credit generation.

(a) Parties that can generate credits. (1) Any of the following parties may generate credits for use towards an average standard specified in subpart C of this part:

(i) U.S. refiners.

(ii) Importers.
(2) No party other than those specified in paragraph (a)(1) of this section may generate credits. Credits may also not be generated by transmix processors, transmix blenders, oxygenate blenders, butane blenders, pentane blenders, or truck and rail importers that use the alternative sampling and testing requirements of §1090.1325.

(b) Credit year. Credits generated pursuant to this section must be identified by the year of creation. For example, credits generated on gasoline produced in 2020 must be identified as 2020 credits.

(c) Sulfur credit generation.

(1) The number of credits generated for use in complying with the annual average sulfur standard of §1090.XXX must be calculated annually for each applicable compliance period according to the following equation:

\[ C_y = \left( \sum_{i=1}^{n} V_i \cdot 10 \right) - CSV_y \]

Where:

- \( C_y \) = Credits generated for the compliance period for use in complying with the annual average sulfur standard of §1090.XXX, in ppm-gallons.
- \( V_i \) = The volume of gasoline produced or imported in batch \( i \), in gallons.
- \( n \) = The number of batches of gasoline produced or imported during the compliance period.
- \( i \) = Individual batch of gasoline produced or imported during the compliance period.
- \( CSV_y \) = Compliance sulfur value for year \( y \), per §1090.700(a)(1), in ppm-gallons.

(2) The value of \( C_y \) must be positive to generate credits.

(3) Sulfur credits generated under this paragraph are in units of “ppm-gallons”.

(4) Sulfur credits calculated pursuant to paragraph (c)(1) of this section must be expressed to the nearest ppm-gallon. Fractional values must be rounded pursuant to §1090.50.

(d) Benzene credit generation.

(1) The number of credits generated for use in complying with the annual average benzene standard of §1090.XXX must be calculated annually for each applicable compliance period according to the following equation:

\[ C_y = \left( \sum_{i=1}^{n} V_i \cdot 0.0062 \right) - CBV_y \]
Where:

\[ C_y = \text{Benzene credits generated for the compliance period for use in complying with the annual average benzene standard of §1090.XXX, in benzene gallons.} \]

\[ V_i = \text{The volume of gasoline produced or imported in batch } i, \text{ in gallons.} \]

\[ B_i = \text{The benzene content of batch } i, \text{ per §1090.XXX, in volume percent.} \]

\[ n = \text{The number of batches of gasoline produced or imported during the compliance period.} \]

\[ i = \text{Individual batch of gasoline produced or imported during the compliance period.} \]

\[ CBV_y = \text{Compliance benzene value for year } y, \text{ per §1090.700(b)(1), in benzene gallons.} \]

(2) The value of \( C_y \) must be positive to generate credits.

(3) Benzene credits generated under this paragraph are in units of “benzene gallons”.

(4) Benzene credits calculated pursuant to paragraph (d)(1) of this section must be expressed to the nearest benzene gallon. Fractional values must be rounded pursuant to §1090.50.

(e) Gasoline refiners and importers that generate credits under this section must report to EPA all information regarding the transaction specified in subpart J of this part using forms and procedures specified by EPA.

**§1090.730 Credit transfers.**

Gasoline refiners and importers can only obtain credits from another gasoline refiner or importer to meet an annual average standard specified in subpart C of this part if all the following conditions are met:

(a) The credits are generated pursuant to the requirements of this subpart and reported according to the applicable requirements of subpart J of this part.

(b) The credits are used for compliance with the limitations regarding the appropriate periods for credit use in §1090.XXX.

(c) Any credit transfer must take place no later than the compliance deadline specified in §1090.XXX following the compliance period when the credits are obtained.

(d) The credit has not been transferred between EPA registered companies more than twice. The first transfer by the gasoline refiner or importer that generated the credit (“transferor”) may only be made to a gasoline refiner or importer that intends to use the credit (“transferee”). If the transferee cannot use the credit, it may make the second, and final, transfer only to a refiner.
or importer that intends to use the credit. Credit transfers that occur within a company are unlimited.

(e) The transferor must apply any credits necessary to meet the transferor’s applicable average standard before transferring credits to any other gasoline refiner or importer.

(f) The transferor may not incur a deficit due to the transfer of credits.

(g) Unless the transferor and transferee are the same party (e.g., transfers within a company), the transferor must supply to the transferee records pursuant to the requirements of subpart K of this part indicating the years the credits were generated, the identity of the refiner or importer that generated the credits, and the identity of the transferring party.

(h) The transferor and the transferee report to EPA all information regarding the transaction specified in subpart J of this part using forms and procedures specified by EPA.

§1090.735 Invalid credits and remedial actions.

In the case of credits that have been calculated or created improperly, or are otherwise determined to be invalid, all the following provisions apply:

(a) Invalid credits may not be used to achieve compliance with an average standard, regardless of the good faith belief that the credits were validly generated.

(b) Any validly generated credits existing in the transferring gasoline refiner or importer’s credit balance after correcting the credit balance, and after the transferor applies credits as needed to meet the average standard at the end of the compliance period, must first be applied to correct the invalid transfers before the transferring gasoline refiner or importer trades or banks the credits.

(c) Remedial action. The gasoline refiner or importer that used the credits, and any transferor of the credits, must adjust their credit records, reports, and average standard compliance calculations as necessary to reflect the use of valid credits only. Updates to any reports must be done pursuant to the applicable reporting requirements of subpart J of this part using forms and procedures specified by EPA.

§1090.740 Downstream oxygenate recertification.

In the case where a downstream party recertifies a BOB that a gasoline refiner or importer specified blending instructions for a specified type and amount (or range of amounts) of oxygenate pursuant to §1090.710 for a different type and/or amount of oxygenate (including gasoline recertification to contain no oxygenate), the party recertifying the fuel is a gasoline refiner for purposes of complying with applicable requirements of this part and incurs deficits to be included in the compliance calculations in §1090.700. Gasoline refiners that recertify BOBs pursuant to this section must calculate deficits for benzene, in benzene gallons, and sulfur, in ppm-gallons, as follows:

(a) Benzene deficits from downstream oxygenate recertification.
(1) To calculate the quantity of benzene gallons from gasoline recertification to include in the compliance calculations in §1090.700, use the following equation:

\[ D_{\text{Bz,Oxy}} = 0.007 \cdot V_{\text{Base}} \cdot \left[ \frac{1}{(1 - \text{PTD}_{\text{Oxy}})} - 1 \right] \]

Where:

\( D_{\text{Bz,Oxy}} \) = Benzene deficit resulting from recertifying gasoline, in benzene gallons. Fractional values must be rounded pursuant to §1090.50.

\( V_{\text{Base}} \) = The volume of gasoline in the batch being recertified, in gallons.

\( \text{PTD}_{\text{Oxy}} \) = The volume fraction of oxygenate that would have been added to the BOB as specified on PTDs.

(b) Sulfur deficits from downstream oxygenate recertification.

(1) To calculate the quantity of sulfur ppm-gallons from gasoline recertification to include in the compliance calculations in §1090.700, use the following equation:

\[ D_{\text{S,Oxy}} = 12 \text{ppm} \cdot V_{\text{Base}} \cdot \left[ \frac{1}{(1 - \text{PTD}_{\text{Oxy}})} - 1 \right] + \sum_{i=1}^{n} V_{\text{Oxy},i} \times S_{\text{Oxy},i} \]

Where:

\( D_{\text{S,Oxy}} \) = Sulfur deficit resulting from recertifying the gasoline, in ppm-gallons. Fractional values must be rounded pursuant to §1090.XXX.

\( V_{\text{Base}} \) = The volume of gasoline in the batch being recertified, in gallons.

\( \text{PTD}_{\text{Oxy}} \) = The volume fraction of oxygenate that would have been added to the BOB as specified on PTDs.

\( V_{\text{Oxy},i} \) = The volume of an oxygenate in the batch being recertified, in gallons.

\( S_{\text{Oxy},i} \) = The sulfur content of oxygenate \( i \), per §1090.XXX, in volume percent.

(c) Gasoline refiners do not incur a deficit, nor may they generate credits, for negative values from the equations in paragraphs (a) and (b) of this section.

(d) Deficits incurred pursuant to this section must be fulfilled in the compliance period in which they occur and may not be carried forward, pursuant to §1090.715.
Subpart I—Registration

§1090.800 General provisions.

(a) Who must register. The following parties must register with EPA prior to engaging in any activity under this part:

1. Refiners and importers of gasoline.
2. Refiners and importers of diesel fuel.
3. Refiners and importers of IMO marine fuel.
4. Oxygenate blenders.
5. Oxygenate producers and importers.
8. Blender-grade pentane blenders.
10. Distributors, carriers, and resellers of 500 ppm LM diesel fuel.
11. Certified ethanol denaturant producers and importers.
12. Independent surveyors.
13. Independent auditors.
14. Third parties that submit reports on behalf of any party regulated under this part. Such parties must register and be associated with the entity for whom they are reporting.

(b) Dates for registration. The deadlines for registration are as follows:

1. **New Registrants.** Except as specified in paragraph (b)(2) of this section, parties not currently registered with EPA must register with EPA no later than sixty (60) days in advance of the first date that such person engages in any activity under this part requiring registration pursuant to paragraph (a) of this section.

2. **Existing registrants.** Parties that are already registered with EPA as of the effective date of this rule are deemed to be registered for purposes of this part, except that such parties are responsible for reviewing and updating their registration information consistent with the requirements of this part and paragraph (c) of this section.
(c) Updates to registration. A registered party must submit updated registration information to EPA within thirty (30) days of any occasion when the registration information previously supplied becomes incomplete or inaccurate.

(d) Forms and procedures for registration. All registrations must use formats and procedures established by EPA.

(e) Company ID and facility ID numbers. EPA will provide registrants with a company ID and facility ID for each facility to be used for recordkeeping and reporting under this part.

(f) English language. Registration information submitted to EPA must be in English.

§1090.805 Contents of registration.

(a) General information required for all registrants. The following general information must be submitted to EPA by all entities required to register:

(1) Company information. For the company of the party, all the following information:

(i) The company name.

(ii) Company address, which must be the physical address of the business (e.g., not a post office box).

(iii) Mailing address, if different from company address.

(iv) Name, title, telephone number, and email address of an RCO. The RCO may delegate responsibility to a person who is familiar with the requirements of this part and who is no lower in the organization that a refinery or facility manager, or equivalent. Delegation must be made following forms and procedures established by EPA.

(2) Facility Information. For each separate facility, all the following information.

(i) The facility name.

(ii) The physical location of the facility.

(iii) A contact name and telephone number for the facility.

(iv) The type of facility.

(3) Location of records. For each separate facility, and for each importer’s operations in a single PADD:

(i) Whether records are kept on-site or off-site of the facility or refinery, or in the case of importers, the registered address.
(ii) If records are kept off-site, the primary off-site storage name, physical location, contact name, and telephone number.

(4) Activities. A description of the activities that are engaged in by the company and its facilities (e.g., refining, importing, etc.).

(b) Additional information required for blender-grade pentane producers.

(i) A description of the production facility that demonstrates that the facility is capable of producing blender-grade pentane that is compliant with the requirements of this part without significant modifications to the existing facility.

(ii) A description of the means by which the blender-grade pentane will be shipped from the production facility to the pentane blender(s) and the associated quality assurance practices that demonstrate that contamination during distribution can be adequately controlled so as not to cause the blender-grade pentane to be in violation of the standards of this part.

§1090.810 Voluntary cancellation of company or facility registration.

An RCO or RCO delegate may request cancellation of the registration of the company, or any of its facilities at any time. Such request will use formats and procedures established by EPA.

§1090.815 Involuntary cancellation of company registration.

(a) Criteria for cancellation. EPA may cancel a company’s registration, using the process specified in paragraph (b) of this section, if any of the following criteria are met:

(1) The company has failed to comply with the registration requirements of this part.

(2) The company has failed to submit any required report within thirty (30) days of the required submission date under this part.

(3) The attest engagement required by subpart T of this part has not been received within thirty (30) days of the required submission date.

(b) EPA will use the following process whenever it decides to cancel the registration of a company:

(1) EPA will provide written notification to the RCO identifying the reasons or deficiencies of why EPA intends to cancel the company’s registration. The company will have sixty (60) days from the date of the notification to correct the deficiencies identified or explain why there is no need for corrective action. If the deficiencies are not corrected or explained within sixty (60) days, EPA will cancel the registration without further notice to the party.

(2) If the basis for EPA’s notice of intent to cancel registration is the absence of reporting activity, the company will have sixty (60) days from the date of the notification to submit its
delinquent reports. If the delinquent reports are not received by EPA within 60 days, EPA may cancel the registration without further notice to the party.

(c) **Effect of Cancellation.** If cancelled:

(1) A company whose registration is cancelled will still be liable for violation of any requirements of this part.

(2) A company whose registration is cancelled will not be listed on any public list of actively registered companies that is maintained by EPA.

(3) A company whose registration is cancelled will not have access to any of the electronic reporting systems associated with this subpart.

(4) If a company whose registration has been cancelled wishes to re-register, it must do all the following:

   (i) Initiate a new registration.

   (ii) Provide any missing reports or correct any identified deficiencies.

§1090.820 **Changes of ownership.**

(a) When a company or any of its facilities will change ownership, the company must notify EPA at least sixty (60) days prior to the date of the requested change in registration.

(b) The notification required by paragraph (a) of this section must include all the following:

   (1) The effective date of the transfer of ownership of the facility and summary of any changes to the registration information provided to EPA under this subpart.

   (2) Documents that demonstrate the sale or change in ownership of the facility.

   (3) The signature of the RCO, or the RCO delegate, of both companies.

   (4) Any additional information requested by EPA to complete the change in registration.
Subpart J—Reporting

§1090.900 General provisions.

(a) Forms and procedures for reporting. All reporting, including all transacting of credits under this part, must be completed using formats and according to procedures established by EPA. Values must be reported in the units (e.g. gallons, ppm, etc.) and to the number of decimal places specified as part of reporting formats and procedures.

(b) English language. All reports submitted under this subpart must be submitted in English.

(c) Rounding. All values measured or calculated pursuant to the requirements of this subpart, must be rounded pursuant to §1090.50.

(d) Report submission. All reports required under this subpart, except attest engagements, must be submitted by March 31 for the preceding compliance period (e.g., reports covering the calendar year 2020 must be submitted to EPA by no later than March 31, 2021). Attest engagements must be submitted by June 1 for the preceding compliance period (e.g., attest engagements covering calendar year 2020 must be submitted to EPA by no later than June 1, 2021).

§1090.905 Annual, batch, and credit transaction reporting for refiners and importers of gasoline.

(a) Annual compliance demonstration for sulfur. Any refiner, for each of its refineries, and any importer for the gasoline it imports, must submit a report for each compliance period that includes the following information:

(1) The EPA-issued company and facility identification numbers.

(2) The total volume of gasoline produced or imported, expressed in gallons.

(3) The compliance sulfur value, expressed in ppm-gallons.

(4) The annual average sulfur level of the gasoline produced or imported, expressed in ppm.

(5) The net annual average sulfur level after inclusion of any deficits and any credits retired for compliance, expressed in ppm.

(6) Separately provide information for credits, and separately by year of creation, as follows:

(i) The number of credits owned at the beginning of the compliance period.

(ii) The number of credits generated during the compliance period.
(iii) The number of credits retired during the compliance period.

(iv) If any credits were obtained from or transferred to other parties, and for each other party, its name and EPA refiner or importer registration number, and the number of credits obtained from or transferred to the other party.

(v) The number of credits that expired at the end of the compliance period.

(vi) The number of credits that will carry over into the next compliance period.

(vii) The credit deficit that was carried over from the previous compliance period

(viii) The credit deficit to be carried over into the next compliance period.

(ix) Any credit deficit incurred from downstream oxygenate recertification.

(b) Annual compliance demonstration for benzene. Any refiner, for each of its refineries, and any importer for the gasoline it imports, must submit a report for each compliance period that includes all the following information:

(1) The EPA-issued company and facility identification numbers.

(2) The total volume of gasoline produced or imported, expressed in gallons.

(3) The annual average benzene concentration of gasoline produced or imported, expressed as a percentage.

(4) The maximum average benzene concentration of gasoline produced or imported, expressed as a percentage.

(5) The net annual average benzene level after inclusion of any deficits and any credits retired for compliance, expressed as a percentage.

(6) Separately provide information for credits, and separately by year of creation, as follows:

(i) The number of credits at the beginning of the compliance period.

(ii) The number of credits generated during the compliance period.

(iii) The number of credits retired during the compliance period.

(iv) If any credits were obtained from or transferred to other parties, and for each other party, its name and EPA refiner or importer registration number, and the number of credits obtained from or transferred to the other party.

(v) The number of credits that expired at the end of the compliance period.
(vi) The number of credits that will carry over into the next compliance period.

(vii) The credit deficit that was carried over from the previous compliance period.

(viii) The credit deficit to be carried over into the next compliance period.

(ix) Any deficit incurred from downstream oxygenate recertification.

(c) Batch reporting.

[NOTE TO READER: EPA has received feedback on restructuring butane/pentane batch reporting. EPA will continue to solicit and incorporate feedback regarding butane/pentane batch reporting and include such changes in the NPRM.]

(1) General requirements. Any refiner, for each of its refineries, and any importer for the gasoline it imports, must submit the following information on a per-batch basis for regulated gasoline, gasoline additives, and regulated gasoline blendstocks:

(i) The EPA-issued company and facility identification numbers.

(ii) The batch number.

(iii) The date the batch was produced or imported.

(iv) The batch volume, expressed in gallons.

(v) The production date or, in the case of PCG, the receipt date.

(vi) A description of the product type (e.g., gasoline, BOB, butane, pentane, GTAB, oxygenate, PCG, etc.).

(vii) The type(s) and amount(s) of oxygenate(s), expressed as a percentage. For hand blends, report the type(s) and amount(s) of oxygenate(s) blended to create the hand blend. For finished gasoline containing oxygenates, report the tested oxygenate(s) content(s). For finished gasoline not containing oxygenate, do not test and report oxygenate type(s) and amount(s).

(viii) The tested sulfur content of the batch, expressed in ppm. For hand blends, report the sulfur content for both the BOB and the hand blend.

(ix) The tested benzene content of the batch, expressed as a percentage. For hand blends, report the benzene content for the hand blend.

(x) For all batches of summer gasoline:

(A) The applicable RVP standard, as specified in §1090.315.

(B) The measured RVP of the batch, expressed in psi. For hand blends, report the RVP of the BOB.
(xi) For producers and importers of blender-grade pentane, the carbon content of the batch.

(2) Additional reporting for refiners and importers that blend butane or pentane with gasoline or BOB to create finished gasoline. Refiners and importers that blend blender-grade butane or blender-grade pentane with gasoline must submit the following additional information for the finished gasoline:

(i) The butane-blended or pentane-blended batch number.

(ii) The date the batch was produced or imported.

(iii) The batch volume, expressed in gallons.

(iv) The amount of butane or pentane in the batch.

(v) The sulfur content of the batch, expressed in ppm.

(vi) The benzene content of the batch, expressed as a volume percentage.

(vii) The RVP of the batch, expressed in psi.

(viii) The carbon content, expressed as a volume percentage.

(ix) The total annual volume of butane that is blended with gasoline, expressed in gallons.

(x) The total annual volume of gasoline produced using butane, expressed in gallons.

(xi) The total annual volume of pentane that is blended with gasoline, expressed in gallons.

(xii) The total annual volume of gasoline produced using pentane, expressed in gallons.

(xiii) A statement affirming that all gasoline produced using butane or pentane meets all applicable standards of subpart C of this part.

(3) Additional reporting for producers of TGP. Any producer of TGP must submit the following additional information:

(i) The TGP batch number.

(ii) Identification of the product as blendstock added to gasoline recovered from transmix.

(iii) The date the batch was produced or imported.

(iv) The batch volume, expressed in gallons.

(v) The sulfur content of the batch, expressed in ppm.
(vi) The benzene content of the batch, expressed as a volume percentage.

(d) Credit transactions. (1) Any party that is required to submit an annual compliance demonstration report for either sulfur or benzene pursuant to paragraph (a) or (b) of this section must submit information related to individual transactions involving benzene and sulfur credits including all the following:

   (i) The generation, purchase, sale, or retirement of such credits.
   
   (ii) Associated volumes of fuel.
   
   (iii) Identification of the trading partner.
   
   (2) Credits must be transacted following forms and using procedures specified by EPA.
   
   (3) All credit generations and retirements must be submitted to EPA by March 31 for the preceding compliance period.

§1090.910 Batch reporting for oxygenate producers and importers.

Any oxygenate producer, for each of its production facilities, and any importer for the oxygenate it imports, must submit a report for each compliance period that includes all the following information:

   (a) The EPA-issued company and facility registration numbers.
   
   (b) The total volume of oxygenate produced or imported.
   
   (c) For each batch of oxygenate produced or imported during the compliance period, all the following:

      (i) The batch number.
      
      (ii) The date the batch was produced or imported.
      
      (iii) One of the following product types:

         (A) Denatured ethanol using certified ethanol denaturant complying with §1090.XXX.
         
         (B) Denatured ethanol from non-certified denaturant.
         
         (C) A specified oxygenate other than ethanol.
         
      (iv) The volume of the batch, expressed in gallons.
      
      (v) The sulfur content of the batch, expressed in ppm.
§1090.915 Reports by blender-grade pentane producers and importers.

Any producer or importer of blender-grade pentane for use by pentane blenders must submit a report for each facility at which blender-grade pentane was produced or imported that contains all the following information:

(a) The EPA-issued company and facility registration numbers.

(b) For each batch of blender-grade pentane produced or imported during the compliance period, all the following:

(1) The batch number.

(2) The date the batch was produced or imported.

(3) The batch volume, expressed in gallons.

(4) The pentane content of the batch, expressed as a volume percentage.

(5) The oxygen content of the batch, expressed as a volume percentage.

(6) The sulfur content of the batch, expressed in ppm.

(7) The benzene content of the batch, expressed as a volume percentage.

(8) The carbon content of the batch, expressed as a volume percentage.

§1090.920 Reports by independent surveyors.

Independent surveyors that complete surveys pursuant to subpart N of this part must submit plans, samples, and reports according to the requirements and submission dates specified in that subpart.

§1090.925 Reports by independent auditors.

Independent auditors must submit attest engagement reports pursuant to subpart T of this part by June 1, as specified in §1090.900(d).

§1090.930 Reporting of test methods.

Any party required to report sulfur, benzene, oxygenate content, RVP, pentane, or carbon content under this subpart must report the test methods used at each of its facilities for the compliance period.

§1090.935 Reporting of sulfur values from diesel batches.

Any party required to report sulfur test results from diesel batches must submit information pursuant to 40 CFR 79.33.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
Subpart K—Product Transfer Document Requirements

§1090.1100 Designation of batches of fuels, fuel additives, and regulated blendstocks.

(a) Refiners, importers, fuel additive manufacturers, and regulated blendstock producers must designate batches of fuels, fuel additives, and regulated blendstocks on PTDs as specified in this subpart.

(b) Responsible parties must designate batches of fuels, fuel additives, and regulated blendstocks prior to the batch leaving the facility at which the batch was produced.

(c) By designating a batch of fuel, fuel additive, or regulated blendstock under this subpart, the designating party is subjecting the batch of fuel, fuel additive, or regulated blendstock to all applicable standards under this part.

§1090.1105 General PTD provisions.

(a) General.

(1) On each occasion when any person transfers custody or title to any product covered under this part other than when fuel is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility, the transferor must provide to the transferee PTDs that include all the following information:

(A) The name and address of the transferor.

(B) The name and address of the transferee.

(C) The volume of the product being transferred.

(D) The location of the product at the time of the transfer.

(E) The date of the transfer.

(2) The specific descriptive information required for gasoline products specified in §1090.1105 or distillate products specified in §1090.1110.

(b) Use of codes. Except for transfers to truck carriers, retailers, or wholesale purchaser-consumers, product codes may be used to convey the information required under this subpart, if such codes are clearly understood by each transferee.

(c) Retention of records. The records required by this subpart must be kept by the transferor and transferee for five (5) years from the date they were created or received by each party in the distribution system.

(d) Request for records. On request by EPA, the records required by this subpart must be made available to EPA. For records that are electronically generated or maintained, the
equipment or software necessary to read the records must be made available, or, if requested by EPA, electronic records must be converted to paper documents.

§1090.1110 PTD requirements for exempted fuels.

(a) In addition to the information required by §1090.1100, on each occasion when any person transfers custody or title to any exempted fuel specified in subpart G of this part, the transferor must provide to the transferee PTDs that include the following statements, as applicable:

(1) **Research and development exemption language.** For fuels used for a research, development, or test purpose specified in §1090.605: “For use in research, development, and test programs only.”

(2) **National security exemption language.** For fuels with a national security exemption specified in §1090.600: “This fuel is for use in vehicles, engines, or equipment under an EPA-approved national security exemption only.”

(3) **Territory fuel exemption language.** For fuels for use in American Samoa, Guam, or the Commonwealth of the Northern Mariana Islands specified in §1090.615: “This fuel is for use only in Guam, American Samoa, or the Northern Mariana Islands.”

(4) **Exported fuel language.** For exported fuels: “This fuel is for export from the United States only.”

(5) **Racing fuel language.** For fuels used for racing purposes specified in §1090.610: “This fuel is for racing purposes only.”

(6) **California gasoline language.** For California gasoline: “California gasoline”.

(7) **California diesel language.** For California diesel: “California diesel”.

(8) **Alaska and Hawaii summer gasoline language.** For summer gasoline for use in Alaska and Hawaii specified in §1090.6XX: “This summer gasoline is for use only in Alaska or Hawaii.”

(b) In statements required by paragraph (a) of this section, where “fuel” is designated in a statement, the specific fuel type (for example, “diesel” or “gasoline”) may be used in place of the word “fuel”.

§1090.1115 Gasoline PTD provisions.

(a) **BOB language requirements.** For batches of BOB, in addition to the information required by §1090.1100, the following information must be included on the PTD:

(1) **Oxygenate type(s) and amount(s).** Statements specifying each oxygenate type(s) and amount (or range of amounts) that, if blended with the BOB, will result in finished gasoline meeting all applicable standards of subpart C of this part.
(2) Winter or summer designation. A statement whether the batch of BOB is designed to be “winter” or “summer” gasoline upon the addition of the specified type(s) and amount(s) of oxygenate in paragraph (a)(1) of this section.

(3) Winter BOB language requirements. For batches of winter BOB, identification of the product as “Winter BOB”.

(4) Summer BOB language requirements.

(i) Except as specified in paragraph (a)(4)(ii) of this section, for batches of summer BOB, identification of the product with one of the following statements indicating the applicable RVP standard as specified in §1090.XXX:

(A) “9.0 psi BOB. This product does not meet the requirements to produce summer reformulated gasoline.”

(B) “7.8 psi BOB. This product does not meet the requirements to produce summer reformulated gasoline.”

(C) “7.4 BOB. This product meets the requirements to produce summer reformulated or conventional gasoline.”

(ii) For BOBs designed to produce a finished gasoline that must meet an RVP per-gallon standard required by any State Implementation Plan approved or promulgated under 42 U.S.C. § 7410 or 7502, additional or substitute language to satisfy the State program may be used as necessary.

(5) Ethanol 1.0 psi waiver language requirements.

(i) For summer BOBs that are designed for the special provisions for gasoline-ethanol blends in §1090.XXX, the following statements:

(A) “Suitable for the special RVP provisions for ethanol blends that contain between 9 and 10 vol % ethanol.”

(B) “The use of this BOB/gasoline to manufacture a gasoline-ethanol blend containing anything other than between 9 and 10 volume percent ethanol may cause a summertime RVP violation.”

(ii) For summer BOBs not covered by paragraph (a)(5)(i) of this section, information regarding the suitable ethanol content, stated in the following format: “Suitable for blending with ethanol at a concentration of no more than 15 vol % ethanol.”

(b) Finished gasoline requirements. For finished gasoline, the following information must be included on the PTDs:

(1) Winter or summer designation. A statement whether the finished gasoline is “winter” or “summer” gasoline.
(2) **Summer gasoline language requirements.**

(i) Except as specified in paragraph (b)(3)(ii) of this section, for summer gasoline, identification of the product with one of the following statements indicating the applicable RVP standard as specified in §1090.XXX:

(A) For finished gasoline that meets the 9.0 psi RVP per-gallon standard of §1090.XXX: “9.0 psi Gasoline.”

(B) For finished gasoline that meets the 7.8 psi RVP per-gallon standard of §1090.XXX: “7.8 psi Gasoline.”

(C) For finished gasoline that meets the 7.4 psi RVP per-gallon standard of §1090.XXX: “7.4 psi Gasoline.”

(ii) For finished gasoline that meets a RVP per-gallon standard required by any State Implementation Plan approved or promulgated under 42 U.S.C. § 7410 or 7502, additional or substitute language to satisfy the State program may be used as necessary.

(4) **Ethanol content language requirements.**

(i) For finished gasoline blended with ethanol, one of the following statements that accurately describes the gasoline:

(A) For finished gasoline containing no ethanol (“E0”), the following statement: “E0: Contains no ethanol. The RVP does not exceed [fill in appropriate value] psi.”

(B) For finished gasoline containing less than 9 volume percent ethanol, the following statement: “EX—Contains up to X% ethanol. The RVP does not exceed [fill in appropriate value] psi.” The term X refers to the maximum volume percent ethanol present in the gasoline.

(C) For finished gasoline containing between 9 and 10 volume percent ethanol (E10), the following statement: “E10: Contains between 9 and 10 vol % ethanol. The RVP does not exceed [fill in appropriate value] psi. The 1 psi RVP waiver applies to this gasoline. Do not mix with gasoline containing anything other than between 9 and 10 vol % ethanol.”

(D) For finished gasoline containing greater than 10 volume percent and not more than 15 volume percent ethanol (E15), the following statement: “E15: Contains up to 15 vol % ethanol. The RVP does not exceed [fill in appropriate value] psi.”.

(ii) The information required by paragraph (b)(4)(i) of this section regarding the ethanol content of the fuel is required year-round. The information required by paragraph (b)(4)(i) of this section regarding the RVP of the fuel is only required for summer gasoline.

(c) **Oxygenate language requirements.** In addition to any other PTD requirements of this subpart, on each occasion when any person transfers custody or title to any oxygenate upstream of any oxygenate blending facility, the transferor must provide to the transferee PTDs that include the following information, as applicable:
(1) For DFE: “Denatured fuel ethanol, maximum 10 ppm sulfur.”

(2) For other oxygenates, the name of the specific oxygenate must be identified on the PTD, followed by “maximum 10 ppm sulfur.” For example, for isobutanol, the following statement on the PTD would be required, “Isobutanol, maximum 10 ppm sulfur.”

(d) **Gasoline detergent language requirements.** In addition to any other PTD requirements of this subpart, the following requirements apply:

(1) The identity of the product being transferred as detergent, detergent-additized gasoline, or non-additized detergent gasoline.

(2) The name of the registered detergent must be used to identify the detergent additive package on its PTD and the lowest additive concentration (LAC) on the PTD must be consistent with the requirements of §1090.340.

(3) If the product being transferred is gasoline that has been additized with detergent under a CARB-based certification, or under a certification option that creates an oxygenate or other use restriction, then the PTD for the additized product must identify the applicable use restriction. The PTD for commingled products containing such restrictions must indicate the applicable restriction(s) from each component.

(e) **Gasoline additives language requirements.** In addition to any other PTD requirements of this subpart, gasoline additive manufacturers that manufacture additives pursuant to the requirements of §1090.355(a) must include all the following information related to the maximum treatment rate on PTDs for the additive:

(1) The maximum allowed treatment rate of the additive so that the additive will contribute no more than 3 ppm sulfur to the finished gasoline.

(2) [Reserved].

(f) **Certified ethanol denaturant language requirements.** In addition to any other PTD requirements of this subpart, on each occasion when any person transfers custody or title to any ethanol denaturant certified under §1090.XXX, the transferor must provide to the transferee PTDs that include all the following information.

(1) The following statement: “Certified Ethanol Denaturant suitable for use in the manufacture of denatured fuel ethanol meeting EPA standards.”

(2) The PTD must state that the sulfur content is 330 ppm or less, or if the certified ethanol denaturant manufacturer represents a batch of denaturant as having a maximum sulfur content lower than 330 ppm, the PTD must state that lower sulfur maximum (e.g., has a sulfur content of 120 ppm or less).

(g) **Pentane and butane language requirements.**
(1) A blender-grade pentane or butane producer or importer must initiate a PTD for each batch that it ships from its facility that contains the following information, as applicable:

(i) The blender-grade pentane or butane producer or importer company name and facility registration number issued by EPA.

(ii) One of the following statements:

(A) “Blender-grade pentane for use by pentane blenders”.

(B) “Blender-grade butane for use by butane blenders”.

(2) PTDs that are compliant with the requirements of paragraph (g)(1) of this section must be transferred from each party transferring blender-grade pentane or butane for use by pentane or butane blenders to each party that receives the blender-grade pentane or butane through to the pentane or butane blender respectively.

§1090.1120 Distillate fuels PTD provisions.

(a) General distillate fuel language requirements. For each occasion that any person transfers custody of any distillate fuel, the transferor must provide the transferee documents that include the following information:

(1) The maximum sulfur content standard that the transferor represents the fuel to meet under §1090.XXX.

(2) An accurate and clear statement of the applicable designation and/or classification of the fuel under §1090.XXX (e.g., “diesel fuel” or “500 ppm LM diesel fuel.”).

(b) 500 ppm LM diesel fuel language requirements. For transfers of 500 ppm LM diesel fuel, the transferor must provide the specified documents that include the following information:

(1) All applicable information specified in paragraph (a) of this section.

(2) The following statement: “500 ppm sulfur (maximum) LM diesel fuel. Not for use in highway or other nonroad vehicles and engines.”

(c) ECA marine fuel language requirements. For transfers of ECA marine fuel, the transferor must provide the transferee documents that include the following information:

(1) All applicable information specified in paragraph (a) of this section.

(2) The following statement: “1,000 ppm sulfur (maximum) ECA marine fuel. For use in Category 3 marine vessels only. Not for use in engines not installed on Category 3 marine vessels.”

(3) Parties may use one of the following statements in lieu of the required statement in paragraph (c)(2) of this section if allowed:
(i) “High sulfur fuel. For use only in ships with an approved permit as allowed by MARPOL Annex VI, Regulation 3.”

(ii) “High sulfur fuel. For use only in ships as allowed by MARPOL Annex VI, Regulation 4.”

(iii) “High sulfur fuel. For use only in ships as allowed by MARPOL Annex VI, Regulation 3 or Regulation 4.”

(d) Heating oil language requirements. For transfers of heating oil, the transferor must provide the transferee documents that include the following information:

(1) All applicable information specified in paragraph (a) of this section.

(2) The following statement: “Heating Oil. Not for use in highway vehicles or engines or nonroad, locomotive, or marine engines.”

§1090.1125 Diesel fuel additives language requirements.

In addition to any other PTD requirements of this subpart, on each occasion that any person transfers custody or title to a diesel fuel additive that is subject to the provisions of §1090.XXX to a party in the additive distribution system or in the diesel fuel distribution system for use downstream of the diesel fuel refiner, the transferor must provide to the transferee documents that identify the additive as follows:

(a) For additives that comply with the 15 ppm sulfur standard specified in §1090.XXX, include the following statement: “The sulfur content of this diesel fuel additive does not exceed 15 ppm.”

(b) For additives that are permitted to have higher than 15 ppm sulfur content and comply with the requirements of §1090.XXX, the transferor must provide to the transferee documents that identify the additive as such, and do each of the following:

(1) Indicate the high sulfur potential of the additive by including the following statement: “This diesel fuel additive may exceed the federal 15 ppm sulfur standard. Improper use of this additive may result in non-complying diesel fuel.”

(2) If the additive package contains a static dissipater additive and/or red dye having a sulfur content greater than 15 ppm, a statement must be included that accurately describes the contents of the additive package pursuant to one of the following statements:

(i) “This diesel fuel additive contains a static dissipater additive having a sulfur content greater than 15 ppm.”

(ii) “This diesel fuel additive contains red dye having a sulfur content greater than 15 ppm.”
(iii) “This diesel fuel additive contains a static dissipater additive and red dye having a sulfur content greater than 15 ppm.”

(3) Include the following information:

(i) The additive package’s maximum sulfur concentration.

(ii) The maximum recommended concentration in volume percent for use of the additive package in diesel fuel.

(iii) The contribution to the sulfur level of the fuel (in ppm) that would result if the additive package is used at the maximum recommended concentration.

(c) For those diesel fuel additives that are sold in containers for use by the ultimate consumer of diesel fuel, each transferor must have displayed on the additive container, in a legible and conspicuous manner, one of the following statements, as applicable:

(1) For those additives that comply with the 15 ppm sulfur standard, “This diesel fuel additive complies with the federal low sulfur content requirements for use in diesel motor vehicles and nonroad engines.”

(2) For those additives with a sulfur content in excess of 15 ppm, the following statement: “This diesel fuel additive does not comply with federal ultra-low sulfur content requirements for use in model year 2007 and newer diesel motor vehicles or model year 2011 and newer diesel nonroad equipment engines.”

**§1090.1130 Alternative PTD language provisions.**

(a) Alternative PTD language to the language specified in this subpart may be used if approved by EPA in advance. Such language must contain all the applicable informational elements specified in this subpart.

(b) Requests for alternative PTD language must be submitted to the attention of “Alternative Product Transfer Document Language” to the contact information in §1090.10.
Subpart L—Recordkeeping

[NOTE TO READER: Recordkeeping requirements are typically one of the last portions of a regulation written due to it being dependent on requirements and provisions across the entire part. This subpart is neither complete nor accurate. However, EPA does not intend to modify its general approach to recordkeeping under the fuels program. Parties would need to keep similar records to those required under 40 CFR part 80 for five years in a similar manner as today.]

1090.1200 General recordkeeping requirements.

(a) **Length of time records must be kept.** Records required by this part must be kept for five (5) years from the date they were created, except that records relating to credit transfers must be kept by the transferor for five (5) years from the date the credits were transferred, and must be kept by the transferee for five (5) years from the date the credits were transferred, used, or terminated, whichever is later.

(b) **Make records available to EPA.** On request by EPA, the records specified in this section must be provided to EPA. For records that are electronically generated or maintained, the equipment and software necessary to read the records must be made available, or upon approval by EPA, electronic records must be converted to paper documents that must be provided to EPA.

1090.1205 Recordkeeping requirements for all regulated parties.

Any party that sells, offers for sale, dispenses, supplies, offers for supply, stores, blends, transports, or causes the transportation of any fuel, fuel additive, or regulated blendstock subject to requirements of this part must maintain records containing the following information:

(a) The PTDs for all fuels, fuel additives, and regulated blendstocks for which the party is the transferor or transferee.

(b) For any sampling and testing on fuels, fuel additives, and regulated blendstocks required under this part, all the following information:

(1) The location, date, time, and storage tank or truck identification for each sample collected.

(2) The identification of the person(s) who collected the sample and the person(s) who performed the testing.

(3) The results of the tests.

(4) The actions taken to stop the sale of any fuel, fuel additive, or regulated blendstock found not to be in compliance with applicable standards of this part, and the actions taken to identify the cause of any noncompliance and prevent future instances of noncompliance.

(c) For parties required to register pursuant to subpart I of this part, records supporting information required to complete and maintain registration for the party’s company and each facility.
(d) For parties required to submit reports pursuant to subpart J of this part, copies of all reports submitted to EPA.

1090.1210 Recordkeeping requirements for gasoline refiners and importers.

Any gasoline refiner for each of its refineries, and any gasoline importer for the gasoline it imports, must keep records that include the following information:

(a) **Batch records.** For each batch of gasoline, all the following information:

(1) The results of tests, including any calculations necessary to transcribe or correlate test results into reported values pursuant to subpart J of this part, performed to determine gasoline properties and characteristics pursuant to subpart M of this part.

(2) The batch volume.

(3) The batch number.

(4) The date the batch was produced or imported.

(5) The designation regarding whether the batch is summer or winter gasoline.

(6) For summer gasoline, the designation of the applicable RVP standard pursuant to §1090.XXX.

(7) The PTDs for any gasoline produced or imported.

(8) The PTDs for any gasoline received.

(9) If appropriate, the designation of the batch as an exempted fuel pursuant to subpart G of this part.

(b) **Downstream oxygenate accounting records.** In the case of BOB certified for including in downstream oxygenate accounting pursuant to §1090.XXX, all the following information:

(1) The results of tests for a hand blended sample prepared pursuant to §1090.XXX to ensure that, following blending, the BOB meets applicable standards.

(2) Records that demonstrate that the gasoline refiner or importer participates in the national fuels survey program specified in subpart N of this part.

(3) Records that demonstrate that the gasoline refiner or importer participates in the sampling oversight program specified in subpart N of this part.

(4) Compliance calculations specified in §1090.XXX based on an assumed addition of oxygenate.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(c) Records for PCG. In the case of any gasoline classified as PCG pursuant to §1090.XXX, all the following information:

(1) Results of the tests to determine the properties and volume of the PCG when received at the gasoline refinery.

(2) Records that reflect the storage and movement of the PCG within the refinery to the point the PCG is used to produce gasoline or BOB.

(d) Records for refiners that blend blender-grade butane and pentane. In the case of blender-grade butane or pentane blended into gasoline or BOB pursuant to §1090.XXX or §1090.XXX, all the following information:

(1) The volume of butane added.

(2) The volume of the pentane added.

(3) The volume of gasoline or BOB both prior to and after the blender-grade butane or pentane blending.

(4) The purity and properties of the blender-grade butane specified in §1090.XXX.

(5) The purity and properties of the blender-grade pentane specified in §1090.XXX.

(6) Compliance with the requirements of 40 CFR 80.82 and 80.85.

(e) Records for the importation of gasoline treated as blendstock. In the case of any imported GTAB, documents that reflect the storage and physical movement of the GTAB from the point of importation to the point of blending to produce gasoline.

(f) Records for interface and transmix. In the case of any interface or transmix used to produce gasoline pursuant to subpart E of this part, records that reflect the results of any sampling and testing of gasoline or BOB required by subparts E and M of this part.

(1) Pipelines must keep records showing that interface was designated in the proper manner, according to the designations listed in §1090.XXX.

(2) Transmix processors and transmix blenders must keep records showing that their transmix meets the definition in §1090.XXX, or contains gasoline and distillate fuel only from the sources listed in §1090.500(c).

(3) Transmix processors must keep records showing the volumes of gasoline or BOB recovered from transmix and the type and amount of any blendstock added, if applicable.

(4) Transmix blenders must keep records showing compliance with the quality assurance program and/or sampling and testing requirements of §1090.510(b), and for each batch of gasoline or BOB with which transmix is blended, the volume of the batch, and the volume of transmix blended into the batch.

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(g) Records related to ABT. Any gasoline refiner for each of its refineries, and any importer for the gasoline it imports, must keep records that include the following information, as applicable:

(1) Compliance sulfur and benzene values pursuant to §1090.XXX, and the calculations used to obtain those values.

(2) The number of valid credits in possession of the refinery or importer at the beginning of each compliance period, separately by generating facility and year of generation.

(3) The number of credits generated by the refinery or importer pursuant to subpart H of this part, separately by facility and by year of generation.

(4) If any credits were obtained from or transferred to other parties, all the following for each other party:
   (i) The party’s name.
   (ii) The party’s EPA refiner or importer registration number.
   (iii) The number of credits obtained from, or transferred to, the party.

(5) The number of credits that expired at the end of each compliance period, separately by generating facility and year of generation.

(6) The number of credits that will be carried over into a subsequent compliance period, separately by generating facility and year of generation.

(7) The number of credits used, separately by generating facility and year of generation.

(8) Contracts or other commercial documents that establish each transfer of credits from the transferor to the transferee.

(h) Records related to exemptions. California gasoline pursuant to §1090.620, exempt gasoline for research and development pursuant to §1090.605, or for export outside the United States.

1090.1215 Recordkeeping requirements for diesel and ECA refiners and importers.

[NOTE TO READER: The regulations at 40 CFR part 80, subpart I, include designate and track provisions for 500 LM diesel fuel and ECA marine fuel. EPA intends to maintain this for 500 ppm LM diesel fuel, but is considering removing the designate and track provisions for ECA marine fuel. Global marine fuel would be treated similarly to ECA marine fuel.]

The following recordkeeping requirements apply to all diesel and ECA marine fuel refiners:
(a) Registration and designation. Registration and designation documents and information are records.

(1) Registration. All documents and information necessary for registration pursuant to subpart I of this part must be maintained.

(2) Designation. All documents and information created or used for the purpose of batch designation pursuant to §1090.1110 must be maintained.

(b) Batches. Batch information and documents are records.

(1) Sampling and testing. For any sampling and testing for sulfur content for a batch of diesel fuel produced or imported and subject to the 15 ppm sulfur standard, or any sampling and testing for sulfur content as part of a quality assurance testing program, and any sampling and testing for cetane index, aromatics content, solvent yellow 124, or solvent red 164 content of diesel fuel, the following records must be maintained:

(i) The location, date, time, and storage tank or truck identification for each sample collected.

(ii) The name and title of the person who collected the sample and the person who performed the testing.

(iii) The results of the tests for sulfur content (including, where applicable, the test results with and without application of the adjustment factor under 40 CFR 80.580(d)) and for cetane index or aromatics content (as applicable), and the volume of product in the storage tank or container from whence the sample was taken.

(2) Remedial actions. If a batch is not in compliance with the sulfur standards of §1090.XXX, then the refiner must maintain records of the following actions:

(i) Stopping the sale or distribution of the noncompliant fuel.

(ii) Identifying the cause of any noncompliance.

(iii) Preventing noncompliance in the future.

(3) Additional batch records. Refiners producing distillate or residual fuel subject to a sulfur standard pursuant to subpart D of this part must, for each refinery, keep records that include the following information for each batch of ULSD or ECA marine fuel:

(i) The batch volume.

(ii) The batch number.

(iii) The date the batch was produced or imported.

(iv) A record designating the batch as one of the following:

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(A) ULSD, LM 500 diesel fuel, or ECA marine fuel, as applicable.

(B) Meeting the 500 ppm sulfur standard of §1090.XXX, the 15 ppm sulfur standard of §1090.XXX, the 1,000 ppm sulfur standard of §1090.XXX, or other applicable standard.

(C) Dyed or undyed with visible evidence of solvent red 164.

(D) Marked or unmarked with solvent yellow 124.

(v) The calculations used to determine baselines or compliance with the volume requirements and volume percentages, as applicable, under this subpart.

(vi) A copy of reports submitted to EPA.

(c) Transmix. Transmix documents and information are records.

(1) Transmix used to make 500 ppm LM diesel fuel. Producers of 500 ppm LM diesel fuel using transmix must have an EPA approved compliance plan, which must include:

(i) A detailed description of how the facility will segregate any 500 ppm LM diesel fuel produced subject to the standards under §1090.XXX from the producer through to the ultimate consumer from fuel having other designations.

(ii) A demonstration showing that the end users of 500 ppm LM diesel fuel will also have access to 15 ppm diesel fuel for use in those engines that require the use of 15 ppm diesel fuel.

(iii) Identification of the entities that handle the 500 ppm LM diesel fuel through to the ultimate consumer. No more than 4 separate entities may handle the 500 ppm LM diesel fuel between the producer and the ultimate consumer.

(iv) Identification of all ultimate consumers to whom the refiner supplies the 500 ppm LM diesel fuel.

(v) A detailed description of how misfueling of 500 ppm LM diesel fuel into vehicles or equipment that require the use of 15 ppm diesel fuel will be prevented.

(2) [Reserved]

(d) Diesel treated as blendstock. DTAB documents and information are records.

(1) The importer must retain records that reflect the importation, sampling and testing, and physical movement of any DTAB.

(2) Any DTAB that ultimately is not used in the importer’s refinery operation (e.g., a tank bottom of DTAB at the conclusion of the refinery operation), must be treated as newly imported diesel fuel, for which all required sampling and testing and recordkeeping must be accomplished, and included in the importer’s compliance calculations for the compliance period when this sampling and testing occurs.

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(e) Heating oil. Heating oil designation documents and information are records.

(1) Heating oil subject to sulfur standards. Refiners producing distillate or residual fuel subject to a sulfur standard of subpart D of this part must, for each refinery, keep records that include the following information for each batch of heating oil:

(i) The batch volume.

(ii) The batch number.

(iii) The date the batch was produced or imported.

(iv) A record designating the batch as heating oil.

(v) The calculations used to determine baselines or compliance with the volume requirements and volume percentages, as applicable.

(vi) A copy of reports submitted to EPA.

(2) [Reserved]

(f) Other. Additional recordkeeping requirements apply to:

(1) Mobile facilities. Any registered mobile facility must maintain records of all the contracts between the mobile facility and any contracted component (e.g., tank truck, barge, marine tanker, rail car, etc.) at each of its registered mobile facilities.

(2) Aggregated facilities consisting of a refinery and a truck loading terminal. In addition to the applicable records required by paragraphs (a) through (e) of this section, such aggregated facilities must also keep the following records:

(i) All the following information for each batch of distillate fuel (or residual fuel with a sulfur level of 1,000 ppm or less if such fuel is intended for use in an ECA) produced by the refinery and sent over the aggregated facility’s truck rack:

(A) The batch volume.

(B) The batch number.

(C) The date of production.

(D) A record designating the batch as one of the following:

(1) NRLM diesel fuel, NR diesel fuel, LM diesel fuel, ECA marine fuel, or heating oil, as applicable.

(2) Meeting the 500 ppm sulfur standard of §1090.XXX, the 15 ppm sulfur standard of §1090.XXX, the 1,000 ppm sulfur standard of §1090.XXX, or other applicable standard.
(3) Dyed or undyed with visible evidence of solvent red 164.

(4) Marked or unmarked with solvent yellow 124.

(ii) Hand-off reports for all distillate fuel (or residual fuel with a sulfur level of 1,000 ppm or less if such fuel is intended for use in an ECA) from external sources (i.e., from another refiner or importer), as specified in §1090.XXX.

1090.1220 Recordkeeping requirements for oxygenate blenders.

Any oxygenate blender that blends any oxygenate with any BOB must, for each occasion such blending occurs, maintain records containing the following:

(a) The date, time, location, and identification of the blending tank or truck in which the blending occurred.

(b) The volume and oxygenate requirements of the BOB to which oxygenate was added.

(c) The volume, type, and purity of the oxygenate which was added, and documents that show the source(s) of the oxygenate used.

1090.1225 Recordkeeping requirements for gasoline additives.

(a) Gasoline additive producers and importers. Gasoline additive producers and importers of gasoline additives must keep the following records for each batch of additive produced or imported:

(1) The batch volume.

(2) The date the batch was produced or imported.

(3) The PTD for the batch.

(4) The maximum recommended treatment rate.

(5) Records of the gasoline additive producer or importer’s control practices that demonstrate that the additive will contribute no more than 3 ppm on a per-gallon basis to the sulfur content of gasoline when used at the maximum recommended treatment rate.

(b) Records that parties that take custody of gasoline additives in the gasoline additive distribution system must keep. Except for gasoline additives packaged for addition to gasoline in the vehicle fuel tank, all parties that take custody of gasoline additives for bulk addition to gasoline from the producer through to the party that adds the additive to gasoline must keep all the following records:

(1) The PTD for each batch of gasoline additive.

(2) As applicable, the treatment at which the additive was added to gasoline.
(3) As applicable, the volume of gasoline that was treated with the additive. A new record must be initiated in cases where a new batch of additives is mixed into a storage tank from which the additive is drawn to be injected into gasoline.

1090.1230 Recordkeeping requirements for oxygenate producers and importers.

(a) Records that oxygenate producers and importers must keep. Oxygenate producers and importers must keep records of all the following for each batch of oxygenate produced or imported:

(1) The batch volume.

(2) The batch number.

(3) The date the batch was produced or imported.

(4) The PTD for the batch.

(5) The sulfur content of the batch.

(6) The following records must be kept if the sulfur content of the batch was determined by analytical testing:

(i) The location, date, time, and storage tank or truck identification for each sample collected.

(ii) The name and title of the person who collected the sample and the person who performed the test.

(iii) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test.

(iv) Any record that contains a test result for the sample that is not identical to the result recorded in paragraph (a)(6)(iii) of this section.

(v) The test methodology used.

(7) For DFE, the following records must be kept if the sulfur content of the batch was determined by the alternative means of demonstrating compliance with the sulfur requirements pursuant to §1090.XXX:

(i) The name and title of the person who calculated the sulfur content of the batch.

(ii) The date the calculation was performed.

(iii) The calculated sulfur content.
(iv) The sulfur content of the neat (un-denatured) ethanol.

(v) The date each batch of neat ethanol was produced.

(vi) The neat ethanol batch number.

(vii) The neat ethanol batch volume.

(viii) As applicable, the neat ethanol production quality control records, or the test results on the neat ethanol, including all the following:

(A) The location, date, time, and storage tank or truck identification for each sample collected.

(B) The name and title of the person who collected the sample and the person who performed the test.

(C) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test.

(D) Any record that contains a test result for the sample that is not identical to the result recorded in paragraph (a)(7)(viii)(C) of this section.

(E) The test methodology used.

(ix) The sulfur content of the denaturant(s) used, and the volume percent at which the denaturant(s) were added to neat (un-denatured) ethanol to produce DFE.

(x) The PTDs for the denaturants used.

(b) Records that parties that take custody of oxygenate in the oxygenate distribution system must keep. All parties that take custody of oxygenate—from the oxygenate producer through to the oxygenate blender—must keep a copy of the PTD for each batch of oxygenate.

1090.1235 Recordkeeping requirements for ethanol denaturant.

(a) Records that must be kept by certified ethanol denaturant producers and importers. Records of all the following must be kept for each batch of certified ethanol denaturant produced or imported:

(1) The batch volume.

(2) The batch number.

(3) The date the batch was produced or imported.

(4) The PTD for the batch.
(5) The sulfur content of the batch.

(6) The location, date, time, and storage tank or truck identification for each sample collected.

(7) The name and title of the person who collected the sample and the person who performed the test.

(8) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test.

(9) Any record that contains a test result for the sample that is not identical to the result recorded in paragraph (a)(8) of this section.

(10) The test methodology used.

(b) Records that parties that take custody of ethanol denaturants designated as suitable for use in the manufacturer of DFE meeting federal quality requirements. All parties that take custody of denaturants designated as suitable for use in the manufacture of DFE pursuant to §1090.XXX must keep the following records:

(1) The PTD for the denaturant.

(2) As applicable, the volume percent at which the denaturant was added to neat ethanol.

1090.1240 Recordkeeping requirements for gasoline detergent blenders.

Gasoline detergent blenders must maintain the following records to demonstrate that a detergent has been added to gasoline before it is distributed to retail and wholesale-purchaser-consumer facilities at a concentration at least as high as represented by the lowest additive concentration for the detergent registered with EPA by the detergent manufacturer pursuant to 40 CFR 79.21(j):

(a) The PTD for the detergent(s) used.

(b) For each detergent used, the records maintained by the detergent blender must compare the volume of gasoline distributed from each detergent blending facility over the period of a calendar month or lesser time period to the volume of detergent blended into the subject gasoline volume.

(c) The detergent blender must provide the records specified in this section to EPA within fourteen (14) days of EPA’s request.
Subpart M—Sampling, Testing, and Retention Requirements

§1090.1300 General provisions.

(a) This subpart is organized as follows:

(1) Sections 1090.1310 through 1090.1335 specify the scope of required testing, including special provisions that apply in several unique circumstances.

(2) Sections 1090.1340 through 1090.1345 specify handling procedures for collecting and retaining samples.

(3) Sections 1090.1350 through 1090.1365 specify the procedures for measuring the specified parameters.

(4) Section 1090.1375 specifies the procedures for testing related to gasoline deposit control test procedure.

(b) Where requirements for a quality assurance program apply at some minimum frequency, your first batch of product triggers the testing requirement. The specified frequency serves as a deadline for performing the required testing, and as a starting point for the next testing period. The following examples illustrate the requirements for testing based on sampling the more frequent of every 90 days or 500,000 gallons of blender-grade butane you received from a supplier:

(1) If your testing period starts March 1 and you use less than 500,000 gallons of blender-grade butane from March 1 through May 29 (90 days), you must perform testing under a quality assurance program sometime between March 1 and May 29. Your next test period starts with the use of blender-grade butane on May 30 and again ends after 90 days or after you use 500,000 gallons of blender-grade butane, whichever comes first.

(2) If your testing period starts March 1 and you use 500,000 gallons of blender-grade butane for the testing period on April 29 (60 days), you must perform testing under a quality assurance program sometime between March 1 and April 29. Your next testing period starts with the use of blender-grade butane on April 30 and again ends after 90 days or after you use 500,000 gallons of blender-grade butane, whichever comes first.

(c) You must apply good laboratory practice for all sampling, measurement, and calculations related to testing required under this part. This requires performing these procedures in a way that is consistent with generally accepted scientific and engineering principles and properly accounts for all available relevant information.

SCOPE OF TESTING

§1090.1310 Testing to demonstrate compliance with standards.

(a) Perform testing as needed to submit the reports specified in subpart J of this part. This section specifies additional test requirements.
(b) Refiners and importers must perform the following measurements before the fuel, fuel additive, or regulated blendstock from a given batch leaves the refinery, import facility or other production facility, except as specified in §1090.1315:

(1) Diesel fuel. Perform testing for each batch of ULSD, 500 ppm LM diesel fuel, and IMO marine fuel to demonstrate compliance with sulfur standards.

(2) Gasoline. Perform testing for each batch of summer gasoline to demonstrate compliance with RVP standards, and for both summer and winter gasoline to demonstrate compliance with sulfur standards.

(c) The following testing provisions apply for gasoline and regulated gasoline blendstocks:

(1) Refiners producing BOB must prepare a hand-blended sample of oxygenated gasoline as specified in §1090.1342 and perform the following measurements:

   (i) Measure sulfur in both the BOB and the hand-blended sample.

   (ii) Measure benzene in the hand-blended sample.

   (iii) Measure RVP of the BOB.

(2) Oxygenate producers must collect a representative sample from each batch of oxygenate for testing to demonstrate compliance with sulfur standards, except that DFE producers may meet the alternative requirements of §1090.1335.

(3) Oxygenate producers must measure the oxygenate content of each batch of oxygenate they produce. Refiners producing gasoline solely from crude oil do not need to test that gasoline for distillation or oxygenate.

(4) Blender-grade butane and blender-grade pentane producers must collect samples for testing to demonstrate compliance with purity specifications and sulfur and benzene standards as specified in §1090.1320.

(5) Ethanol denaturant producers that certify the denaturant under §1090.1335 must test each batch to demonstrate compliance with the sulfur standard.

(6) Refiners blending transmix to make gasoline must test as specified in subpart E of this part and §1090.1330.

(d) Refiners producing gasoline by adding blendstock to PCG must comply with §1090.1320.
§1090.1315 In-line blending.

This section specifies how refiners using in-line blending equipment may qualify for an exemption from the requirement of §1090.1310(b) to test every batch of fuel before the fuel leaves the refinery.

(a) The exemption in this section applies if you use in-line blending equipment to supply fuel directly into a pipeline, marine vessel, or other type of distribution that does not involve collecting fuel in a tank or other type of storage for creating a batch of fuel.

(b) To request an exemption, send us a request signed by the RCO with the following information:

(1) Describe the location of your in-line blending operation, how long it has been in operation, and how much of each type of fuel you have blended over the preceding three years. Describe the physical layout of the blending operation, and describe how you move the blended fuel into distribution. Also describe how your automated system monitors and controls blending proportions and the properties of the blended fuel.

(2) Describe how you collect and test fuel samples and perform composite calculations in a way that is equivalent to measuring the fuel properties of a batch of blended fuel. Your procedures need to conform to the sampling specifications in ASTM D4177 and the composite calculations in ASTM D5854 (both incorporated by reference in §1090.95).

(3) Describe any expectation or plan for you or another party to perform additional downstream testing for the same fuel parameters.

(4) Describe your quality assurance procedures. Describe any experiences from the previous three years where these quality assurance procedures led you to make corrections to your in-line blending operation.

(5) Describe any times from the previous three years that you modified fuel after it came out of your blending operation. Describe how you modified the fuel and why that was necessary.

(6) Describe how you will meet the auditing requirements of paragraph (c) of this section.

(c) You must arrange for an independent audit of your blending operation each calendar year, as follows:

(1) The third party must meet the independence and competency requirements of §1090.2000.

(2) The audit must include a review of procedures and documents to determine whether measured and calculated values properly represent the aggregate fuel properties for the blended fuel.

(3) You or the auditor must send us an annual audit report by June 1 to address compliance for the previous year.
(e) If we approve your request for an exemption under this section, we may require you to update your procedures for more effective control and documentation of measured fuel parameters based on audit results, development of improved practices, or other information.

§1090.1320 Testing requirements for refiners adding blendstock to PCG.

The following requirements apply for refiners that add blendstock to previously certified gasoline (PCG) to produce a new blended batch of gasoline.

(a) Sample and test using one of the following methods to exclude PCG from the compliance demonstration for sulfur and benzene:

(1) Compliance by subtraction.

(i) Sample and test the sulfur and benzene content of the PCG before blending.

(ii) After adding blendstock to the PCG, determine the volume of the blended batch of gasoline and sample and test the sulfur and benzene content of the blended batch of gasoline.

(iii) Sample and test the blended batch of gasoline before adding any additional PCG. If additional PCG is added to the blended batch of gasoline, consider this a new blended batch of gasoline.

(iv) Report the PCG as a batch with a negative volume and report the blended batch with a positive volume. Include only the shipped volume of PCG that was blended with blendstock.

(v) For each PCG batch, report to EPA all blended batches in which that PCG was used. For each blended batch report to EPA all PCG batches which were used to create that blended batch.

(vi) Include the PCG batch in sulfur and benzene compliance calculations in subpart H as a negative volume and include the blended batch as a positive volume.

(vii) [NOTE TO READER: EPA is seeking input regarding what to do when the entire volume of a blended batch is not shipped before the tank containing it is turned back into a blend tank.]

(viii) Keep records demonstrating all the following:

(A) Which batches of PCG were used in each blended batch.

(B) Which blendstocks were used in each blended batch.

(2) Compliance by addition.

(i) Measure the sulfur and benzene content of each batch of blendstock used to produce a new blended batch of gasoline as specified in §1090.1350.
(ii) Determine the volume of each batch of blendstock used to produce the new blended batch of gasoline.

(iii) Report to EPA the volume, sulfur and benzene content for each batch of blendstock.

(iv) Include only the volume, benzene and sulfur content for each batch of blendstock when demonstrating compliance with the average standards under subpart H. Do not include any PCG test results or volumes in these calculations.

(b) Regardless of which approach is used for (a) above, refiners must determine the volume of each blended batch, and perform the following measurements with the blended gasoline using the procedures specified in §1090.1350:

(1) Measure sulfur content.

(2) Determine the following distillation parameters: T10, T50, T90, end point, and distillation residue.

(3) In the case of summer gasoline, measure RVP.

(4) Report to EPA the volume, sulfur content and (for summer gasoline only) the RVP of the blended batch.

(5) Keep records of the test results for sulfur, distillation and for summer gasoline, RVP.

(c) [NOTE TO READER: EPA seeks feedback on whether to include other uses of PCG here. For example, how refiners deal with tank heels in tanks that were already certified but have not shipped; or when a refiner re-designating E0 as E10 downstream and claiming the dilution factor; etc.]

(d) **Butane and pentane blenders.** If you receive blender-grade butane or pentane from a registered producer and blend it into PCG, you may meet the sampling and testing requirements of this subpart based on test results from the butane or pentane producer, as follows:

(1) Before you blend the blender-grade butane or pentane with gasoline, you must obtain a copy of the producer’s test results that indicate the product meets the applicable standards of paragraph (e) of this section.

(2) You must enter into a contract with all parties who transport or store blender-grade pentane for use by the refiner to assure that an adequate quality assurance program is implemented to ensure that blender-grade pentane will not be contaminated in transit to the refinery.

(3) You must conduct a quality assurance program for each producer’s testing based on sampling the more frequent of every 90 days or 500,000 gallons of butane or pentane you receive from each producer.
(4) If you fail to meet the requirements of this paragraph, the gasoline produced with butane or pentane is deemed to be in violation of the standards of subpart C of this part.

(5) If a refiner does not fully implement the requirements of this section, it may not rely on test results from the butane or pentane producer, and may only blend butane or pentane with gasoline if it fully complies with all applicable requirements of this part, including the sampling and testing requirements applicable to refiners who produce gasoline by adding blendstocks to PCG.

(6) When blender-grade pentane or butane is blended under this section with summer gasoline subject to the RVP requirements of §1090.315(b) and (c). The butane or pentane blender shall demonstrate through sampling and testing, using the test method for RVP specified in §1090.1352, that each batch of summer gasoline blended with pentane meets the applicable volatility standard specified in subpart C of this part, and in any EPA approved SIP.

(7) Pentane and butane may not be blended under this section with summer gasoline subject to the RFG RVP requirements of §1090.315(d).

(e) This paragraph describes how blender-grade butane and pentane producers can qualify their products as blender-grade butane or blender-grade pentane for purposes of this section. The producer must use the procedures of §1090.1350 to demonstrate compliance with the specifications in Table 1 of this section. Testing must occur after the most recent delivery into the producer’s storage tank and before transferring the butane or pentane batch for delivery. The producer must provide documentation of the test results for each butane or pentane batch to the refiner. Table 1 follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Blender-grade butane</th>
<th>Blender-grade pentane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (volume %, minimum)</td>
<td>92</td>
<td>—</td>
</tr>
<tr>
<td>Pentane (volume %, minimum)</td>
<td>—</td>
<td>95</td>
</tr>
<tr>
<td>Benzene (volume %, maximum)</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>C6 and higher hydrocarbons (volume %, maximum)</td>
<td>—</td>
<td>5.0</td>
</tr>
<tr>
<td>Sulfur (ppm, maximum)</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

§1090.1325 Testing requirements for importing gasoline or diesel fuel by rail or truck.

If you import gasoline or ULSD by rail or truck, you can meet the sampling and testing requirements of this subpart based on test results from the supplier if you meet the following requirements:

(a) Your fuel supplier must perform tests on fuel parameters specified in §1090.1310 using the procedures specified in §1090.1350. Testing for a given load must occur after the most recent delivery into the supplier’s storage tank and before transferring product to the railcar or truck. The supplier must provide documentation of the test results for each load to you.
(b) You must conduct a quality assurance program for each supplier’s testing. Collect fuel samples for testing without notifying the supplier in advance. Collect a sample at least once for the more frequent of every 30 days or every 50 rail or truckloads from a given supplier. Treat importation of gasoline and diesel fuel separately under this paragraph, but treat rail and truckloads together if you import product from a given supplier by rail and truck. Test quality assurance samples as specified in paragraph (a) of this section.

(c) If you fail to meet requirements under this section, you must perform your own testing as specified in §1090.1310 until we agree that you have adequately addressed the cause of the failure.

§1090.1330 Testing requirements for blending with transmix gasoline product.

This section is addressed to transmix processors producing gasoline by adding blendstock to transmix gasoline product (TGP).

(a) The testing requirements for volatility apply for gasoline you produce from TGP.

(b) Measure the distillation endpoint for gasoline you produce from TGP as specified in §1090.1350.

(c) Determine the volume, sulfur content, and benzene content of each blendstock batch you receive for reporting and compliance calculations by the blendstock through sampling and testing as specified in this subpart. The blendstock must comply with the average and per-gallon standards of subpart C of this part.

(d) Sample and test the finished TGP and blendstock blend to demonstrate compliance with the 95 ppm maximum downstream sulfur standard of §1090.510 and the applicable maximum RVP standard of §1090.315.

§1090.1335 Denatured fuel ethanol.

This section is addressed to producers and importers of DFE. You may calculate the sulfur content of a batch of DFE instead of measuring every batch as follows:

(a) Determine the ppm sulfur content of ethanol before adding denaturant by measuring it as specified in §1090.1310 or by estimating it based on your production quality control procedures.

(b) Use the ppm sulfur content of certified ethanol denaturant specified by a registered supplier based on the appropriate PTD. If the sulfur content is specified as a range, use the maximum specified value.

(c) Calculate the weighted sulfur content of the DFE from the values you determined under paragraphs (a) and (b) of this section.
HANDLING AND TESTING SAMPLES

§1090.1340 Collecting and preparing samples for testing.

(a) Use good laboratory practice to collect samples to represent the batch you are testing. For example, always take steps to prevent sample contamination, such as completely flushing sampling taps and piping and prerinsing sample containers with the product being sampled. Perform manual sampling as specified in paragraph (b) of this section, or perform automatic sampling as specified in paragraph (c) of this section.

(b) Perform manual sampling using one of the methods specified in ASTM D4057 (incorporated by reference in §1090.95) as follows:

(1) Use tap sampling to collect upper, middle, and lower samples. If you test all three samples for a given fuel parameter, calculate the arithmetic average of the three test results to represent the batch; otherwise, you may use the test result from a single sample to represent the batch. Do not create a composite sample from the three separate samples.

(2) Collect a “running” or “all-levels” sample from the top of the tank with no standpipe. Drawing a sample from a standpipe is acceptable only if it is slotted or perforated to ensure that the drawn sample properly represents the whole batch of fuel.

(3) If the procedure in paragraphs (b)(1) and (2) of this section are impractical for a given storage configuration, you may perform alternative sampling procedures as specified in ASTM D4057. This applies for sampling at downstream locations.

(4) Test results with manual sampling under this paragraph are valid only after you demonstrate homogeneity as specified in §1090.1341, with the following exceptions:

(i) The homogeneity requirement does not apply for testing at downstream locations if you are unable to collect separate samples and you take steps to ensure that the batch is well mixed.

(ii) You may disregard the homogeneity demonstration if you test all three samples for every parameter subject to a testing requirement, and use the worst-case test results. This applies for meeting per-gallon and averaging standards and all other aspects of compliance.

(c) Perform automatic sampling as specified in ASTM D4177 (incorporated by reference in §1090.95). Configure the system to ensure a well-mixed stream at the sampling point. Calculate the number of grab samples for a given batch based on a margin of error of 0.01 and a 95 percent confidence level. Take steps to align the start and end of sampling with the start and end of creating the batch.

(d) The following additional provisions apply for preparing samples to measure RVP of summer gasoline:

(1) Meet the additional specifications for manual and automatic sampling in ASTM D5842 (incorporated by reference in §1090.95).
(2) Each tested sample must meet the RVP standard that applies.

(3) You may use samples you draw under this paragraph for testing other fuel parameters, but only after RVP testing is complete.

§1090.1341 Demonstrating homogeneity.

(a) Use the procedures in this section as specified in §1090.1340 to determine whether a batch is homogeneous and suitable for parameter measurements under this subpart. If the batch is not homogeneous, increase mixing or take other appropriate steps and repeat the procedure.

(b) Draw a sample representing at least the upper, middle, and lower segments of the stored fuel, fuel additive, or regulated blendstock as specified in §1090.1340(b). Use one of the following procedures to determine homogeneity:

(1) Measure sulfur from each sample as specified in §1090.1350. Consider the fuel batch to be homogeneous if sulfur content for all tested samples varies by 2 ppm or less for gasoline and ULSD, 5 ppm or less for 500 ppm LM diesel fuel, and 20 ppm or less for IMO marine fuel.

(2) Measure API gravity from each sample using ASTM D287, ASTM D1298, or ASTM D4052 (incorporated by reference in §1090.95). Consider the batch to be homogeneous if API gravity varies by 0.6° or less for all tested samples.

§1090.1342 Sample preparation for BOB testing.

(a) If you produce or import BOB and instruct downstream blenders to add oxygenate, you may meet the sampling requirements of this subpart by blending oxygenate into a BOB sample to represent the final blended fuel. To do this, prepare each fuel sample by adding oxygenate to the BOB sample in a way that corresponds to your instructions to downstream blenders for the sampled batch of fuel. If your instructions allow for downstream blenders to add more than one type of oxygenate, prepare a hand blend sample for each type of oxygenate allowed. Report the highest result for sulfur, benzene and RVP (for summer gasoline) and use the highest results for determining compliance with per-gallon and average standards. Blend the fuel using the procedures specified in ASTM D7717 (incorporated by reference in §1090.95). Use this blended fuel sample for all testing required under this part.

(b) If you produce or import BOB and you blend in oxygenate before selling or transporting the fuel, you must draw samples from the blended fuel for all testing required under this part.

§1090.1345 Sample retention.

(a) Refiners and importers must retain samples of fuel and regulated blendstocks tested under this subpart as follows:

(1) If you perform a test required under this subpart, you must keep a representative sample of the tested product for at least 30 days after testing is complete, with the following exceptions:
(i) Keep samples for 90 days for gasoline you produce at a given refinery with any blendstock—other than alkylate, reformate, blender-grade butane, or blender-grade pentane—that you did not produce from crude oil at that refinery. For example, this applies if you produce gasoline with naphtha or natural gas liquids you received from outside the refinery.

(ii) Keep samples for 90 days for diesel fuel and IMO marine fuel you produce at a given refinery with any blendstock—other than kerosene, jet fuel, or heating oil—that you did not produce from crude oil at that refinery. This longer sample-retention also applies for blending cutter stock into diesel fuel or IMO marine fuel, even if your produced it at the same refinery.

(2) The nominal volume of retained samples of summer gasoline must be at least 1 liter; other retained samples must be at least 330 ml. If you have only a single sample for testing, keep that sample after testing is complete. If you collect multiple samples from a single batch or you create a hand-blended sample, select a representative sample as follows:

(i) If you test hand-blended mixtures of BOB and oxygenate under §1090.1342, keep separate samples of the BOB and the blended fuel.

(ii) For summer gasoline, keep an untested (or less tested) sample that is most like the tested sample, as applicable.

(iii) For measuring properties or parameters of butane, keep a sufficient residual quantity of butane in a pressurized container, or keep a second, untested sample.

(iv) In all other cases, keep the tested (or most tested) sample.

(b) Oxygenate producers and importers must keep oxygenate samples as follows:

(1) Keep a representative sample of any tested oxygenate. Also keep a representative sample of DFE if you used the provisions of §1090.1335 to calculate its sulfur content. The nominal volume of retained samples must be at least 330 ml.

(2) Keep all the samples you collect over the previous 21 days. If you have fewer than 20 samples from the previous 21 days, continue keeping the most recent 20 samples collected up to a maximum of 90 days for any given sample.

(c) Keep a record of all calculations, test results, and test methods for the batch associated with each stored sample.

(d) If we ask for a test sample, you must promptly send it to us by a courier service (or equivalent) according to our instructions. You must identify the test results and test methods along with each test sample.

(e) You are responsible for meeting requirements of this section even if a third party performs testing and stores the fuel samples for you.
MEASUREMENT PROCEDURES

§1090.1350 Overview of test procedures.

Refiners and importers meet the requirements of this subpart based on laboratory measurements of the specified fuel parameters. Test procedures for these measurements apply as follows:

(a) The Performance-based Analytical Test Method specified in §§1090.1352 through 1090.1358 applies for the following fuels and fuel parameters:

1. Sulfur content of diesel fuel and IMO marine fuel.
2. Aromatic content of diesel fuel.
3. RVP, sulfur, benzene, oxygenate content, and distillation parameters of gasoline.
4. Sulfur in butane and pentane.

(b) Specific test procedures apply for measuring other fuel parameters, as follows:

1. Determine the cetane index of diesel fuel as specified in ASTM D976 or ASTM D4737 (incorporated by reference in §1090.95). There is no cetane-related test requirement for biodiesel.

2. Measure the purity of butane and pentane as specified in ASTM D2163 (incorporated by reference in §1090.95).

3. Measure benzene in butane and pentane as specified in ASTM D6730 (incorporated by reference in §1090.95). You may alternatively use ASTM D6729 (incorporated by reference in §1090.95) if you correlate your test results with ASTM D6730.

4. Measure the phosphorus content of gasoline as specified in ASTM D3231 (incorporated by reference in §1090.95).

5. Measure the lead content of gasoline as specified in ASTM D3237 (incorporated by reference in §1090.95).

6. Use the following methods to measure gasoline fuel parameters to meet the survey requirements of subpart N of this part:

<table>
<thead>
<tr>
<th>Fuel parameter</th>
<th>Units</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillation (T50 and T90)</td>
<td></td>
<td>ASTM D86</td>
</tr>
<tr>
<td>Aromatic content</td>
<td>volume percent</td>
<td>ASTM D5769</td>
</tr>
<tr>
<td>Olefin content</td>
<td>volume percent</td>
<td>ASTM D6550</td>
</tr>
</tbody>
</table>

1 ASTM specifications are incorporated by reference in §1090.95.

(c) Record measured values with the following precision:

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(1) Record sulfur content as follows:

(i) For gasoline, to the nearest 0.1 ppm.

(ii) For butane, to the nearest whole ppm for values at or above 10 ppm, and to the nearest 0.1 ppm for smaller values.

(iii) For diesel fuel and IMO marine fuel, to the nearest whole ppm.

(2) Record gasoline benzene to the nearest 0.01 volume percent.

(3) Record gasoline RVP to the nearest 0.01 psi or 0.1 kPa.

(4) Record gasoline oxygenate content to the nearest 0.01 mass percent for each calibrated oxygenate; record gasoline oxygen content to the nearest 0.1 mass percent.

(5) Record diesel aromatic content to the nearest 0.1 volume percent, or record cetane index to the nearest whole number.

§1090.1351 Calculation adjustments and corrections.

Adjust measured values for special circumstances as follows:

(a) Adjust measured values for total vapor pressure using the following equation:

\[ \text{RVP (psi)} = 0.956 \cdot \text{VP}_{\text{total}} - 0.347 \]

Where:

\[ \text{VP}_{\text{total}} = \text{Measured total vapor pressure, in psi.} \]

(b) For measuring sulfur and benzene in gasoline, adjust a given test result upward in certain circumstances, as follows:

(1) If your measurement method involves a published procedure with a Pooled Limit of Quantitation (PLOQ) and your measured result is below the PLOQ, treat the PLOQ as your final result.

(2) If your measurement method involves a published procedure without a PLOQ, but has a published limit of detection (LOD) and your measured result is below the LOD, treat the LOD as your final result.

(3) If your measurement method involves a published procedure without a PLOQ or a LOD, and your measured result is below the published scope of the published procedure, treat the lower bound of the scope as your final result.

(c) For measuring benzene in butane and pentane, report a zero value if the test result is at or below the Pooled Limit of Quantitation or Limit of Detection that applies for the test method.
§1090.1352 Performance-based Analytical Test Method.

(a) The Performance-based Analytical Test Method is a measurement system that allows for testing with any procedure that meets specified performance criteria. This subpart specifies the performance criteria for measuring certain fuel parameters to demonstrate compliance with the standards and other specifications of this part.

(b) The following general provisions apply:

(1) Requirements apply differently for absolute fuel parameters and method-defined fuel parameters. An absolute fuel parameter is one for which it is possible to evaluate measurement accuracy by comparing measured values of a test sample to a reference sample with a known value for the measured parameter. Sulfur is currently the only absolute fuel parameter. This applies for measuring sulfur in any fuel, fuel additive, or regulated blendstock. Method-defined fuel parameters are all those that are not absolute fuel parameters. Additional test provisions apply for method-defined fuel parameters under this section because there is no reference sample for evaluating measurement accuracy.

(2) A crosscheck program is an arrangement for laboratories to perform measurements from a single reference fuel sample for evaluating precision and accuracy. This subpart relies on monthly inter-laboratory crosscheck programs sponsored by ASTM International or another voluntary consensus standards body, or on monthly crosscheck programs conducted separately by one or more companies.

(3) A voluntary consensus standards body is an organization that follows consistent protocols to adopt standards reflecting a wide range of input from interested parties. ASTM International and the International Organization for Standardization are examples of VCSB organizations.

(c) The performance criteria of this section apply as follows:

(1) Section 1090.1354 specifies the initial qualifying criteria for all measurement procedures. The referee procedures identified in paragraph (e) of this section are presumed to meet these initial qualifying criteria. You may use an alternative procedure only if testing shows that you meet the initial qualifying criteria. Such testing for method-defined fuel parameters must take place at a reference installation as specified in §1090.1356.

(2) Section 1090.1358 specifies ongoing quality testing requirements that apply for laboratories that use either referee procedures or alternative procedures.

(3) Streamlined requirements for alternative procedures apply in the case of procedures adopted by a voluntary consensus standards body (VCSB). Procedures developed by individual companies or other parties are considered “non-VCSB” procedures in this subpart. Draft procedures under development by a VCSB organization are considered non-VCSB procedures until they are approved for publication. Compliance testing with non-VCSB procedures requires our advance approval.
(4) You may qualify updated versions of the referee procedures as alternative procedures under §1090.1354. This may not require new testing, as specified in §1090.1354(a)(2). You may not use updated versions of the referee procedures without prior approval by us. You may ask us for approval to use an updated version of the referee procedure for qualifying other alternative procedures if the updated referee procedure has the same or better accuracy and precision compared to the version specified in §1090.95. If the updated procedure has worse accuracy and precision compared to the earlier version, you must complete the required testing specified in §1090.1354(a)(2).

(5) The Performance-based Analytical Test Method in 40 CFR 80.47 waived precision and accuracy demonstrations for laboratories that had been using the specified referee procedure before October 28, 2013. The protocol for qualifying test procedures in this subpart M includes no such “grandfather” date, which means that any laboratory may use the specified referee procedure without qualification testing. To use alternative procedures at a given facility, you must perform the specified testing to demonstrate compliance with precision and accuracy requirements, with the following exceptions:

(i) Testing you performed to qualify alternative procedures under 40 CFR part 80 continues to be valid for making the demonstrations we require in this part 1090.

(ii) Qualification testing is not required for laboratories that measure benzene in gasoline using Procedure B of ASTM D3606 (incorporated by reference in §1090.95). Similarly, qualification testing is not required for laboratories that measure sulfur in ULSD using ASTM D2622 or ASTM D7039 (incorporated by reference in §1090.95). However, qualification testing may be necessary for updated versions of these alternative procedures as specified in §1090.1354(a)(2).

(d) Referee procedures identified in this paragraph are presumed to meet the initial qualifying criteria in this section. You may use alternative procedures if you qualify them using the referee procedures as a benchmark as specified in §1090.1354.

<table>
<thead>
<tr>
<th>Tested Product</th>
<th>Parameter</th>
<th>Referee Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULSD, 500 ppm diesel fuel, MO marine fuel, diesel fuel additives, gasoline, regulated gasoline blendstock, and gasoline fuel additives</td>
<td>sulfur</td>
<td>ASTM D2622</td>
</tr>
<tr>
<td>Butane and pentane</td>
<td>sulfur</td>
<td>ASTM D6667</td>
</tr>
<tr>
<td>Gasoline, regulated gasoline blendstock, and gasoline fuel additives</td>
<td>oxygen and oxygenate content</td>
<td>ASTM D5599</td>
</tr>
<tr>
<td>Gasoline, regulated gasoline blendstock, and gasoline fuel additives</td>
<td>volatility</td>
<td>ASTM D5191, except as specified in §1090.1351(a)</td>
</tr>
<tr>
<td>Gasoline, regulated gasoline blendstock, and gasoline fuel additives</td>
<td>benzene</td>
<td>ASTM D5769</td>
</tr>
<tr>
<td>PCG and transmix gasoline</td>
<td>distillation</td>
<td>ASTM D86</td>
</tr>
<tr>
<td>Diesel fuel</td>
<td>aromatics</td>
<td>ASTM D5769</td>
</tr>
</tbody>
</table>

1 ASTM specifications are incorporated by reference in §1090.95.
§1090.1354 Initial qualifying criteria for alternative measurement procedures.

This section specifies how to qualify alternative procedures for measuring absolute and method-defined fuel parameters under the Performance-based Analytical Test Method specified in §1090.1352.

(a) The following general provisions apply for qualifying alternative procedures:

1. Alternative procedures must have appropriate repeatability to allow for reporting to the number of decimal places specified in §1090.1350(c).

2. Testing to qualify an alternative procedure applies for the published version of the procedure you use for making the necessary measurements. Once an alternative procedure for a method-defined fuel parameter is qualified for your laboratory, updated versions of that same procedure are qualified without further testing, as long as the procedure’s specified reproducibility is unchanged from the procedure used for the original qualification testing. In the case of absolute fuel parameters, updated versions are qualified without testing if both repeatability and reproducibility remain unchanged.

3. Except as specified in paragraph (d) of this section, testing to demonstrate compliance with the precision and accuracy specifications in this section apply only for the test facility where the testing occurred.

4. A procedure for measuring benzene or sulfur in gasoline does not qualify under this section if it has no specified Pooled Limit of Quantitation or Limit of Detection.

(b) All alternative procedures must meet precision criteria based on a calculated maximum allowable standard deviation for a given fuel parameter as specified in this paragraph. The precision criteria apply for measuring the parameters and fuels specified in paragraph (b)(4) of this section. Take the following steps to qualify the measurement procedure for measuring a given fuel parameter:

1. Select a commercially available fuel batch for testing. Store and mix the fuel to maintain a homogenous mixture throughout the measurement period to ensure that each fuel sample drawn from the batch has the same properties.

2. Measure the fuel parameter from a test sample at least 20 times. Record each result in sequence. Do not omit any valid results unless you determine that the omission is necessary according to good laboratory practices and you document those results and the reason for excluding them. Draw test samples over a 20-day period, with not more than one test sample in any single day. You may make up to four separate measurements in a single day.

3. Test samples for measuring sulfur in diesel fuel that is subject to a 15 ppm sulfur standard must have at least 5 ppm sulfur. Test samples for measuring sulfur in IMO marine fuel must have at least 700 ppm sulfur.

4. Determine the maximum allowable standard deviation, $\sigma_{\text{max}}$, as follows:
(i) For ULSD and associated fuel additives, $\sigma_{\text{max}}$ is 0.72 ppm.

(ii) For 500 ppm LM diesel fuel, $\sigma_{\text{max}}$ is 9.68 ppm.

(iii) For IMO marine fuel, $\sigma_{\text{max}}$ is 18.07 ppm.

(iv) Calculate $\sigma_{\text{max}}$ for other fuel parameters using the following equation:

$$\sigma_{\text{max}} = x_1 \cdot \frac{x_2}{x_3}$$

Where $x_1$, $x_2$, and $x_3$ have the values from the following table:

| Fuel, fuel additive, or regulated blendstock | Fuel parameter | Range/type | $x_1 = \text{Repeatability (r) or Reproducibility (R)}^{1}$ | $x_2$ | $x_3$ | Source$^2$
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>butane and pentane sulfur all</td>
<td></td>
<td></td>
<td>$r = 0.1152 \cdot x$</td>
<td>1.5</td>
<td>2.77</td>
<td>ASTM D6667-14</td>
</tr>
<tr>
<td>gasoline sulfur all</td>
<td></td>
<td></td>
<td>$r = 0.4998 \cdot x^{0.54}$</td>
<td>1.5</td>
<td>2.77</td>
<td>ASTM D7039-15a</td>
</tr>
<tr>
<td>gasoline oxygen all</td>
<td></td>
<td></td>
<td>$R = 0.13 \cdot x^{0.83}$</td>
<td>0.3</td>
<td>1</td>
<td>ASTM D5599-17</td>
</tr>
<tr>
<td>gasoline volatility 250 ml container</td>
<td></td>
<td></td>
<td>$R = 0.40$</td>
<td>0.3</td>
<td>1</td>
<td>ASTM D5191-15</td>
</tr>
<tr>
<td>gasoline volatility 1000 ml container</td>
<td></td>
<td></td>
<td>$R = 0.01014 \cdot (0.965 \cdot V_{P_{\text{total}}} - 0.548 + 23.2)$ $R = 0.009785 \cdot V_{P_{\text{total}}} + 0.2297$</td>
<td>0.3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>gasoline benzene &lt; 1.5 volume %</td>
<td></td>
<td></td>
<td>$R = 0.13 \cdot x + 0.05$</td>
<td>0.15</td>
<td>1</td>
<td>ASTM D3606-17 Procedure B</td>
</tr>
<tr>
<td>gasoline distillation initial boiling point</td>
<td></td>
<td></td>
<td>$R = 8.5$</td>
<td>0.3</td>
<td>1</td>
<td>ASTM D86-07</td>
</tr>
<tr>
<td>gasoline distillation T10</td>
<td></td>
<td></td>
<td>$R = 3.0 + 2.64 \cdot S_c$</td>
<td>0.3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>gasoline distillation T50</td>
<td></td>
<td></td>
<td>$R = 2.9 + 3.97 \cdot S_c$</td>
<td>0.3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>gasoline distillation T90</td>
<td></td>
<td></td>
<td>$R = 2.0 + 2.53 \cdot S_c$</td>
<td>0.3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
<table>
<thead>
<tr>
<th>ULSD, 500 ppm LM diesel fuel, and IMO marine fuel</th>
<th>sulfur</th>
<th>all</th>
<th>[pending]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULSD and 500 ppm LM diesel fuel</td>
<td>aromatic</td>
<td>35 volume %</td>
<td>R=3.3</td>
</tr>
</tbody>
</table>

\[ \sigma_{\text{max}} = 1.73 \text{ ppm} \cdot 1.5/2.77 = 0.94 \text{ ppm.} \]

\[ \sigma_{\text{max}} = 1.15 \text{ ppm} \cdot 1.5/2.77 = 0.62 \text{ ppm.} \]

\[ \sigma_{\text{max}} = 0.32 \text{ mass} \% \cdot 0.3/1 = 0.10 \text{ mass} \%. \]

\[ \sigma_{\text{max}} = 0.40 \text{ psi} \cdot 0.3/1 = 0.12 \text{ psi.} \]

\[ \sigma_{\text{max}} = 0.18 \text{ volume} \% \cdot 0.15/1 = 0.027 \text{ volume} \%. \]

\[ \sigma_{\text{max}} = 3.3 \text{ volume} \% \cdot 0.3/1 = 0.99 \text{ volume} \%. \]

(5) The following examples illustrate maximum allowable standard deviation for different fuel parameters:

(i) **Gasoline sulfur**. For a test fuel with 10 ppm sulfur, \( \sigma_{\text{max}} = 1.73 \text{ ppm} \cdot 1.5/2.77 = 0.94 \text{ ppm} \).

(ii) **Butane sulfur**. For a test fuel with 10 ppm sulfur, \( \sigma_{\text{max}} = 1.15 \text{ ppm} \cdot 1.5/2.77 = 0.62 \text{ ppm} \).

(iii) **Gasoline oxygen**. For a test fuel with 3 mass \% oxygen, \( \sigma_{\text{max}} = 0.32 \text{ mass} \% \cdot 0.3/1 = 0.10 \text{ mass} \% \).

(iv) **Gasoline RVP**. For a test fuel with a volatility of 6.8 psi RVP and a 250 ml sample container, \( \sigma_{\text{max}} = 0.40 \text{ psi} \cdot 0.3/1 = 0.12 \text{ psi} \).

(v) **Gasoline benzene**. For a test fuel with 1 volume \% benzene, \( \sigma_{\text{max}} = 0.18 \text{ volume} \% \cdot 0.15/1 = 0.027 \text{ volume} \% \).

(vi) **Diesel aromatics**. For a test fuel with 35 volume \% aromatics, \( \sigma_{\text{max}} = 3.3 \text{ volume} \% \cdot 0.3/1 = 0.99 \text{ volume} \% \).

(c) Alternative VCSB procedures for measuring absolute fuel parameters (sulfur) must meet accuracy criteria as specified in this paragraph. Take the following steps to qualify the measurement procedure:

(1) Buy a commercially available gravimetric sulfur standard to serve as reference samples as specified in this paragraph. The fuel samples must have known sulfur content within the ranges specified in paragraph (c)(3) of this section; the known sulfur content is the accepted reference value (ARV) for the fuel sample.
(2) Measure the sulfur content of the fuel sample at your laboratory at least ten times, without interruption. Use good laboratory practice to compensate for any known chemical interferences; however, you must apply that same compensation for all tests to measure sulfur content in a test fuel. Calculate the arithmetic average of all the measured values, including any compensation.

(3) The measurement procedure meets the accuracy requirement as follows:

(i) Calculate the maximum allowable difference between the average measured value and ARV using the following equation:

\[
\text{Maximum Allowable Difference} = \frac{(0.75 \cdot 1.5 \cdot r)}{2.77}
\]

Where,

\[ r = \text{the repeatability from paragraph (b)(4) of this section using the sulfur content represented by ARV.} \]

(ii) The following table illustrates maximum allowable difference between average measured values and ARV corresponding to ARV at the upper end of the specified ranges:

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Sulfur Content (ppm)</th>
<th>Illustrated Maximum Allowable Differences¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline, regulated gasoline blendstock, and gasoline fuel additives subject to the gasoline sulfur standard</td>
<td>1-10</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>10-20</td>
<td>1.02</td>
</tr>
<tr>
<td>Butane subject to the butane sulfur standard</td>
<td>1-10</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>10-20</td>
<td>0.94</td>
</tr>
<tr>
<td>ULSD</td>
<td>1-10</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>10-20</td>
<td>0.54</td>
</tr>
<tr>
<td>ECA marine fuel</td>
<td>300-400</td>
<td>13.55</td>
</tr>
<tr>
<td></td>
<td>900-1,000</td>
<td>13.55</td>
</tr>
<tr>
<td>Global marine fuel</td>
<td>1,500-2,000</td>
<td>[Pending]</td>
</tr>
<tr>
<td></td>
<td>4,500-5,000</td>
<td>[Pending]</td>
</tr>
</tbody>
</table>

¹ As an example, \( r=1.733 \) for gasoline with 10 ppm sulfur, and Maximum Allowable Difference = \( \frac{(0.75 \cdot 1.5 \cdot 1.733)}{2.77}=0.70 \).

(d) Alternative VCSB procedures for measuring method-defined fuel parameters must meet accuracy criteria as follows:

(1) You may use the alternative procedure only if you meet the statistical criteria specified in Section 6.7 of ASTM D6708 (incorporated by reference in §1090.95) when comparing your measurements using the alternative procedure to measurements at a reference installation using the appropriate referee test method identified in §1090.1352(e).

(2) For qualifying alternative procedures, determine whether the alternative procedure needs a correlation equation to correct bias relative to the reference test method. Create such a
correlation equation as specified in Section 7 of ASTM D6708 (incorporated by reference in §1090.95). For all testing, apply the correlation equation to adjust measured values to be equivalent to measuring with the reference test method.

(3) If an alternative VCSB procedure states that it meets the accuracy criteria of ASTM D6708, that finding applies for all test facilities using that procedure.

(e) Alternative non-VCSB procedures for measuring absolute fuel parameters (sulfur) must meet accuracy criteria as follows:

(1) Demonstrate whether the procedure meets statistical criteria and whether it needs a correlation equation as specified in paragraphs (d)(1) and (2) of this section. Apply the correlation equation for all testing with the alternative procedure.

(2) Demonstrate at your laboratory that the alternative procedure meets the accuracy criteria specified in paragraph (c) of this section.

(3) Send us a written request to use the alternative procedure. In your request, fully describe the procedure to show how it functions for achieving accurate measurements and include detailed information related to your assessment under paragraph (d)(1) and (2) of this section. We will approve your request if we agree that you meet the requirements of this paragraph.

(f) Alternative non-VCSB procedures for measuring method-defined fuel parameters must meet accuracy and precision criteria as follows:

(1) Demonstrate whether the procedure meets statistical criteria and whether it needs a correlation equation as specified in paragraphs (d)(1) and (2) of this section. Apply the correlation equation for all testing with the alternative procedure.

(2) Test with a range of fuels that are typical of those you will analyze at your laboratory. Use consensus named fuels or locally-named reference materials. Consensus named fuels are homogeneous fuel quantities sent around to different laboratories for analysis, which results in a “consensus name” representing the average value of the parameter for all participating laboratories. Locally named reference materials are fuel samples analyzed using the reference test method, either at your laboratory or at a reference installation, to establish an estimated value for the fuel parameter; locally named reference materials usually come from the fuel you produce.

(3) You may qualify your procedure as meeting the variability requirements of paragraph (f)(1) of this section only for a narrower, defined range of fuels. If this is the case, identify the appropriate range of fuels in your request for approval and describe how you will screen fuel samples accordingly.

(4) Qualify the precision of the alternative procedure by comparing results to testing with the referee procedure based on “between methods reproducibility,” Rcm, as specified in ASTM
D6708. The Rcm must be at or below 70 percent of the reproducibility of the referee procedure from §1090.1352(e).

(5) Perform testing at your laboratory as specified in paragraph (b) of this section to establish the repeatability of the alternative procedure. The repeatability must be as good as or better than that specified in paragraph (b)(4) of this section.

(6) Fully describe the procedure to show how it functions for achieving accurate measurements. Describe the technology, test instruments, and testing method so a competent person lacking experience with the procedure and test instruments would be able to replicate the results.

(7) Engage a third-party auditor to review and verify your information under this paragraph. The auditor must qualify as an independent third party and meet the specifications for technical ability as specified in §1090.2000.

(iii) The auditor must send you a report describing its inspection of your facilities and its review of the information supporting your request to use the alternative procedure. The report must describe how the auditor performed the review, identify any errors or discrepancies, and state whether the information supports a conclusion that the alternative procedure should be approved.

(iv) The auditor must keep records related to the review for at least five years after sending you the report, and give us those records if we ask for them.

(8) Send us a written request to use the alternative procedure. Include the information specified in this paragraph and any additional information we need to evaluate your request. We will approve your request for a specific laboratory if we agree that you meet the requirements of this paragraph. We will make best efforts to notify you of our decision within 90 days. We will describe our reasons if we disapprove your request.

(g) We may find from testing that an alternative procedure qualifying under this section in fact does not meet performance specifications. If this happens, we will notify you in writing.

(h) Keep fuel samples from any qualification testing under this section for at least 90 days after you have taken all steps to qualify an alternative procedure under this section. This applies for testing at your laboratory and at any reference installation you use for demonstrating the accuracy of an alternative procedure.

§1090.1356 Qualifying criteria for reference installations.

A reference installation refers to a particular test instrument used to evaluate the accuracy of alternative procedures for method-defined parameters, by comparing measured values to companion tests using one of the referee procedures in §1090.1352(e). This evaluation may result in an equation to correlate results between the two procedures. Paragraphs (a) and (b) of this section specify two alternative methods to qualify a laboratory and instruments as a reference installation for a given method-defined parameter. Once a facility qualifies as a

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reference installation, that qualification applies indefinitely, consistent with good laboratory practices.

(a) You may qualify a reference installation by participating in a crosscheck program that relies on Section 6.2.2.1 and Note 7 of ASTM D6299 (incorporated by reference in §1090.95) to establish the ARV of the crosscheck fuel. To qualify, you must perform testing to cover a representative range of values for each fuel parameter.

(b) You may qualify a reference installation based on the following measurement protocol:

(1) Use the precision testing procedure specified in §1090.1354(b) to show that your standard deviation for tests using the reference test method is at or below 0.3 times the reproducibility for a particular fuel parameter.

(2) You must correlate your test results and the results of a monthly crosscheck program for a given fuel parameter as follows:

   (i) If there are multiple fuels available from the crosscheck program, select the fuel that is closest to the standard. If there is no standard for a given fuel parameter, select the fuel with values for the fuel parameter that best represent typical values for fuels you test.

   (ii) Measure the fuel parameter for the crosscheck fuel at your facility using the appropriate referee procedure. Calculate a mean value that includes all your repeat measurements.

   (iii) Determine the mean value from the crosscheck program and calculate the difference between this value and the mean value from your testing. Express this difference as a number of standard deviations relative to the data set from the crosscheck program.

   (iv) The calculated monthly difference between the mean values from paragraph (b)(2)(ii) of this section for five consecutive months must fall within the central 50 percent of the distribution of data at least three times. The central 50 percent of the distribution corresponds to 0.68 standard deviations.

   (v) Calculate the mean value of the differences from paragraph (b)(2)(ii) of this section for all five months. This mean value must fall within the central 50 percent of the distribution of data from the crosscheck program. For example, if the difference was 0.5 standard deviations for two months, 0.6 for one month, and 0.7 for two months, the mean value of the difference is 0.6 standards deviations, and the reference installation meets the requirements of this paragraph.

(3) You must demonstrate that the reference installation is in statistical quality control for at least five months with the designated procedure as specified in ASTM D6299 (incorporated by reference in §1090.95). If at any point the reference installation is not in statistical quality control, you must make any necessary changes and restart testing toward meeting the requirement to achieve statistical quality control for at least five months, except as follows:

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(i) Do not consider measurements you perform as part of regular maintenance or recalibration for evaluating statistical quality control.

(ii) If you find that the reference installation is not in statistical quality control during an initial five-month period and you are able to identify the problem and make the necessary changes to again achieve statistical quality control before the end of the five-month demonstration period, you may consider the reference installation to meet the requirement to be in statistical quality control for at least five months.

§1090.1358 Quality control procedures.

This section specifies ongoing quality testing requirements that apply for both referee procedures and alternative procedures as part of the Performance-based Analytical Test Method specified in §1090.1352.

(a) General provisions. You must perform testing periodically to show that your test facility meets specified precision and accuracy criteria.

(1) The testing requirement applies for the referee procedures in §1090.1352(e) and for alternate procedures that are qualified or approved under §1090.1354. The testing requirements apply separately for each test instrument at each test facility.

(2) If you fail to do specified testing, your test facility is not qualified for measuring fuel parameters to demonstrate compliance with the standards and other specifications of this part until you perform this testing. Similarly, if your test facility fails to meet the specified criteria, it is not qualified for measuring fuel parameters to demonstrate compliance with the standards and other specifications of this part until you make the necessary changes to your test facility and perform testing to show that the test facility again meets the specified criteria.

(3) If you do major maintenance such as replacing or overhauling an instrument’s major components, you must show that you meet the precision and accuracy criteria before you start testing again.

(4) Keep records to document your testing under this section for five years.

(b) Precision demonstration. Show that you meet precision criteria as follows:

(1) Meeting the precision criteria qualifies your test facility for performing up to 20 production tests or seven days, whichever is less.

(2) Perform precision testing using the procedures of ASTM D6299 (incorporated by reference in §1090.95). Transition from one batch of quality control material to the next as specified in Section 8.7 and Annex A1 of ASTM D6299. If you opt to use the Q-procedure, validate the first run on the new QC batch by either an overlap in-control result of the old batch, or by a single execution of an accompanying standard reference material. The new QC material result would be considered validated if the single result of the standard reference material is
within the established site precision (R’) of the ARV of the standard reference material, as determined by ASTM D6792.

(3) Use I charts and MR charts as specified in Section 8.7 and Annex A1 of ASTM D6299 to show that the long-term standard deviation for the test facility meets the precision criteria specified in §1090.1354(b).

(c) Accuracy demonstration. For method-defined VCSB procedures, you may meet the requirements of this paragraph by participating in an inter-laboratory crosscheck program sponsored by ASTM International or another voluntary consensus standards body at least three times per year. For absolute fuel parameters and for non-VCSB procedures you must show that you meet accuracy criteria as follows:

(1) Meeting the accuracy criteria qualifies your test facility for 130 days.

(2) Except as specified in paragraph (c)(3) of this section, test every instrument using a check standard as follows:

(i) Select a fuel sample with an ARV that is at or slightly below the standard that applies. If there are both average and batch standards, use the average standard. If there is no standard, select a fuel sample representing fuel that is typical for your testing.

(ii) For measuring method-defined fuel parameters, use a commercially available check standard as defined in ASTM D6299. The check standard must be an ordinary fuel with fuel parameters close to either the regulatory standard or the average level for your testing.

(iii) For method-defined VCSB procedures designated in §1090.1352(e), determine the ARV of the check standard as specified in ASTM D6299 (incorporated by reference in §1090.95) based on testing with the referee procedure.

(iv) For alternative VCSB and non-VCSB procedures qualified under §1090.1354, use the ARV of the check standard established using the referee procedure as part of a crosscheck program according to ASTM D6299. However, if the crosscheck program does not provide an accepted reference value, calculate the average result from at least 16 repeat in-statistical-control tests on a production fuel sample using the referee procedure to establish an ARV for your check standard.

(v) Testing for method-defined VCSB procedures under this paragraph are intended to align with participation in a crosscheck program such as the Proficiency Testing Programs sponsored by ASTM International (see www.astm.org/STATQA).

(3) This paragraph applies for method-defined non-VCSB alternative procedures with high sensitivity to sample-specific effects. Procedures have high sensitivity if the closeness sum of squares (CSS) statistic exceeds the 95th percentile value, as specified in Section 6.7.1 of ASTM D6708 (incorporated by reference in §1090.95). Create a check standard from production fuel representing the fuel you will routinely analyze. Determine the ARV of your check standard according to the protocol in ASTM D6299 (incorporated by reference in §1090.95) at a reference
You must send us a fuel sample from every 20th batch of gasoline or diesel fuel, and identify the procedures and corresponding test results from your testing. We may return one of your samples to you for further testing; if we do this, you must repeat your measurement and report your results within 180 days of receiving the fuel sample.

(4) You meet accuracy requirements under this section if your measurement of the check standard is less than the following value:

\[
x = 0.75 \cdot R \cdot \sqrt{1 + \frac{1}{L}}
\]

Where,

- \( R \) = the reproducibility of the referee procedure identified in §1090.1352(e).
- \( L \) = the total number of test results used to determine the ARV of a consensus-named fuel. For testing locally named fuels, use \( L = \infty \).

**GASOLINE DEPOSIT CONTROL TESTING**

**§1090.1375 Gasoline deposit control test procedures.**

This section specifies how gasoline detergent manufacturers demonstrate compliance with the deposit control standard specified in §1090.340.

(a) Perform testing as specified in paragraph (b) of this section to identify a Lowest Additive Concentration for your detergent. You may alternatively perform testing as specified in paragraph (c) of this section for gasoline sold in California.

(b) Perform testing to determine the Lowest Additive Concentration for your detergent using the procedures specified in ASTM D6201 (incorporated by reference in §1090.95), as follows:

(1) Use a base fuel that conforms to the specifications for gasoline-alcohol blends in ASTM D4814 (incorporated by reference in §1090.95). Blendstocks used to formulate the test fuel must be derived from conversion units downstream of distillation, with all processes representing normal refinery operations. Blendstocks may not come from chemical grade streams. You may add butane and pentane to adjust vapor pressure. The base fuel should include any nondetergent additives typical of commercially available fuel if they may positively or negatively affect deposit formation. In addition, the base fuel must have–

(i) 8.0–10.0 volume percent DFE that meets the requirements of 40 CFR 80.1610 and conforms to the specifications of ASTM D4806 (incorporated by reference in §1090.95).

(ii) At least 8.0 volume percent olefins.

(iii) At least 15 volume percent aromatics.
(iv) No more than 80 ppm sulfur.

(v) T90 distillation temperature at or above 143 °C (290 °F).

(vi) No detergent-active substance. You may use a base fuel with typical nondetergent additives, such as antioxidants, corrosion inhibitors, and metal deactivators.

(2) Perform testing with the base fuel to establish that the test engine accumulates at least an average of 500 mg of deposits on each intake valve during the 100-hour test. If the test engine fails to accumulate enough deposits, make any necessary adjustments and repeat the test. This demonstration is valid for any further detergent testing with the same base fuel.

(3) Repeat the test on the same engine with a specific concentration of detergent added to the base fuel. If the test meets the standard specified in §1090.340, the tested detergent concentration is the Lowest Additive Concentration for the detergent.

(c) You may use an updated version of ASTM D6201 if we approve it in advance. We will approve your request if we determine that the updated method is equivalent to or better than the earlier version for evaluating detergent performance.

(d) You may perform testing to certify your detergent using the procedures specified by California ARB in 13 CCR section 2257 (incorporated by reference in §1090.95). Our approval for a detergent tested under this paragraph applies only for fuel that will be sold in California as reformulated gasoline under California ARB regulations, either by adding the detergent in California, or by selling it to someone who will sell the fuel to ultimate consumers in California.
Subpart N—Survey Provisions

§1090.1400 National fuels survey program participation.

(a) Gasoline refiners and importers that elect to account for the addition of oxygenate added downstream pursuant to §1090.7XX must participate in the national fuel survey program specified in this subpart.

(b) Parties required to participate in an E15 survey pursuant to §1090.1435 must participate in the national fuels survey specified in this subpart or a survey approved by EPA under §1090.14XX.

(c) Other parties may participate in the national fuel survey program as an element to establishing an affirmative defense against violations of requirements and provisions under this part as specified in subpart S of this part.

§1090.1405 National fuels survey program requirements.

The national fuels survey program must meet all the following requirements:

(a) The survey program must be planned and conducted by an independent surveyor that meets the requirements specified in §1090.1410.

(b) The survey program must be conducted at a representative sample of gasoline and diesel retail outlets in the United States as determined by the methodology specified in §1090.XXX.

§1090.1410 Independent surveyor requirements.

The independent surveyor conducting the survey program specified in §1090.1405 must meet all the following requirements:

(a) Submit a proposed survey program plan pursuant to §1090.1415 to EPA for approval each calendar year.

(b)(1) Obtain samples representative of the gasoline and diesel fuels offered for sale separately from all gasoline and diesel retail stations pursuant to the survey program plan approved by EPA, or immediately notify EPA of any refusal of a retail station to allow samples to be taken.

(2) Obtain a number of samples representative of the number of gasoline retail stations offering E15.

(3) Samples of gasoline produced at blender pump must be collected using “method 1” specified in NIST Handbook 158 (incorporated by reference, see §1090.XXX). All other samples of gasoline and diesel fuels must be collected using methods specified in §1090.XXX.
(4) Samples collected must be shipped within two (2) days of the samples being collected via ground service to an EPA-approved laboratory.

(c) Test, or arrange to be tested, the collected samples, as follows:

(1) All gasoline samples must be analyzed for oxygenate content, sulfur content, and benzene content. Gasoline samples collected from June 1 through September 15 must also be analyzed for RVP.

(2) A subset of gasoline samples, as determined by §1090.XXX, must also be analyzed for aromatics content, olefins content, and distillation characteristics (i.e., T50 and T90).

(3) All diesel samples must be analyzed for sulfur content.

(4) All samples must be tested by an EPA-approved laboratory using test methods specified in subpart M of this part.

(5) All analyses must be completed by the EPA-approved laboratory within 10 days after receipt of the sample.

(d) Verify E15 labeling requirements at gasoline retail stations that offer for sale E15.

(e) Notify EPA, the retail station, and the branded refiner (if applicable) within 24 hours after the EPA-approved laboratory has completed analysis when any of the following occur:

(1) A test result for a gasoline sample yields a sulfur content result that exceeds 95 ppm.

(2) A test result for a gasoline sample yields a RVP result that exceeds the applicable geographic and seasonal RVP standard of §1090.3XX or any SIP approved or promulgated under 42 U.S.C. § 7410 or 7502.

(3) A test result for a diesel sample yields a sulfur content result that exceeds 15 ppm.

(4) A test result for a gasoline sample labeled as “E15” yields an ethanol content result that exceeds 15 volume percent.

(5) A test result for a gasoline sample not labeled as “E15” pursuant to §1090.XXX yields an ethanol content of more than 10 volume percent ethanol and up to 15 volume ethanol.

(f) Provide to EPA quarterly and annual summary survey reports that include the information specified in §1090.XXX.

(g) Maintain all records relating to the surveys conducted under this section as specified in §1090.XXX.

(h) Permit any representative of EPA to monitor at any time the conducting of the survey, including sample collection, transportation, storage, and analysis.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
§1090.1415 Survey plan design requirements.

The survey program plan specified in §1090.1405 must, at a minimum, include all the following:

(a) Number of surveys. The survey program plan must include four surveys each calendar year, which must occur during the following time periods:

(1) One survey during the period of January 1 through March 31.

(2) One survey during the period of April 1 through June 30.

(3) One survey during the period of July 1 through September 30.

(4) One survey during the period of October 1 through December 31.

(b) Sampling areas. The survey program plan must include sampling in all sampling strata, as defined in §1090.XXX, during each survey. These sampling strata must be further divided into discrete sampling areas as defined in §1090.XXX. Each survey must include sampling in at least 40 sampling areas in each stratum that are randomly selected.

(c) No advance notice of surveys. The survey plan must include procedures to keep the identification of the sampling areas that are included in any survey plan confidential from any party participating to the survey program as specified in §1090.1400 prior to the beginning of a survey in an area. However, this information must not be kept confidential from EPA.

(d) Gasoline and diesel retail station selection.

(1) Gasoline and diesel retail stations to be sampled in a sampling area must be selected from among all gasoline retail stations in the United States as defined in §1090.XXX that sell gasoline with the probability of selection proportionate to the volume of gasoline sold at the retail station. The sample of retail stations must also include gasoline retail stations with different brand names as well as those gasoline retail stations that are unbranded.

(2) In the case of any gasoline or diesel retail station from which a sample of gasoline was collected during a survey was reported to EPA pursuant to §1090.1410(e), that gasoline or diesel retail station must be included in the subsequent survey.

(3) At least one sample of a product dispensed as E15 must be collected at each gasoline retail station when E15 is present, and separate samples must be taken that represent the gasoline contained in each storage tank at the gasoline retail station unless collection of separate samples is not practicable.

(4) At least one sample of a product dispensed as diesel must be collected at each diesel retail station when diesel is present. Samples of diesel may be collected at retail stations that sell gasoline.

(e) Number of samples.
(1) The number of retail stations to be sampled must be independently calculated for the total number of gasoline retail stations and the total number of diesel retail stations. The same retail station may represent both a gasoline retail station and a diesel retail station for purposes of determining the number of samples.

(2) The minimum number of samples to be included in the survey plan for each calendar year is calculated as follows:

\[
n = \left( \frac{(z_{\alpha} + z_{\beta})^2}{4 \cdot \left( \arcsin(\sqrt{\varphi_1}) - \arcsin(\sqrt{\varphi_0}) \right)^2} \right) \cdot F_a \cdot F_b \cdot S_n \cdot S_t_n
\]

Where:

- \(n\) = Minimum number of samples in a year-long survey series. However, \(n\) must be greater than or equal to 2,000 for the number of diesel samples or 5,000 for the number of gasoline samples.
- \(z_{\alpha}\) = Upper percentile point from the normal distribution to achieve a one-tailed 95% confidence level (5% \(\alpha\)-level). Thus, \(z_{\alpha}\) equals 1.645.
- \(z_{\beta}\) = Upper percentile point to achieve 95% power. Thus, \(z_{\beta}\) equals 1.645.
- \(\varphi_1\) = The maximum proportion of non-compliant stations for a region to be deemed compliant. In this test, the parameter needs to be 5% or greater, i.e., 5% or more of the stations, within a stratum such that the region is considered non-compliant. For this survey, \(\varphi_1\) will be 5%.
- \(\varphi_0\) = The underlying proportion of non-compliant stations in a sample. For the first survey plan, \(\varphi_0\) will be 2.3%. For subsequent survey plans, \(\varphi_0\) will be the average of the proportion of stations found to be non-compliant over the previous four surveys.
- \(F_a\) = Adjustment factor for the number of extra samples required to compensate for collected samples that cannot be included in the survey, based on the number of additional samples required during the previous four surveys. \(F_a\) must be greater than or equal to 1.1.
- \(F_b\) = Adjustment factor for the number of samples required to resample each retail station with test results reported to EPA pursuant to §1090.1410(e), based on the rate of resampling required during the previous four surveys. \(F_b\) must be greater than or equal to 1.1.
- \(S_n\) = Number of surveys per year. For purposes of this survey program, \(S_n\) equals 4.
- \(S_t_n\) = Number of sampling strata. For purposes of this survey program, \(S_t_n\) equals 3.

(3) The number of gasoline samples that also need to be tested for aromatics, olefins, and distillation parameters pursuant to §1090.1410(c)(2) must be calculated using the methodology specified in paragraph (e)(2) of this section without the \(F_a\), \(F_b\), and \(S_n\) parameters.
(4) The number of samples determined pursuant to paragraphs (e)(2) and (e)(3) of this section must be distributed approximately equally among the four surveys conducted during the calendar year.

(f) Laboratory designation. Any laboratory that the independent surveyor intends to use to test samples collected as part of the survey program specified in this section must be approved annually as part of the survey plan approval process in §1090.1420. In the survey plan submitted to EPA, the independent surveyor must include the following information regarding any laboratory it intends to use to test samples:

(1) The name of the laboratory.

(2) The address of the laboratory.

(3) The test methods for each fuel parameter measured at the laboratory.

§1090.1420 Survey plan approval process.

(a) A survey program plan that complies with the requirements of §1090.1415 must be submitted to EPA no later than November 15 of the year preceding the calendar year in which the survey will be conducted.

(b) The survey program plan must be signed by a responsible officer of the independent surveyor conducting the survey program.

(c) The survey program plan must be sent to the attention of “Survey Plan to Meet Fuels Survey Requirements” to the address in §1090.10.

(d) EPA will send a letter to the party submitting the survey program plan that indicates whether EPA approves or disapproves the survey plan.

(e) The approving official for a survey plan under this section is the Director of the Compliance Division, Office of Transportation and Air Quality.

§1090.1425 Independent surveyor contract.

(a) No later than December 15 of the year preceding the year in which the survey will be conducted, the contract with the independent surveyor must be in effect, and an amount of money necessary to carry out the entire survey plan must be paid to the independent surveyor or placed into an escrow account with instructions to the escrow agent to pay the money to the independent surveyor during the course of the survey plan.

(b) No later than December 31 of the year preceding the year in which the survey will be conducted, EPA must receive a copy of the contract with the independent surveyor and proof that the money necessary to carry out the survey plan has either been paid to the independent surveyor or placed into an escrow account. If placed into an escrow account, a copy of the escrow agreement must be sent to the official designated in §1090.1420(e).
§1090.1430 Consequences of failure to fulfill survey requirements.

(a) No person may fail to fulfill or cause to be fulfilled any of the requirements of this subpart and is a prohibited act pursuant to 42 U.S.C. § 7545(c) and §1090.XXX.

(b) EPA may revoke its approval of a survey plan under this subpart for cause, including, but not limited to, an EPA determination that the approved survey plan has proved to be inadequate in practice.

(c) EPA may void ab initio its approval of a survey plan if EPA’s approval was based on false information, misleading information, or incomplete information, or if there was a failure to fulfill, or cause to be fulfilled, any of the requirements of the survey plan.

§1090.1435 Additional requirements for E15 misfueling mitigation surveying.

(a) E15 misfueling mitigation survey requirement.

(1) Any gasoline refiner, gasoline importer, oxygenate blender, oxygenate producer, or oxygenate importer that manufactures, introduces into commerce, sells, or offers for sale E15, gasoline, BOB, DFE, or gasoline-ethanol blended fuel that is intended for use in or as E15 must comply with either survey program Option 1 as specified in paragraph (b) of this section or Option 2 as specified in paragraph (c) of this section.

(2) In the case of oxygenate producers and importers that produce or import DFE, the DFE that is produced or imported is deemed as intended for use in E15 unless an oxygenate producer or importer demonstrates that it was not intended for such use.

(b) Survey Option 1. To comply with the E15 misfueling mitigation survey requirement specified in paragraph (a) of this section, any gasoline refiner, gasoline importer, ethanol blender, ethanol producer, or ethanol importer that manufactures, introduces into commerce, sells, or offers for sale E15, gasoline, BOB, DFE, or gasoline-ethanol blended fuel intended for use in or as E15 must properly conduct a program of compliance surveys pursuant to a survey program plan that has been approved by EPA in all areas that may be reasonably expected to be supplied with their gasoline, BOB, DFE, or gasoline-ethanol blended fuel if these may be used to manufacture E15 or as E15 at any time during the year. Such approval must be based upon a survey program plan meeting all the following criteria:

(1) The survey program must consist of at least quarterly surveys that occur during the following time periods in every year during which the gasoline refiner, gasoline importer, ethanol blender, ethanol producer, or ethanol importer introduces E15 into commerce:

   (i) One survey during the period January 1 through March 31.

   (ii) One survey during the period April 1 through June 30.

   (iii) One survey during the period July 1 through September 30.

   (iv) One survey during the period October 1 through December 31.
(2) The survey program plan must meet all the requirements of this subpart, except for §§1090.1400, 1090.1405(b), 1090.1410(c)(2) and (3), and 1090.1415(b), (d)(1), (2), and (4), and (e). In lieu of meeting the exempted sessions specified in this paragraph, any survey program plan submitted to EPA to meet this requirement must specify the sampling strata, clusters, and area(s) to be surveyed, and the number of samples to be included in the survey.

(c) Survey Option 2. To comply with the E15 misfueling mitigation survey requirement specified in paragraph (a) of this section, any gasoline refiner, gasoline importer, oxygenate blender, oxygenate producer, or oxygenate importer that manufactures, introduces into commerce, sells, or offers for sale E15, gasoline, BOB, DFE, or gasoline-ethanol blended fuel intended for use in or as E15 must participate in the survey program specified in §1090.1405.

§1090.1440 National sampling oversight program requirements.

(a) National sampling oversight program participation.

(1) Any gasoline refiner or importer that elects to account for the addition of oxygenate added downstream pursuant to §1090.7XX must participate in the national sampling oversight program in this section.

(2) Other gasoline refiners and importers may elect to participate in the national sampling oversight program as part of an affirmative defense to a violation pursuant to subpart S of this part.

(3) Gasoline refiners and importers that elect to participate in the national sampling oversight program must test, or arrange to be tested, samples collected from their refineries and import facilities as specified in paragraph (c)(2) of this section and report results to the independent surveyor within ten (10) business days of the date the sample was collected.

(b) National sampling oversight program requirements. The national oversight sampling program must meet all the following requirements:

(1) The sampling program must be planned and conducted by an independent surveyor that meets the independence requirements of §1090.20XX and the requirements of paragraph (c) of this section.

(2) The sampling program must be conducted at each refinery and import facility from all participating gasoline refiners and importers.

[NOTE TO READER: EPA is still considering how this program applies to refiners with approved in-line blending waivers under 40 CFR part 80.]

(c) Independent surveyor requirements. The independent surveyor conducting the national sampling oversight program must meet all the following requirements:

(1) Submit a proposed national sampling oversight program plan pursuant to §1090.XXX to EPA for approval each calendar year.
(2)(i) Obtain at least one sample representing summer gasoline and one sample representing winter gasoline for each gasoline refinery and import facility that participates in the national sampling oversight program, if possible.

(ii) Observe the refiner or importer collect at least one sample representing summer gasoline and one sample representing winter gasoline for each gasoline refinery and import facility that participates in the national sampling oversight program. The independent surveyor must also obtain a portion of the sample collected by the refiner or importer and ship the sample as specified in paragraph (c)(2)(v) of this section. The observed sample does not need to represent a batch of certified gasoline (i.e., the independent surveyor may observe the collection of a simulated sample if the refiner or importer does not have a batch of certified gasoline available).

(iii) The independent surveyor must immediately notify EPA of any refusal of a refiner to allow samples to be taken. Refiners or importers participating in the national sampling oversight program that refuse to allow the independent surveyor to allow samples to be taken are no longer considered by EPA to participate in the national sampling oversight program and may not account for the addition of oxygenate added downstream pursuant to §1090.710.

(iv) Samples must be collected and retained by the independent surveyor as specified in §1090.13XX.

(v) Samples collected must be shipped via ground service within two (2) business days from when the samples are collected to an EPA-approved laboratory as established in an approved plan under this section. A random subset of collected samples must also be shipped to the EPA National Vehicle and Fuel Emissions Laboratory as established in an approved plan under this section.

(3) Test, or arrange to be tested, samples collected pursuant to paragraph (b) of this section as follows:

(i) Winter gasoline samples must be analyzed for oxygenate content, sulfur content, benzene content, distillation characteristics, aromatics, and olefins.

(ii) Summer gasoline samples must be analyzed for oxygenate content, sulfur content, benzene content, distillation characteristics, aromatics, olefins, and RVP.

(iii) All samples must be tested by an EPA-approved laboratory using test methods specified in subpart M of this part.

(iv) All analyses must be completed by the EPA-approved laboratory within ten (10) days after receipt of the sample.

(4) Using procedures specified in an EPA-approved plan under this section, notify EPA and the gasoline refiner or importer within 24 hours after the EPA-approved laboratory has completed analysis when any of the following occur:

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(i) A test result for a gasoline sample yields a sulfur content result that exceeds 80 ppm.

(ii) A test result for a gasoline sample yields a RVP result that exceeds the applicable geographic and seasonal RVP standard of §1090.XXX or any SIP approved or promulgated under 42 U.S.C. § 7410 or 7502.

(5) Make the test results available to EPA and the gasoline refiner or importer for all analyses specified in paragraph (c)(3) of this section within five (5) business days of completion of the analysis.

(6) Compare test results of all samples obtained in paragraph (c)(2) of this section and all test results obtained from the gasoline refiner or importer from the same samples as specified in paragraph (a)(3) of this section and inform EPA and the gasoline refiner or importer if the test result for any parameter tested pursuant to paragraph (c)(3) of this section is greater than the reproducibility of the applicable method specified in subpart M of this part.

(7) Provide to EPA quarterly and annual summary sampling oversight program reports that include the information specified in subpart J of this part.

(8) Maintain all records relating to the sampling oversight program conducted pursuant to paragraph (d) of this section as specified in subpart L of this part.

(9) Submit contracts to EPA pursuant to §1090.1425.

(10) Permit any representative of EPA to monitor at any time the conducting of the national sampling oversight program, including sample collection, transportation, storage, and analysis.

(d) National sampling oversight program plan requirements. The national sampling oversight program plan specified in §1090.1405 must include, at a minimum, all the following:

(1) Advance notice of sampling. The national sampling oversight program plan must include procedures on how to keep the identification of the refineries and import facilities included in any national sampling oversight program plan confidential with minimal advanced notification from any refiner or importer prior to collecting a sample. However, this information may not be kept confidential from EPA.

[NOTE TO READER: EPA recognizes the myriad of issues associated with this. EPA believes that this can be worked out through the plan since each refinery and import facility is in a different situation. Some ideas suggested in feedback include: allowing the surveyor to observe sampling of a simulated batch if product is not ready at a refinery or having refiners inform the surveyor of windows where product is available. EPA will continue to discuss these ideas and any others suggested by stakeholders.]

(2) Gasoline refinery and import facility selection.

(i) Each refinery and import facility of participating gasoline refiners and importers must be sampled at least once during the summer season and once during the winter season. The plan
must demonstrate how these refineries and import facilities will be randomly selected within the summer and winter seasons.

(ii) In addition to the summer and winter sample collected at each refinery or import facility, additional oversight samples to ensure sampling oversight are required pursuant to paragraph (c) of this section. The independent surveyor must identify how these samples will be randomly distributed among participating refineries and import facilities.

(3) Number of samples.

(i) The number of refineries and import facilities to be sampled must be calculated for the total number of samples to be collected for the next compliance period as part of the national sampling oversight program plan.

(ii) The minimum number of samples to be included in the national sampling oversight plan for each calendar year is calculated as follows:

\[ n = R \times F_a \times F_b \times S_{un} \]

Where:

n = Minimum number of samples in a year.
R = The number of participating gasoline refineries and import facilities.
F_a = Adjustment factor for the number of extra samples required to compensate for samples that could not be included in the sampling oversight program (e.g., due to technical or logistical considerations), based on the number of additional samples required during the previous two surveys. F_a must be greater than or equal to 1.1.
F_b = Adjustment factor for the number of samples required to ensure oversight. For purposes of this survey program, F_b equals 1.25.
S_{un} = Number of surveys per year. For purposes of this survey program, S_{un} equals 2 (representing summer and winter gasoline).

(4) Laboratory designation. Any laboratory that the independent surveyor intends to use to test samples collected as part of the national sampling oversight program specified in this subpart must be approved annually as part of the sampling oversight program plan. The independent surveyor must include the following information regarding any laboratory it intends to use to test samples:

(i) The name of the laboratory.

(ii) The address of the laboratory.

(iii) The test methods for each fuel parameter measured at the laboratory.
(iv) Reports demonstrating the laboratory’s performance in a laboratory cross-check program for the most recent 12 months prior to submission of the plan.

(5) Sampling procedure. The plan must include a detailed description of the sampling procedures used to collect samples at participating refineries and import facilities.

(6) Notification of test results. The plan must include a description of how the independent surveyor will notify EPA and refiners and importers of test results as required by §1090.1440(c)(4).

(7) Submission. Plans submitted under this section are subject to the requirements of §1090.1420.
Subpart O—Labeling Requirements

§1090.1500 General labeling provisions.

Any retailer or wholesale purchaser-consumer required to affix a label under this subpart must affix the label to the fuel dispenser as follows:

(a) Labels must be displayed prominently and conspicuously on the vertical surface of the pump on each side with gallonage and price meters and must be on the upper two-thirds of the pump, in a location where they are clearly visible to the public.

(b) Labels must be legible, and clearly readable to the public.

(c) An alternative label design to those specified in this subpart may be used if the design is submitted to EPA for approval prior to use and meets all the following criteria:

   (1) Is similar in substance and appearance to the EPA-required label.

   (2) Contains the same informational elements.

   (3) Is submitted in the manner specified in §1090.XXX.

§1090.1505 E15 labeling provisions.

Any retailer or wholesale purchaser-consumer dispensing E15 must apply a label to the fuel dispenser as follows:

(a) Position the label to clearly identify which control the consumer will use to select E15. If the dispenser is set up to dispense E15 without the consumer taking action to select the fuel, position the label on a vertical surface in a prominent place, approximately at eye level.

(b) Figure 1 of this section shows the required content and formatting. Use black letters on an orange background for the lower portion and the diagonal “Attention” field, and use orange letters on a black background for the rest of the upper portion. Font size is shown in Figure 1. Set vertical position and line spacing as appropriate for each field. Dimensions are nominal values.
§1090.1510 Diesel sulfur labeling provisions.

Any retailer or wholesale purchaser-consumer dispensing diesel fuel must apply a label to the fuel dispenser as follows:

(a) The labels must be displayed on or in the immediate area of each pump stand, as applicable. The content of the label must be in block letters of no less than 24-point bold type, printed in a color contrasting with the background.

(1) Where heating oil is being dispensed along with diesel fuel for any kind of engine, vehicle, or equipment, apply the following label:

HEATING OIL

WARNING

Federal law prohibits use in highway vehicles or engines, or in nonroad, locomotive, or marine diesel engines.

Its use may damage these diesel engines.

(2) Where 500 ppm LM diesel fuel is being dispensed, apply the following label:

LOW SULFUR LOCOMOTIVE AND MARINE DIESEL FUEL (500 ppm Sulfur Maximum)
WARNING

Federal law prohibits use in nonroad engines or in highway vehicles or engines.

(3) Where ECA marine fuel is being dispensed, apply the following label:

1,000 ppm SULFUR ECA MARINE FUEL (1,000 ppm Sulfur Maximum).

For use in Category 3 (C3) marine vessels only.

WARNING

Federal law prohibits use in any engine that is not installed in a C3 marine vessel; use of fuel oil with a sulfur content greater than 1,000 ppm in an ECA is prohibited except as allowed by 40 CFR part 1043.

(b) [Reserved]
This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
Subpart Q—Reserved
Subpart R—Importation and Exportation of Fuels, Fuel Additives, and Regulated Blendstocks

§1090.1700 General provisions for importers.

(a) This subpart specifies certain provisions that apply to parties that import fuels, fuel additives, or regulated blendstocks.

(b) The entity that is the importer of record for U.S. Customs Service is the importer for purposes of this part. Note that this is typically the entity that owns the fuel, fuel additive, or regulated blendstock when the import vessel arrives at the U.S. port of entry, or the entity that owns the fuel, fuel additive, or regulated blendstock after it has been discharged by the import vessel into a shore tank, but sometimes it is a licensed customs house broker. The Customs importer of record is always responsible for compliance the standards and requirements of this part. Other entities involved in the importation remain subject to the prohibited acts of this part.

(c) For importers that import fuel at multiple import facilities, the facilities must be aggregated together for purposes of complying with average standards and reporting as an aggregated import facility. However, where different standards apply for fuel imported at different facilities, the averaged standards must be complied with separately for each group of facilities that is subject to the same standards.

(d) Batches of imported fuel for which certification is required must be certified separately for Customs Service purposes at each U.S. port of entry.

(e) Testing requirements for importing gasoline or diesel fuel by rail or truck are specified in §1090.1325.

§1090.1705 Importation by marine vessel.

(a) Separate certification is required at each import facility, whether or not fuel is transported by the same vessel making multiple stops.

(b) Importers may not rely on testing from a foreign source or be based on samples collected after the fuel is off-loaded.

(c) Except as specified in paragraphs (c)(1) through (4) of this section, different ship compartments must be considered different batches of gasoline.

(1) Importers may treat the gasoline in different compartments of a ship as a single batch only if the importer has a strong basis to believe that the gasoline is homogeneous across the compartments, but such a determination requires analysis of the different compartment samples for most of the RFG parameters. Only if the different compartments of a ship have the same values for each of these parameters, within the ASTM repeatability range for each parameter, may the gasoline in different ship compartments be considered to be homogeneous. The minimum set of parameters that may be used to establish homogeneity are the following:

(i) API gravity.
(ii) Sulfur.

(iii) Benzene.

(iv) E200.

(v) E300.

(2) EPA will accept the analysis of samples collected from different ship compartments that are combined into a single volume-weighted composite sample if one of the following conditions are met:

(i) The compartments are off-loaded into a single shore tank.

(ii) Each individual vessel compartment is shown, through sampling and testing, to meet all applicable standards.

(iii) Each shore tank into which the imported RFG is off-loaded is also sampled and tested to establish that the imported RFG meets all applicable standards.

(A) Any RFG contained in the shore tank before the imported RFG is added must be sampled and tested for all applicable standards using the methods specified in subpart M of this part.

(B) After the imported RFG is added to the tank, the entire tank again must be sampled and tested for all applicable standards using the methods specified in subpart M of this part.

(C) The volume and properties of the tank bottom must then be subtracted from the post-addition test results, to mathematically determine the levels of all applicable standards for the imported RFG.

(D) Only if these shore tank test results meet all applicable standards may the ship composite sample be used to certify the imported RFG.

(d) Imported gasoline must be certified while the gasoline is on board the marine vessel used to transport the gasoline to the United States, and the certification sampling must be performed after the vessel's arrival in the port where the gasoline will be off-loaded.

(1) This sampling may not be performed while the vessel is at the foreign loading port or at sea.

(2) Once gasoline on a vessel has been fully certified (each vessel compartment is certified separately, or the homogeneity of the gasoline in the vessel's compartments is established and the vessel's gasoline is certified using a composite sample protocol), the gasoline may be transferred to shore tanks using smaller vessels or barges (lightered) as fully certified RFG or CG. These lightering transfers may be to terminals located in any harbor, and are not restricted to terminals located in the harbor where the ship is anchored. For example, certified RFG could be transferred from a ship anchored in New York harbor to a lightering vessel and...
transported to Albany, New York or Providence, Rhode Island without separately certifying the gasoline upon arrival in Albany or Providence. In this lightering situation transfers to a lightering vessel must meet the PTD requirements.

§1090.1710 General provisions for exporters.

Except as specified in this section, gasoline and diesel fuel produced, imported, distributed, or offered for sale in the United States is subject to the standards and requirements of this part. Note that subpart G of this part exempts certain fuels from these requirements.

(a) Fuels designated for export by a refiner or importer are not subject to the standards of this part, provided they are ultimately exported to a foreign country. However, such fuels must be designated at the refinery or import facility, and must be accompanied by documentation stating for “export only” that complies with the PTD requirements of subpart K of this part. Refiners must retain records to demonstrate that the fuel was exported. Fuel designated for export must be segregated from all fuel intended for use in the United States.

(b) Fuel not designated for export may be exported without restriction. However, the fuel remains subject to the provisions of this part while in the United States. For example, fuel designated as ULSD must meet the applicable sulfur standards even if it will later be exported.

(c) Gasoline that has been classified as American Goods Returned to the United States by the U.S. Customs Service is not considered to be imported for purposes of this part, provided all the following conditions are met:

(1) The gasoline was produced at a refinery located within the United States and has not been mixed with gasoline produced at a refinery located outside the United States.

(2) The gasoline must be included in compliance calculations by the producing refiner.

(3) All the gasoline that was exported must ultimately be classified as American Goods Returned to the United States and none may be used in a foreign country.

(4) No gasoline classified as American Goods Returned to the United States may be combined with any gasoline produced at a foreign refinery prior to being imported into the United States.

§1090.1715 Gasoline treated as a blendstock.

This section addresses imported fuel that meets the definition of gasoline at the time of importation, but that will be blended with other fuels, fuel additives, or regulated blendstocks to produce a new gasoline prior to title transfer from the importer to another party. Where an importer meets all requirements of this section for a given volume of gasoline, the importer may designate the fuel as GTAB.

(a) The GTAB must be included in all applicable designation, credit, and compliance calculations for gasoline for a refinery operated by the same party that is the importer. That party must meet all refiner standards and requirements.
(b) After importation, the title of the GTAB may not be transferred to another party until the GTAB has been blended to produce gasoline and all applicable standards and requirements have been met for the gasoline produced.

(c) The facility at which the GTAB is used to produce gasoline must be physically located at either the same terminal at which the GTAB first arrives in the United States, the import facility, or at a facility to which the GTAB is directly transported from the import facility.

(d) The GTAB must be completely segregated from any other gasoline, including any gasoline tank bottoms, prior to the point of blending and sampling and testing, except as follows:

(1) The GTAB may be placed into a storage tank that contains other GTAB imported by that importer.

(2) The GTAB may be placed in a storage tank that contains PCG provided that the blending is performed in that storage tank, and one of the following criteria is met:

(i) The PCG has the same designations pursuant to §1090.XXX as the gasoline that will be produced using the GTAB, and the volume and properties of the gasoline produced using GTAB are determined in a manner that excludes the volume and properties of the PCG.

(ii) In the case of GTAB used to produce gasoline, the requirements for PCG in §1090.XXX are met.

(e)(1) The importer must complete all requirements for gasoline importers pursuant to §1090.105(a) for the GTAB at the time it is imported as if the GTAB were imported gasoline.

(2) The volume and properties of GTAB that has been combined with other GTAB may be determined by subtracting the volume and properties of the GTAB in the tank prior to receipt of the new product, from the volume and properties of the GTAB in the tank after receipt of the new product.

(3) Pursuant to paragraph (e)(1) of this section, any GTAB batch that is used in whole or in part to produce gasoline must be treated as imported gasoline for purposes of sampling and testing and reporting, except that the sampling and testing may be based on vessel composite samples without regard to whether the gasoline in individual ship compartments separately meets all applicable gasoline standards.

(4) Any reports to EPA for imported GTAB must identify the GTAB as “GTAB”.

(5) Any GTAB that ultimately is not used to produce gasoline (e.g., a tank bottom of GTAB) must be treated as newly imported gasoline, for which all applicable requirements for imported gasoline apply.

§1090.1720 Diesel fuel treated as a blendstock.

This section addresses imported fuel that meets the definition of diesel fuel at the time of importation, but that will be blended with other fuels, fuel additives, or regulated blendstocks to
produce a new diesel fuel prior to title transfer from the importer to another party. Where an importer meets all requirements of this section for a given volume of diesel fuel, the importer may designate the fuel as DTAB.

(a) The DTAB must meet all applicable standards of subpart D of this part and the importer must meet all applicable requirements for diesel fuel refiners in §1090.105(b).

(b) After importation, the title of the DTAB may not be transferred to another party until the DTAB has been blended to produce diesel fuel and all applicable standards and requirements have been met for the diesel fuel produced.

(c) The facility at which the DTAB is used to produce diesel fuel must be physically located at either the same terminal at which the DTAB first arrives in the United States, the import facility, or at a facility to which the DTAB is directly transported from the import facility.

(d) The DTAB must be completely segregated from any other diesel fuel, including any diesel fuel tank bottoms, prior to the point of blending and sampling and testing, except as follows:

(1) The DTAB may be added to a diesel fuel blending tank where the diesel fuel tank bottom is not included as part of the batch volume for a prior batch.

(2) The DTAB may be placed into a storage tank that contains other DTAB imported by that importer.

(3) The DTAB may be discharged into a tank containing finished diesel fuel of the same category as the diesel fuel that will be produced using the DTAB (e.g., ULSD or ECA marine fuel) provided that the blending process is performed in that same tank.

(e) The importer must exclude the volume of any previously designated diesel fuel when accounting for the volume of diesel fuel produced using DTAB. The diesel fuel tank bottom must be excluded for the batch of diesel fuel if the fuel in that tank bottom has been previously designated by a refiner or importer. This exclusion of previously designated diesel fuel must be accomplished using the following approach:

(1) Determine the volume of any tank bottom that is previously designated diesel fuel before beginning to produce new diesel fuel from the DTAB.

(2) Add the DTAB plus any blendstock to the storage tank, and completely mix the tank.

(3) Determine the volume and sulfur content of the diesel fuel contained in the storage tank after blending is complete. Subtract the volume of the tank bottom to determine the volume of the DTAB plus blendstock added, and subsequently transferred to another facility.

(4) As an alternative to paragraphs (e)(1) through (e)(3) of this section, an importer that has a blending tank that is used only to combine DTAB and blending components, and no previously designated diesel fuel is added to the tank, the importer may certify the diesel fuel
produced in such a blending tank by sampling and testing the batch for the sulfur content after DTAB and blendstock are added and mixed.

(f) Any DTAB that ultimately is not used to produce diesel fuel (e.g., a tank bottom of DTAB) must be treated as newly imported diesel fuel, for which all applicable requirements for imported diesel fuel apply.
Subpart S—Compliance and Enforcement Provisions

§1090.1800 Prohibited acts.

(a) No person may violate any prohibited act in this part or fail to meet a requirement that applies to that person under this part.

(b) No person may cause another person to commit an act in violation of this part.

§1090.1805 Evidence related to violations.

(a)(1) EPA may use results from any testing required by this part to determine whether a given fuel, fuel additive, or regulated blendstock meets any applicable standard. However, EPA may also use any other evidence or information to make this determination if the evidence or information supports the conclusion that the fuel, fuel additive, or regulated blendstock would fail to meet one or more of the parameter specifications in this part if the appropriate sampling and testing methodology had been correctly performed. Examples of other relevant information include business records, commercial documents, and measurements with alternative procedures.

(2) Testing to determine noncompliance with this part may occur at any location and be performed by any party.

(b) Determinations of compliance with the requirements of this part other than the fuel, fuel additive, or regulated blendstock standards, and determinations of liability for any violation of this part, may be based on information from any source or location. Such information may include, but is not limited to, business records and commercial documents.

§1090.1810 Penalties.

(a) Any person liable for a violation under this part is subject to civil penalties as specified in 42 U.S.C. §§ 7524 and 7545 for every day of each such violation and the amount of economic benefit or savings resulting from each violation.

(b) Any person liable for the violation of an annual average standard under this part, or causing another person to violate an annual average standard under this part, is subject to a separate day of violation for each and every day in the compliance period. Any person liable under this part for a failure to fulfill any requirement for credit generation, transfer, use, banking, or deficit correction is subject to a separate day of violation for each and every day in the compliance period in which invalid credits are generated or used.

(c)(1) Any person liable under this part for a violation of a per-gallon standard, or of causing another party to violate a per-gallon standard, is subject to a separate day of violation for each and every day the non-complying fuel, fuel additive, or regulated blendstock remains any place in the distribution system.

(2) For the purposes of paragraph (c)(1) of this section, the length of time the fuel, fuel additive, or regulated blendstock that violates a per-gallon standard remained in the distribution system is deemed to be twenty-five (25) days, unless a person subject to liability or EPA...
demonstrates by reasonably specific showings, by direct or circumstantial evidence, that the non-complying fuel, fuel additive, or regulated blendstock remained in the distribution system for fewer than or more than twenty-five (25) days.

(d) Any person liable for failure to meet, or causing a failure to meet, any other provision of this part is liable for a separate day of violation for each and every day such provision remains unfulfilled.

(e) For any person that fails to meet separate parameter requirements of this part, these count as separate violations.

(g) Violation of any misfueling prohibition under this part counts as a separate violation for each day the noncompliant fuel, fuel additive, or regulated blendstock remains in the engine, vehicle, or equipment.

(h) The presumed values of fuel parameters in paragraphs (h)(1) through (3) of this section apply for cases in which any person fails to perform required testing and must be reported, unless EPA, in its sole discretion, approves a different value in writing. EPA may consider any relevant information to determine whether a different value is appropriate.

(1) For gasoline: 970 ppm sulfur, 5 volume percent benzene, and 11 psi RVP.

(2) For diesel fuel: 1,000 ppm sulfur.

(3) For ECA marine fuel: 5,000 ppm sulfur.

§1090.1815 Liability provisions.

(a) Any person who violates any requirement of this part is liable for the violation.

(b) Any person who causes someone to commit a prohibited act under this subpart is liable for violating that prohibition.

(c) Any parent corporation is liable for any violation committed by any of its wholly-owned subsidiaries.

(d) Each partner to a joint venture, or each owner of a facility owned by two or more owners, is jointly and severally liable for any violation of this subpart that occurs at the joint venture facility or facility owned by the joint owners, or is committed by the joint venture operation or any of the joint owners of the facility.

(e)(1) Any refiner, importer, distributor, reseller, carrier, retailer, wholesale purchaser-consumer, oxygenate producer, oxygenate importer, oxygenate blender, ethanol denaturant producer, ethanol denaturant importer, fuel additive manufacturer, or fuel additive blender that produced, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation or storage of fuel, fuel additive, or regulated blendstock that is in the storage tank containing fuel, fuel additive, or regulated blendstock that is found to be in violation of a per-gallon standard is liable for the violation.
(2) In order for a carrier to be liable under paragraph (e)(1) of this section, EPA must demonstrate by reasonably specific showing, by direct or circumstantial evidence, that the carrier caused the violation.

(f) If a refiner or importer’s corporate, trade, or brand name is displayed at a facility where a violation occurs, the refiner or importer is liable for the violation. This also applies where the displayed corporate, trade, or brand name is from the refiner or importer’s marketing subsidiary.

§1090.1820 Affirmative defense provisions related to noncompliant fuels, fuel additives, or regulated blendstocks.

(a) Any person liable for a violation in §1090.1815(e) or (f) will not be deemed in violation if the person demonstrates all the following:

(1) The violation was not caused by the person or the person’s employee or agent.

(2) In cases where PTD requirements of this part apply, the PTDs account for the fuel found to be in violation and indicate that the violating product was in compliance with the applicable requirements while in that person’s control.

(3) The person conducted a quality assurance sampling and testing program, as specified in paragraph (d) of this section.

(i) A carrier may rely on the quality assurance program carried out by another party, including the party that owns the fuel in question, provided that the quality assurance program is carried out properly.

(ii) Retailers and wholesale purchaser-consumers are not required to conduct sampling and testing of fuel as part of their quality assurance programs.

(b) In the case of a violation found at a facility operating under the corporate, trade, or brand name of a refiner or importer, or a refiner or importer’s marketing subsidiary, the refiner or importer must show, in addition to the defense elements required by paragraph (a) of this section, that the violation was caused by one of the following:

(1) An act in violation of law (other than the Clean Air Act or this part), or an act of sabotage or vandalism.

(2) The action of any refiner, importer, retailer, distributor, reseller, oxygenate blender, carrier, retailer, or wholesale purchaser-consumer in violation of a contractual agreement between the branded refiner or importer and the person designed to prevent such action, and despite periodic sampling and testing by the branded refiner or importer to ensure compliance with such contractual obligation.

(3) The action of any carrier or other distributor not subject to a contract with the refiner or importer, but engaged for transportation of fuels, fuel additives, or regulated blendstocks.
despite specifications or inspections of procedures and equipment that are reasonably calculated to prevent such action.

(c) Pursuant to paragraph (a) of this section, for any person to show that a violation was not caused by that person, or pursuant to paragraph (b) of this section to show that a violation was caused by any of the specified actions, the person must demonstrate by reasonably specific showings, by direct or circumstantial evidence, that the violation was caused or must have been caused by another person and that the person asserting the defense did not contribute to that other person’s causation.

(d) To demonstrate an acceptable quality assurance and testing program pursuant to paragraph (a)(2) of this section, a person must present evidence of all the following:

1. A periodic sampling and testing program adequately designed to ensure the fuel, fuel additive, or regulated blendstock the person sold, dispensed, supplied, stored, or transported meets the applicable per-gallon standard. A person may meet the periodic sampling and testing requirements required by this paragraph by participating in a survey program that was in effect at the time of the violation that meets the requirements specified in subpart N of this part.

2. On each occasion when fuel, fuel additive, or regulated blendstock is found to be not in compliance with the applicable per-gallon standard, the person does all the following:

   i. Immediately ceases selling, offering for sale, dispensing, supplying, offering for supply, storing, or transporting the non-complying fuel, fuel additive, or regulated blendstock.

   ii. Promptly remedies the violation and the factors that caused the violation (e.g., by removing the non-complying product from the distribution system until the applicable standard is achieved and taking steps to prevent future violations of a similar nature from occurring).

3. For any carrier that transports a fuel, fuel additive, or regulated blendstock in a tank truck, the quality assurance program required under paragraph (d)(1) of this section does not need to include periodic sampling and testing of gasoline in the tank truck. In lieu of such tank truck sampling and testing, the carrier must demonstrate evidence of an oversight program for monitoring compliance with the requirements of this part relating to the transport or storage of gasoline by tank truck, such as appropriate guidance to drivers regarding compliance with the applicable per-gallon standards and PTD requirements, and the periodic review of records received in the ordinary course of business concerning gasoline quality and delivery.
Subpart T—Attestation Engagement

§1090.1900 General provisions.

(a) The following companies must arrange for attestation engagement by an independent auditor as specified in this subpart:

(1) Gasoline refiners and importers that produce or import gasoline subject to requirements of subpart C of this part.

(2) [Reserved].

(b) Independent auditors must meet all the following requirements:

(1) Meet the applicable requirements of §1090.2000.

(2) Not be suspended or debarred under 2 CFR part 1532 or 48 CFR part 9, subpart 9.4.

(c) Independent auditors performing an attest engagement must evaluate the specified documentation using the agreed-upon procedures specified in this subpart.

(1) Unless specified otherwise, the compliance period for the engagement is the calendar year.

(2) The auditor must identify any instances where compared values do not agree, or where specified values are outside of what the regulation allows. If there is a discrepancy in a value that is needed for further calculations, the auditor must reconcile the discrepancy with the refiner or importer before continuing.

(3) The auditor must prepare a report to describe these findings and the corresponding procedures used for the engagement, and submit the report and underlying documentation electronically to EPA by June 1 of the year following the compliance period. The report must also include a statement from the refiner or importer acknowledging any identified discrepancies or noncompliance, and describe any appropriate corrective action.

(4) The auditor must keep the engagement reports and underlying documentation for five (5) years after the end of the compliance period as specified in subpart K of this part.

(d) Refiners and importers must send the documents and information specified in this subpart to the auditor.

(e) The following general provisions apply:

(1) The auditor may foot (foot means to add a series of numbers, generally in columns or rows to a total amount) to subtotals on a sample basis if applicable, in which case the auditor should foot the total from the subtotals and foot the subtotals on a test basis using at least 25 percent of the subtotals.
(2) Laboratory analysis refers to the original test result for each analysis of a product’s properties. The following provisions apply in special cases:

(i) For laboratories using test methods that must be correlated to the standard test method, the laboratory analysis must include the correlation factors along with the corresponding test results.

(ii) For refiners or importers that produce RFG, CG, or BOB and rely on independent laboratories for all testing, the laboratory analysis consists of the results reported by the independent laboratory.

(iii) Where the regulation allows for assumed properties, such as for butane, the assumed properties may serve as the test results.

(3) Nonfinished gasoline petroleum products are liquid petroleum products whose initial boiling point is above 75 °F and whose final boiling point is less than 450 °F using ASTM D86 or an equivalent procedure.

(4) Representative sample means a selected subset of available data for the engagement, as specified in §1090.1905.

(5) Tender means the transfer of ownership or physical custody of a volume of gasoline or other petroleum product, all of which has the same identification (RFG, CG, BOB, or other nonfinished gasoline petroleum products), and characteristics (time and place of use restrictions for RFG, CG, and BOB).

§1090.1905 Representative samples.

(a) If the specified procedures require evaluation of a representative sample from the overall population for a given data set, determine the number of results for evaluation using one of the following methods:

(1) Determine sample size using the following table:

<table>
<thead>
<tr>
<th>Population (N)</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>The smaller of N or 19</td>
</tr>
<tr>
<td>26-40</td>
<td>20</td>
</tr>
<tr>
<td>41-65</td>
<td>25</td>
</tr>
<tr>
<td>66 or more</td>
<td>29</td>
</tr>
</tbody>
</table>

(2) Determine sample size corresponding to a confidence level of 95 percent, an expected error rate of 0 percent, and a maximum tolerable error rate of 10 percent, using conventional statistical principles and methods.

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(3) Determine sample size using an alternate method that is equivalent to or better than the methods specified in paragraphs (a)(1) and (2) of this section with respect to strength of inference and freedom from bias. Describe and justify the alternate method in the final report.

(b) Select specific data points for evaluation over the course of the compliance period in a way that leads to a random sample that properly represents the overall population for the data set.

§1090.1910 General procedures.

(a) EPA reports. Take the following steps for reviewing the reports required by subpart J of this part:

(1) If the report includes aggregated figures for multiple refineries, the refiner must provide refinery-specific volumes and the corresponding property information. Foot the refinery-specific totals and compare these totals with the aggregate values in the report. Apply the procedures in this section separately for each refinery.

(2) Identify the name of the commercial computer program used by the refiner or importer to track the data required by the regulations in this part, if any.

(b) Inventory reconciliation analysis. Review the refiner or importer’s inventory reconciliation analysis by gasoline type and take the following steps:

(1) Foot the volume totals reflected in the analysis.

(2) Compare the beginning and ending inventories in the analysis to the actual inventory records. The analysis may exclude nonfinished gasoline petroleum products if the analysis shows no production of conventional gasoline.

(3) Identify the volume totals for each gasoline type.

(c) Listing of tenders and batches. For gasoline and BOB, review the refiner or importer’s separate listing of tenders, showing for each tender the volume shipped and other information as needed to distinguish tenders. Also review the refiner or importer’s separate listings of all batches reported to EPA. Foot to the volume totals in each listed entry for tenders and batches. Compare the total volumes in each listing to the production volume in the inventory reconciliation analysis from paragraph (b) of this section.

(d) Gasoline tenders and batches. Select representative tender and batch samples of gasoline from the listings specified in paragraph (c) of this section and take the following steps for each selected tender or batch:

(1) Review PTDs associated with each tender and compare the volume on the tender listing to the volume on the PTDs. Note whether the PTDs evidencing the date and location of the tender and the compliance designations for the tender agree.

(2) Compare the volume shown on the batch listing to the corresponding batch volume reported to EPA.
(3) Review the refiner or importer’s laboratory analysis and compare the listed properties to the corresponding figures from the batch report submitted to EPA.

(e) BOB tenders and batches. Select representative tender and batch samples of BOB from the listings specified in paragraph (c) of this section and take the following steps for each selected tender or batch:

(1) Review PTDs associated with each tender and compare the volume of the specified oxygenate on the tender listing to the corresponding volume on the PTDs.

(2) Review batch information from the refiner or importer identifying the oxygenate compound and the oxygenate volume needed for hand blending with the BOB consistent with §1090.XXX. Compare this adjusted volume to the corresponding batch volume reported to EPA.

(3) Review the refiner or importer’s laboratory analysis of the hand-blended BOB. Compare the oxygenate type and oxygen amount from the laboratory analysis to the corresponding values determined by paragraph (e)(2) of this section. Also compare the properties identified in the laboratory analysis to the corresponding figures from the batch report submitted to EPA.

(f) Oxygenate blending. Review the refiner or importer’s list of downstream oxygenate blenders and their blending facilities that are related to the refiner or importer’s compliance calculations. The procedures in this paragraph may be omitted if the refiner or importer declares in writing that its compliance demonstration does not involve any downstream oxygenate blending.

(1) Review the refiner or importer’s listing of oxygenate batches added at each facility by downstream oxygenate blenders where those batches are included in its compliance calculations. Foot to the total volume of batches in the listing:

(2) The downstream oxygenate blender must provide a listing of the oxygenate volumes blended with RFG, CG, or BOB supplied by the refiner or importer. Foot to the total volume of oxygenate batches in the listing. Compare these volumes to the values from paragraph (f)(1) of this section.

(3) Take the following steps if the refiner or importer declares that the downstream oxygenate blender is a separate entity:

(i) Review the refiner or importer’s contract with the downstream oxygenate blender and confirm that the contract was in force when the blending occurred.

(ii) Review the refiner or importer’s records documenting physical inspections of blending at the blending facility to confirm that the inspections occurred.

(iii) Review the refiner or importer’s records documenting an audit of the blending operation. Confirm that these records show that the audit evaluated whether oxygenate types and overall volumes the blender purchased and used were consistent with the information from the
refiner or importer. Also confirm that the audit established that this oxygenate was blended with gasoline or blending stock from the refiner or importer.

(iv) Review the refiner or importer’s listing of results from testing related to the downstream oxygenate blending operation. Select a representative sample from the listing. Compare the oxygenate volume from each selected test to the corresponding values from paragraph (f)(2) of this section.

§1090.1915 Procedures for imported gasoline classified as blendstock.

The following procedures apply in the case of importers that import GTAB pursuant to §1090.XXX:

(a) Review the importer’s listing of all imported GTAB volumes. Compare the total GTAB volume from the listing to the corresponding volume in the inventory reconciliation analysis in §1090.1910(b) or to some alternative documentation if the inventory reconciliation analysis is not sufficient for making the comparison.

(b) Review the importer’s listing of all GTAB batches reported to EPA. Compare the total GTAB volume from the listing to the import summary from the U.S. Customs Service, and to the corresponding GTAB volume reported to EPA. Note that the report to EPA states that the batch is not included in the compliance calculations because the imported product is GTAB. Select a representative sample from the listing of GTAB batches and take the following steps for each selected GTAB batch:

(1) Trace the GTAB batch to the importer’s tank activity records. Determine the volumes of gasoline produced from the tank activity records. Compare the volumes from the tank activity records to volumes from the batch volume reported to EPA as RFG or CG.

(2) Use available records, such as U.S. Customs entry records, to confirm that the refinery location identified in the tank activity records for producing gasoline from GTAB is the same as the location where the GTAB arrived in the United States, or the same as the location where GTAB was transported directly upon importation. Use product transfer records to trace volumes transported from the import facility directly to the refinery, as applicable.

(3) Review the importer’s tank activity records for all received GTAB batches. Determine whether the GTAB was received into an empty tank, into a tank with blendstock, or into a tank with other GTAB imported by that importer or with finished gasoline of the same category as the gasoline that will be produced using the GTAB. Use the tank activity records to determine the volume of any tank bottom (beginning tank inventory) that is PCG before adding GTAB to the tank. Determine the properties of the tank bottom using laboratory reports, batch reports, or PTDs.

(4) Determine whether the calculations of properties and volume of gasoline produced using GTAB excluded the volume and properties of any gasoline already included in any refiner or importer’s compliance calculations, using one of the following procedures, noting the documented tank mixing procedures:

This document is a staff-level working draft, developed in preparation for EPA’s Fuels Regulatory Streamlining rulemaking.
(i) Determine the volume and properties of the gasoline in the storage tank after blending is complete. Use a calculation methodology to subtract out the volume and properties of the PCG to determine the volume and properties of the resulting fuel blend. Compare the volume and properties of the blended fuel to the corresponding volume and properties reported to EPA.

(ii) If GTAB and blending components were blended together without adding gasoline, volume and properties of the blended fuel may be determined using tank activity records. Compare the volumes and properties of shipments from the tank after blending and testing to the volumes and properties the refiner reported to EPA.

(5) Review the importer’s laboratory analysis for each selected GTAB batch. Compare the listed properties to the corresponding figures from the batch report submitted to EPA.

§1090.1920 Procedures for certain gasoline imported by truck.

The following procedures apply in the case of importers that import conventional gasoline into the United States by truck using the sampling and testing option in §1090.1325:

(a) Review the importer’s listing of all truck import volumes. Compare the total volume from this listing to the corresponding volume in the inventory reconciliation analysis in §1090.1910(b).

(b)(1) Review the importer’s listing of all truck import batches reported to EPA. Agree this total volume to the import summary from the U.S. Customs Service, and to the volume of truck imports reported to EPA.

(2) Select a representative sample from the listing in paragraph (b)(1) of this section and take the following steps for each selected truck import batch:

(i) Review the terminal test results in §1090.1325. Determine whether the test sample was analyzed using the methods specified in subpart M of this part and compare the terminal test results to the batch properties reported to EPA.

(ii) Review the importer’s tank activity records for the terminal storage tank showing receipts, discharges, and sampling. Determine whether the test sample in paragraph (b)(2)(i) of this section was collected after the most recent receipt into the storage tank.

(c) Review the importer’s listings of all collected quality assurance test samples for each terminal with loading of truck imported gasoline. Select a representative sample from the listing and take the following steps for each quality assurance test sample:

(1) Determine whether the importer analyzed the test sample, and whether they performed the analysis using the methods specified in subpart M of this part.

(2) Review the terminal test results corresponding to the time of collecting the quality assurance test samples. Compare the terminal test results with the quality assurance test results.
(3) Determine whether the sampling frequency for quality assurance testing was within the frequency specified in §1090.1325.

§1090.1925 Procedures for PCG used to produce gasoline.

The following procedures apply in the case of a refiner that uses PCG pursuant to §1090.XXX.

(a) Review the refiner’s listing of all batches of PCG received at the refinery. Compare the total volume of PCG from the listing to the corresponding volume in the inventory reconciliation analysis in §1090.1910(b) or to some alternative documentation if the inventory reconciliation analysis is not sufficient for making the comparison.

(b)(1) Review the refiner’s listing of all PCG batches reported to EPA. Compare this total volume to the volume of PCG reported to EPA from paragraph (a) of this section.

(2) Select a representative sample from the listing in paragraph (b)(1) of this section and take the following steps for each selected batch of PCG:

(i) Trace the batch to the refiner’s tank activity records. Determine whether the refiner included the PCG in a batch of RFG or CG from the refinery.

(ii) Review the refiner’s laboratory analysis and volume measurement for the PCG when received at the refinery and compare these values to the corresponding properties and volume listed in the batch report submitted to EPA.

(iii) Review the PTDs for the PCG when received at the refinery. Determine whether the PTDs designate it as RFG, CG, or BOB, and make note of any designations regarding RVP standards. Compare these designations to the corresponding designations in the batch report submitted to EPA.

§1090.1930 Procedures for butane blenders.

The following procedures apply in the case of a refiner that blends butane pursuant to §1090.XXX:

(a) Review the refiner’s listing of all butane batches received at the refinery.

(b)(1) Review the refiner’s listing of all butane batches reported to EPA. Compare this total butane volume to the total butane volume reported to EPA.

(2) Select a representative sample from the listing in paragraph (b)(1). Trace the butane in the batch to the documents the butane supplier provided to the refiner. Determine whether these documents establish the butane as blender-grade butane as specified in §1090.1320.
§1090.1935 Procedures related to benzene credits.

The procedures of this section apply to gasoline refiners and importers participating in the program for benzene credits specified in subpart H of this part. This applies for refiners and importers that have a positive or negative balance of credits at any time during the year, even if they do not generate, use, buy, or sell sulfur credits during the reporting year.

(a)(1) If the refiner or importer generated or used benzene credits during the year, review the refiner or importer’s annual gasoline benzene report submitted pursuant to subpart J of this part. Calculate the difference between the reported annual average benzene value and 0.62 percent by volume. Multiply the difference by the corresponding volume of gasoline identified in the report to determine the benzene credits for the year. Report the total benzene credits. If the annual average benzene concentration is less than 0.62, the refiner or importer is generating positive benzene credits. If it is more than 0.62, the refiner or importer is using benzene credits or creating a credit deficit; this is a negative credit for calculation purposes.

(2) Compare the benzene credit calculated in paragraph (a)(1) of this section with the value reported to EPA.

(b) If the refiner or importer has an annual average benzene value greater than 0.62 percent by volume, ask them to state in writing whether they will resolve the deficit with credits, or whether they will carry forward the deficit pursuant to §1090.715. Compare the statement with the information reported to EPA.

(c) If the refiner bought or sold credits during the year, review the contracts or other documentation of all credit transactions. Calculate the credits associated with each transaction and identify the year each credit was generated. Compare these figures to the information reported to EPA.

(d) Reconcile the refiner or importer’s credit balance as follows:

(1) Review the refiner or importer’s annual gasoline benzene report from the previous year to determine the ending credit balance. The engine credit balance for the previous year is the starting balance for the year being reviewed.

(2) Calculate the credit balance at the end of the year being reviewed. Calculate this value by adding positive and negative credits to the starting credit balance as specified in paragraph (a) of this section, and by adding purchased credits and subtracting sold credits as specified in paragraph (c) of this section. Also subtract any expired credits.

(3) Compare the calculated year-end credit balance with the information reported to EPA.

(4) Identify the refiner or importer as noncompliant if they had a year-end credit deficit for both the year being reviewed and the previous year.
§1090.1940 Procedures related to compliance with gasoline sulfur standards.

The procedures of this section apply to gasoline refiners and importers. The procedures related to credits in paragraphs (b) through (e) of this section apply to refiners and importers that have a positive or negative balance of credits at any time during the year, even if they do not generate, use, buy, or sell sulfur credits during the reporting year.

(a) Review the refiner or importer’s annual sulfur report submitted pursuant to subpart J of this part. Compare the volume of gasoline in the annual sulfur report to the corresponding volume in the inventory reconciliation analysis in §1090.1910(b). Calculate the annual average sulfur level and compare it to the value reported to EPA. Also compare the information in the annual sulfur report to the corresponding batch reports submitted to EPA and to any available laboratory analysis.

(b)(1) Review the refiner or importer’s annual gasoline sulfur credit report submitted pursuant to subpart J of this part. Using the annual average sulfur level in paragraph (a) of this section, calculate the difference between this value and 10 ppm. Multiply the difference by the corresponding volume of gasoline identified in the report to determine the sulfur credits for the year. Report the total sulfur credits. If the annual average sulfur concentration is less than 10 ppm, the refiner or importer is generating positive sulfur credits. If it is more than 10 ppm, the refiner or importer is using sulfur credits or creating a credit deficit; this is a negative credit for calculation purposes.

(2) Compare the sulfur credit calculated in paragraph (b)(1) of this section with the value reported to EPA.

(c) If refiners or importers have an annual average sulfur value greater than 10 ppm, ask them to state in writing whether they will resolve the deficit with credits, or whether they will carry forward the deficit pursuant to §1090.715. Compare the statement with the information reported to EPA.

(d) If the refiner bought or sold credits during the year, review the contracts or other documentation of all credit transactions. Calculate the credits associated with each transaction and identify the year each credit was generated. Compare these figures to the information reported to EPA.

(e) Reconcile the refiner or importer’s credit balance as follows:

(1) Review the refiner or importer’s annual gasoline benzene report from the previous year to determine the ending credit balance. The engine credit balance for the previous year is the starting balance for the year being reviewed.

(2) Calculate the credit balance at the end of the year being reviewed. Calculate this value by adding positive and negative credits to the starting credit balance as specified in paragraph (a) of this section, and by adding purchased credits and subtracting sold credits as specified in paragraph (c) of this section. Also subtract any expired credits.
(3) Compare the calculated year-end credit balance with the information reported to EPA.

(4) Identify the refiner or importer as noncompliant if they had a year-end credit deficit for both the year being reviewed and the previous year.

§1090.1945 Procedures related to meeting statistical quality control for measurement procedures.

The procedures of this section apply to laboratories that must perform quality control testing as specified in §1090.1358.

(a) Confirm that the laboratory’s previous demonstration did not expire before performing the new testing.

(b) Review test results used to demonstrate compliance with precision criteria.

(c) Review the accuracy demonstration as follows:

(1) If the accuracy demonstration was based on participation in an inter-laboratory crosscheck program, review the laboratory’s test results and the assessment of those results as part of the program.

(2) For testing pursuant to §1090.1358(c), review test results used to demonstrate compliance.

[NOTE TO READER: In lieu of requiring PBMS qualification reporting or ongoing SQC reporting, EPA believes that the attest auditor should verify the underlying records for PBMS qualification and SQC. EPA seeks feedback on this approach and will amend the recordkeeping requirements of subpart L for the NPRM.]
Subpart U—Other Requirements and Provisions

§1090.2000 Requirements for independent parties.

(a) Independence. The independent third-party, its contractors, subcontractors, and their organizations must be independent of the regulated party. All the criteria listed in paragraphs (a)(1) and (2) of this section must be met by every individual involved in the substantive aspects of specified activities in this part in which the independent third-party is hired to perform for a regulated party.

(1) **Employment criteria.** (i) No person employed by an independent third party, including contractor and subcontractor personnel, who is involved in a specified activity performed by the third party according to provisions of this part, may be employed, currently or previously, by the regulated party for any time within the three (3) years preceding the date when the regulated party hired the independent third party to provide services according to this part.

(ii) Third-party personnel may have been a contractor or subcontractor to the regulated party, if all other criteria listed in this section are met.

(2) **Financial criteria.** (i) The third party’s primary personnel, the third party’s organization, or any organization or individual that may be contracted or subcontracted by the third party must meet all the following requirements:

(A) Have received no more than one-quarter of its revenue from the regulated party during the year prior to the date of hire of the third party by the regulated party for auditing purposes. Income received from the third party to perform specified activities under this part are excepted.

(B) Have no interest in the regulated party’s business.

(C) Not receive compensation for any specified activity in this part that is dependent on the outcome of the specified activity.

(ii) The regulated party must be free from any interest in the third-party’s business.

(3) For purposes of conducting annual attest engagements required by subpart T of this part, a certified internal auditor (CIA) is deemed to comply with the independent requirements of paragraphs (a)(1) and (2) of this section.

(b) **Technical ability.** All the following criteria must be met by the third party in order to demonstrate its technical capability to perform specified activities under this part:

(1) An independent auditor that performs an attest engagement pursuant to subpart T of this part must be one of the following:

(i) An independent certified public accountant.

(ii) An independent firm of such accountants.

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(iii) An independent internal auditor employed by the refiner, if all the following requirements are met:

(A) That auditor is certified by the Institute of Internal Auditors.

(B) The auditor performs the attest engagement according to the Codification of Standards for the Professional Practice of Internal Auditing, incorporated by reference in §1090.95.

(2) Independent surveyors that conduct surveys pursuant to subpart N of this part must have personnel familiar with petroleum marketing, the sampling and testing of gasoline and diesel at retail stations, and designing surveys to estimate compliance rates or fuel parameters nationwide. Independent surveyors must demonstrate this technical ability in survey plans submitted pursuant to subpart N of this part.

(3) Laboratories attempting to qualify alternative procedures may need to contract with an auditing service to verify the accuracy and precision of measured values as specified in §1090.1354. Such an auditor must demonstrate work experience and a good working knowledge of the voluntary consensus standards referenced in §§1090.1354 and 1090.1356, with training and expertise corresponding to a bachelor’s degree in chemical engineering, or combined bachelor’s degrees in chemistry and statistics.

(4) Laboratories auditing inline blending operations must demonstrate work experience and a good working knowledge of the voluntary consensus standards referenced in §§1090.1354 and 1090.1356.

(c) Professional Auditing Standards. Except as specified in (b)(iii) of this section, independent auditors must perform the attest engagements in subpart T of this part according to the Codification of Statements on Auditing Standards, incorporated by reference in §1090.95.

(d) Suspension and debarment. Third parties suspended or debarred under 40 CFR part 32 or 48 CFR part 9, subpart 9.4, are not qualified to perform review functions under this part.

§1090.2010 Procedures for opting out of RFG, relaxing the federal 7.8 psi RVP standard, and other provisions related to RFG covered areas.

(a) Procedures for opting out of RFG.

(1) EPA may approve a petition from a State asking for removal of any RFG opt-in area, or portion of an RFG opt-in area, from inclusion as a covered area listed in §1090.2015, if it meets the requirements of paragraph (a)(2) of this section. If EPA approves such a petition, an effective date will be set as provided in paragraph (a)(3) of this section. EPA will notify the State in writing of EPA’s action on the petition and the effective date of the removal when the petition is approved.

(2) An opt-out petition must be signed by the Governor of a State, or their authorized representative, and must include all the following:

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(i) A geographic description of each RFG opt-in area, or portion of each RFG opt-in area, which is covered by the petition.

(ii) A description of all ways in which emissions reductions from RFG are relied upon in any approved SIP or any submitted SIP that has not yet been approved by EPA.

(iii) For any RFG opt-in areas covered by the petition where emissions reductions from RFG are relied upon as specified in paragraph (a)(2)(ii) of this section, the petition must include all the following information:

(A) Identify whether the State is withdrawing any submitted SIP that has not yet been approved.

(B)(1) Identify whether the State intends to submit a SIP revision to any approved SIP or any submitted SIP that has not yet been approved, which relies on emissions reductions from RFG, and describe any control measures that the State plans to submit to EPA for approval to replace the emissions reductions from RFG.

(2) A description of the State’s plans and schedule for adopting and submitting any revision to any approved SIP or any submitted SIP that has not yet been approved.

(C) If the State is not withdrawing any submitted SIP that has not yet been approved, and does not intend to submit a revision to any approved SIP or any submitted SIP that has not yet been approved, describe why no revision is necessary.

(iv) The Governor of a State, or their authorized representative, must submit additional information upon request of EPA.

(3)(i) Except as specified in paragraph (a)(3)(ii) of this section, EPA will set an effective date of the RFG opt-out as requested by the Governor, but no less than ninety (90) days from EPA’s written notification to the State approving the RFG opt-out petition.

(ii) Where emissions reductions from RFG are included in an approved SIP or any submitted SIP that has not yet been approved, other than as a contingency measure consisting of a future opt-in to RFG, then the effective date of the RFG opt-out in paragraph (a)(1) of this section will be the date requested by the Governor, but no less than ninety (90) days from the effective date of EPA approval of the SIP revision that removes the emissions reductions from RFG, and, if necessary, provides emissions reductions to make up for those from RFG opt-out.

(iii) Notwithstanding the provisions of paragraphs (a)(3)(i) and (ii) of this section, for an area in the ozone transport region that opted in to RFG pursuant to 42 U.S.C. § 7545(k)(6)(B), EPA will not set the effective date for removal of the area earlier than four (4) years after the commencement date of opt-in.

(4) EPA will publish a notice in the Federal Register announcing the approval of any petition pursuant to paragraph (a)(1) of this section, and the effective date of the RFG opt-out.
(5) Upon the effective date for removal of any RFG opt-in area or portion of an RFG opt-in area included in an approved petition, the geographic area covered by such approved opt-out petition will no longer be considered an RFG covered area. After the effective date of the RFG opt-out, EPA will publish a final rule revising the list of RFG covered areas in §1090.2015.

(6) Any area that became an RFG covered area pursuant to 42 U.S.C. § 7545(k)(10)(D) may have the RFG requirement removed upon redesignation to attainment for the most stringent ozone NAAQS in effect at the time of redesignation. The maintenance plan required by 42 U.S.C. § 7505a for the redesignation must request EPA to remove the RFG requirement, provide for maintenance of the ozone NAAQS without the emissions reductions from RFG and comply with the anti-backsliding requirements of 42 U.S.C. § 7410(l). EPA will address the effective date of the removal of the RFG requirement in its approval of the maintenance plan. Upon the effective date of the action the subject area will no longer be considered an RFG covered area. After the effective date, EPA will publish a final rule revising the list of RFG covered areas in §1090.2015.

(b) Procedures for relaxing the federal 7.8 psi RVP standard.

(1) EPA may approve a request from a State asking for relaxation of the federal 7.8 psi gasoline standard for any area, or portion of an area, required to use such gasoline, if it meets the requirements of paragraph (f)(2) of this section. If EPA approves such a request, an effective date will be set as provided in paragraph (b)(3) of this section. EPA will notify the State in writing of EPA’s action on the request and the effective date of the relaxation when the request is approved.

(2) The request must be signed by the Governor of the State, or their authorized representative, and must include all the following:

(i) A geographic description of each federal 7.8 psi gasoline area, or portion of such area, which is covered by the request.

(ii) A description of all ways in which emissions reduction from the federal 7.8 psi gasoline are relied upon in any approved SIP or in any submitted SIP that has not yet been approved by EPA.

(iii) For any federal 7.8 psi gasoline area covered by the request where emissions reductions from the federal 7.8 psi gasoline are relied upon as specified in paragraph (b)(2)(ii) of this section, the request must include the following information:

(A) Identify whether the State is withdrawing any submitted SIP that has not yet been approved.

(B) Identify whether the State intends to submit a SIP revision to any approved SIP or any submitted SIP that has not yet been approved, which relies on emissions reductions from federal 7.8 psi gasoline and describe any control measures that the State plans to submit to EPA for approval to replace the emissions reductions from federal 7.8 psi gasoline.
(2) A description of the State’s plans and schedule for adopting and submitting any revision to any approved SIP or any submitted SIP that has not yet been approved.

(C) If the State is not withdrawing any submitted SIP that has not yet been approved, and does not intend to submit a revision to any approved SIP or any submitted SIP that has not yet been approved, describe why no revision is necessary.

(iv) The Governor of a State, or their authorized representative, must submit additional information upon request of EPA.

(3)(i) Except as specified in paragraph (b)(3)(ii) of this section, EPA will set an effective date of the relaxation of the federal 7.8 psi gasoline standard as requested by the Governor, but no less than ninety (90) days from EPA’s written notification to the State approving the relaxation request.

(ii) Where emissions reductions from the federal 7.8 psi gasoline are included in an approved SIP or any submitted SIP that has not yet been approved, then the effective date of the relaxation request in paragraph (b)(1) of this section will be the date requested by the Governor, but no less than ninety (90) days from the effective date of EPA approval of the SIP revision that removes the emissions reductions from the federal 7.8 psi gasoline, and, if necessary, provides emissions reductions to make up for those from the federal 7.8 psi gasoline relaxation.

(4) EPA will publish a notice in the Federal Register announcing the approval of any relaxation request pursuant to paragraph (b)(1) of this section, and the effective date of the federal 7.8 psi gasoline RVP requirement.

(5) Upon the effective date of the approval of the request to relax the federal 7.8 psi gasoline standard in a subject area or portion of a subject area, the geographic area covered by the approved request will no longer be considered a federal 7.8 psi gasoline area. After the effective date of the relaxation, EPA will publish a final rule revising the list of areas subject to the federal 7.8 psi gasoline standard of §1090.315.

§1090.2015 RFG covered areas.

(a) For purposes of this part, the RFG covered areas are as follows:

(1) Covered areas specified in 42 U.S.C. § 7545(k)(10)(D):

The Los Angeles-Anaheim-Riverside, California, area, comprised of the following counties: Los Angeles; Orange; Ventura; San Bernadino (part)8; and Riverside (part)9.

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8 That portion of San Bernadino County, CA that lies south of latitude 35 degrees, 10 minutes north and west of longitude 115 degrees, 45 minutes west.

9 That portion of Riverside County, CA that which lies to the west of a line described as follows: beginning at the northeast corner of Section 4, Township 2 South, Range 5 East, a point on the boundary line common to Riverside and San Bernadino Counties; then southerly along section lines to the centerline of the Colorado River Aqueduct;
San Diego County, California.

The Greater Connecticut area, comprised of the following counties: Hartford; Middlesex; New Haven; New London; Tolland; Windham; Fairfield (part) \(^{10}\); and Litchfield (part) \(^{11}\).

The New York-Northern New Jersey-Long Island-Connecticut area, comprised of the following counties:

In Connecticut: Fairfield (part) \(^{12}\) and Litchfield (part) \(^{13}\).

In New Jersey: Bergen; Essex; Hudson; Hunterdon; Middlesex; Monmouth; Morris; Ocean; Passaic; Somerset; Sussex; and Union.

In New York: Bronx; Kings; Nassau; New York (Manhattan); Queens; Richmond; Rockland; Suffolk; Westchester; Orange; and Putnam.

The Philadelphia-Wilmington-Trenton area, comprised of the following counties:

In Delaware: New Castle and Kent.

In Maryland: Cecil.

In New Jersey: Burlington; Camden; Cumberland; Gloucester; Mercer; and Salem.

In Pennsylvania: Bucks; Chester; Delaware; Montgomery; and Philadelphia.

The Chicago-Gary-Lake County, Illinois-Indiana area, comprised of the following counties:

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then southeasterly along the centerline of said Colorado River Aqueduct to the southerly line of Section 36, Township 3 South, Range 7 East; then easterly along the township line to the northeast corner of Section 6, Township 4 South, Range 9 East; then southerly along the easterly line of Section 6 to the southeast corner thereof; then easterly along section lines to the northeast corner of Section 10, Township 4 South, Range 9 East; then southerly along section lines to the northeast corner of Section 15, Township 4 South, Range 9 East; then easterly along the section lines to the northeast corner of Section 21, Township 4 South, Range 10 East; then southerly along the easterly line of Section 21 to the southeast corner thereof; then easterly along the northerly line of Section 27 to the northeast corner thereof; then southerly along section lines to the southeast corner of Section 34, Township 4 South, Range 10 East; then easterly along the township line to the northeast corner of Section 2, Township 5 South, Range 10 East; then southerly along the easterly line of Section 2, to the southeast corner thereof; then easterly along the northerly line of Section 12 to the northeast corner thereof; then southerly along the range line to the northwest corner of Section 18, Township 5 South, Range 11 East; then easterly along section lines to the northeast corner of Section 24, Township 5 South, Range 11 East; and then southerly along the range line to the southeast corner of Section 36, Township 8 South, Range 11 East, a point on the boundary line common to Riverside and San Diego Counties.

\(^{10}\) In Fairfield County, CT, the City of Shelton.

\(^{11}\) In Litchfield County, CT, all cities and townships except the towns of Bridgewater and New Milford.

\(^{12}\) In Fairfield County, CT, all cities and townships except Shelton City

\(^{13}\) In Litchfield County, CT, the towns of Bridgewater and New Milford.

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In Illinois: Cook; Du Page; Kane; Lake; McHenry; Will; Grundy (part)\textsuperscript{14}; and Kendall (part)\textsuperscript{15}.

In Indiana: Lake and Porter.

The Baltimore, Maryland area, comprised of the following counties: Anne Arundel; Baltimore; Carroll; Harford; Howard; and the City of Baltimore.

The Houston-Galveston-Brazoria, Texas area, comprised of the following counties: Brazoria; Fort Bend; Galveston; Harris; Liberty; Montgomery; Waller; and Chambers.

The Milwaukee-Racine, Wisconsin area, comprised of the following counties: Kenosha; Milwaukee; Ozaukee; Racine; Washington; and Waukesha.

(2) Covered areas due to reclassification as Severe for an ozone NAAQS:

The Washington, DC-MD-VA area, comprised of the following counties:

The District of Columbia.

In Maryland: Calvert; Charles; Frederick; Montgomery; and Prince George’s.

In Virginia: Arlington, Fairfax; Loudoun; Prince William; Stafford; Alexandria City; Fairfax City; Falls Church City; Manassas City; and Manassas Park City.

\textsuperscript{14} In Grundy County, IL, the townships of Aux Sable and Goose Lake.

\textsuperscript{15} In Kendall County, IL, Oswego township.
The Sacramento Metro, CA area, comprised of the following counties: Sacramento; Yolo; El Dorado (part)\textsuperscript{16}; Placer (part)\textsuperscript{17}; Solano (part)\textsuperscript{18}; and Sutter (part)\textsuperscript{19}.

The San Joaquin Valley, CA area, comprised of the following counties: Fresno; Kings; Madera; Merced; San Joaquin; Stanislaus; Tulare; and Kern (part)\textsuperscript{20}.

(3) **Classified ozone nonattainment areas that have opted into RFG:**

Sussex County, Delaware.

\textsuperscript{16} All portions of El Dorado County except that portion of the County within the drainage area naturally tributary to Lake Tahoe including said Lake.

\textsuperscript{17} All portions of Placer County except that portion of the County within the drainage area naturally tributary to Lake Tahoe including said Lake, plus that area in the vicinity of the head of the Truckee River described as follows: commencing at the point common to the aforementioned drainage area crestline and the line common to Townships 15 North and 16 North, Mount Diablo Base and Meridian (M.D.B.&M.), and following that line in a westerly direction to the northwest corner of Section 3, Township 15 North, Range 16 East, M.D.B.&M., thence south along the west line of Sections 3 and 10, Township 15 North, Range 16 East, M.D.B.&M., to the intersection with the said drainage area crestline, thence following the said drainage area boundary in a southeasterly, then northeasterly direction to and along the Lake Tahoe Dam, thence following the said drainage area crestline in a northeasterly, then northwesterly direction to the point of beginning.

\textsuperscript{18} That portion of Solano County which lies north and east of a line described as follows:

beginning at the intersection of the westerly boundary of Solano County and the 1/4 section line running east and west through the center of Section 34; T. 6 N., R. 2 W., M.D.B.&M.;

thence east along said 1/4 section line to the east boundary of Section 36, T. 6 N., R. 2 W.;

thence south 1/2 mile and east 2.0 miles, more or less, along the west and south boundary of Los Putos Rancho to the northwest corner of Section 4, T. 5 N., R. 1 W.;

thence east along a line common to T. 5 N. and T. 6 N. to the northeast corner of Section 3, T. 5 N., R. 1 E.;

thence south along section lines to the southeast corner of Section 10, T. 3 N., R. 1 E.;

thence east along section lines to the south 1/4 corner of Section 8, T. 3 N., R. 2 E.;

thence east to the boundary between Solano and Sacramento Counties.

\textsuperscript{19} That portion of Sutter County south of a line connecting the northern border of Yolo Co. to the SW tip of Yuba Co. and continuing along the southern Yuba Co. border to Placer Co.

\textsuperscript{20} Boundary between the Kern County and San Joaquin Valley air districts that generally follows the ridge line of the Sierra Nevada and Tehachapi Mountain Ranges. That portion of Kern County that lies west and north of a line described as follows: beginning at the Kern-Los Angeles County boundary and running north and east along the northwestern boundary of the Rancho La Liebre Land Grant to the point of intersection with the range line common to Range 16 West and Range 17 West, San Bernardino Base and Meridian; north along the range line to the point of intersection with the Rancho El Tejon Land Grant boundary; then southeast, northeast, and northwest along the boundary of the Rancho El Tejon Grant to the northwest corner of Section 3, Township 11 North, Range 17 West; then west 1.2 miles; then north to the Rancho El Tejon Land Grant boundary; then northwest along the Rancho El Tejon line to the southeast corner of Section 34, Township 32 South, Range 30 East, Mount Diablo Base and Meridian; then north to the northwest corner of Section 35, Township 31 South, Range 30 East; then northeast along the boundary of the Rancho El Tejon Land Grant to the southwest corner of Section 18, Township 31 South, Range 31 East; then east to the southeast corner of Section 13, Township 31 South, Range 31 East; then south along the range line common to Range 31 East and Range 32 East, Mount Diablo Base and Meridian, to the northeast corner of Section 6, Township 29 South, Range 32 East; then east to the southwest corner of Section 31, Township 28 South, Range 32 East; then north along the range line common to Range 31 East and Range 32 East to the northwest corner of Section 6, Township 28 South, Range 32 East; then west to the southeast corner of Section 36, Township 27 South, Range 31 East; then north along the range line common to Range 31 East and Range 32 East to the Kern-Tulare County boundary.

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The Kentucky portion of the Louisville, KY-IN area, comprised of the following counties: Jefferson; Bullitt (part)\textsuperscript{21}; and Oldham (part)\textsuperscript{22}.

The following Maryland counties: Kent and Queen Anne’s.

The entire State of Massachusetts.

The following New Hampshire counties: Strafford; Merrimack; Hillsborough; and Rockingham.

The following New Jersey counties: Atlantic; Cape May; and Warren.

The following New York counties: Dutchess and Essex (part)\textsuperscript{23}.

The entire State of Rhode Island.

\textsuperscript{21} In Bullitt County, KY, beginning at the intersection of Ky 1020 and the Jefferson-Bullitt County Line proceeding to the east along the county line to the intersection of county road 567 and the Jefferson-Bullitt County Line; proceeding south on county road 567 to the junction with Ky 1116 (also known as Zoneton Road); proceeding to the south on KY 1116 to the junction with Hebron Lane; proceeding to the south on Hebron Lane to Cedar Creek; proceeding south on Cedar Creek to the confluence of Floyds Fork turning southeast along a creek that meets Ky 44 at Stallings Cemetery; proceeding west along Ky 44 to the eastern most point in the Shepherdsville city limits; proceeding south along the Shepherdsville city limits to the Salt River and west to a point across the river from Mooney Lane; proceeding south along Mooney Lane to the junction of Ky 480; proceeding west on Ky 480 to the junction with Ky 2237; proceeding south on Ky 2237 to the junction with Ky 61 and proceeding north on Ky 61 to the junction with Ky 1494; proceeding south on Ky 1494 to the junction with the perimeter of the Fort Knox Military Reservation; proceeding north along the military reservation perimeter to Castleman Branch Road; proceeding north on Castleman Branch Road to Ky 44; proceeding a very short distance west on Ky 44 to a junction with Ky 1020 and proceeding north on Ky 1020 to the beginning.

\textsuperscript{22} In Oldham County, KY, beginning at the intersection of the Oldham-Jefferson County Line with the southbound lane of Interstate 71; proceeding to the northeast along the southbound lane of Interstate 71 to the intersection of Ky 329 and the southbound lane of Interstate 71; proceeding to the northwest on Ky 329 to the intersection of Zaring Road on Ky 329; proceeding to the east-northeast on Zaring Road to the junction of Cedar Point Road and Zaring Road; proceeding to the north-northeast on Cedar Point Road to the junction of Ky 393 and Cedar Point Road; proceeding to the south-southwest on Cedar Point Road to the junction of Ky 393 and county road 746; proceeding to the east-northeast on county road 746 and Dawkins Lane to the east-northeast across Ky 53 on to the La Grange Water Filtration Plant; proceeding on to the east-southeast along the power line then south across Fort Pickens Road to a power substation on Ky 146; proceeding along the power line south across Ky 146 and the Seaboard System Railroad track to adjoin the incorporated city limits of La Grange; then proceeding east then south along the La Grange city limits to a point abutting the north side of Ky 712; proceeding east-northeast on Ky 712 to the junction of Massie School Road and Ky 712; proceeding to the south-southwest and then north-northwest on Massie School Road to the junction of Ky 53 and Massie School Road; proceeding on Ky 53 to the north-northwest to the junction of Moody Lane and Ky 53; proceeding on Moody Lane to the south-southwest until meeting the city limits of La Grange; then briefly proceeding north following the La Grange city limits to the intersection of the northbound lane of Interstate 71 and the La Grange city limits; proceeding southwest on the northbound lane of Interstate 71 until intersecting with the North Fork of Currys Fork; proceeding south-southwest beyond the confluence of Currys Fork to the south-southwest beyond the confluence of Floyds Fork continuing on to the Oldham-Jefferson County Line and proceeding northwest along the Oldham-Jefferson County Line to the beginning.

\textsuperscript{23} In Essex County, NY, the portion of Whiteface Mountain above 4,500 feet in elevation.

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The Dallas-Fort Worth, TX area, comprised of the following counties: Collin; Dallas; Denton; and Tarrant.

The Norfolk-Virginia Beach-Newport News (Hampton Roads), VA area, comprised of the following counties: James City County; York County; Chesapeake City; Hampton City; Newport News City; Norfolk City; Poquoson City; Portsmouth City; Suffolk City; Virginia Beach City; and Williamsburg City.

The Richmond, VA area, comprised of the following counties: Charles City County; Chesterfield County; Hanover County; Henrico County; Colonial Heights City; Hopewell City; and Richmond City.

The St. Louis, MO-IL area, comprised of the following counties:

In Missouri: Franklin; Jefferson; St. Charles County; St. Louis County; and St. Louis City.

In Illinois: Jersey; Madison; Monroe; and St. Clair.

(4) Ozone attainment areas located in the Clean Air Act section 184(a) transport region that have opted into RFG:

The following Maine counties: York; Cumberland; Sagadahoc; Androscoggin; Kennebec; Knox; and Lincoln.24

(b)(1) Any ozone nonattainment area classified in 40 CFR part 81, subpart C, as Marginal, Moderate, Serious, or Severe may be included as a covered area on petition of the Governor of the State in which the area is located.

(2) Any ozone attainment area in the ozone transport region established by 42 U.S.C. § 7511c(a) 184(a) must be included as a covered area upon petition by the Governor of the State in which the area is located.

(3) Effective one year after an area has been reclassified as a Severe ozone nonattainment area under 42 U.S.C. § 7511(b), such Severe area must also be a covered area under the RFG program. The geographic extent of each such covered area must be the nonattainment area boundaries as specified in 40 CFR part 81, subpart C, for the ozone NAAQS that was the subject of the reclassification.

(c) If EPA revises the ozone NAAQS, regardless of whether or not the prior ozone NAAQS is revoked, all RFG covered areas at the time the revised ozone NAAQS is promulgated remain covered areas.

24 The effective date of opt-in for the counties in Maine was June 1, 2015. Pursuant to 42 U.S.C. § 7545(k)(6)(B)(ii)(II) these counties must remain as covered areas until at least June 1, 2019.
(d) Any area that opted into RFG and has not subsequently been reclassified as a Severe ozone nonattainment area may opt-out of RFG using the opt-out process in §1090.2010(a).

§1090.2020 Petroleum Administration for Defense Districts (PADDs).

For the purposes of this part, the following definitions of PADDs apply:

(a) The following States are included in PADD I:

- Connecticut
- New Jersey
- Delaware
- New York
- District of Columbia
- North Carolina
- Florida
- Pennsylvania
- Georgia
- Rhode Island
- Maine
- South Carolina
- Maryland
- Vermont
- Massachusetts
- Virginia
- New Hampshire
- West Virginia

(b) The following States are included in PADD II:

- Illinois
- Nebraska
- Indiana
- North Dakota
- Iowa
- Ohio
- Kansas
- Oklahoma
- Kentucky
- South Dakota
- Michigan
- Tennessee
- Minnesota
- Wisconsin
- Missouri

(c) The following States are included in PADD III:

- Alabama
- Mississippi
- Arkansas
- New Mexico
- Louisiana
- Texas

(d) The following States are included in PADD IV:

- Colorado
- Utah
- Idaho
- Wyoming
- Montana

(e) The following States are included in PADD V:

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(f) The following States are included in PADD VI:

U.S. Virgin Islands  Commonwealth of Puerto Rico

REFUELING HARDWARE REQUIREMENTS FOR DISPENSING FACILITIES AND MOTOR VEHICLES

§1090.2025 Requirements for gasoline dispensing nozzles.

(a) Every retailer and wholesale purchaser-consumer must limit each nozzle from which gasoline is introduced into motor vehicles to a maximum fuel flow rate not to exceed 10 gallons per minute (37.9 liters per minute). The flow rate may be controlled through any means in the pump/dispenser system, as long as the nozzle flow rate does not exceed the maximum specified flow rate. Any dispensing pump that is dedicated exclusively to heavy-duty vehicles, boats, or airplanes is exempt from this requirement.

(b) Every retailer and wholesale purchaser-consumer must equip all gasoline pumps from which gasoline is dispensed into motor vehicles with a nozzle spout that meets the following specifications:

(1) The outside diameter of the terminal end must not be greater than 0.840 inches (2.134 centimeters).

(2) The terminal end must have a straight section of at least 2.5 inches (6.34 centimeters).

(3) The retaining spring must terminate at least 3.0 inches (7.6 centimeters) from the terminal end.

(c) The specifications in paragraphs (c)(1) through (4) of this section apply for any new nozzle installations used primarily for dispensing gasoline into marine vessels beginning January 1, 2009. Note that nozzles meeting the specifications of this paragraph also meet the specifications of paragraph (b) of this section. Every retailer and wholesale purchaser-consumer must use nozzles meeting these specifications for any new construction or for nozzle replacements. This does not require replacement of existing nozzles for refueling marine vessels before they would be replaced for other reasons. The following specifications apply to spouts on new or replacement nozzles intended for dispensing gasoline into marine vessels:

(1) The outside diameter of the terminal end must have a diameter of 0.824±0.017 inches (2.093±0.043 centimeters).
(2) The spout must include an aspirator hole for automatic shutoff positioned with a center that is 0.67±0.05 inches (1.70±0.13 centimeters) from the terminal end of the spout.

(3) The terminal end must have a straight section of at least 2.5 inches (6.34 centimeters) with no holes or grooves other than the aspirator hole.

(4) The retaining spring (if applicable) must terminate at least 3.0 inches (7.6 centimeters) from the terminal end.

§1090.2030 Refueling-related requirements for gasoline-fueled motor vehicles.

(a) Gasoline-fueled motor vehicles must be manufactured such that every gasoline tank filler inlet allows insertion of the refueling nozzle specified in §1090.2020(b), and does not allow insertion of a nozzle whose spout has an outside diameter of 0.930 inches (2.363 cm) or greater.

(b) Highway motorcycles subject to standards under 40 CFR part 86, subpart E, are exempt from the requirements of paragraph (a) of this section.

§1090.2035 Requirements related to dispensing natural gas and liquefied petroleum gas.

(a) Natural gas. Every retailer and wholesale purchaser-consumer must equip each pump from which natural gas is introduced into motor vehicles with a nozzle and hose configuration that vents no more than 1.2 grams of natural gas during a complete refueling event for a vehicle meeting the requirements of 40 CFR 86.1813-17(f)(1). Compliance with this requirement must be demonstrated using calculations based on the geometric shape of the nozzle and hose.

(b) Liquefied petroleum gas. Every retailer and wholesale purchaser-consumer must equip each pump from which liquefied petroleum gas is introduced into motor vehicles with a nozzle that has no greater than 2.0 cm³ dead space from which liquefied petroleum gas will be released when the nozzle disconnects from the vehicle. The volume of the nozzle cavity must be determined using calculations based on the geometric shape of the nozzle, with an assumed flat surface where the nozzle face seals against the vehicle.

(c) Exemptions. Any dispensing pump dedicated to heavy-duty vehicles is exempt from the requirements of paragraphs (a) and (b) of this section.