
**Fuels Regulatory Streamlining -
Discussion Draft Regulations,
December 2019**

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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 fuel quality standards for gasoline and diesel fuel in the United States. Additional requirements apply for 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 vehicle, engine, and equipment emissions, air quality, and public health. The regulations also include standards and requirements for fuel additives and regulated blendstocks that are components of the fuels regulated under this part.

(2) This part also specifies requirements for any person that engages in activities associated with the production, distribution, storage, and sale of fuels, fuel additives, and regulated blendstocks, such as collecting and testing samples for regulated parameters, reporting information to EPA to demonstrate compliance with fuel quality requirements, and performing other compliance measures to implement the standards. Parties that produce and distribute other related products, such as heating oil, may need to meet certain reporting, recordkeeping, labeling, or other requirements of this part.

(b)(1) The 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 standards and related requirements are specified in 40 CFR part 1043. This part also sets corresponding sulfur standards that apply to any person who produces or handles ECA marine fuel.

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

(c) The requirements for the registration of fuel and fuel additives under 42 U.S.C. § 7545(a), (b), and (e) are specified in 40 CFR part 79. Parties that must meet 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.

(d) The requirements for the Renewable Fuel Standard (RFS) are specified in 40 CFR part 80, subpart M. Parties that must meet requirements of this part may also need to comply with the requirements for the RFS program under 40 CFR part 80, subpart M.

(e) Nothing in this part is intended to preempt the ability of state or local governments to control or prohibit any fuel or additive for use in motor vehicles and motor vehicle engines that is not explicitly regulated by this part.

§1090.5 Implementation dates.

(a) The provisions of this part apply beginning January 1, 2021, unless otherwise specified.

(b) The following provisions of 40 CFR part 80 are applicable after December 31, 2020:

(1) Positive gasoline sulfur and benzene credit balances and deficits from the 2020 compliance period carry forward for demonstrating compliance with requirements of this part. Any restrictions that apply to credits and deficits under 40 CFR part 80, such as a maximum credit life of 5 years, continue to apply under this part.

(2) Unless otherwise specified, any approval granted under 40 CFR part 80 continues to be in effect under this part. For example, if EPA approved the use of alternate labeling under 40 CFR part 80, that approval continues to be valid under this part, subject to any conditions specified for the approval.

(3) Unless otherwise specified, regulated parties must use the provisions of 40 CFR part 80 in 2021 to demonstrate compliance with regulatory requirements for the 2020 calendar year. This applies to calculating credits for the 2020 compliance period, and to any sampling, testing, reporting, and auditing related to fuels, fuel additives, and regulated blendstocks produced or imported in 2020.

(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, 2021, continue to be in effect, as specified in 40 CFR part 80.

§1090.10 Contacting EPA.

Parties must submit all reports, registrations, and documents for approval required under this part electronically to EPA using forms and procedures specified by EPA.

§1090.15 Confidential business information.

EPA will store confidential information as specified in 40 CFR part 2 and will disclose it only as specified in 40 CFR part 2.

§1090.50 Rounding.

(a) Complying with this part requires rounding final values, such as sulfur test results and volume of gasoline. Do not round intermediate values to transfer data unless the rounded number has at least 6 significant digits.

(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. Perform all

rounding 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 6 or more significant digits.

(2) Devices that report fewer than 6 digits may be used, consistent with the accuracy and repeatability specifications of the procedures specified in subpart M of this part.

(e) Use a consistent rounding convention for all batch volumes in a given compliance period, and for all reporting under this part, using one of the following methods:

(1) Identify batch volume in gallons to the nearest whole gallon.

(2)(i) Round batch volumes between 1,000 and 10,000 gallons to the nearest 10 gallons.

(ii) Round batch volumes above 10,000 gallons to the nearest 100 gallons.

§1090.55 Requirements for independent parties.

This section specifies how third parties demonstrate their independence from the regulated party that hires them and their technical ability to perform the specified services.

(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 specified activities in this part that the independent third-party is hired to perform for a regulated party, except as specified in paragraph (a)(3) of this section.

(1) *Employment criteria.* 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 under the provisions of this part, may be employed, currently or previously, by the regulated party for any duration within the 3 years preceding the date when the regulated party hired the independent third party to provide services under this part.

(2) *Financial criteria.* (i) The third-party's 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 any purpose.

(B) Have no interest in the regulated party's business. Income received from the third-party to perform specified activities under this part is excepted.

(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) *Exceptions.* Auditors that meet the requirements in §1090.1800(b)(1) do not have to satisfy the employment and financial criteria in paragraphs (a)(1) and (2) of this section to be considered independent.

(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) Independent surveyors that conduct surveys under subpart N of this part must have personnel familiar with petroleum marketing, the sampling and testing of gasoline and diesel at retail stations, and the designing of surveys to estimate compliance rates or fuel parameters nationwide. Independent surveyors must demonstrate this technical ability in survey plans submitted under subpart N of this part.

(2) Laboratories attempting to qualify alternative procedures must contract with an independent third-party to verify the accuracy and precision of measured values as specified in §1090.1365. Such independent third-parties must demonstrate work experience and a good working knowledge of the voluntary consensus standards specified in §§1090.1365 and 1090.1370, with training and expertise corresponding to a bachelor's degree in chemical engineering, or combined bachelor's degrees in chemistry and statistics.

(3) Auditors auditing in-line blending operations must demonstrate work experience and a good working knowledge of the voluntary consensus standards specified in §§1090.1365 and 1090.1370.

(c) *Suspension and disbarment.* Any person suspended or disbarred under 40 CFR part 32 or 48 CFR part 9, subpart 9.4, is not qualified to perform review functions under this part.

§1090.80 Definitions.

500 ppm LM diesel fuel means diesel fuel subject to the alternative sulfur standards in §1090.320 for diesel fuel produced by transmix processors that may only be used in locomotive engines and marine engines that do not require the use of ULSD under 40 CFR parts 1033 and 1042, respectively.

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

Aggregated import facility means all import facilities within a PADD owned or operated by an importer and treated as a single fuel manufacturing facility to comply with average standards under this part.

Auditor means any person that conducts audits under subpart R of this part.

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

Average standard means a fuel standard applicable over a compliance period.

Batch means a quantity of fuel, fuel additive, or regulated blendstock that has a homogeneous set of properties.

Biodiesel means a diesel fuel that contains at least 80 percent mono-alkyl esters made from nonpetroleum feedstocks.

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 pumps are fuel blending facilities if PCG is blended with a fuel that contains anything other than PCG and DFE.

Blending manufacturer means any person who owns, leases, operates, controls, or supervises a fuel blending facility in the United States.

Blendstock means any liquid compound or mixture of compounds (not including certified fuels or 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 means an organic compound with the formula C₄H₁₀.

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

California diesel means diesel fuel designated by a diesel fuel manufacturer as for use in California and is used in California.

California gasoline means gasoline designated by a gasoline manufacturer 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.

CBOB means conventional gasoline for which a gasoline manufacturer has accounted for the effects of oxygenate blending that occurs downstream of the fuel manufacturing facility.

Certified butane means butane that is certified to meet the requirements in §1090.220.

Certified butane blender means a blending manufacturer that produces gasoline by blending certified butane into PCG, and that uses the provisions of §1090.1320 to meet the applicable sampling and testing requirements.

Certified butane producer means a regulated blendstock producer that certifies butane as meeting the requirements in §1090.220.

Certified ethanol denaturant means ethanol denaturant that is certified to meet the requirements in §1090.235.

Certified ethanol denaturant producer means any person that certifies ethanol denaturant as meeting the requirements in §1090.235.

Certified pentane means pentane that is certified to meet the requirements in §1090.225.

Certified pentane blender means a blending manufacturer that produces gasoline by blending certified pentane into PCG and that uses the provisions of §1090.1320 to meet the applicable sampling and testing requirements.

Certified pentane producer means a regulated blendstock producer that certifies pentane as meeting the requirements in §1090.225.

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 §1090.245.

Days means calendar days, including weekends and holidays.

Denatured fuel ethanol or *DFE* means anhydrous ethanol 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 is added to gasoline to control deposit formation and meets the requirements in §1090.240. Detergent may be part of a detergent additive package.

Detergent additive package means an additive package containing detergent 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 manufacturer means any person who owns, leases, operates, controls, or supervises a facility that produces detergent. Detergent manufacturers are fuel additive manufacturers.

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 detergent carrier oil (if present and a detergent-active component) that acts to enhance the detergent's ability to control deposits. Detergent carrier oils may be a detergent-active or non-detergent-active component and are sometimes added to a detergent additive package only to modify the cold flow properties of the additive package.

Detergent-additized gasoline or *detergent gasoline* means any gasoline that contains a detergent that meets the requirements in §1090.240.

Diesel fuel means any of the following:

- (1) Any fuel commonly or commercially known as diesel fuel.
- (2) Any fuel (including NP diesel fuel) that is intended or used to power a vehicle or engine that is designed to operate using diesel fuel, except for residual or gaseous fuel.
- (3) Any fuel that conforms to the specifications of ASTM D975 (incorporated by reference in §1090.95) and is made available for use in a vehicle or engine designed to operate using diesel fuel.

Distillate fuel means diesel fuel and other petroleum fuels that can be used in vehicles or engines that are designed to operate using diesel fuel. For example, diesel fuel, jet fuel, heating oil, No. 1 fuel (kerosene), No. 4 fuel, DMX, DMA, DMB, and DMC are distillate fuels. These specific fuel grades are identified in ASTM D975 and ISO 8217. Natural gas, LPG, and gasoline are not distillate fuels. Any blend of fuel that contains distillate fuel is a distillate fuel.

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 fuel

manufacturing facility, fuel additive manufacturing facility, or regulated blendstock production facility and any retail outlet or WPC facility.

Downstream location means any point in the fuel distribution system other than a fuel manufacturing facility through which the fuel passes after it leaves the gate of the fuel manufacturing facility at which it was certified (e.g., fuel at facilities of distributors, pipelines, terminals, carriers, retailers, kerosene blenders, and WPCs).

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 more than 10 and no more than 15 volume percent ethanol.

E85 means a fuel that contains more than 50 volume percent but no more than 83 volume percent ethanol and is used, intended for use, or made available for use in flex-fuel vehicles or flex-fuel engines.

E200 means the distillation fraction of a fuel at 200 degrees Fahrenheit expressed as a volume percentage.

E300 means the distillation fraction of a fuel at 300 degrees Fahrenheit expressed as a volume percentage.

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 means an alcohol of the chemical formula C_2H_5OH .

Ethanol denaturant means PCG, regulated gasoline blendstocks, or natural gasoline liquids that are added to anhydrous ethanol to make the ethanol unfit for human consumption as required and defined in 27 CFR parts 19 through 21.

Facility means any place, or series of places, where any fuel, fuel additive, or regulated blendstock is produced, imported, blended, transported, distributed, stored, or sold.

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 designated for registration under 40 CFR part 79 and is added to fuel such that it amounts to less than 1.0 volume percent of the resultant mixture,

or is an oxygenate added up to a level consistent with levels that are “substantially similar” under 42 U.S.C. § 7545(f)(1) or as permitted under a waiver granted under 42 U.S.C. § 7545(f)(4).

Fuel additive blender means any person who blends fuel 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 owns, leases, operates, controls, or supervises a facility where fuel additives are produced or imported into the United States.

Fuel blending facility means any facility, other than a refinery or transmix processing facility, where fuel is produced by combining blendstocks or by combining blendstocks with fuel. Types of blending facilities include, but are not limited to, terminals, storage tanks, plants, tanker trucks, retail outlets, and marine vessels.

Fuel dispenser means any apparatus used to dispense fuel into motor vehicles, nonroad vehicles, engines, equipment, or portable fuel containers.

Fuel manufacturer means any person who owns, leases, operates, controls, or supervises a fuel manufacturing facility. Fuel manufacturers include refiners, importers, blending manufacturers, and transmix processors.

Fuel manufacturing facility means any facility where fuels are produced or imported by a fuel manufacturer. Fuel manufacturing facilities include refineries, fuel blending facilities, transmix processing facilities, and import facilities.

Fuel manufacturing facility gate means the point where the fuel leaves the fuel manufacturing facility at which it was produced or imported by the fuel manufacturer.

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) and is made available for use in a gasoline-fueled vehicle or engine.

Gasoline before oxygenate blending or *BOB* means gasoline that must be blended with oxygenate before being dispensed into a vehicle or engine’s fuel tank, unless recertified as specified in §1090.740. A BOB that meets any of the criteria in the definition of gasoline before or after the addition of ethanol is gasoline and subject to all requirements and standards that apply to gasoline, unless subject to a specific alternative standard or requirement under this part.

Gasoline manufacturer means a fuel manufacturer who owns, leases, operates, controls, or supervises a fuel manufacturing facility where gasoline is produced. Any person recertifying a BOB under §1090.740 is considered to be a gasoline manufacturer.

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 fuel manufacturing facility that includes the GTAB in a gasoline manufacturer's compliance calculations for the facility under §1090.1615.

Global marine fuel means diesel fuel, distillate fuel, or residual fuel used, intended for use, or made available for use in steamships or Category 3 marine vessels while the vessels are operating in international waters or in any waters outside the boundaries of an ECA. Global marine fuel is subject to the provisions of MARPOL Annex VI.

Heating oil means a combustible product that is used, intended for use, or made available 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.

Import facility means any facility where an importer imports fuel, fuel additive, or regulated blendstock.

Independent surveyor means any person who meets the independence requirements in §1090.55 and conducts a survey under subpart N of this part.

Intake valve deposits or IVD means the deposits formed on the intake valve(s) of a gasoline-fueled engine during operation.

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

Kerosene means any No.1 distillate fuel that is used, intended for use, or made available for use 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.

Methanol means any fuel sold for use in motor vehicles and engines and commonly known or commercially sold as methanol or MXX, where XX represents the percent methanol (CH₃OH) by volume.

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

Natural gas liquids or NGLs 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, gas processing plant, natural gas pipeline, refinery, or similar facility.

Nonpetroleum (NP) diesel means renewable diesel or biodiesel. NP diesel also includes other biomass-based diesel as specified under 40 CFR part 80, subpart M.

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

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

Oxygenate producer means any person who produces or imports oxygenate for gasoline in the United States, or any person who owns, leases, operates, controls, or supervises an oxygenate production or import facility 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 or fuel additive.

PADD means Petroleum Administration for Defense District. These districts are the same as the PADDs used by other federal agencies, except for the addition of PADDs VI and VII. The individual PADDs are identified by region, state, and territory as follows:

PADD	Regional Description	State or Territory
I	East Coast	Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, West Virginia
II	Midwest	Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri
III	Gulf Coast	Alabama, Arkansas, Louisiana, Mississippi, New Mexico, Texas
IV	Rocky Mountain	Colorado, Idaho, Montana, Utah, Wyoming
V	West Coast	Alaska, Arizona, California, Hawaii, Nevada, Oregon, Washington

VI	Antilles	Puerto Rico, U.S. Virgin Islands
VII	Pacific Territories	American Samoa, Guam, Northern Mariana Islands

Pentane means an organic compound with the formula C₅H₁₂.

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

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

Person has the meaning given in 42 U.S.C. § 7602(e).

Pipeline interface means the mixture between different fuels and products that abut each other during shipment by the refined petroleum products pipeline system.

Pipeline operator means any person who owns, leases, operates, controls, or supervises a pipeline that transports fuels, fuel additives, or regulated blendstocks in the United States.

Previously certified gasoline or *PCG* means CG, RFG, or BOB that has been included in a batch by a gasoline manufacturer for purposes of complying with the standards in this part.

Product transfer documents or *PTDs* mean documents that reflect the transfer of title or physical custody of fuels, fuel additives, or regulated blendstocks (e.g., invoices, receipts, bills of lading, manifests, pipeline tickets) between a transferor and a transferee.

RBOB means reformulated gasoline for which a gasoline manufacturer has accounted for the effects of oxygenate blending that occurs downstream of the fuel manufacturing facility.

Refiner means any person who owns, leases, operates, controls, or supervises a refinery in the United States.

Refinery means a facility where fuels are produced from feedstocks, including crude oil or renewable feedstocks, through physical or chemical processing equipment.

Reformulated gasoline or *RFG* means gasoline that is certified to meet the requirements in §1090.245.

Regulated blendstock means certified butane, certified pentane, TGP, TDP, and GTAB.

Regulated blendstock producer means any person who owns, leases, operates, controls, or supervises a facility where regulated blendstocks are produced or imported.

Renewable diesel fuel means diesel fuel that is made from renewable (nonpetroleum) feedstocks and is not a mono-alkyl ester.

Reseller means any person who purchases fuel identified by the corporate, trade, or brand name of a fuel manufacturer from such manufacturer or a distributor and resells or transfers it to

retailers or WPCs, and whose assets or facilities are not substantially owned, leased, or controlled by such manufacturer.

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 authorized by the regulated party to make representations on behalf of or obligate the company as ultimately responsible for any activity regulated under this part (e.g., refining, importing, blending). An example is an officer of a corporation under the laws of incorporation of the state in which the company is incorporated. Examples of positions in non-corporate business structures that qualify are owner, chief executive officer, president, or operations manager.

Retail outlet means any establishment at which gasoline, diesel fuel, methanol, natural gas, E85, 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 §1090.270 in which only RFG may be sold or dispensed to ultimate consumers.

RFG opt-in area means an area that becomes a covered area under §1090.270 under 42 U.S.C. § 7545(k)(6).

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

Sampling strata means the three types of areas sampled during a survey, which include the following:

- (1) Densely populated areas.
- (2) Transportation corridors.
- (3) Rural areas.

State Implementation Plan or *SIP* means a state implementation plan approved or promulgated under 42 U.S.C. § 7410.

Summer gasoline means gasoline that is subject to the RVP standards in this part.

Summer season or *high ozone season* means the period from June 1 to September 15 for retailers and WPCs, and May 1 to September 15 for all other persons, or a period in any SIP RVP provision, whichever is longer.

Tank truck means a truck 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 as a fuel without further processing:

(1) Pipeline interface that is not cut into the adjacent products.

(2) Mixtures produced by unintentionally combining gasoline and distillate fuels.

(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 that are segregated for further processing.

(4) Incidental mixtures that occur during normal pipeline and terminal operation, such as volumes captured in sumps or product trapped in pumps or valve manifolds that are injected into batches of fuel under §1090.520.

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 gasoline blendstock that is produced when transmix is separated into blendstocks at a transmix processing facility.

Transmix processing facility means any facility 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 or other products.

Transmix processor means any person who owns, leases, operates, controls, or supervises a transmix processing facility. Transmix processors are fuel manufacturers.

Ultra low-sulfur diesel or *ULSD* means diesel fuel certified to meet the requirements in §1090.305.

United States means the 50 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.

Volume Additive Reconciliation Period or *VAR Period* means for automated detergent blending facilities a time period lasting no more than 31 days or until an adjustment to a detergent concentration rate that increases the initial rate by more than 10 percent, whichever

occurs first. The concentration setting for a detergent injector may be adjusted by more than 10 percent above the initial rate without terminating the VAR Period provided the purpose of the change is to correct a batch misadditization prior to the transfer of the batch to another party, or to correct an equipment malfunction and the concentration is immediately returned to no more than 10 percent above the initial rate of concentration after the correction. For non-automated detergent blending facilities, the VAR Period constitutes the blending of one batch of gasoline.

Volume Additive Reconciliation Record or *VAR Record* means the record created for each VAR Period by a gasoline detergent blender.

Wholesale purchaser-consumer or *WPC* means any person that is an ultimate consumer of fuels and who purchases or obtains fuels 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 the RVP standards in this part.

Winter season means any time outside of the summer season or high ozone season.

§1090.85 Explanatory terms.

This section explains how certain phrases and terms are used in this part, especially those used to clarify and explain regulatory provisions. They do not, however, constitute specific regulatory requirements and as such do not impose any compliance obligation on regulated persons.

(a) *Types of provisions.* The term “provision” includes all aspects of the regulations in this part. As described in this section, regulatory provisions include standards, requirements, and prohibitions, along with a variety of other types of provisions. In certain cases, these terms apply to some but not all the provisions of a part or section. For example, recordkeeping requirements apply to jet fuel even though it is not subject to standards under this part.

(1) A standard is a limit on the formulation, components, or characteristics of any fuel, fuel additive, or regulated blendstock, established by regulation under this part. Compliance with or conformance to a standard is a specific type of requirement, and in some cases a standard may be discussed as a requirement. Thus, a statement about the requirements of a part or section also applies with respect to the standards in the part or section. Examples of standards include the sulfur per-gallon standards for gasoline and diesel fuel.

(2) While requirements state what someone must do, prohibitions state what someone may not do. Prohibitions are often referred to as prohibited acts. Failing to meet any requirement that applies to a person under this part is a prohibited act.

(3) The regulations in this part include provisions that are not standards, requirements, or prohibitions, such as definitions.

(b) A fuel is considered “subject to” a specific provision if that provision applies, even if it falls within an exemption authorized under a different part of this regulation. For example, gasoline is subject to the provisions of this part even if it is exempted from the standards under subpart G of this part.

(c) *Singular and plural.* Unless stated otherwise or unless it is clear from the regulatory context, provisions written in singular form include the plural form and provisions written in plural form include the singular form.

(d) *Inclusive lists.* Lists in the regulations in this part prefaced by “including” or “this includes” are not exhaustive. The terms “including” and “this includes” should be read to mean “including but not limited to” and “this includes but is not limited to.”

(e) *Notes.* Statements that begin with “Note:” or “Note that” are intended to clarify specific regulatory provisions stated elsewhere in the regulations in this part. By themselves, such statements are not intended to specify regulatory requirements.

(f) *Examples.* Examples provided in the regulations in this part are typically introduced by either “for example” or “such as.” Specific examples given in the regulations do not necessarily represent the most common examples. The regulations may specify examples conditionally (that is, specifying that they are applicable only if certain criteria or conditions are met). Lists of examples cannot be presumed to be exhaustive lists.

§1090.90 Acronyms and abbreviations.

500 ppm LM diesel fuel	As defined in §1090.80
ABT	averaging, banking, and trading
ARV	accepted reference value
BOB	Gasoline before oxygenate blending
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CG	conventional gasoline
DFE	denatured fuel ethanol
E0	As defined in §1090.80
E10	As defined in §1090.80
E15	As defined in §1090.80
E200	As defined in §1090.80
E300	As defined in §1090.80
ECA marine fuel	As defined in §1090.80
EPA	Environmental Protection Agency
GTAB	gasoline treated as blendstock
IMO marine fuel	As defined in §1090.80
LAC	lowest additive concentration
LLOQ	laboratory limit of quantitation
MARPOL Annex VI	The International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 Annex VI

NAAQS	National Ambient Air Quality Standard
NARA	National Archives and Records Administration
NGL	natural gas liquids
NIST	National Institute for Standards and Technology
PCG	previously certified gasoline
PLOQ	published limit of quantitation
ppm (mg/kg)	parts per million (or milligram per kilogram)
PTD	product transfer document
R&D	research and development
RCO	responsible corporate officer
RFG	reformulated gasoline
RFS	renewable fuel standard
RVP	Reid vapor pressure
SIP	state implementation plan
SQC	statistical quality control
T10, T50, T90	temperatures representing the points in a distillation process where 10, 50, and 90 percent of the sample evaporates, respectively
TDP	transmix diesel products
TGP	transmix gasoline products
U.S.	United States
U.S.C.	United States Code
ULSD	ultra-low-sulfur diesel fuel
VCSB	voluntary consensus standards body

§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 EPA 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, WJC West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC 20460, (202) 566-1742, 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 §1090.1800.

(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) Statements on Standards for Attestation Engagements (SSAE) No. 18, Attestation Standards: Clarification and Recodification, Revised April 2016; IBR approved for §1090.1800.

(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.

(1) NIST Handbook 158, 2016 Edition, Field Sampling Procedures for Fuel and Motor Oil Quality Testing—A Handbook for Use by Fuel and Oil Quality Regulatory Officials, April 2016; IBR approved for §1090.1410.

(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.

(1) ASTM D86-07, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, approved January 15, 2007 (“ASTM D86”); IBR approved for §1090.1350.

(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 §1090.1350.

(3) ASTM D287-12b, Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method), approved June 1, 2012 (“ASTM D287”); IBR approved for §1090.1337.

(4) ASTM D975-18, Standard Specification for Diesel Fuel Oils, approved April 1, 2018 (“ASTM D975”); IBR approved for §1090.80.

(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 §1090.1350.

(6) ASTM D1298-12b (Reapproved 2017), Standard Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method, approved July 15, 2017 (“ASTM D1298”); IBR approved for §1090.1337.

(7) ASTM D1319-15, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption, approved December 1, 2015 (“ASTM D1319”); IBR approved for §1090.1360.

(8) ASTM D2163-14e1, Standard Test Method for Determination of Hydrocarbons in Liquefied Petroleum (LP) Gases and Propane/Propene Mixtures by Gas Chromatography, approved January 1, 2014 (“ASTM D2163”); IBR approved for §1090.1350.

(9) ASTM D2622-16, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry, approved January 1, 2016 (“ASTM D2622”); IBR approved for §§1090.1360 and 1090.1365.

(10) ASTM D3231-18, Standard Test Method for Phosphorus in Gasoline, approved April 1, 2018 (“ASTM D3231”); IBR approved for §1090.1350.

(11) ASTM D3237-17, Standard Test Method for Lead in Gasoline by Atomic Absorption Spectroscopy, approved June 1, 2017 (“ASTM D3237”); IBR approved for §1090.1350.

(12) ASTM D3606-17, Standard Test Method for Determination of Benzene and Toluene in Spark Ignition Fuels by Gas Chromatography, approved December 1, 2017 (“ASTM D3606”); IBR approved for §1090.1360.

(13) ASTM D4052-18, Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter, approved May 1, 2018 (“ASTM D4052”); IBR approved for §1090.1337.

(14) ASTM D4057-12, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, approved December 1, 2012 (“ASTM D4057”); IBR approved for §1090.1335.

(15) ASTM D4177-16e1 Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved October 1, 2016 (“ASTM D4177”); IBR approved for §§1090.1315 and 1090.1335.

(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.

(17) ASTM D4806-13a, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, approved June 15, 2013 (“ASTM D4806”); IBR approved for §1090.1395.

(18) ASTM D4806-17, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, approved July 1, 2017 (“ASTM D4806”); IBR approved for §1090.1395.

(19) ASTM D4814-18, Standard Specification for Automotive Spark-Ignition Engine Fuel, approved April 1, 2018 (“ASTM D4814”); IBR approved for §§1090.80 and 1090.1395.

(20) ASTM D5191-15, Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method), approved October 1, 2015 (“ASTM D5191”); IBR approved for §§1090.1360 and 1090.1365.

(21) ASTM D5453-16e1, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence, approved April 15, 2016, (“ASTM D5453”); IBR approved for §1090.1350.

(22) ASTM D5500-16 Standard Test Method for Vehicle of Unleaded Automotive Spark-Ignition Engine Fuel for Intake Deposit Formation, approved January 1, 2016, (“ASTM D5500”); IBR approved for §1090.1395.

(23) 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 §§1090.1360 and 1090.1365.

(24) ASTM D5769-15, Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry, approved October 1, 2010 (“ASTM D5769”); IBR approved for §§1090.1350, 1090.1360, and 1090.1365.

(25) ASTM D5842-17, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement, approved July 1, 2017 (“ASTM D5842”); IBR approved for §1090.1335.

(26) 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 §1090.1315.

(27) ASTM D6201-18, Standard Test Method for Dynamometer Evaluation of Unleaded Spark-Ignition Engine Fuel for Intake Valve Deposit Formation, approved July 1, 2018 (“ASTM D6201”); IBR approved for §1090.1395.

(28) 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 §§1090.1370, 1090.1375, and 1090.1845.

(29) ASTM D6550-15, Standard Test Method for Determination of Olefin Content of Gasolines by Supercritical-Fluid Chromatography, approved December 1, 2015 (“ASTM D6550”); IBR approved for §1090.1350.

(30) ASTM D6667-14, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, approved October 1, 2014 (“ASTM D6667”); IBR approved for §§1090.1360 and 1090.1365.

(31) 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 §§1090.1360, 1090.1365, and 1090.1375.

(32) ASTM D5134-13 (Reapproved 2017), Standard Test Method for Detailed Analysis of Petroleum Naphthas through n-Nonane by Capillary Gas Chromatography, approved October 1, 2017 (“ASTM D5134”); IBR approved for §1090.1350.

(33) ASTM D7039-15a, Standard Test Method for Sulfur in Gasoline, Diesel Fuel, Jet Fuel, Kerosine, Biodiesel, Biodiesel Blends, and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry, approved July 1, 2015 (“ASTM D7039”); IBR approved for §1090.1365.

(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 §1090.1340.

Subpart B—General Requirements and Provisions for Regulated Parties

§1090.100 General provisions.

This subpart provides an overview of the general requirements and other provisions applicable to any regulated party under this part. A person who meets the definition of more than one type of regulated party must comply with the requirements applicable to each of those types of regulated parties. For instance, a fuel manufacturer who also transports fuel must meet the requirements applicable to fuel manufacturers and distributors. Regulated parties are required to comply with all applicable requirements of this part, regardless of whether they are identified in this subpart. Any person that produces, sells, transfers, supplies, dispenses, or distributes fuel, fuel additive, or regulated blendstock must comply with all applicable requirements.

(a) *Recordkeeping.* Any party that engages in activities that are regulated under this part must comply with recordkeeping requirements under subpart L of this part.

(b) *Compliance and enforcement.* Any party that engages in activities that are regulated under this part is subject to compliance and enforcement provisions under subpart Q of this part.

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

(d) In addition to the requirements in paragraphs (a) through (c) of this section and §1090.105 that apply to importers based on the fuel, fuel additive, or regulated blendstock being imported, importers must also comply with subpart P of this part.

§1090.105 Fuel manufacturers.

This section provides an overview of general requirements applicable to fuel manufacturers. Gasoline manufacturers must comply with the requirements of paragraph (a) of this section and diesel fuel and ECA marine fuel manufacturers must comply with the requirements of paragraph (b) of this section.

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

(1) *Producing compliant gasoline.* Gasoline manufacturers must produce, or import, and certify gasoline under subpart K of this part as meeting the standards of subpart C of this part and must comply with the ABT requirements in subpart H of this part.

(2) *Registration.* Gasoline manufacturers must register with EPA under subpart I of this part.

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

(4) *Reporting.* Gasoline manufacturers must submit reports to EPA under subpart J of this part.

(5) *Sampling, testing, and sample retention.* Gasoline manufacturers must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

(6) *Surveys.* Gasoline manufacturers may participate in applicable fuel surveys under subpart N of this part.

(7) *Annual attest engagement.* Gasoline manufacturers must submit annual attest engagement reports to EPA under subpart R of this part.

(b) *Diesel fuel and ECA marine fuel manufacturers.* Diesel fuel and ECA marine fuel manufacturers must comply with the following requirements, as applicable:

(1) *Producing compliant diesel fuel and ECA marine fuel.* Diesel fuel and ECA marine fuel manufacturers must produce, or import, and certify diesel fuel and ECA marine fuel under subpart D of this part.

(2) *Registration.* Diesel fuel and ECA marine fuel manufacturers must register with EPA under subpart I of this part.

(3) *Reporting.* Diesel fuel manufacturers must submit reports to EPA under subpart J of this part.

(4) *PTDs.* On each occasion when a diesel fuel or ECA marine fuel manufacturer transfers custody or title to any diesel fuel or ECA marine fuel, the transferor must provide to the transferee PTDs under subpart K of this part.

(5) *Sampling, testing, and retention requirements.* Diesel fuel and ECA marine fuel manufacturers must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

(6) *Surveys.* Diesel fuel manufacturers may participate in applicable fuel surveys under subpart N of this part.

(7) *Manufacturers of global marine fuel.* Manufacturers of global marine fuel do not need to comply with the requirements of paragraphs (b)(1) through (5) of this section if they produce global marine fuel that is exempt from the standards in subpart D of this part, as specified in §1090.650.

§1090.110 Detergent blenders.

Detergent blenders must comply with the requirements of this section.

(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 of or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs under subpart K of this part.

(c) *Recordkeeping*. Detergent blenders must demonstrate compliance with the requirements of §1090.240(a) as specified in §1090.1240.

§1090.115 Oxygenate blenders.

Oxygenate blenders must comply with the requirements of this section.

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

(b) *Registration*. Oxygenate blenders must register with EPA under 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 under subpart K of this part.

(d) *Oxygenate blending requirements*. Oxygenate blenders must follow blending instructions as specified for gasoline manufacturers in §1090.710 unless the oxygenate blender recertifies BOBs under §1090.740.

§1090.120 Oxygenate producers.

This section provides an overview of general requirements applicable to oxygenate producers (e.g., DFE and isobutanol producers). DFE producers must comply with all requirements for oxygenate producers and all additional requirements specified in paragraph (b) of this section.

(a) Oxygenate producers must comply with the following requirements:

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

(2) *Registration*. Oxygenate producers must register with EPA under subpart I of this part.

(3) *Reporting*. Oxygenate producers must submit reports to EPA under subpart J of this part.

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

(5) *Sampling, testing, and retention requirements*. Oxygenate producers must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

(b) *Additional requirements for DFE producers*. In addition to the requirements specified in paragraph (a) of this section, DFE producers must meet the following requirements:

(1) Use denaturant that complies with the requirements specified in §§1090.230(b) and 1090.235.

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

§1090.125 Certified butane producers.

Certified butane producers must comply with the requirements of this section.

(a) *Gasoline standards.* Certified butane producers must comply with the applicable requirements of subpart C of this part.

(b) *PTDs.* On each occasion when a certified butane producer transfers custody of or title to any certified butane, the transferor must provide to the transferee PTDs under subpart K of this part.

(c) *Sampling, testing, and retention requirements.* Certified butane producers must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

§1090.130 Certified butane blenders.

Certified butane blenders that blend certified butane into PCG are gasoline manufacturers that may comply with the requirements of this section in lieu of the requirements in §1090.105.

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

(b) *Registration.* Certified butane blenders must register with EPA under subpart I of this part.

(c) *Reporting.* Certified butane blenders must submit reports to EPA under subpart J of this part.

(d) *Sampling, testing, and retention requirements.* Certified butane blenders must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

(e) *PTDs.* When certified butane is blended with PCG, PTDs that accompany the gasoline blended with certified butane must comply with subpart K of this part.

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

(g) *Annual attest engagement.* Certified butane blenders must submit annual attest engagement reports to EPA under subpart R of this part.

§1090.135 Certified pentane producers.

Certified pentane producers must comply with the requirements of this section.

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

(b) *Registration.* Certified pentane producers must register with EPA under subpart I of this part.

(c) *Reporting.* Certified pentane producers must submit reports to EPA under subpart J of this part.

(d) *PTDs.* On each occasion when a certified pentane producer transfers custody of or title to any certified pentane, the transferor must provide to the transferee PTDs under subpart K of this part.

(e) *Sampling, testing, and retention requirements.* Certified pentane producers and importers must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

§1090.140 Certified pentane blenders.

Certified pentane blenders that blend certified pentane into PCG are gasoline manufacturers that may comply with the requirements of this section in lieu of the requirements in §1090.105.

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

(b) *Registration.* Certified pentane blenders must register with EPA under subpart I of this part.

(c) *Reporting.* Certified pentane blenders must submit reports to EPA under subpart J of this part.

(d) *Sampling, testing, and retention requirements.* Certified pentane blenders must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

(e) *PTDs.* When certified pentane is blended with PCG, PTDs that accompany the gasoline blended with pentane must comply with subpart K of this part.

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

(g) *Annual attest engagement.* Certified pentane blenders must submit annual attest engagement reports to EPA under subpart R of this part.

§1090.145 Transmix processors.

Transmix processors may elect to comply with the requirements identified in the section in lieu of other requirements that apply to fuel manufacturers. Such transmix processors must meet the following requirements:

- (a) *Transmix requirements.* Transmix processors must comply with the transmix requirements of subpart F of this part.
- (b) *Registration.* Transmix processors must register with EPA under subpart I of this part.
- (c) *Batch Certification, Designation, and PTDs.* On each occasion when a transmix processor produces a batch of fuel or transfers custody of or title to any fuel, fuel additive, or regulated blendstock, the transferor must comply with the batch certification, designation, and PTDs requirements under subpart K of this part.
- (d) *Sampling, testing, and retention requirements.* Transmix processors must conduct sampling, testing, and sample retention in accordance with subparts F and M of this part.
- (e) *Reporting.* Transmix processors must submit reports to EPA under subpart J of this part.

§1090.150 Transmix blenders.

Transmix blenders may elect to comply with the requirements identified in the section in lieu of other requirements that apply to fuel manufacturers. Such transmix blenders must meet the following requirements:

- (a) *Transmix requirements.* Transmix blenders must comply with the transmix requirements of §1090.505.
- (b) *Batch Certification, Designation, and PTDs.* On each occasion when a transmix blender produces a batch of fuel or transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must comply with the batch certification, designation, and PTDs requirements under subpart K of this part.
- (c) *Sampling, testing, and retention requirements.* Transmix blenders must conduct sampling, testing, and sample retention in accordance with subparts F and M of this part.

§1090.155 Fuel additive manufacturers.

This section provides an overview of general requirements applicable to 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 concentration of less than 1.0 volume percent must meet the following requirements:

(1) *Gasoline standards.* Gasoline additive manufacturers must produce gasoline additives that comply with subpart C of this part.

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

(3) *Gasoline detergent manufacturers.* Gasoline detergent manufacturers must comply with the following requirements:

(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 LAC reported by the gasoline detergent manufacturer under 40 CFR 79.21(j). Note that EPA provides a list on EPA's website of detergents that have been certified by the gasoline detergent manufacturer as meeting the deposit control requirement (Search for "List of Certified Detergent Additives").

(ii) *Gasoline standards.* Report the LAC determined under §1090.240(b) and provide specific composition information as part of the gasoline detergent manufacturer's registration of the detergent under 40 CFR 79.21(j).

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

(iv) *Sampling, testing, and retention requirements.* Gasoline detergent manufacturers must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

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

(1) *Diesel fuel standards.* Diesel fuel additive manufacturers must produce diesel fuel additives that comply with subpart D of this part.

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

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

(1) *Certification of certified ethanol denaturant.* Certified ethanol denaturant producers and importers must certify that certified ethanol denaturant meets the requirements in §1090.235.

(2) *Registration.* Certified ethanol denaturant producers and importers must register with EPA under 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 under subpart K of this part.

§1090.160 Distributors, carriers, and resellers.

Distributors, carriers, and resellers must comply with the requirements of this section.

(a) *Gasoline and diesel standards.* Distributors, carriers, and resellers must comply with the applicable requirements of subparts C and D of this part.

(b) *Registration.* Distributors, carriers, and resellers must register with EPA under subpart I of this part if they are part of the 500 ppm LM diesel fuel distribution chain under a compliance plan submitted under §1090.515(c).

(c) *PTDs.* Distributors, carriers, and resellers may have specific PTD requirements under 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 specify a new minimum concentration that complies with the deposit control requirements in §1090.240.

§1090.165 Retailers and WPCs.

Retailers and WPCs must comply with the requirements of this section.

(a) *Gasoline and diesel standards.* Retailers and WPCs must comply with the applicable requirements of subparts C and D of this part.

(b) *Labeling.* Retailers and WPCs that dispense fuels requiring a label under this part must display fuel labels under subpart O of this part.

(c) *Fuel manufacturing activities.* Retailers and WPCs that engage in fuel manufacturing activities become fuel manufacturers and are subject to the requirements in §1090.105. For example, retailers that produce E15 through a blender pump with PCG and E85 (made with DFE and NGLs) must comply with the applicable requirements under this part for a gasoline manufacturer.

§1090.170 Independent surveyors.

Independent surveyors that conduct fuel surveys must comply with the requirements of this section.

(a) *Survey provisions.* Independent surveyors must conduct fuel surveys under subpart N of this part.

(b) *Registration*. Independent surveyors must register with EPA under subpart I of this part.

(c) *Sampling, testing, and retention requirements*. Independent surveyors must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

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

(e) *Independence requirements*. In order to perform a survey program under subpart N of this part, independent surveyors must meet the independence requirements in §1090.55.

§1090.175 Auditors.

Auditors that conduct audits for responsible parties under this part must comply with the requirements of this section.

(a) *Registration*. Auditors must register with EPA under subpart I of this part.

(b) *Reporting*. Auditors must submit reports to EPA under subpart J of this part.

(c) *Attest engagement*. Auditors must conduct audits under subpart R of this part.

(d) *Independence requirements*. In order to perform an annual attest engagement under subpart R of this part, auditors must meet the independence requirements in §1090.55 unless they are a certified internal auditor.

§1090.180 Pipeline operators.

Pipeline operators must comply with the requirements of this section.

(a) *Gasoline and diesel standards*. Pipeline operators must comply with the applicable requirements of subparts C and D of this part.

(b) *PTDs*. Pipeline operators must maintain PTDs for the fuel, fuel additive, regulated blendstock, and heating oil of which they take custody.

(c) *Transmix requirements*. Pipeline operators must comply with all applicable requirements in subpart F of this part.

Subpart C—Gasoline Standards

§1090.200 Overview and general requirements.

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

(b) Except for the sulfur average standard in §1090.205(a) and the benzene average standards in §1090.210(a) and (b), the standards in this part apply to gasoline, gasoline fuel additives, and regulated gasoline blendstocks on a per-gallon basis. Gasoline manufacturers and gasoline fuel additive manufacturers (e.g., oxygenate producers and certified ethanol denaturant producers), and regulated gasoline blendstock producers (e.g., certified butane and pentane producers) must demonstrate compliance with the per-gallon standards in this subpart by measuring fuel parameters in accordance with subpart M of this part.

(c) The sulfur average standard in §1090.205(a) and the benzene average standards in §1090.210(a) and (b) apply to all gasoline produced or imported by a fuel manufacturer during a compliance period, except for truck and rail importers using the provisions of §§1090.205(d) and 1090.210(c), certified butane blenders, and certified pentane blenders. Fuel manufacturers must demonstrate compliance with average standards by measuring fuel parameters in accordance with subpart M of this part and by determining compliance under 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 fuel additive, or regulated gasoline blendstock that does not comply with any per-gallon standard set forth in this subpart.

(e) No person may sell, offer for sale, supply, offer for supply, dispense, transport, or introduce into commerce for use as fuel in any motor vehicle (as defined in Section 216(2) of the Clean Air Act, 42 U.S.C. § 7550(2)) any gasoline that is produced with the use of additives containing lead, that contains more than 0.05 gram of lead per gallon, or that contains more than 0.005 grams of phosphorous per gallon.

§1090.205 Sulfur standards.

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

(a) *Sulfur average standard.* Gasoline manufacturers must meet a sulfur average standard of 10.00 ppm for each compliance period.

(b) *Fuel manufacturing facility gate sulfur per-gallon standard.* Gasoline at any fuel manufacturing facility gate is subject to a maximum sulfur per-gallon standard of 80 ppm. Fuel manufacturers cannot account for the downstream addition of oxygenates in determining compliance with the fuel manufacturing facility gate sulfur per-gallon standard.

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

(d) *Sulfur standard for importers that import gasoline by truck or rail.* Importers that import gasoline by truck or rail under §1090.1620 must comply with a maximum sulfur per-gallon standard of 10 ppm instead of the standards in paragraphs (a) through (c) of this section.

§1090.210 Benzene standards.

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

(a) *Benzene average standard.* Gasoline manufacturers must meet a benzene average standard of 0.62 volume percent for each compliance period.

(b) *Maximum benzene average standard.* Gasoline manufacturers must meet a maximum benzene average standard of 1.30 volume percent without the use of credits for each compliance period.

(c) *Benzene standard for importers that import gasoline by truck or rail.* Importers that import gasoline by truck or rail under §1090.1620 must comply with a 0.62 volume percent benzene per-gallon standard instead of the standards in paragraphs (a) and (b) of this section.

§1090.215 Gasoline RVP standards.

Except as specified in subpart G of this part and paragraph (c) of this section, all gasoline designated as summer gasoline or located at any location in the United States during the summer season is subject to a maximum RVP per-gallon standard in this section.

(a) *Federal 9.0 psi maximum RVP per-gallon standard.* Gasoline designated as summer gasoline or located at any location in the United States during the summer season must meet a maximum RVP per-gallon standard of 9.0 psi unless the gasoline is subject to one of the following lower maximum RVP per-gallon standards:

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

Area Designation	State	Counties
Denver-Boulder-Greeley-Ft. Collins-Loveland	Colorado	Adams Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer, ¹ and Weld ²
Reno	Nevada	Washoe
Portland	Oregon	Clackamas (only the Air Quality Maintenance Area), Multnomah (only the Air Quality Maintenance Area) and Washington (only the Air Quality Maintenance Area)
Salem	Oregon	Marion (only the Salem Area Transportation Study) and Polk (only the Salem Area Transportation Study)

Beaumont-Port Arthur	Texas	Hardin, Jefferson and Orange
Salt Lake City	Utah	Salt Lake and Davis

¹ That portion of Larimer County, CO 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, 33 minutes and 17.4 seconds north latitude, thence proceed west on 40 degrees, 33 minutes, 17.4 seconds north latitude until this line intersects Larimer County's western boundary and Grand County's eastern boundary. (Includes part of Rocky Mtn. Nat. Park).

² That portion of Weld County, CO 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.

(2) *RFG maximum RVP per-gallon standard.* Gasoline designated as Summer RFG or located in RFG areas specified in §1090.270 during the summer season must meet a maximum RVP per-gallon standard of 7.4 psi.

(3) *California gasoline.* Gasoline designated as California gasoline or used in areas subject to the California reformulated gasoline regulations must comply with those regulations under Title 13, California Code of Regulations, sections 2250-2273.5.

(4) *SIP-controlled gasoline.* Gasoline designated as SIP-controlled gasoline or located 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.

(b) *Ethanol 1.0 psi waiver.* (1) Any gasoline subject to a federal 9.0 psi or 7.8 psi maximum RVP per-gallon standard in paragraph (a) of this section that meets the requirements of paragraph (b)(2) of this section is not in violation of this section if its RVP does not exceed the applicable standard by more than 1.0 psi.

(2) To qualify for the special regulatory treatment specified in paragraph (b)(1) of this section, gasoline must meet the applicable RVP per-gallon standard in 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 15 volume percent.

(c) The RVP per-gallon standard for the area in which the gasoline is located does not apply to that gasoline if a person can demonstrate one of the following:

(1) The gasoline is designated as winter gasoline and was not sold, offered for sale, supplied, offered for supply, dispensed, or introduced into commerce for use during the summer season and was not delivered to any retail station or wholesale purchaser consumer during the summer season.

(2) The gasoline is designated as summer gasoline for use in an area other than the area in which it is located and was not sold, offered for sale, supplied, offered for supply, dispensed, or introduced into commerce in the area in which the gasoline is located. In this case, the standard that applies to the gasoline is the standard applicable to the area for which the gasoline is designated.

§1090.220 Certified butane standards.

Butane designated as certified butane under §1090.1100(e) for use under the butane blending provisions of §1090.1320(c) 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.

§1090.225 Certified pentane standards.

Pentane designated as certified pentane under §1090.1100(f) for use under the pentane blending provisions of §1090.1320(c) must meet the following per-gallon standards:

(a) *Pentane content.* Minimum 95 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.

§1090.230 Gasoline oxygenate standards.

(a) All oxygenates designated for blending with gasoline or blended 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.

(b) DFE designated for blending into gasoline or blended with gasoline must meet the following additional requirements:

(1) *Denaturant type.* Only PCG, gasoline blendstocks, NGLs, or certified ethanol denaturant that meets the requirements in §1090.235 may be used as denaturants.

(2) *Denaturant concentration.* The concentration of all denaturants used in DFE may not exceed 3.0 volume percent.

§1090.235 Ethanol denaturant standards.

(a) *Standard for all ethanol denaturant.* All ethanol denaturant, certified or uncertified, used to produce DFE must be composed solely of carbon, hydrogen, nitrogen, oxygen and sulfur.

(b) *Standards for certified ethanol denaturant.* Certified ethanol denaturant must meet the following requirements:

(1) *Sulfur per-gallon standard.* The sulfur content must not be greater than 330 ppm. If the certified ethanol denaturant producer represents a batch of denaturant as having a maximum sulfur content less than or equal to 330 ppm on the PTD (for example, less than or equal to 120 ppm), then the actual sulfur content must be less than or equal to the stated value.

(2) *Denaturant type.* Only PCG, gasoline blendstocks, or NGLs may be used to produce certified ethanol denaturant.

§1090.240 Gasoline deposit control standards.

(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 WPC must be treated with a detergent certified under paragraph (b) of this section at a rate at least as high as the detergent's LAC over VAR period.

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

(1) The detergent must comply with one of the deposit control certification methods specified in §1090.1395.

(2) The detergent must have been certified prior to January 1, 2021, under the intake valve deposit control requirements of 40 CFR 80.165(b) for any of the detergent certification options under 40 CFR 80.163. Di-tertiary butyl disulfide may have been used to meet the test fuel specifications under 40 CFR 80.164 associated with the intake valve deposit control requirements of 40 CFR 80.165(b). Parties compliant with this paragraph are exempted from the port fuel injector deposit control requirements of 40 CFR 80.165(a).

(3) Gasoline detergent manufacturers must produce detergents consistent with their detergent certification.

§1090.245 RFG standards.

The standards in this section apply to gasoline that is designated as RFG or RBOB or that is used in the RFG areas listed in §1090.270. 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 average standard in §1090.205(a). RFG and RBOB must comply with sulfur per-gallon standards in §1090.205(b) and (c).

(b) *Benzene standards.* RFG must comply with the benzene standards in §1090.210.

(c) *RVP standard.* Summer RFG must comply with the RFG RVP standard in §1090.215(a)(2).

(d) *Heavy metals standard.* On a per-gallon basis, RFG must not contain any 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.

(e) *Certified butane and certified pentane blending limitation.* Certified butane and certified pentane may not be blended with Summer RFG or Summer RBOB under §1090.1320.

§1090.250 Anti-dumping standards.

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

§1090.255 Gasoline fuel additive standards.

(a) Any gasoline fuel 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) *Registration.* The gasoline fuel additive must be registered by a gasoline fuel additive manufacturer under 40 CFR part 79.

(2) *Sulfur content.* The gasoline fuel additive must contribute less than or equal to 3 ppm on a per-gallon basis to the sulfur content of gasoline when used at the maximum recommended concentration.

(3) *Treatment rate.* Except for oxygenates, the gasoline fuel additive(s) must be used at a maximum treatment rate less than or equal to a combined total of 1.0 volume percent.

(b) Any fuel additive blender who is not otherwise subject to any other requirement in this part and only blends a gasoline fuel additive that meets the requirements of paragraph (a) of this section into gasoline is not subject to any requirement in this part solely due to this gasoline fuel additive blending, except the downstream gasoline sulfur per-gallon standard in §1090.205(c), if all the following conditions are met:

(1) The fuel additive blender blends the gasoline fuel additive into gasoline at a concentration less than or equal to 1.0 volume percent.

(2) The fuel additive blender does not add any other blendstock or fuel additive into the gasoline except for oxygenates meeting the requirements in §1090.230.

(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 manufacturer and must comply with all requirements applicable to gasoline manufacturer in this part.

(d) Any gasoline fuel additive intended for use or used to comply with the gasoline deposit control requirement in §1090.240(a) must have been certified by the gasoline detergent manufacturer under §1090.240(b).

§1090.260 Gasoline substantially similar provisions.

(a) Gasoline and gasoline fuel additives (including oxygenates) are subject to the substantially similar requirement in 42 U.S.C. § 7545(f) unless waived under 42 U.S.C. § 7545(f)(4).

(b) No fuel or fuel additive manufacturer may introduce into commerce gasoline or gasoline fuel additives (including oxygenates) that violate any conditions set forth in a waiver under 42 U.S.C. § 7545(f)(4).

(c) No fuel or fuel additive manufacturers may introduce into commerce gasoline or gasoline fuel additives (including oxygenates) that violate any parameters articulated in the definition of “substantially similar.”

§1090.265 Requirements for E15.

(a) No person may sell, introduce, cause or permit the sale or introduction of gasoline containing greater than 10 volume percent ethanol (i.e., greater than E10) into 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.

(b) Paragraph (a) of this section does not prohibit a person from producing, selling, introducing, or causing or allowing the sale or introduction of gasoline containing greater than 10 volume percent ethanol into any flex-fuel vehicle or flex-fuel engine.

§1090.270 RFG covered areas.

For purposes of this part, the RFG covered areas are as follows:

(a) RFG covered areas specified in 42 U.S.C. § 7545(k)(10)(D):

Area Designation	State	Counties	Independent Cities
Los Angeles-Anaheim-Riverside	California	Los Angeles, Orange, Ventura, San Bernardino, ¹ Riverside ²	
San Diego County	California	San Diego	

Greater Connecticut	Connecticut	Hartford, Middlesex, New Haven, New London, Tolland, Windham, Fairfield (only the City of Shelton), Litchfield (all except the towns of Bridgewater and New Milford)	
New York-Northern New Jersey-Long Island-Connecticut	Connecticut	Fairfield (all except the City of Shelton), Litchfield (only the towns of Bridgewater and New Milford)	
	New Jersey	Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union	
	New York	New York, Kings, Queens, Bronx, Nassau, Richmond, Rockland, Suffolk, Westchester, Orange, Putnam	
Philadelphia-Wilmington-Trenton	Delaware	New Castle, Kent	
	Maryland	Cecil	
	New Jersey	Burlington, Camden, Cumberland, Gloucester, Mercer, Salem	
	Pennsylvania	Bucks, Chester, Delaware, Montgomery, Philadelphia	
Chicago-Gary-Lake County	Illinois	Cook, Du Page, Kane, Lake, McHenry, Will, Grundy (only Aux Sable Township and Goose Lake Township), Kendall (only Oswego Township)	
	Indiana	Lake, Porter	
Baltimore	Maryland	Anne Arundel, Baltimore, Carroll, Harford, Howard	Baltimore
Houston-Galveston-Brazoria	Texas	Brazoria, Fort Bend, Galveston, Harris, Liberty, Montgomery, Waller, Chambers	
Milwaukee-Racine	Wisconsin	Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha	

¹ That portion of San Bernardino County, CA that lies south of latitude 35 degrees, 10 minutes north and west of longitude 115 degrees, 45 minutes west.

² That portion of Riverside County, CA that 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 Bernardino Counties; then southerly along section lines to the centerline of the Colorado River Aqueduct; 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 southeast 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 southwest 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.

(b) RFG covered areas based on being reclassified as Severe ozone nonattainment areas under 42 U.S.C. § 7511(b):

Area Designation	State or District	Counties	Independent Cities
Washington, DC-Maryland-Virginia	District of Columbia	Washington	
	Maryland	Calvert, Charles, Frederick, Montgomery, Prince George's	
	Virginia	Arlington, Fairfax, Loudoun, Prince William, Stafford	Alexandria, Fairfax, Falls Church, Manassas, Manassas Park
Sacramento Metro	California	Sacramento, Yolo, El Dorado (except Lake Tahoe and its drainage area), Placer, ¹ Solano, ² Sutter ³	
San Joaquin Valley	California	Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare, Kern ⁴	

¹ 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.

² That portion of Solano County that 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 Potos 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.

³ 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.

⁴ 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 northwest 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 north along the range line common to Range 31 East and Range 32 East, Mount Diablo Base and Meridian, to the northwest 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.

(c) RFG covered areas based on being classified ozone nonattainment areas at the time that the state requested to opt into RFG under 42 U.S.C. § 7545(k)(6)(A)(i):

Area Designation at the Time of Opt-in	State	Counties	Independent Cities
Sussex County	Delaware	Sussex	
St. Louis, Missouri-Illinois	Illinois	Jersey, Madison, Monroe, St. Clair	
	Missouri	Franklin, Jefferson, St. Charles, St. Louis	St. Louis
Kentucky portion of Louisville	Kentucky	Jefferson, Bullitt, ¹ Oldham ²	
Kent and Queen Anne's Counties	Maryland	Kent, Queen Anne's	
Statewide	Massachusetts	All	
Strafford, Merrimack, Hillsborough, Rockingham Counties	New Hampshire	Strafford, Merrimack, Hillsborough, Rockingham	
Atlantic City	New Jersey	Atlantic, Cape May	
New Jersey portion of Allentown-Bethlehem-Easton	New Jersey	Warren	
Dutchess County	New York	Dutchess	
Essex County	New York	Essex (the portion of Whiteface Mountain above 4,500 feet in elevation)	
Statewide	Rhode Island	All	
Dallas-Fort Worth	Texas	Collin, Dallas, Denton, Tarrant	

Norfolk-Virginia Beach, Newport News (Hampton Roads)	Virginia	James City, York	Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg
Richmond	Virginia	Charles City, Chesterfield, Hanover, Henrico	Colonial Heights, Hopewell, Richmond

¹ 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.

² 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-southeast on Ky 393 to the junction of county road 746 (the road on the north side of Reformatory Lake and the Reformatory); proceeding to the east-northeast on county road 746 to the junction with Dawkins Lane (also known as Saddlers Mill Road) and county road 746; Proceeding to follow an electric power line east-northeast across from the junction of 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-southeast 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.

(d) RFG covered area that is located in the ozone transport region established by 42 U.S.C. § 7511c(a) that a state has requested to opt into RFG under 42 U.S.C. § 7545(k)(6)(B)(i)(I):

State	Counties
Maine	York, Cumberland, Sagadahoc, Androscoggin, Kennebec, Knox, Lincoln

§1090.275 Changes to RFG covered areas and procedures for opting out of RFG.

(a) *New RFG covered areas.* (1) Effective 1 year after an area has been reclassified as a Severe ozone nonattainment area under 42 U.S.C. § 7511(b), such Severe area shall become a covered area under the RFG program as required by 42 U.S.C. § 7545(k)(10)(D). 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.

(2) Any classified ozone nonattainment area identified in 40 CFR part 81, subpart C, as Marginal, Moderate, Serious, or Severe may be included as a covered area upon the request of the governor of the state in which the area is located. EPA must:

(i) Publish the governor's request in the Federal Register upon receipt.

(ii) Establish an effective date that is not later than 1 year after the request is received unless EPA determines that there is insufficient capacity to supply RFG as governed by 42 U.S.C. § 7545(k)(6)(A)(ii).

(3) Any ozone attainment area in the ozone transport region established by 42 U.S.C. § 7511c(a) may be included as a covered area upon petition by the governor of the state in which the area is located as governed by 42 U.S.C. § 7545(k)(6)(B)(i). EPA must:

(i) Publish the governor's request in the Federal Register as soon as practicable after it is received.

(ii) Establish an effective date that is not later than 180 days after the request is received unless EPA determines that there is insufficient capacity to supply RFG as governed by 42 U.S.C. § 7545(k)(6)(B)(iii).

(b) Any area that opted into RFG under 42 U.S.C. § 7545(k)(6)(A) or (B) and has not subsequently been reclassified as a Severe ozone nonattainment area may opt out of RFG using the opt-out procedure in paragraph (d) of this section.

(c) The governor of the state in which any covered area under 42 U.S.C. § 7545(k)(10)(D) is located may request that EPA remove the prohibition specified in 42 U.S.C. § 7545(k)(5) in such area by following the opt-out procedure specified in paragraph (d) of this section upon one of the following:

(1) Redesignation to attainment for such area for the most stringent ozone NAAQS in effect at the time of redesignation.

(2) Designation as an attainment area for the most stringent ozone NAAQS in effect at the time of the designation. The area must also be redesignated to attainment for the prior ozone NAAQS.

(d) *Procedure for opting out of RFG.* (1) EPA may approve a request 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 §1090.270(c) and (d), if it meets the requirements of paragraph (d)(2) of this section. If EPA approves such a request, an effective date will be set as specified in paragraph (d)(3) of this section. EPA will notify the state in writing of EPA's action on the request and the effective date of the removal when the request is approved.

(2) An opt-out request must be signed by the governor of a state, or their authorized representative, and must include all the following:

(i) A geographic description of each RFG opt-in area, or portion of each RFG opt-in area, which is covered by the request.

(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 request where emissions reductions from RFG are relied upon as specified in paragraph (d)(2)(ii) of this section, the request 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 by EPA.

(3)(i) Except as specified in paragraph (d)(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 90 days from EPA's written notification to the state approving the RFG opt-out request.

(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 (d)(1) of this section will be the date requested by the governor, but no less than 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 (d)(3)(i) and (ii) of this section, for an area in the ozone transport region that opted into RFG under 42 U.S.C. § 7545(k)(6)(B), EPA will not set the effective date for removal of the area earlier than 4 years after the commencement date of opt-in.

(4) EPA will publish a notice in the Federal Register announcing the approval of any request under paragraph (d)(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 request, the geographic area covered by such approved opt-out request will no longer be considered an RFG covered area.

(e) EPA will periodically publish a final rule revising the list of RFG covered areas in §1090.270.

§1090.280 Procedures for relaxing the federal 7.8 psi RVP standard.

(a) 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 (b) of this section. If EPA approves such a request, an effective date will be set as specified in paragraph (c) 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.

(b) The request must be signed by the governor of the state, or their authorized representative, and must include all the following:

(1) A geographic description of each federal 7.8 psi gasoline area, or portion of such area, which is covered by the request.

(2) 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.

(3) 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) of this section, the request must include the following information:

(i) Identify whether the state is withdrawing any submitted SIP that has not yet been approved.

(ii)(A) 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.

(B) 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.

(iii) 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.

(4) The governor of a state, or their authorized representative, must submit additional information upon request by EPA.

(c)(1) Except as specified in paragraph (c)(2) 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 90 days from EPA's written notification to the state approving the relaxation request.

(2) 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 (a) of this section will be the date requested by the governor, but no less than 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.

(d) EPA will publish a notice in the Federal Register announcing the approval of any relaxation request under paragraph (a) of this section, and the effective date of relaxation of the federal 7.8 psi gasoline RVP requirement.

(e) 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.

(f) EPA will periodically publish a final rule revising the list of areas subject to the federal 7.8 psi gasoline standard in §1090.215(a)(1).

Subpart D—Diesel Fuel and ECA Marine Fuel Standards

§1090.300 Overview and general requirements.

(a) Diesel fuel is subject to the ULSD standards in §1090.305, except as follows:

(1) Alternative sulfur standards apply for 500 ppm LM diesel fuel and ECA marine fuel as specified in §§1090.320 and 1090.325, respectively.

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

(b) Diesel fuel additives must meet the requirements in §1090.310.

(c) Diesel fuel manufacturers and diesel fuel additive manufacturers must demonstrate compliance with the standards in this subpart by measuring fuel parameters in accordance with subpart M of this part.

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

(e)(1) 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, ECA marine fuel, or diesel fuel additive that exceeds any standard set forth in this subpart.

(2) Notwithstanding paragraph (e)(1) of this section, importers may import diesel fuel that does not comply with the standards set forth in this subpart if all the following conditions are met:

(i) The importer offloads the imported diesel fuel into one or more tanks that are physically located at the same import facility at which the imported diesel fuel first arrives in the United States or at a facility to which the imported diesel fuel is directly transported from the import facility at which the imported diesel fuel first arrived in the United States.

(ii) The importer uses the imported diesel fuel to produce one or more new batches of diesel fuel.

(iii) The importer certifies the new batch of diesel fuel and demonstrates that it complies with the standards in this subpart by measuring fuel parameters in accordance with subpart M of this part before title or custody to any new batch of diesel fuel is transferred.

(f) No person may introduce used motor oil, or used motor oil blended with diesel fuel, into the fuel system of model year 2007 or later diesel motor vehicles or engines or model year 2011 or later nonroad diesel vehicles or engines (not including locomotive or marine diesel engines).

§1090.305 ULSD standards.

(a) Except as specified in §1090.300(a)(1) and (2), diesel fuel must meet the ULSD per-gallon standards in this section.

(b) *Sulfur standard.* Maximum sulfur content of 15 ppm.

(c) *Cetane index or aromatic content.* Diesel fuel must meet one of the following standards:

(1) Minimum cetane index of 40.

(2) Maximum aromatic content 35 volume percent.

§1090.310 Diesel fuel additives standards.

This section specifies how the ULSD sulfur standard applies to additives blended into diesel fuel that is subject to the standards in §1090.305.

(a) Except as specified in paragraph (b) and (c) of this section, diesel fuel additives must have a sulfur concentration less than or equal to 15 ppm on a per-gallon basis.

(b) Diesel fuel additives do not have to comply with paragraph (a) of this section if all the following conditions are met:

(1) The additive is added to or used in the diesel fuel in a quantity less than 1.0 volume percent of the resultant additive/diesel fuel mixture.

(2) The PTD complies with the requirements in §1090.1170(b).

(3) The additive is not commercially available as a retail product for ultimate consumers.

(c) The provisions of this section do not apply to additives used with 500 ppm LM diesel fuel or ECA marine fuel.

§1090.315 Heating oil, kerosene, and jet fuel provisions.

Heating oil, kerosene, and jet fuel may not be sold for use in motor vehicles or non-road equipment and are not subject to the ULSD standards in §1090.305 unless redesignated as ULSD under §1090.1115(b)(3).

§1090.320 500 ppm LM diesel fuel standards.

(a) Transmix processors and pipeline operators that produce and distribute 500 ppm LM diesel fuel under §1090.515 for use only in the eligible locomotives and marine engines must meet the per-gallon standards of this section.

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

(c) *Cetane index or aromatic content.* The standard for cetane index or aromatic content in §1090.305(a)(2) applies to 500 ppm LM diesel fuel.

§1090.325 ECA marine fuel standards.

(a)(1) The standards and provisions of this section apply to ECA marine fuel.

(2) The standards in paragraph (b) 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.

(3) The standards in paragraph (b) this section do not apply to global marine fuel if the fuel is exempt under §1090.650.

(4) Diesel fuel and other distillate fuel used in diesel engines operated on such vessels is subject to the standards in this section instead of the standards in §1090.305 or §1090.320.

(b) *ECA marine fuel sulfur per-gallon standard.* The maximum sulfur content of ECA marine fuel is 1,000 ppm.

(c) Under 40 CFR 1043.80, fuel suppliers (i.e., ECA marine fuel distributors, retailers, and WPCs) must provide bunker delivery notes to vessel operators in addition to any applicable PTD requirements under subpart K of this part.

Subpart E—Reserved

Subpart F—Transmix and Pipeline Interface Provisions

§1090.500 Scope.

(a) This subpart contains provisions for transmix blenders, transmix processors, and distributors that produce and distribute the specified fuels from transmix that may be complied with in lieu of the requirements that would otherwise apply to a fuel manufacturer.

(b) Any person other than a transmix blender that uses the provisions of this subpart must be registered with EPA under subpart I of this part.

§1090.505 Gasoline produced from blending transmix into PCG.

(a) Transmix blenders who blend transmix into PCG under §1090.150 must comply with the requirements of this section

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

(2) The resultant transmix-blended gasoline meets the downstream sulfur per-gallon standard in §1090.205(c) and the applicable RVP standard in §1090.215.

(3) The transmix blender complies with the recordkeeping requirements in §1090.1255.

(4) 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 (d) 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, using one of the following sampling methods:

(1) For transmix that is blended in a tank (including a tank on a barge), collect a sample of the final transmix-blended gasoline following each occasion transmix is blended.

(2) For 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. In-line samples may be collected to comply with the requirements of this paragraph if the applicable requirements in paragraph (d)(2) of this section are met.

(d) Any transmix blender may petition EPA for approval of a quality assurance program that does not include the minimum sampling and testing requirements in paragraph (c) 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:

(1) 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 in 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.

(2) 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 §1090.1315.

(3) 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.

(4) 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.

(5) 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*.

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

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

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

(3) Notify EPA of the noncompliance.

(4) If the transmix was blended by a computer controlled in-line blending system, increase the rate of sampling and testing to a minimum frequency of once per week and a maximum frequency of once per day and continue the increased frequency of sampling and testing until the results of 10 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.

(f) Small volumes of fuel that are captured in pipeline sumps or trapped in pipeline pumps or valve manifolds and that are injected back into batches of gasoline or diesel fuel are exempt from the transmix blending requirements in this section.

§1090.510 Gasoline produced from TGP.

(a) *General provisions.* (1) Transmix processors who produce gasoline from TGP under §1090.145 must meet the requirements of this section.

(2) Transmix processors may produce gasoline using only TGP, a combination of TGP and PCG, a combination of TGP and blendstock(s), or a combination TGP, PCG, and blendstock(s) under the provisions of this section.

(b) *Sulfur per-gallon standard compliance.* Gasoline produced from TGP must meet the sulfur per-gallon standards as follows:

(1) Each batch of gasoline produced solely from TGP or a combination of TGP and PCG must comply with the downstream sulfur per-gallon standard in §1090.205(c).

(2) Each batch of gasoline produced from TGP and any blendstock must comply with the fuel manufacturing facility gate sulfur per-gallon standard in §1090.205(b).

(c) *Demonstration of compliance with sulfur and benzene average standards.* (1) The transmix processor must exclude TGP and PCG used to produce gasoline under the provisions of this section and PCG blended with TGP from its compliance calculations to demonstrate compliance with the sulfur and benzene average standards in §§1090.205 and 1090.210, respectively. Transmix processors that produce gasoline from only TGP or TGP and PCG are deemed to be in compliance with the sulfur and benzene average standards in §§1090.205 and 1090.210, respectively.

(2) The transmix processor must include any blendstocks other than TGP and exclude any TGP and PCG used to produce gasoline under the provisions of this section in calculations to demonstrate compliance with the sulfur and benzene average standards in §§1090.205 and 1090.210, respectively.

(3) Transmix processors must meet the provisions in §1090.1325 for gasoline produced by adding blendstock to TGP.

(d) *RVP standard compliance.* Each batch of gasoline made from TGP must comply with the applicable RVP standard in §1090.215.

(e) *Distillation point determination.* Determine the following distillation parameters in accordance with subpart M of this part:

(i) T10.

(ii) T50.

- (iii) T90.
- (iv) End-point.
- (v) Distillation residue.

§1090.515 500 ppm LM diesel fuel produced from TDP.

(a) Transmix processors who produce 500 ppm LM diesel fuel from TDP must comply with the requirements of this section and the standards for 500 ppm LM diesel fuel specified in §1090.320.

(b) *Blending component limitation.* Transmix processors may only use the following components to produce 500 ppm LM diesel fuel:

- (1) TDP.
- (2) ULSD.
- (3) Diesel fuel additives that comply with the requirements in §1090.310.

(c) *Compliance plan.* For each facility, a transmix processor that produces 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 detail how the transmix processor intends to meet all the following requirements:

(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 under paragraph (f) of this section.

(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 ULSD.

(3) Identify the parties that handle the 500 ppm LM diesel fuel through to the ultimate consumer. No more than 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 prevented.

(6) Include an EPA registration number.

(d) *Volume requirements.* 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 a compliance period basis. An increase in the volume of 500 ppm LM diesel fuel delivered compared to the volume received must be due solely to one or more of the following:

(1) Normal pipeline interface cutting practices under paragraph (c)(1)(i) of this section.

(2) Thermal expansion due to a temperature difference between the times when the volume of 500 ppm LM diesel fuel received and the volume of 500 ppm LM diesel fuel delivered were measured.

(3) The addition of ULSD to a retail outlet or WPC 500 ppm LM diesel fuel storage tank under paragraph (c)(1)(ii) of this section.

(e) 500 ppm LM diesel fuel may only be used in locomotive and marine engines that are not required to use ULSD under 40 CFR 1033.815 and 40 CFR 1042.660, respectively. No person may use 500 ppm LM diesel fuel in locomotive or marine engines that are required to use ULSD, in any nonroad vehicle or engine, or in any motor vehicle engine.

(f) *Segregation requirement.* Transmix processors and distributors must segregate 500 ppm LM diesel fuel from other fuels except as follows:

(1) Pipeline operators may ship 500 ppm LM diesel fuel by pipeline provided that the 500 ppm LM diesel fuel does not come into physical contact in the pipeline with distillate fuels that have a sulfur content greater than 15 ppm. If 500 ppm LM diesel fuel is shipped by pipeline adjacent to ULSD, the pipeline operator must cut ULSD into the 500 ppm LM diesel fuel.

(2) WPCs 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.

§1090.525 Handling practices for pipeline interface that is not transmix.

(a) Subject to the limitations in paragraph (b) of this section, pipeline operators may cut pipeline interface from two batches of gasoline subject to EPA standards that are shipped adjacent to each other by pipeline into either or both these batches of gasoline provided that this action does not cause or contribute to a violation of the standards in this part.

(b) During the summer season, pipeline operators may not cut pipeline interface from two batches of gasoline subject to different RVP standards that are shipped adjacent to each other by pipeline into the gasoline batch that is subject to the more stringent RVP standard. For example, during the summer season, pipeline operators may not cut pipeline interface from a batch of RFG shipped adjacent to a batch of conventional gasoline into the batch of RFG.

(c) 500 ppm LM diesel fuel may be shipped via pipeline as specified in §1090.515(f).

Subpart G—Exemptions, Hardships, and Special Provisions

§1090.600 General provisions.

(a) Gasoline, diesel fuel, or IMO marine fuel that is exempt under this section is exempt from other provisions of this part, unless otherwise stated.

(b) Fuel not meeting all the requirements and conditions specified in this subpart for an exemption is subject to all applicable standards and requirements of this part.

§1090.605 National security and military use exemptions.

(a) Fuels, fuel additives, and regulated blendstocks that are produced, imported, sold, offered for sale, supplied, offered for supply, stored, dispensed, or transported for use in the following tactical military vehicles, engines, or equipment, including locomotive and marine, are exempt from the standards specified in this part:

(1) Tactical military vehicles, engines, or equipment, including locomotive and marine engines, that have 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 engines that 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 meeting the requirements of 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 those specified in paragraph (a) of this section.

§1090.610 Temporary research, development, and testing exemptions.

(a) *Requests for an 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 as specified in §1090.10.

(b) *Criteria for an R&D 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 aid in demonstrating each of the elements in paragraph (b) of this section, the person requesting an exemption must include, at a minimum, 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 meeting the requirements of 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 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 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.

(viii) Any other information requested by EPA to determine whether the test program satisfies the criteria of paragraph (b) of this section.

(d) *Additional requirements.* (1) The PTDs associated with fuel must comply with subpart K of this part.

(2) The fuel must be designated by the fuel manufacturer or supplier, as applicable, as exempt fuel.

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

(4) The 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 WPC facility, unless the WPC 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) *Approval 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 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 must not exceed the estimated amount in paragraph (c)(3)(iv) of this section, unless EPA grants a greater amount.

(2) Any exemption granted under this section will expire at the completion of the test program or 1 year from the date of approval, whichever occurs first, and may only be extended upon re-application consistent with all requirements of this section.

(3) 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.

(4) Failure to meet any term or condition of the exemption, or of any requirement in this section, will cause the exemption to be void *ab initio*.

(5) If any information required by paragraph (c) of this section changes 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 may make it void *ab initio* and may make the party liable for a violation of this part.

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

§1090.615 Racing and aviation fuel exemptions.

(a) Fuels, fuel additives, and regulated blendstocks that are used in aircraft, or racing vehicles or racing boats in sanctioned racing events, are exempt from the standards in subparts C and D of this part if all the requirements of this section are met.

(b) The fuel is identified on PTDs and any fuel dispenser from which such fuel is dispensed, as restricted for use either in aircraft, or in racing motor vehicles or racing boats that are used only in sanctioned racing events.

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

(d) The fuel is not made available for use as gasoline or diesel fuel subject to the standards in 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.

§1090.620 Exemptions for Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

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, is exempt from the standards in subparts C and D of this part if all the following requirements are met:

(a) The fuel is designated by the fuel manufacturer 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 meeting 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 under 40 CFR 1043.20) but outside these territories.

§1090.625 Exemptions for California gasoline and diesel fuel.

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

(b) *California gasoline and diesel fuel requirements.* (1) Each batch of California gasoline or diesel fuel must be designated as such by its fuel manufacturer.

(2) Designated California gasoline or 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 or diesel fuel must ultimately be used only in the state of California.

(4) Transferors and transferees of California gasoline and diesel fuel produced outside the state of California must meet the PTD requirements of subpart K of this part.

(5) Each transferor and transferee of California gasoline or diesel fuel produced outside the state of California must maintain copies of the PTDs as specified in subpart L of this part.

(6) California gasoline or California diesel fuel may not be used in any part of the United States outside of the state of California unless the manufacturer or distributor recertifies or redesignates the batch of California gasoline or diesel fuel as specified in paragraph (d) or (e) of this section.

(c) *Use of California test methods and offsite sampling procedures.* For any gasoline or diesel fuel that is not California gasoline or diesel fuel and that is either produced at a facility located in the state of California or is imported from outside the United States into the state of California, the manufacturer 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) Determine the sulfur content, benzene content, and RVP (during the summer) of gasoline at offsite tankage (which would otherwise be prohibited under §1090.1615(c)) if the following requirements are met:

(i) The samples are properly collected under the terms of a current and valid protocol agreement between the manufacturer 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 manufacturer provides a copy of the protocol agreement to EPA upon request.

(d) *California gasoline used outside of California.* California gasoline may either be recertified as gasoline under this part or may be used in any part of the United States outside of the state of California if the fuel designated as California gasoline meets all applicable requirements for California reformulated gasoline under Title 13 of the California Code of Regulations and the manufacturer or distributor of such fuel does all the following:

(1) The manufacturer or distributor properly redesignates the fuel under §1090.1110(b)(2)(vi).

(2) The manufacturer or distributor generates PTDs under subpart K of this part.

(3) The manufacturer or distributor keeps records under subpart L of this part.

(4) The manufacturer or distributor does not include the California gasoline in their average standard compliance calculations.

(e) *California diesel used outside California.* California diesel fuel may be used in any part of the United States outside of the state of California and is deemed to meet the standards in subpart D of this part without recertification if the fuel designated as California diesel fuel meets all applicable requirements for diesel fuel under Title 13 of the California Code of Regulations and the manufacturer or distributor of such fuel does all the following:

(1) The manufacturer or distributor properly redesignates the fuel under §1090.1115(b)(3)(iii).

(2) The manufacturer or distributor generates PTDs under subpart K of this part.

(3) The manufacturer or distributor keeps records under subpart L of this part.

§1090.630 Exemptions for Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands summer gasoline.

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, is exempt from the RVP standards in §1090.215 provided all the following requirements are met:

(a) The summer gasoline is designated by the fuel manufacturer 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 meeting 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.

§1090.635 Refinery extreme unforeseen hardship exemption.

(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 and that could not have been avoided by the exercise of prudence, diligence, and due care, EPA may permit a refiner, for a brief period, to distribute fuel that is exempt from the standards in 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 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 can show how the requirements for making compliant fuel, and/or purchasing credits to partially or completely offset the nonconformity, will be expeditiously achieved.

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

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

(b) Hardship applications under this section must be submitted to EPA as specified in §1090.10 and must contain a letter signed by the RCO, or their delegate, stating that the information contained in the application is true to the best of their knowledge.

§1090.640 Exemptions from the gasoline deposit control requirements.

Gasoline that is used to produce E85 is exempt from the gasoline deposit control requirements in §1090.240. Any person that uses this exemption must keep records to demonstrate that such exempt gasoline was used to produce E85 and was not distributed from a terminal for use as gasoline.

§1090.645 Exemption for exports of fuels, fuel additives, and regulated blendstocks.

Fuels, fuel additives, and regulated blendstocks are exempt from the standards in subparts C and D of this part if all the following requirements are met:

(a) Fuel manufacturers, fuel additive manufacturers, and regulated blendstock producers must designate the fuel, fuel additive, or regulated blendstock for export as specified in §1090.1610(a).

(b) Fuels, fuel additives, or regulated blendstocks designated for export must be accompanied by PTDs meeting the requirements of subpart K of this part.

(c) Fuels, fuel additives, or regulated blendstocks are exported from the United States.

(d) *Segregation requirement.* Fuels, fuel additives, and regulated blendstocks designated for export must be completely segregated from non-exempt fuels, fuel additives, and regulated blendstocks at all points throughout the production and distribution system, from the point the fuels, fuel additives, and regulated blendstocks are produced or imported to the point where the fuels, fuel additives, and regulated blendstocks are exported.

§1090.650 Global marine fuel exemption.

(a) The standards of subpart D of this part do not apply to global marine fuel that is produced, imported, sold, offered for sale, supplied, offered for supply, stored, dispensed, or transported for use in steamships or Category 3 marine vessels when operating outside of ECA boundaries.

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

(1) It must not exceed 0.50 weight percent sulfur (5. ppm).

(2) It must be accompanied by product transfer documents as required under §1090.1165.

(3) It must be designated as specified in §1090.1115.

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

(5) It may not be used in an vehicles, engines, or equipment other than those referred to in paragraph (a) of this section.

(c)(1) Fuel not meeting the conditions specified in paragraph (b) of this section is subject to the standards, requirements, and prohibitions that apply for ULSD under this part.

(2) Any person who produces, imports, sells, offers for sale, supplies, offers for supply, stores, dispenses, or transports global marine fuel without meeting the applicable recordkeeping requirements in subpart L of this part may not claim the fuel is exempt from the standards, requirements, and prohibitions that apply for ULSD under this part.

Subpart H—Averaging, Banking, and Trading Provisions

§1090.700 Compliance with average standards.

(a) *Compliance with the sulfur average standard.* Gasoline manufacturers must demonstrate compliance with the sulfur average standard in §1090.205(a) by using the equations in paragraphs (a)(1) and (2) of this section. Gasoline manufacturers 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 gasoline manufacturer for each of its facilities with the sulfur average standard in §1090.205(a) 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:

$$CSV_y = \sum_{i=1}^n (V_i \cdot S_i) + D_{S,(y-1)} + D_{S_Oxy_Total} - C_S$$

Where:

CSV_y = Compliance sulfur value for compliance period *y*, in ppm-gallons.

V_i = The volume of gasoline produced or imported in batch *i*, in gallons.

S_i = The sulfur content of batch *i*, 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.

$D_{S,(y-1)}$ = Sulfur deficit from the previous compliance period, per §1090.715, in ppm-gallons.

$D_{S_Oxy_Total}$ = The total sulfur deficit from BOB recertification, per §1090.740(b)(3), in ppm-gallons.

C_S = Sulfur credits used by the gasoline manufacturer, per §1090.720, in ppm-gallons.

(2) *Sulfur compliance calculation.* (i) Compliance by a gasoline manufacturer with the sulfur average standard in §1090.205(a) is achieved if CSV_y is equal to or less than 10 times the total gasoline volume produced or imported. Compliance is achieved if the following equation is true:

$$CSV_y \leq \left(\sum_{i=1}^n V_i \cdot 10 \right)$$

(ii) Compliance by a gasoline manufacturer with the sulfur average standard in §1090.205(a) is not achieved if a deficit is incurred two or more consecutive years. A gasoline

manufacturer incurs a deficit under §1090.715, if for compliance period y, the compliance sulfur value is greater than 10 times the total gasoline volume produced or imported.

$$CSV_y > \left(\sum_{i=1}^n V_i \cdot 10 \right)$$

(b) *Compliance with the benzene average standards.* Gasoline manufacturers must demonstrate compliance with the benzene average standard in §1090.210(a) by using the equation in paragraph (b)(1) of this section and with the maximum benzene average standard in §1090.210(b) by using the equation in paragraph (b)(3)(i) of this section. Compliance with the benzene average standard is determined as specified in paragraph (b)(2) of this section. Compliance with the maximum benzene average standard is determined by as specified in paragraph (b)(3)(ii) of this section. Gasoline manufacturers must also calculate and report net annual average benzene levels as specified in paragraph (b)(4) of this section.

(1) *Compliance benzene value calculation.* Compliance by a gasoline manufacturer for each of its facilities with the benzene average standard in §1090.310(a) is achieved if, for calendar year y, the compliance benzene value is less than or equal to 0.62 volume percent benzene times the total gasoline volume produced or imported, as determined by the following equation:

$$CBV_y = \sum_{i=1}^n \left(\frac{V_i \cdot B_i}{100} \right) + D_{(y-1)} + \sum_{i=1}^m D_{Bz_Oxy_Total} - C_{Bz}$$

Where:

CBV_y = Compliance benzene value for year y, in benzene gallons.

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

B_i = The benzene content of batch i, in volume percent.

m = The number of batches of BOB gasoline recertified during the compliance period.

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 §1090.715, in benzene gallons.

D_{Bz_Oxy_Total} = Benzene deficit from BOB recertification, per §1090.740(b)(4), in benzene gallons.

C_{Bz} = Benzene credits used by the gasoline manufacturer, per §1090.720, in benzene gallons.

(2) *Benzene compliance calculation.* (i) Compliance by a gasoline manufacturer with the benzene average standard in §1090.210(a) is achieved if the compliance benzene value (CBV_y) for compliance period y is equal to or less than 0.62 volume percent times the total gasoline volume produced or imported. Compliance is achieved if the following equation is true:

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

(ii) Compliance by a gasoline manufacturer with the benzene average standard in §1090.210(a) is not achieved if a deficit is incurred two or more consecutive years. A gasoline manufacturer must incur a deficit under §1090.715, if for compliance period y, CBV_y is greater than 0.62 volume percent times the total gasoline volume produced or imported.

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

(3) *Annual average benzene concentration calculation.* (i) The annual average benzene concentration of gasoline produced at a fuel manufacturing facility or imported by an aggregated import facility is determined as follows:

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

Where:

B_a = Annual average benzene concentration, in volume percent benzene.

(ii) Compliance with the maximum benzene average standard in §1090.210(b) for calendar year y is achieved by a gasoline manufacturer if the value of B_a calculated in paragraph (b)(3)(i) of this section is no greater than 1.30 volume percent.

(4) *Reporting net annual average benzene levels.* Gasoline manufacturers 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 fuel manufacturing facility net annual average benzene level, in volume percent benzene. The net average benzene level is the average benzene level for gasoline produced at a fuel manufacturing facility 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 rounded and reported to two decimal places in accordance with §1090.50.

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

(d) *Inclusions.* Gasoline manufacturers must include the following products that they produced or imported during the compliance period in their compliance calculations:

(1) CG.

(2) RFG.

(3) BOB.

(4) Added gasoline volume resulting from the production of gasoline from PCG as follows:

(i) For PCG by subtraction as specified in §1090.1320(a)(1), include as a negative batch the PCG volume and PCG sulfur and benzene content and include as a positive batch the new batch of gasoline volume and sulfur and benzene content in compliance calculations under this section.

(ii) For PCG by addition as specified in §1090.1320(a)(2), include as a positive batch only the volume and sulfur and benzene content of the blendstock added to make the new batch of gasoline in compliance calculations under this section. Do not include any test results or volumes for the PCG or new batch of gasoline in these calculations.

(5) Inclusion of a particular batch of gasoline for compliance calculations for a compliance year is based on the date the batch is produced, not shipped. For example, a batch produced on December 30, 2021, but shipped on January 2, 2022, would be included in the compliance calculations for the 2021 compliance period. However, the volume included in the 2021 compliance period for that batch would be the entire batch volume, even though the shipment of all or some of the batch did not occur until 2022.

(e) *Exclusions.* Gasoline manufacturers must exclude the following products from their compliance calculations:

(1) Gasoline that was not produced by the gasoline manufacturer.

(2) Regulated blendstock, unless the regulated blendstock is added to PCG or TGP under §1090.1320 or §1090.1325, respectively.

(3) PCG.

(4) Certified butane and certified pentane blended under §1090.1320.

(5) TGP.

(6) Gasoline exempted under subpart G of this part from the average standards under subpart C of this part.

§1090.705 Annual average facility level compliance.

(a) Except as specified in paragraph (c) of this section, gasoline manufacturers must comply with average standards at the individual facility level.

(b) Except as specified in paragraph (c) of this section, gasoline manufacturers must achieve compliance at the individual facility level for the maximum benzene average standard in §1090.210(b).

(c) Gasoline importers must aggregate all import facilities within a PADD as a single facility to comply with average standards as specified in §1090.1600(c).

§1090.710 Downstream oxygenate accounting.

The requirements of this section apply to BOB for which a gasoline manufacturer is accounting for the effects of the oxygenate blending that occurs downstream of the fuel manufacturing facility in the gasoline manufacturer's average standard compliance calculations of this subpart. This section includes requirements on distributors to ensure that oxygenate is added in accordance with the blending instructions specified by the gasoline manufacturer in order to ensure fuel quality standards are met.

(a) *Provisions for gasoline manufacturers.* In order to account for the effects of oxygenate blending downstream, a gasoline manufacturer of BOB must meet all the following requirements:

(1) Produce or import the BOB such that, ~~when blended with a designated type and amount of oxygenate,~~ the gasoline continues to meet the applicable gasoline standards in subpart C of this part after the addition of the specified type and amount of oxygenate.

(2) Conduct tests on each batch of BOB produced or imported that represents the gasoline after the specified type and amount of each oxygenate is added to the batch of BOB by creating a hand blend in accordance with §1090.1340 and determining the properties of the hand blend using methods specified in subpart M of this part. When creating the hand blend in accordance with §1090.1340, gasoline manufacturers must add to the BOB an amount of oxygenate within 0.1 volume percent to the amount of oxygenate specified on the PTD for the BOB under paragraph (a)(5) of this section.

(3) Participate in the independent sampling oversight program specified in §1090.1440 or have an approved in-line blending waiver under §1090.1315.

(4) Transfer ownership of the BOB only to an oxygenate blender that is registered with EPA under 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 manufacturer certified for compliance of the hand blend on the PTD for the BOB, as specified in §1090.1160(b)(1).

(6) Participate in the national fuels survey program under 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 PTD for the BOB, except as specified in paragraph (c)(2) of this section.

(c) *Limitations.* (1) Only the gasoline manufacturer that first certifies the BOB may account for the downstream addition of oxygenate under this section. On any occasion where any person downstream of the fuel manufacturing facility gate of the gasoline manufacturer that produced or imported gasoline or BOB adds oxygenate to such product, the person may not include the volume and sulfur and benzene content of the oxygenate in any compliance calculations for demonstrating compliance with the average standards specified in subpart C of this part or for credit generation under this subpart. All applicable per-gallon standards specified in subpart C of this part continue to apply.

(2) A person downstream of the fuel manufacturing facility gate 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 manufacturers and must meet all applicable requirements for gasoline manufacturers specified in this part.

§1090.715 Deficit carryforward.

(a) A gasoline manufacturer incurs a compliance deficit if the manufacturer exceeds the average standard specified in subpart C of this part for a given compliance period, creating a compliance deficit, provided that, in the following compliance period.

(b) The deficit incurred must be determined as specified in paragraph (b)(1) of this section for sulfur and paragraph (b)(2) of this section for benzene.

(1) The deficit value for sulfur to be included in the following year's compliance calculation is determined as follows:

$$D_{S,y} = CSV_y - \left(\sum_{i=1}^n V_i \cdot 10 \right)$$

Where:

$D_{S,y}$ = Sulfur deficit incurred in compliance period y, in ppm-gallons.

(2) The deficit value for benzene to be included in the following year's compliance calculation is determined as follows:

$$D_{Bz,y} = CBV_y - \left(\sum_{i=1}^n V_i \cdot 0.0062 \right)$$

Where:

$D_{Bz,y}$ = Benzene deficit incurred in compliance period y, in benzene gallons.

(c) Gasoline manufacturers must use all sulfur or benzene credits previously generated or obtained at any of their facilities to achieve compliance with an average standard specified in subpart C of this part before carrying forward a sulfur or benzene deficit at any of their facilities.

§1090.720 Credit use.

(a) *General credit use provisions.* Only gasoline manufacturers specified in §1090.725(a) may generate, use, transfer, or own credits generated under this subpart. Credits may be used by a gasoline manufacturer to comply with the gasoline average standards specified in subpart C of this part. Gasoline manufacturers may also bank credits for future use, transfer credits to another facility within a company (i.e., intracompany trading), or transfer credits to another gasoline manufacturer, if all applicable requirements of this subpart are met.

(b) *Part 80 credit use.* Valid credits generated under 40 CFR 80.1615 and 80.1290 may be used by gasoline manufacturers to comply with the average standards in subpart C of this part, subject to the provisions of this subpart.

(c) *Credit life.* Credits are valid for use for 5 years after the compliance period for which they are generated.

(d) *Limitations on credit use.* (1) Credits that have expired may not be used for demonstrating compliance with the average standards specified in subpart C of this part or be used to replace invalid credits under §1090.735.

(2) A gasoline manufacturer possessing credits must use all credits prior to falling into compliance deficit under §1090.715.

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

(4) Credits may not be used to meet the maximum benzene average standard in §1090.210(b).

(e) Credits may only be used if the gasoline manufacturer owns them at the time of use.

(f) Gasoline manufacturers that generate, transact, or use credits under this subpart must report to EPA as specified in §1090.905 using forms and procedures specified by EPA.

§1090.725 Credit generation.

(a) *Parties that may generate credits.* (1) Only gasoline manufacturers may generate credits for use towards an average standard specified in subpart C of this part.

(2) No person other than a gasoline manufacturer may generate credits. Credits may not be generated for gasoline produced by the following activities: transmix processing, transmix blending, oxygenate blending, certified butane blending, certified pentane blending, or importation of gasoline by truck and rail using the alternative sampling and testing requirements in §1090.1620.

(3) No gasoline manufacturer may generate sulfur credits at a facility if that facility used sulfur credits in that same compliance year. No gasoline manufacturer may generate benzene credits at a facility if that facility used benzene credits in that same compliance year.

(b) *Credit year.* Credits generated under this section must be identified by the year of generation. For example, credits generated on gasoline produced in 2021 must be identified as 2021 credits.

(c) *Sulfur credit generation.* (1) The number of credits generated for use in complying with the sulfur average standard in §1090.205(a) must be calculated annually as follows:

$$C_{S,y} = \left(\sum_{i=1}^n V_i \cdot 10 \right) - CSV_y$$

Where:

$C_{S,y}$ = Credits generated for the compliance period for use in complying with the sulfur average standard in §1090.205(a), in ppm-gallons. Fractional values must be rounded in accordance with §1090.50.

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 compliance period y , per §1090.700(a)(1), in ppm-gallons.

(2) The value of $C_{S,y}$ must be positive to generate credits.

(3) Sulfur credits are in units of “ppm-gallons”.

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

(d) *Benzene credit generation.* (1) The number of credits generated for use in complying with the benzene average standard in §1090.210(a) must be calculated annually as follows:

$$C_{Bz,y} = \left(\sum_{i=1}^n V_i \cdot 0.0062 \right) - CBV_y$$

Where:

$C_{Bz,y}$ = Benzene credits generated for the compliance period for use in complying with the benzene average standard in §1090.210(a), in benzene gallons. Fractional values must be rounded in accordance with §1090.50 to the nearest whole benzene gallon.

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

B_i = The benzene content of batch i , 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.

CBV_y = Compliance benzene value for compliance period y , per §1090.700(b)(1), in benzene gallons.

(2) The value of $C_{Bz,y}$ must be positive to generate credits.

(3) Benzene credits are in units of “benzene gallons”.

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

(e) Gasoline manufacturers may only generate credits after they have finished producing or importing gasoline for the compliance period.

(f) Gasoline manufacturers that generate credits under this section must report to EPA all information regarding the generation transaction as specified in §1090.905 using forms and procedures specified by EPA.

§1090.730 Credit transfers.

Gasoline manufacturers may only obtain credits from another gasoline manufacturer to meet an average standard specified in subpart C of this part if all application provisions of this section are met.

(a) The credits are generated as specified in §1090.725 and reported as specified in §1090.905.

(b) The credits are used for compliance with the limitations regarding the appropriate periods for credit use in §1090.720.

(c) Any credit transfer must take place no later than the compliance deadline specified in §1090.900(d) 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 manufacturer that generated the credit (“transferor”) may

only be made to a gasoline manufacturer 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 gasoline manufacturer that intends to use the credit. Intracompany credit transfers 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 manufacturer.

(f) No person may transfer credits if the transfer would cause them to incur a deficit.

(g) Unless the transferor and transferee are the same party (e.g., intracompany transfers), the transferor must supply to the transferee records as specified in §1090.1210(g) indicating the years the credits were generated, the identity of the gasoline manufacturer 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 as specified in §1090.905 using forms and procedures specified by EPA.

§1090.735 Invalid credits and remedial actions.

For credits that have been calculated or generated 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 manufacturer’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 manufacturer trades or banks the credits.

(c) *Remedial action.* The gasoline manufacturer 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 in accordance with subpart J of this part using forms and procedures specified by EPA.

§1090.740 Downstream BOB recertification.

(a)(1) Gasoline manufacturers may recertify a BOB that another gasoline manufacturer has specified blending instructions for oxygenate(s) under §1090.710 for a different type and/or amount of oxygenate (including gasoline recertification to contain no oxygenate) if the recertifying gasoline manufacturer meets all the requirements of this section.

(2) Gasoline manufacturers must comply with applicable requirements of this part and incur deficits to be included in the compliance calculations in §1090.700.

(3) Unless otherwise required under this part, gasoline manufacturers that recertify 200,000 or less gallons of BOB under this section do not need to arrange for an auditor to conduct audits under subpart R of this part.

(b) Gasoline manufacturers that recertify a BOB under this section must calculate deficits for each batch and the annual total deficits for sulfur, in ppm-gallons, and benzene, in benzene gallons, as follows:

(1) *Sulfur deficits from downstream BOB recertification.* Calculate the quantity of sulfur ppm-gallons from BOB recertification to for the individual batch of BOB recertified as follows:

$$D_{S_Oxy_Batch} = 11\text{ppm} \cdot V_{\text{Base}} \cdot \left[\frac{1}{(1 - \text{PTD}_{\text{Oxy}})} - 1 \right]$$

Where:

$D_{S_Oxy_Batch}$ = Sulfur deficit resulting from recertifying the gasoline, in ppm-gallons. Fractional values must be rounded in accordance with §1090.50.

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

PTD_{Oxy} = The volume fraction of oxygenate that would have been added to the BOB as specified on PTDs.

(2) *Benzene deficits from downstream BOB recertification.* Calculate the quantity of benzene gallons from BOB recertification to for the individual batch of BOB recertified as follows:

$$D_{Bz_Oxy_Batch} = 0.0068 \cdot V_{\text{Base}} \cdot \left[\frac{1}{(1 - \text{PTD}_{\text{Oxy}})} - 1 \right]$$

Where:

$D_{Bz_Oxy_Batch}$ = Benzene deficit resulting from recertifying gasoline, in benzene gallons. Fractional values must be rounded in accordance with §1090.50.

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

PTD_{Oxy} = The volume fraction of oxygenate that would have been added to the BOB as specified on PTDs.

(3) *Total annual sulfur deficits from downstream BOB recertification.* Calculate the total annual sulfur deficits from downstream BOB recertification as follows:

$$D_{S_Oxy_Total} = \sum_{i=1}^n D_{S_Oxy_Batch_i}$$

Where:

$D_{S_Oxy_Total}$ = The total annual sulfur deficit from downstream BOB recertification during the compliance period, in ppm-gallons. Fractional values must be rounded in accordance with §1090.50.

$D_{S_Oxy_Batch_i}$ = The estimated sulfur deficit for a batch of BOB recertified as calculated under paragraph (b)(1) of this section, in ppm-gallons.

n = The number of batches of BOB recertified during the compliance period.

i = Individual batch of BOB recertified during the compliance period.

(4) *Total annual benzene deficits from downstream BOB recertification.* Calculate the total annual benzene deficit from downstream BOB recertification as follows:

$$D_{Bz_Oxy_Total} = \sum_{i=1}^n D_{Bz_Oxy_Batch_i}$$

Where:

$D_{Bz_Oxy_Total}$ = The total annual benzene deficit from downstream BOB recertification, in benzene gallons during the compliance. Fractional values must be rounded in accordance with §1090.50.

$D_{Bz_Oxy_Batch_i}$ = The estimated benzene deficit for a batch of BOB recertified as calculated under paragraph (b)(2) of this section, in benzene gallons.

n = The number of batches of BOB recertified during the compliance period.

i = Individual batch of BOB recertified during the compliance period.

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

(d) Deficits incurred under this section must be fulfilled in the compliance period in which they occur and may not be carried forward under §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) Fuel manufacturers, including:

(i) Gasoline manufacturers; and

(ii) Diesel fuel and ECA marine fuel manufacturers.

(2) Oxygenate blenders.

(3) Oxygenate producers, including DFE producers.

(4) Certified butane blenders.

(5) Certified pentane producers.

(6) Certified pentane blenders.

(7) Transmix processors.

(8) Certified ethanol denaturant producers and importers.

(9) Distributors, carriers, pipeline operators and resellers who are part of the 500 ppm LM fuel distribution chain under a compliance plan submitted under §1090.515(c).

(10) Independent surveyors.

(11) Auditors.

(12) Third parties that submit reports on behalf of any party regulated under this part. Such parties must register and associate their registration 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 60 days in advance of the first date that such person engages in any activity under this part requiring registration under paragraph (a) of this section.

(2) *Existing registrants.* Parties that are already registered with EPA as of January 1, 2021, 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 30 days of any occasion when the registration information previously supplied becomes incomplete or inaccurate.

(d) *Forms and procedures for registration.* All registrants must use forms and procedures specified by EPA.

(e) *Company and facility identification.* EPA will provide registrants with company and facility identifiers 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 than a fuel manufacturing facility manager, or equivalent. Delegation must be made using forms and procedures specified 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 for 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 certified pentane producers.* (1) A description of the production facility that demonstrates that the facility is capable of producing certified pentane that is compliant with the requirements of this part without significant modifications to the existing facility.

(2) A description of how the certified pentane will be shipped from the production facility to the certified 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 certified pentane to be in violation of the standards in this part.

§1090.810 Voluntary cancellation of company or facility registration.

(a) *Criteria for cancellation.* A party may request cancellation of the registration of the company or any of its facilities at any time. Such request must use forms and procedures specified by EPA.

(b) *Effect of cancellation.* A party whose registration is canceled:

(1) Will still be liable for violation of any requirements under this part.

(2) Will not be listed on any public list of actively registered companies that is maintained by EPA.

(3) Will not have access to any of the electronic reporting systems associated with this subpart.

(4) Will still be required to follow the recordkeeping provisions under subpart L of this part.

(c) *Re-registration.* If a party whose registration has been cancelled wants to re-register, it must do all the following:

(1) Notify EPA of its intent to re-register.

(2) Provide any missing reports and correct any identified deficiencies.

(3) Refrain from initiating a new registration unless directed to by EPA.

(4) Submit updated information as needed.

§1090.815 Deactivation (involuntary cancellation) of company registration.

(a) *Criteria for deactivation.* EPA may deactivate the registration of any party required to register under this part, using the process specified in paragraph (b) of this section, if any of the following criteria are met:

(1) The party has not accessed its account or engaged in any registration or reporting activity within 24 months.

(2) The party has failed to comply with the registration requirements of this section.

(3) The party has failed to submit any required notification or report within 30 days of the required submission date.

(4) The attest engagement has not been received within 30 days of the required submission date.

(5) The party fails to pay a penalty or to perform any requirement under the terms of a court order, administrative order, consent decree, or administrative settlement between the party and EPA.

(6) The party submits false or incomplete information.

(7) The party denies EPA access or prevents EPA from completing authorized activities under section 114 or 208 of the Clean Air Act despite presenting a warrant or court order. This includes a failure to provide reasonable assistance.

(8) The party fails to keep or provide the records required by this subpart.

(9) The party otherwise circumvents the intent of the Clean Air Act or of this subpart.

(b) *Process for deactivation.* Except as specified in paragraph (c) of this section, EPA will use the following process whenever it decides to deactivate the registration of a party:

(1) EPA will provide written notification to the responsible corporate officer identifying the reasons or deficiencies for which EPA intends to deactivate the party's registration. The party will have 14 calendar days from the date of the notification to correct the deficiencies identified or explain why there is no need for corrective action.

(2) If the basis for EPA's notice of intent to deactivate registration is the absence of activity under paragraph (a)(1) of this section, a stated intent to engage in activity will be sufficient to avoid deactivation of registration.

(3) If the party does not correct identified deficiencies under paragraphs (a)(2) through (9) of this section or does not provide an adequate explanation regarding why such correction is not necessary within the time allotted for response, EPA may deactivate the party's registration without further notice to the party.

(c) *Immediate deactivation.* In instances of willfulness or those in which public health, interest, or safety requires otherwise, EPA may deactivate the registration of the party without any notice to the party. EPA will provide written notification to the responsible corporate officer identifying the reasons EPA deactivated the registration of the party.

(d) *Effect of deactivation.* A party whose registration is deactivated:

- (1) Will still be liable for violation of any requirement under this part.
 - (2) Will not be listed on any public list of actively registered companies that is maintained by EPA.
 - (3) Will not have access to any of the electronic reporting systems associated with this part.
 - (4) Will still be required to follow the recordkeeping provisions under subpart L of this part.
- (e) *Re-registration.* If a party whose registration has been deactivated wishes to re-register, they may seek to do so by submitting a new registration pursuant to the requirements of this subpart. In order to re-register, the party must:
- (1) Notify EPA of its intent to re-register.
 - (2) Provide any missing reports and correct any identified deficiencies.
 - (3) Refrain from initiating a new registration unless directed to by EPA.
 - (4) Submit updated information as needed.

§1090.820 Changes of ownership.

- (a) When a company or any of its facilities will change ownership, the company must notify EPA within 30 days after the date of sale or change in ownership.
- (b) The notification required under paragraph (a) of this section must include all the following:
 - (1) The effective date of the transfer of ownership of the facility and a summary of any changes to the registration information for the affected companies and facilities.
 - (2) Documents that demonstrate the sale or change in ownership of the facility.
 - (3) A letter, signed by an RCO from the company that currently owns or will own the company and/or facility and, if possible, an RCO from the company that previously registered the company and/or facility that details the effective date of the transfer of ownership of the company and/or facility and summarizes any changes to the registration information.
 - (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.* (1) All reporting, including all transacting of credits under this part, must be submitted electronically, using forms and procedures specified by EPA.

(2) 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 under this subpart must be rounded in accordance with §1090.50.

(d) *Report submission.* All annual reports required under this subpart, except attest engagement reports, must be submitted by March 31 for the preceding compliance period (e.g., reports covering the calendar year 2021 must be submitted to EPA by no later than March 31, 2022). Attest engagement reports must be submitted by June 1 for the preceding compliance period (e.g., attest engagement reports covering calendar year 2021 must be submitted to EPA by no later than June 1, 2022). Independent survey quarterly reports must be submitted by the deadlines in Table 1 to §1090.925.

§1090.905 Annual, batch, and credit transaction reporting for gasoline manufacturers.

(a) *Annual compliance demonstration for sulfur.* Gasoline manufacturers, for each of their facilities, must submit a report for each compliance period that includes the following information:

(1) *Company-level reporting.* (i) The EPA-issued company and facility identifiers.

(ii) Separately provide information for credits, and separately by compliance period of creation, as follows:

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

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

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

(D) Any other information as EPA may require.

(2) *Facility-level reporting.* For each refinery, import facility or aggregate import facility, as applicable:

(i) The EPA-issued company and facility identifiers.

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

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

(iv) The unadjusted volume-weighted average annual sulfur level, expressed in ppm.

(v) The net annual average sulfur level, expressed in ppm.

(vi) Separately provide information for credits, and separately by compliance period of creation, as follows:

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

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

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

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

(E) Total of any credit deficit(s) incurred from downstream oxygenate recertification under §1090.740(b)(1).

(vii) Any other information as EPA may require.

(b) *Annual compliance demonstration for benzene.* Any gasoline manufacturer for each of its facilities must submit a report for each compliance period that includes all the following information:

(1) *Company-level reporting.* (i) The EPA-issued company identifier and compliance level.

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

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

(iv) If any credits were obtained from or transferred to other parties, and for each other party, its name and EPA-issued company identifier, and the number of credits obtained from or transferred to the other party.

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

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

(B) If any credits were obtained from or transferred to other parties, and for each other party, its name and EPA-issued company identifier, and the number of credits obtained from or transferred to the other party.

- (C) The number of credits that expired at the end of the compliance period.
- (E) The number of credits that will carry over into the next compliance period.
- (vi) The number of credits that expired at the end of the compliance period.
- (vii) The number of credits that will carry over into the next compliance period.
- (viii) Any other information as EPA may require.

(2) *Facility-level reporting.* For each refinery, import facility or aggregate import facility, as applicable:

- (i) The EPA-issued company and facility identifiers.
- (ii) The compliance benzene value, expressed in gallons.
- (iii) The total volume of gasoline produced or imported, expressed in gallons.
- (iv) The unadjusted volume-weighted average annual benzene concentration, expressed in % volume.

(v) The net annual average benzene level, expressed in % volume.

(vi) Separately provide information for credits, and separately by compliance period of creation, as follows:

- (A) The number of credits generated during the compliance period.
- (B) The number of credits retired during the compliance period.
- (C) The credit deficit that was carried over from the previous compliance period
- (D) The credit deficit to be carried over into the next compliance period.

(E) Total of any credit deficit(s) incurred from downstream oxygenate recertification under §1090.740(b)(1).

(vii) Any other information as EPA may require.

(c) *Batch reporting.* Any gasoline manufacturers for each of its facilities must report the following information on a per-batch basis for gasoline and regulated gasoline blendstocks:

(1) For gasoline (CG and RFG), and BOB for which the fuel manufacturer does not include the addition of downstream oxygenate in its compliance calculations (i.e., when oxygenate to be blended with the BOB is not reported by, or included in, the compliance calculations of the gasoline manufacturer that produced or imported the BOB):

- (i) The EPA-issued company and facility identifiers.

(ii) The batch number.

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

(iv) The batch volume, expressed in gallons.

(v) The designation of the gasoline or BOB (i.e., RFG, CG, RBOB, CBOB).

(vi) The tested sulfur content of the batch, expressed in ppm, and the test method used to measure the sulfur content.

(vii) The tested benzene content of the batch, expressed as a volume percentage, and the test method used to measure the benzene content. Gasoline produced by a transmix processor using only TGP or both TGP and PCG under §1090.510 is exempt from the requirement to measure and report the benzene content under §1090.1320. Transmix processors that use this exemption must report whether the batch was produced using TGP or both TGP and PCG.

(viii) For all batches of summer gasoline or BOB:

(A) The applicable RVP standard, as specified in §1090.215.

(B) The tested RVP of the batch, expressed in psi, and the test method used to measure the RVP.

(ix) If the gasoline contains oxygenate, the type(s) of oxygenate and tested oxygenate content(s), expressed as a volume percentage, and the test method used to measure the content of each oxygenate.

(2) For BOB in which the oxygenate to be blended with the BOB is reported by, and included in, the compliance calculations of the gasoline manufacturer that produced the BOB:

(i) The EPA-issued company and facility identifiers.

(ii) The batch identification.

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

(iv) The batch volume, expressed in gallons. This volume is the sum of the BOB volume and the oxygenate volume that the gasoline manufacturer specifies to be blended with the BOB.

(v) The designation of the BOB (CBOB or RBOB) used to prepare the hand blend of BOB and oxygenate under §1090.1340.

(vi) The tested sulfur content for both the BOB and the hand blend of BOB and oxygenate prepared under §1090.1340, and the test method used to measure the sulfur content.

(vii) The tested benzene content for the hand blend of BOB and oxygenate prepared under §1090.1340, and the test method used to measure the benzene content.

(viii) For all batches of summer gasoline:

(A) The applicable RVP standard, as specified in §1090.215, for the neat CBOB, or hand blend of RBOB and oxygenate prepared under §1090.1340, and the test method used to measure RVP.

(B) The tested RVP of the both the BOB and the hand blend prepared under §1090.1340, expressed in psi, and the test method used to measure the RVP.

(ix) The type(s) of oxygenates(s) and oxygenate content for each oxygenate, expressed as a volume percentage, in the hand blend of BOB and oxygenate prepared under §1090.1340, and the test method used for each oxygenate.

(3) For blendstock(s) added to PCG by gasoline manufacturers complying by subtraction under §1090.1320(a)(1):

(i) For the PCG prior to the addition of blendstock(s):

(A) The EPA-issued company and facility identifiers for the facility at which the PCG is blended to produce a new batch.

(B) The batch number assigned by the facility at which the PCG is blended to produce a new batch.

(C) The date the batch was received or, for PCG that was not received from another company, the date the PCG was designated to be used to produce a new batch of gasoline.

(D) The batch volume including the volume of any oxygenate that would have been added to the PCG, expressed as a negative number in gallons.

(E) The designation of the PCG.

(F) The tested sulfur content of the batch, expressed in ppm, and the test method used to measure the sulfur content.

(G) The tested benzene content of the batch, expressed as a volume percentage, and the test method used to measure the benzene content.

(H) For all batches of summer gasoline or BOB:

(I) The applicable RVP standard, as specified in §1090.215.

(2) The tested RVP of the batch, expressed in psi, and the test method used to measure the RVP.

(I) If the PCG contains oxygenate, the type(s) of oxygenate(s) and oxygenate(s) content, expressed as a volume percentage, and the test method used to measure the content of each oxygenate;

(J) Identification of the PCG batch as such.

(ii) For the batch of gasoline or BOB produced using PCG and blendstock:

(A) For batches of finished gasoline or neat BOB, all the information specified in paragraph (c)(1) of this section.

(B) For batches of BOB in which the oxygenate to be blended with the BOB is included in the gasoline manufacturer's compliance calculations, all the information specified in paragraph (c)(2) of this section.

(4) For blendstock added by gasoline manufacturers to PCG and complying by addition per §1090.1320(a)(2) (i.e., treat the blendstock as a separate batch):

(i) For the blendstock, the sulfur content, benzene content, and oxygenate type and content of the batch, and for summer gasoline, the RVP of the batch.

(ii) For batches produced by adding blendstock to PCG, the sulfur content of the batch, and for summer gasoline, the RVP of the batch.

(5) For certified butane blended by certified butane blenders and certified pentane blended by certified pentane blenders:

(i) For the certified butane or certified pentane batch:

(A) The batch number.

(B) The date the batch was received by the blender.

(C) The batch volume, expressed in gallons.

(D) The designation of the batch (certified butane or certified pentane).

(E) The volume percentage of butane in butane batches, or pentane in pentane batches provided by the butane or pentane supplier.

(F) The sulfur content of the batch, expressed in ppm, provided by the butane or pentane supplier.

(G) The benzene content of the batch, expressed in volume percent, provided by the butane or pentane supplier.

(H) The RVP of the batch, expressed in psi, provided by the butane or pentane supplier for butane or pentane blended into PCG from May 1 through September 15.

(ii) For the batch of blended product (i.e., PCG plus butane or PCG plus pentane):

(A) The batch number.

- (B) The date the batch was produced.
 - (C) The batch volume, expressed in gallons.
 - (D) The designation of the blended product.
 - (E) The RVP of the batch, expressed in psi, and the test method used to measure the RVP.
- (6) For manufacturers of TGP and any blendstocks added to TGP:
 - (i) For the TGP, the sulfur content of the batch, and for summer gasoline, the RVP of the batch.
 - (ii) For blendstocks added to TGP, where the TGP is treated like PCG, one of the following:
 - (A) The information specified in paragraph (c)(3) of this section.
 - (B) The information specified in paragraph (c)(4) of this section.
 - (7) For GTAB:
 - (i) The EPA-issued company and facility identifiers.
 - (ii) The batch number.
 - (iii) The date the batch was imported.
 - (iv) The batch volume, expressed in gallons.
 - (v) The designation of the product as GTAB.
 - (8) Any other information as EPA may require.
- (d) *Credit transactions.* (1) Any party that is required to demonstrate annual compliance for either sulfur or benzene under paragraph (a) or (b) of this section must submit information related to individual transactions involving sulfur and benzene credits including all the following:
- (i) The generation, purchase, sale, or retirement of such credits.
 - (ii) Associated volumes and properties of fuel.
- (2) If any credits were obtained from or transferred to other fuel manufacturers, and for each other party, its name and EPA-issued company identifier, the number of credits obtained from or transferred to the other party, and the year the credits were generated.
- (3) Any other information as EPA may require.

§1090.910 Reporting for gasoline manufacturers that recertify BOB to gasoline.

Any person that recertifies BOB under §1090.740 must report the information of this section, as applicable.

(a) *Batch reporting.* (1) Any person that recertifies a BOB under §1090.740 with less oxygenate than specified by the fuel manufacturer of the BOB must report the following for each batch:

(i) The EPA-issued company and facility identifiers for the recertifying gasoline manufacturer.

(ii) The batch number assigned by the recertifying gasoline manufacturer.

(iii) The date the batch was recertified.

(iv) The batch volume, expressed as a negative number in gallons. The volume is the amount of oxygenate that the recertifying gasoline manufacturer did not blend with the BOB.

(v) The designation of the batch.

(vi) A sulfur content of 12 ppm.

(vii) A benzene content of 0.07 volume percent.

(viii) The type(s) of oxygenate and oxygenate(s) content, expressed as a volume percentage.

(ix) The sulfur deficit for the batch calculated under §1090.740(b)(1).

(x) The benzene deficit for the batch calculated under §1090.740(b)(2).

(2) Any person that recertifies a BOB under §1090.740 with more oxygenate than specified by the fuel manufacturer of the BOB need not report the batch.

(b) *Annual sulfur and benzene compliance reporting.* Any person that recertifies a BOB under §1090.740 must include any deficits incurred from recertification in reports under §1090.905(a) and (b).

(c) *Credit transactions.* Any person that recertifies a BOB under §1090.740 must report any credit transactions under §1090.905(d).

§1090.915 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 identifiers.

(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:

(1) The batch number.

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

(3) One of the following product types:

(i) Denatured ethanol using certified ethanol denaturant complying with §1090.235(b).

(ii) Denatured ethanol from non-certified denaturant.

(iii) A specified oxygenate other than ethanol.

(4) The volume of the batch, expressed in gallons.

(5) The sulfur content of the batch, expressed in ppm, and the test method used to measure the sulfur content.

(d) Any other information as EPA may require.

§1090.920 Reports by certified pentane producers and importers.

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

(a) The EPA-issued company and facility identifiers.

(b) For each batch of certified 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, and the test method used to measure pentane content.

(5) The sulfur content of the batch, expressed in ppm, and the test method used to measure the sulfur content.

(6) The benzene content of the batch, expressed as a volume percentage, and the test method used to measure the benzene content.

- (7) The tested RVP, expressed in psi, and the test method used to measure the RVP.
- (c) Any other information as EPA may require.

§1090.925 Reports by independent surveyors.

(a) *General procedures.* (1) Independent surveyors must electronically submit any plans, notifications, or reports required under this subpart using forms and procedures specified by EPA.

(2) For each report required under this section, the independent surveyor must attest that the survey was conducted in accordance with an EPA-approved survey plan and that the survey results are accurate.

(3) The independent surveyor must include EPA-issued company identifiers on each report required under this section.

(4) Independent surveyors must submit quarterly reports required under paragraph (b) of this section by the following deadlines:

Table 1 to §1090.925—Quarterly Reporting Deadlines

Calendar quarter	Time period covered	Quarterly report deadline
Quarter 1	January 1-March 31	June 1.
Quarter 2	April 1-June 30	September 1.
Quarter 3	July 1-September 30	December 1.
Quarter 4	October 1-December 31	March 31.

(b) *Quarterly reporting.* Independent surveyors must submit the following information quarterly, as applicable:

(1) For each retail outlet sampled by the independent surveyor:

(i) The identification information for the retail outlet, as assigned by the surveyor in a consistent manner and as described in the survey plan.

(ii) The displayed fuel manufacturer brand name at the retail outlet, if any.

(iii) The location (e.g., address) of the retail outlet.

(2) For each gasoline sample collected at a retail outlet by the independent surveyor:

(i) A description of the labeling of the fuel dispenser(s) (e.g., “E15”) from which the independent surveyor collected the sample.

(ii) The date and time the independent surveyor collected the sample.

(iii) The test results for each gasoline sample, and the test methods used, as determined by the independent surveyor including the following parameters:

- (A) The oxygen content in weight percent.
- (B) The oxygenates type(s) and amount(s) by weight and volume percent.
- (C) The sulfur content in ppm.
- (D) The benzene content in volume percent.
- (E) The specific gravity.
- (F) The RVP in psi, if tested.
- (G) The aromatic content in volume percent, if tested.
- (H) The olefin content in volume percent, if tested.
- (I) The distillation parameters (i.e., E200, E300, T50, T90), if tested.

(3) For each diesel sample collected at a retail outlet by the independent surveyor:

(i) A description of the labeling of the fuel dispenser(s) (e.g., “E15”) from which the independent surveyor collected the sample.

(ii) The date and time the independent surveyor collected the sample.

(iii) The sulfur content for the diesel sample, and the test method used, as determined by the independent surveyor, in ppm.

(4) Any other information as EPA may require.

(c) *Annual reporting.* Independent surveyors must submit the following information annually by March 31.

(1) An identification of the parties that participated in the survey during the compliance year.

(2) An identification of each geographic area included in a survey.

(3) Summary statistics for each identified geographic area including the following:

(i) The number of samples collected and tested.

(ii) The mean, median, and range expressed in appropriate units for each measured gasoline and diesel parameter.

(iii) The standard deviation for each measured gasoline and diesel parameter.

(iv) The estimated compliance rate for each measured gasoline and diesel parameter subject to a per-gallon standard in subpart C or D of this part.

(v) A summary of potential non-compliance issues.

(4) Any other information as EPA may require.

§1090.930 Reports by auditors.

(a) Attest engagement reports must be submitted by independent auditors who are registered with EPA and associated with a company, or companies, via registration under subpart I of this part. Each attest engagement must clearly identify the company and compliance level (e.g., facility), time period, etc., covered by the report. Attest engagement reports covered by this section include those required under this part, and under 40 CFR part 80, subpart M, beginning with the report due June 1, 2022.

(b) An attest engagement report must be submitted to EPA covering each compliance period by June 1 of the following calendar year. The auditor must make the attest engagement available to the company for which it was performed.

(c) The attest engagement must comply with subpart R of this part and the attest engagement report must clearly identify the methodologies followed and any findings, exceptions, etc.

(d) A single attest engagement submission by the auditor may include procedures performed under this part and under 40 CFR part 80, subpart M. If a single submission method is used, the auditor must clearly and separately describe the procedures and findings for each program.

(e) If the attest engagement reveals discrepancies or instances of noncompliance requiring correcting action, then the RCO must submit a statement acknowledging them and stating that they are undertaking corrective action.

§1090.935 Reports by diesel manufacturers.

(a) *Batch reporting.* (1) For each compliance period, manufacturers of ULSD must submit the following information:

(i) The EPA-issued company and facility identifiers for the manufacturer of ULSD.

(ii) The highest sulfur content level observed for a batch of ULSD produced during the compliance period on a company level, as expressed in ppm.

(iii) The average sulfur content level of all batches produced during the compliance period on a company level, as expressed in ppm.

(iv) A list of all batches of ULSD that exceeded the 15 ppm maximum per-gallon sulfur standard by facility. For each batch of ULSD that exceeded the 15 ppm maximum per-gallon sulfur standard, report the following:

- (A) The batch number.
- (B) The date the batch was produced.
- (C) The volume of the batch.
- (D) The sulfur content of the batch.
- (E) The corrective action taken, if any.

Subpart K—Batch Certification, Designation, and Product Transfer Document Requirements

BATCH CERTIFICATION AND DESIGNATION

§1090.1100 Batch certification requirements.

(a) *General provisions.* (1) Fuel manufacturers, fuel additive manufacturers, and regulated blendstock producers must certify batches of fuels, fuel additives, and regulated blendstocks as specified in this section.

(2) Fuels, fuel additives, and regulated blendstocks that are exempt under subpart G of this part from the standards in subparts C and D of this part do not need to be certified.

(3) For purposes of this part, the volume of a batch is the sum of all shipments or transfers of fuel, fuel additive or regulated blendstock out of the tank or vessel in which the fuel, fuel additive, or regulated blendstock was certified. If a volume of fuel, fuel additive, or regulated blendstock is placed in a tank, certified (if not previously certified), and is not changed in some way, it is considered to be the same batch even if several shipments or transfers are made out of that tank.

(4) No person may introduce into commerce gasoline, diesel fuel, or ECA marine fuel that is not certified under this section.

(b) *Gasoline.* (1) Gasoline manufacturers must certify gasoline as specified in paragraph (b)(2) of this section prior to introducing the fuel into commerce.

(2) To certify batches of gasoline, gasoline manufacturers must do all the following:

(i) Register with EPA as a refiner, blending manufacturer, importer, transmix processor, certified butane blender, or certified pentane blender under subpart I of this part, as applicable, prior to producing gasoline.

(ii) Ensure that each batch of gasoline meets the applicable requirements of subpart C of this part using the applicable procedures specified in subpart M of this part. Transmix processors and transmix blenders must also meet all applicable requirements in subpart F of this part to ensure that each batch of gasoline meets the applicable requirements in subpart C of this part.

(iii) Assign batch numbers as specified in §1090.1120.

(iv) Designate batches of gasoline as specified in §1090.1110.

(3) Certified gasoline may be mixed with other certified gasoline without re-certification if the resulting mixture complies with §1090.1110 and subpart C of this part. Resulting mixtures are not new batches and should not be assigned new batch numbers.

(4) Any person that mixes summer gasoline with summer or winter gasoline that has a different designation must either:

(i) Designate the resulting mixture as meeting the least stringent RVP designation of any batch that is mixed. For example, a distributor who mixes Summer RFG with 7.8 psi Summer CG must designate the mixture as 7.8 psi Summer CG.

(ii) Determine the RVP of the mixture using the procedures specified in subpart M and designate the new batch accurately to reflect the RVP of the gasoline as described under this section.

(5) Any person that mixes summer gasoline with winter gasoline to transition any storage tank from winter to summer gasoline is exempt from the requirement in paragraph (b)(4)(ii) of this section but must assure that the gasoline meets the applicable RVP standard in §1090.215.

(c) *Diesel fuel and ECA marine fuel.* (1) Diesel fuel and ECA marine fuel manufacturers must certify diesel fuel as specified in paragraph (c)(2) of this section prior to introducing the fuel into commerce.

(2) To certify batches of diesel fuel and ECA marine fuel, diesel fuel and ECA marine fuel manufacturers must do all the following:

(i) Register with EPA as a refiner, blending manufacturer, importer, or transmix processor under subpart I of this part, as applicable, prior to producing diesel fuel or ECA marine fuel.

(ii) Ensure that each batch of diesel fuel or ECA marine fuel meets the applicable requirements of subpart D of this part using the applicable procedures specified in subpart M of this part. Transmix processors must also meet all applicable requirements specified in subpart F of this part to ensure that each batch of diesel fuel or ECA marine fuel meets the applicable requirements in subpart D of this part.

(iii) Assign batch numbers as specified in §1090.1120.

(iv) Designate batches of diesel fuel as specified in §1090.1115.

(d) *Oxygenates.* (1) Oxygenate producers must certify oxygenates intended to be blended into gasoline as specified in paragraph (d)(2) of this section.

(2) To certify batches of oxygenates, oxygenate producers and importers must do the following:

(i) Register with EPA as an oxygenate producer under subpart I of this part prior to either producing or importing oxygenate intended for blending into gasoline.

(ii) Ensure that each batch of oxygenate meets the requirements in §1090.230 by using the applicable procedures specified in subpart M of this part.

(iii) Assign batch numbers as specified in §1090.1120.

(iv) Designate batches of oxygenate as intended for blending with gasoline as specified in §1090.1110(c).

(e) *Certified butane.* (1) Certified butane producers must certify butane intended to be blended by a blending manufacturer under §1090.1320 as specified in paragraph (e)(2) of this section.

(2) To certify batches of certified butane, certified butane producers must do the following:

(i) Ensure that each batch of certified butane meets the requirements in §1090.220 by using the applicable procedures specified in subpart M of this part.

(A) Testing must occur after the most recent delivery into the producer's storage tank, and prior to transferring the certified butane batch for delivery.

(B) The certified butane producer must provide documentation of the test results for each batch of certified butane to the certified butane blender.

(ii) Designate batches of certified butane as intended for blending with gasoline as specified in §1090.1110(d).

(f) *Certified pentane.* (1) Certified pentane producers must certify pentane intended to be blended by a blending manufacturer under §1090.1320 as specified in paragraph (f)(2) of this section.

(2) To certify batches of certified pentane, certified pentane producers must do the following:

(i) Register with EPA as a certified pentane producer under subpart I of this part prior to producing certified pentane.

(ii) Ensure that each batch of certified pentane meets the requirements in §1090.225 by using the applicable procedures specified in subpart M of this part.

(A) Testing must occur after the most recent delivery into the producer's storage tank, before transferring the certified pentane batch for delivery.

(B) The certified pentane producer must provide documentation of the test results for each batch of certified pentane to the certified pentane blender.

(iii) Assign batch numbers as specified in §1090.1120.

(iv) Designate batches of certified pentane as intended for blending with gasoline as specified in §1090.1110(d).

(g) *Certified ethanol denaturant.* (1) Certified ethanol denaturant producers must certify certified ethanol denaturant intended to be used to make DFE that meets the requirements in §1090.235 as specified in paragraph (g)(2) of this section.

(2) To certify batches of certified ethanol denaturant, certified ethanol denaturant producers must do the following:

(i) Register with EPA as a certified ethanol denaturant producer under subpart I of this part prior to producing certified ethanol denaturant.

(ii) Ensure that each batch of certified ethanol denaturant meets the requirements in §1090.235 by using the applicable procedures specified in subpart M of this part.

(iii) Assign batch numbers as specified in §1090.1120.

(iv) Designate batches of certified ethanol denaturant as intended for blending with gasoline as specified in §1090.1110(e).

§1090.1105 Designation of batches of fuels, fuel additives, and regulated blendstocks.

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

(b) Fuel manufacturers, fuel additive manufacturers, and regulated blendstock producers must include designations on PTDs as specified in this subpart and must make the designation prior to the batch leaving the facility where the batch was produced.

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

(d) A person must comply with all provisions of this part even if they fail to designate or improperly designate a batch of fuel, fuel additive, or regulated blendstock.

(e) No person may use the designation provisions of this subpart to circumvent any standard or requirement in this part.

§1090.1110 Designation requirements for gasoline.

(a) *Designation requirements for gasoline manufacturers.* Gasoline manufacturers must accurately and clearly designate each batch of gasoline as follows:

(1) Gasoline manufacturers must designate each batch of gasoline as one of the following fuel types:

(i) Winter RFG or RBOB.

(ii) Summer RFG or RBOB.

(iii) Winter CG or CBOB.

(iv) Summer CG or CBOB.

(v) Exempt gasoline under subpart G of this part (including additional identifying information).

(vi) California gasoline.

(2) Manufacturers must further designate gasoline designated as Summer CG or Summer CBOB as follows:

(i) 7.8 psi Summer CG or CBOB.

(ii) 9.0 psi Summer CG or CBOB.

(iii) SIP-controlled Summer CG or CBOB.

(3) CBOB and RBOB manufacturers must further designate the CBOB or RBOB with the type(s) and amount(s) of oxygenate specified to be blended with the CBOB or RBOB as specified in §1090.710.

(b) *Designation requirements for gasoline distributors.* Gasoline distributors must accurately and clearly designate each batch or portion of a batch of gasoline for which they transfer custody to another facility as follows:

(1) Distributors must accurately and clearly classify each batch or portion of each batch of gasoline as specified by the gasoline manufacturer in paragraph (a) of this section.

(2) Distributors may redesignate batches or portions of batches of gasoline for which they transfer custody to another facility without recertifying the batch or portion of the batch as follows:

(i) Winter RFG or RBOB may be redesignated as Winter CG or CBOB.

(ii) Winter CG or CBOB may be redesignated as Winter RFG or RBOB.

(iii) Summer RFG or RBOB and Summer CG or CBOB may be redesignated to a less stringent RVP designation (including Winter RFG or CG or Winter RBOB or CBOB as appropriate). For example, a distributor could redesignate without recertification a portion of a batch of Summer RFG to 7.8 psi Summer CG or 9.0 psi Summer CG.

(iv) Summer RFG or RBOB and Summer CG or CBOB may be redesignated as Winter RFG or RBOB or Winter CG or CBOB.

(v)(A) California gasoline may be redesignated as RFG or CG, with appropriate season designation and RVP designation under paragraph (a) of this section, if the requirements specified in §1090.620(d) are met.

(B) California gasoline that is not redesignated under paragraph (b)(2)(v)(A) of this section must be recertified as gasoline under §1090.1100(b).

(3) Distributors that redesignate batches or portions of gasoline under paragraph (b)(2) of this section must accurately and clearly designate the batch or portion of the batch of gasoline as specified in paragraph (a) of this section.

(c) *Designation requirements for oxygenate producers.* Oxygenate producers must accurately and clearly designate each batch of oxygenate intended for blending with gasoline as one of the following oxygenate types:

(1) DFE.

(2) The name of the specific oxygenate (e.g., iso-butanol).

(d) *Designation requirements for certified butane and certified pentane.* Certified butane and certified pentane producers must accurately and clearly designate each batch of certified butane and certified pentane as one of the following types:

(i) Certified butane.

(ii) Certified pentane.

(e) *Designation requirements for certified ethanol denaturant.* Certified ethanol denaturant producers must accurately and clearly designate batches of certified ethanol denaturant as “certified ethanol denaturant”.

§1090.1115 Designation requirements for diesel and distillate fuels.

(a) *Designation requirements for diesel and distillate fuel manufacturers.* Diesel and distillate fuel manufacturers must accurately and clearly designate all diesel or distillate fuel that they either produce or import as specified in this section.

(1) Except as specified in paragraphs (a)(3) and (4) of this section, diesel and distillate fuel manufacturers must accurately and clearly designate each batch of diesel fuel or distillate fuel as at least one of the following fuel types:

(i) ULSD. Diesel fuel manufacturers may also designate the fuel as 15 ppm MVNRLM.

(ii) LM 500 diesel fuel.

(iii) Heating oil.

(iv) Jet fuel.

(v) Kerosene.

(vi) ECA marine fuel.

(vii) Global marine fuel.

(viii) Exempt diesel or distillate fuel under subpart G of this part (including additional identifying information).

(2) Only fuel manufacturers that comply with the requirements in §1090.515 may designate fuel as LM 500 diesel fuel.

(3) Any batch of diesel or distillate fuel that is suitable for use as ULSD and that is also suitable for use as kerosene or jet fuel (commonly referred to as dual use kerosene) may be designated as ULSD, kerosene, or jet fuel (as applicable).

(4) Any batch of diesel or distillate fuel that is suitable for use as ULSD may also be designated as heating oil, ECA marine fuel, or global marine fuel (commonly referred to as double or triple certified diesel fuel) if the applicable requirements in §§1090.315 and 1090.325 are met.

(b) *Designation requirements for distributors of diesel and distillate fuels.* Distributors of diesel and distillate fuels must accurately and clearly designate each batch of diesel or distillate fuel for which they transfer custody as follows:

(1) Distributors must accurately and clearly designate such diesel and distillate fuel by sulfur content while it is in their custody (e.g., as 15 ppm or 500 ppm).

(2) Distributors must accurately and clearly designate such diesel fuel and distillate fuel as specified by the manufacturer of the distillate fuel under paragraph (a) of this section.

(3) Distributors may redesignate batches or portions of batches of diesel fuel or distillate fuel for which they transfer custody to another facility without recertifying the batch or portion of the batch as follows:

(i) ULSD that is also suitable for use as kerosene or jet fuel (commonly referred to as dual use kerosene) may be designated as ULSD, kerosene, or jet fuel (as applicable).

(ii) ULSD may be redesignated as LM 500 diesel fuel, heating oil, jet fuel, kerosene, ECA marine fuel, or global marine fuel if all applicable requirements under this part are met.

(iii) California diesel may be redesignated as ULSD if the requirements specified in §1090.620(e) are met.

(iv) Heating oil, kerosene, or jet fuel may be redesignated as ULSD if the requirements specified in §1090.315 are met.

(v) 500 ppm LM diesel fuel may be redesignated as ECA marine fuel, global marine fuel, heating oil, or blendstock. Any person that redesignates 500 ppm LM diesel fuel to ECA marine fuel or global marine fuel must maintain records from the producer of the 500 ppm LM diesel fuel (i.e., PTDs accompanying the fuel under §1090.1165) to demonstrate compliance with the 500 ppm sulfur standard in §1090.320(a)(1).

(c) No person may designate distillate fuel with a sulfur content greater than 15 ppm as ULSD.

(d) Any person that is both a diesel fuel distributor and manufacturer must comply with the provisions of paragraph (a) of this section for all distillate fuel they produced or imported, and the provisions of paragraph (b) of this section for all distillate fuel for which they distributed.

§1090.1120 Batch numbering.

(a) Fuel manufacturers, fuel additive manufacturers, and regulated blendstock producers must assign a number (the “batch number”) to each batch of gasoline, diesel fuel, oxygenate, certified pentane, or certified ethanol denaturant either produced or imported. The batch number must, if available, consist of the EPA-assigned company registration number of the party that either produced or imported the fuel, fuel additive, or regulated blendstock, the EPA-assigned facility registration number where the fuel, fuel additive, or regulated blendstock was produced or imported, the last two digits of the year that the batch was either produced or imported, 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., 4321-54321-19-000001, 4321-54321-19-000002, etc.). EPA assigns company and facility registration numbers as specified in subpart I of this part.

(b) Certified butane or certified pentane blended with previously certified gasoline during a period of up to one month may be included in a single batch for purposes of reporting to EPA. However, certified butane and certified pentane must be reported as separate batches.

PRODUCT TRANSFER DOCUMENTS

§1090.1150 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 WPC facility, the transferor must provide to the transferee PTDs that include all the following information:

- (i) The name and address of the transferor.
- (ii) The name and address of the transferee.
- (iii) The volume of the product being transferred.
- (iv) The location of the product at the time of the transfer.
- (v) The date of the transfer.

(2) The specific designations required for gasoline-related products specified in §1090.1110 or distillate-related products specified in §1090.1115.

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

§1090.1155 PTD requirements for exempted fuels.

(a) In addition to the information required by §1090.1150, on each occasion when any person transfers custody or title to any exempted fuel under subpart G of this part, the transferor must provide to the transferee PTDs that include the following statements, as applicable:

(1) *R&D exemption language.* For fuels used for an R&D purpose specified in §1090.610: “For use in research, development, and test programs only.”

(2) *National security exemption language.* For fuels with a national security exemption specified in §1090.605: “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 §1090.620: “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 §1090.615: “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, Hawaii, Puerto Rico, and U.S. Virgin Islands summer gasoline language.* For summer gasoline for use in Alaska, Hawaii, Puerto Rico, or the U.S. Virgin Islands specified in §1090.630: “This summer gasoline is for use only in Alaska, Hawaii, Puerto Rico, or the U.S. Virgin Islands.”

(b) In statements required by paragraph (a) of this section, where “fuel” is designated in a statement, the specific fuel type (for example, “diesel fuel” or “gasoline”) may be used in place of the word “fuel”.

§1090.1160 Gasoline, gasoline additive, and gasoline regulated blendstock PTD provisions.

(a) *General requirements.* For each occasion that any person transfers custody of any gasoline, gasoline fuel additive, or gasoline regulated blendstock, the transferor must provide the transferee documents that include the following information:

(1) All applicable information required under §1090.1150 and this section.

(2) An accurate and clear statement of the applicable designation of the gasoline, gasoline fuel additive, or gasoline regulated blendstock under §1090.1110.

(b) *BOB language requirements.* For batches of BOB, in addition to the information required under §1090.1160(a), the following information must be included on the PTD:

(1) *Oxygenate type(s) and amount(s).* Statements specifying each oxygenate type(s) and amount(s) (or range of amounts) that the fuel manufacturer certified a hand blend under §1090.710 for the BOB.

(2) *Summer BOB language requirements.* Except as specified in paragraph (b)(2)(iv) 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 §1090.215.

(i) “9.0 psi CBOB. This product does not meet the requirements to produce summer reformulated gasoline.”

(ii) “7.8 psi CBOB. This product does not meet the requirements to produce summer reformulated gasoline.”

(iii) “RBOB. This product meets the requirements to produce summer reformulated or conventional gasoline.”

(iv) For BOBs designed to produce a finished gasoline that must meet an RVP per-gallon standard required by any SIP 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 but must include at a minimum the applicable RVP standard established under the SIP.

(3) *Ethanol 1.0 psi waiver language requirements.* For summer CBOBs that are designed for the special provisions for gasoline-ethanol blends in §1090.215(b), the following statements:

(i) “Suitable for the special RVP provisions for ethanol blends that contain between 9 and 15 vol % ethanol.”

(ii) “The use of this BOB/gasoline to manufacture a gasoline-ethanol blend containing anything other than between 9 and 15 volume percent ethanol may cause a summertime RVP violation.”

(iii) For summer CBOBs that must meet an RVP per-gallon standard required by any SIP approved or promulgated under 42 U.S.C. § 7410 or 7502 that does not allow for a 1.0 psi waiver for gasoline-ethanol blends, additional or substitute language to satisfy the state program may be used as necessary.

(c) *RFG and CG requirements.* For batches of RFG and CG, in addition to the information required under paragraph (a) of this section, the following information must be included on the PTDs:

(1) *Summer gasoline language requirements.* (i) Except as specified in paragraph (c)(1)(ii) of this section, for summer gasoline, identification of the product with one of the following statements indicating the applicable RVP standard:

(A) For gasoline that meets the 9.0 psi RVP per-gallon standard in §1090.215(a): “9.0 psi Gasoline.”

(B) For gasoline that meets the 7.8 psi RVP per-gallon standard in §1090.215(a)(1): “7.8 psi Gasoline.”

(C) For gasoline that meets the RFG 7.4 psi RVP per-gallon standard in §1090.215(a)(2): “Reformulated Gasoline.”

(ii) For finished gasoline that meets an RVP per-gallon standard required by any SIP 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.

(2) *Ethanol content language requirements.* (i) For gasoline-ethanol blends, one of the following statements that accurately describes the gasoline:

(A) For gasoline containing no ethanol (“E0”), the following statement: “E0: Contains no ethanol.”

(B) For finished gasoline containing less than 9 volume percent ethanol, the following statement: “EX—Contains up to X% ethanol.” The term X refers to the maximum volume percent ethanol present in the gasoline-ethanol blend.

(C) For E10, the following statement: “E10: Contains between 9 and 10 vol % ethanol.”

(D) For E15, the following statement: “E15: Contains up to 15 vol % ethanol.”

(E) For gasoline-ethanol blends containing more than 15 volume percent ethanol, the following statement: “EXX: Contains up to XX vol % ethanol.” The term XX refers to the maximum volume percent ethanol present in the gasoline-ethanol blend.

(ii) No person may designate a fuel as E10 if the fuel is produced by blending ethanol and gasoline in a manner designed to contain less than 9.0 or more than 10.0 volume percent ethanol.

(iii) No person may designate a fuel as E15 if the fuel is produced by blending ethanol and gasoline in a manner designed to contain less than 10.0 or more than 15.0 volume percent ethanol.

(d) *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.”

(e) *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 LAC on the PTD must be consistent with the requirements in §1090.240.

(f) *Gasoline additives language requirements.* In addition to any other PTD requirements of this subpart, gasoline additive manufacturers that manufacture additives under §1090.255(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].

(g) *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 §1090.235(b), 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).

(h) *Butane and pentane language requirements.* (1) A certified butane or certified pentane producer must initiate a PTD for each batch that it ships from its facility that contains the following information:

(i) The certified butane or certified pentane producer company name and facility registration number issued by EPA.

(ii) One of the following statements:

(A) “Certified pentane for use by certified pentane blenders”.

(B) “Certified butane for use by certified butane blenders”.

(2) PTDs that are compliant with the requirements of paragraph (h)(1) of this section must be transferred from each party transferring certified butane or certified pentane for use by certified butane or certified pentane blenders to each party that receives the certified butane or certified pentane through to the certified butane or certified pentane blender, respectively.

§1090.1165 PTD requirements for distillate and residual fuels.

(a) *General diesel fuel language requirements.* For each occasion that any person transfers custody of any distillate or residual fuel, the transferor must provide the transferee documents that include the following information:

(1) The sulfur per-gallon standard that the transferor represents the fuel to meet under subpart D of this part (e.g., 15 ppm sulfur for ULSD or 1,000 ppm sulfur for ECA marine fuel).

(2) An accurate and clear statement of the applicable designation(s) of the fuel under 1090.1115 of this part (e.g., “ULSD” or “500 ppm LM diesel fuel” or “ECA marine fuel”).

(3) If the fuel does not meet the 15 ppm sulfur ULSD standard, the following statement: “Not for use in highway vehicles or engines or nonroad, locomotive, or marine engines.”

(b) *500 ppm LM diesel fuel language requirements.* For transfers of 500 ppm LM diesel fuel, the transferor must provide PTDs 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. For use only in accordance with a compliance plan under 40 CFR 1090.515(c). Not for use in highway vehicles or other nonroad vehicles and engines.”

(c) *ECA marine fuel language requirements.* For transfers of ECA marine fuel, the transferor must provide the transferee PTDs 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 Category 1 or Category 2 marine vessels.”

(3) Parties may replace the required statement in paragraph (c)(2) of this section with the following statement for qualifying vessels under 40 CFR part 1043: “High sulfur fuel. For use only in ships as allowed by MARPOL Annex VI, Regulation 3 or Regulation 4.”

(d) *Global marine fuel language requirements.* For transfers of global marine fuel, the transferor must provide the transferee PTDs that include the following information:

(1) All applicable information specified in paragraph (a) of this section.

(2) The following statement: “For use only in steamships or Category 3 marine vessels outside of an Emission Control Area (ECA), consistent with MARPOL Annex VI.”

§1090.1170 Diesel fuel additives language requirements.

In addition to any other PTD requirements in this subpart, on each occasion that any person transfers custody or title to a diesel fuel additive that is subject to the provisions of §1090.310 to a party in the additive distribution system or in the diesel fuel distribution system for use downstream of the diesel fuel manufacturing facility, the transferor must provide to the transferee documents that identify the additive as follows:

(a) For diesel fuel additives that comply with the 15 ppm sulfur standard in §1090.310(a), include the following statement: “The sulfur content of this diesel fuel additive does not exceed 15 ppm.”

(b) For diesel fuel additives that are permitted to have higher than 15 ppm sulfur content and comply with the requirements in §1090.310(b), the transferor must provide to the transferee documents that identify the additive as such, and do all the following:

(1) Indicate the high sulfur potential of the diesel fuel 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-compliant diesel fuel.”

(2) If the diesel fuel additive package contains a static dissipater additive and/or red dye having a sulfur content greater than 15 ppm, one of the following statements must be included that accurately describes the contents of the additive package:

(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 diesel fuel additive package’s maximum sulfur concentration.

(ii) The maximum recommended concentration in volume percent for use of the diesel fuel additive package in diesel fuel.

(iii) The contribution to the sulfur level of the fuel (in ppm) that would result if the diesel fuel 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 in §1090.310(a), “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.”

§1090.1175 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 as specified in §1090.10.

Subpart L—Recordkeeping

§1090.1200 General recordkeeping requirements.

(a) *Length of time records must be kept.* Records required by this part must be kept for 5 years from the date they were created, except that records relating to credit transfers must be kept by the transferor for 5 years from the date the credits were transferred and must be kept by the transferee for 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 part 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.

(a) Any party subject to the requirements and provisions of this part must maintain records containing the information specified in this section.

(b) Any party that transfers title or custody of any fuel, fuel additive, or regulated blendstock must maintain the PTDs for which the party is the transferor or transferee.

(c) Any party required to perform any sampling and testing on fuels, fuel additives, or regulated blendstocks required under this part must maintain all the following information:

(1) The location, date, time, and storage tank or truck, rail car, or vessel 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 all tests as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person or apparatus that performed the test. Where more than one test is performed on the fuel, keep all of the results.

(4) The methodology used to test any parameter under this part.

(5) Records related to performance-based measurement and statistical quality control under §§1090.1360, 1090.1365, 1090.1370 and 1090.1375.

(6) The actions taken to stop the sale of any fuel, fuel additive, or regulated blendstock found not to be in compliance with applicable standards under this part, and the actions taken to identify the cause of any noncompliance and prevent future instances of noncompliance.

(d) For parties required to register under subpart I of this part, the party must maintain records supporting the information required to complete and maintain the registration for the

party's company and each registered facility. The party must also maintain copies of any confirmation received from the submission of such registration information to EPA.

(e) For parties required to submit reports under subpart J of this part, the party must maintain copies of all reports submitted to EPA. The party must also maintain copies of any confirmation received from the submission of such reports to EPA.

§1090.1210 Recordkeeping requirements for gasoline manufacturers.

(a) In addition to the requirements in §1090.1205, gasoline manufacturers must keep records for each of its facilities that include the information in this section.

(b) *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 under subpart J of this part, performed to determine gasoline properties and characteristics as specified in 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 for the batch under §1090.1110.

(6) The PTDs for any gasoline produced or imported.

(7) The PTDs for any gasoline received.

(c) *Downstream oxygenate accounting records.* For BOB certified for including in downstream oxygenate accounting under §1090.710, the gasoline manufacturer must maintain all the following information:

(1) The results of tests for a hand blended sample prepared under §1090.1340.

(2) Records that demonstrate that the gasoline manufacturer participates in the national fuels survey program under subpart N of this part.

(3) Records that demonstrate that the gasoline manufacturer participates in the sampling oversight program under subpart N of this part.

(4) Compliance calculations specified in §1090.700 based on an assumed addition of oxygenate.

(d) *Records for PCG.* In the case where a gasoline manufacturer produces a new batch of gasoline by blending PCG, the gasoline manufacturer must keep the following records:

(1) In all cases, keep records that reflect the storage and movement of the PCG and blendstocks within the manufacturing facility to the point such PCG is used to produce gasoline or BOB.

(2) In addition to the records required under paragraph (d)(1) of this section, keep the following records for the PCG and new batches of gasolines produced by blending with PCG under §1090.1320(a)(1):

(i) The results of tests to determine the sulfur content, benzene content, RVP in the summer, and oxygenate(s) content for the PCG and volume of the PCG when received at the fuel manufacturing facility.

(ii) Records demonstrating which batches of PCG were used in each new batch of gasoline produced by blending with PCG;

(iii) Records demonstrating which, if any, batches of blendstocks were used in each new batch of gasoline produced by blending with PCG;

(iv) Records of the test results for sulfur content, benzene content, RVP in the summer, oxygenate(s) content, and distillation parameters for each new batch of gasoline produced with PCG.

(3) In addition to the records required under paragraph (d)(1) of this section, keep the following records for the PCG and new batches of gasolines produced by blending with PCG under §1090.1320(a)(2):

(i) Records of the test results for sulfur content, benzene content, RVP in the summer, and oxygenate(s) content of each blendstock used to produce the new batch of gasoline.

(ii) Records of the test results for sulfur content and RVP in the summer of each new batch of gasoline produced by blending blendstocks with PCG.

(e) *Records for certified butane and certified pentane blenders.* For certified butane or certified pentane blended into gasoline or BOB under §1090.1320, certified butane and certified pentane blenders must maintain all the following information:

(1) The volume of butane added.

(2) The volume of the pentane added.

(3) The volume of gasoline prior to and after the certified butane or certified pentane blending.

(4) The purity and properties of the certified butane specified in §1090.220.

(5) The purity and properties of the certified pentane specified in §1090.225.

(f) *Records for the importation of gasoline treated as blendstock.* For 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.

(g) *Records related to ABT.* Gasoline manufacturers must keep records related to their ABT activities under subpart H of this part that include the following information, as applicable:

(1) Compliance sulfur values and compliance benzene values under §1090.700, and the calculations used to determine those values.

(2) The number of valid credits in possession of the gasoline manufacturer at the beginning of each compliance period, separately by facility and year of generation.

(3) The number of credits generated by the gasoline manufacturer under §1090.725, separately by facility and 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 company and facility registration numbers.

(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 facility and year of generation.

(6) The number of credits that will be carried over into a subsequent compliance period, separately by facility and year of generation.

(7) The number of credits used, separately by 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.* Anyone that produces or distributes exempt gasoline under subpart G of this part must keep the following records:

(1) Designation of the gasoline under subpart G of this part.

(2) Copies of PTDs generated or accompanying the exempted gasoline.

(3) Records demonstrating that the exempt gasoline was actually used in accordance with the requirements of the applicable exemption(s) under subpart G of this part.

§1090.1215 Recordkeeping requirements for diesel fuel and ECA marine fuel manufacturers.

(a) In addition to the requirements in §1090.1205, diesel fuel and ECA marine fuel manufacturers must keep records for each of its facilities that include the information in this section.

(b) *Batches.* Batch documents and information are records.

(1) *Designation.* All documents and information created or used for the purpose of batch designation under §1090.1115 must be maintained.

(2) *Additional batch records.* Diesel fuel and ECA marine fuel manufacturers producing distillate or residual fuel subject to a sulfur standard under subpart D of this part must, for each manufacturing facility, keep records that include the following information for each batch of ULSD, 500 ppm LM diesel fuel, 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:

(A) ULSD, LM 500 diesel fuel, or ECA marine fuel, as applicable.

(B) Meeting the 15 ppm sulfur standard in §1090.305(a)(1), the 500 ppm sulfur standard in §1090.320(a)(1), the 1,000 ppm sulfur standard in §1090.325(b), or other applicable standard.

(c) *ECA marine fuel.* (1) ECA fuel manufacturers must keep records of the following information for each batch of ECA marine fuel (distillate fuel or residual fuel):

(i) The batch volume.

(ii) The batch number.

(iii) The date of production.

(iv) A record designating the batch.

(v) The PTD for the batch.

(2) ECA fuel distributors must keep records of the PTD for the batch.

(d) *Global marine fuel.* Manufacturers and distributors for global marine fuel must keep the following records for any global marine fuel they make or distribute:

(1) Records demonstrating the designation of any distillate fuel as global marine fuel.

(2) Copies of PTDs generated or accompanying the global marine fuel.

§1090.1220 Recordkeeping requirements for oxygenate blenders.

(a) In addition to the requirements in §1090.1205, oxygenate blenders that blend oxygenate into gasoline must maintain the information specified in this section.

(b) For each occasion that an oxygenate blender blends oxygenate into gasoline, maintain all the following information:

(1) The date, time, location, and identification of the blending tank or truck in which the blending occurred.

(2) The volume and oxygenate requirements of the gasoline to which oxygenate was added.

(3) The volume, type, and purity of the oxygenate that was added, and documents that show the supplier(s) of the oxygenate used.

§1090.1225 Recordkeeping requirements for gasoline additives.

(a) *Gasoline additive producers and importers.* In addition to the requirements in §1090.1205, gasoline additive manufacturers 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 manufacturer'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.

(a) *Records that oxygenate producers must keep.* In addition to the requirements in §1090.1205, oxygenate producers 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 sampling and testing records specified in §1090.1205(c) must be kept if the sulfur content of the batch was determined by analytical testing.

(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 under §1090.1330:

- (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.* In addition to the recordkeeping requirements specified in §1090.1205, 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) Any record that contains a test result for the sample that is not identical to the result recorded in §1090.1205(c)(3).

(b) *Records that must be kept by parties that take custody of ethanol denaturants.* All parties that take custody of denaturants designated as suitable for use in the production of DFE under §1090.230(b) must keep the following records:

(1) The PTD for the denaturant.

(2) The volume percent at which the denaturant was added to ethanol, as applicable.

§1090.1240 Recordkeeping requirements for gasoline detergent blenders.

In addition to the requirements in §1090.1205, gasoline detergent blenders must maintain VAR records to demonstrate that a detergent has been added to gasoline before it is distributed to

retail and WPC facilities at a rate of concentration at least as high as represented by the LAC for the detergent registered with EPA by the detergent manufacturer under 40 CFR 79.21(j).

(a) The PTD for the detergent(s) used.

(b) For automated detergent blending facilities:

(1) The dates of the VAR Period.

(2) The total volume of detergent blended into gasoline, in accordance with paragraph (b)(2)(i) or (ii) of this section, as applicable.

(i) For a facility that uses in-line meters to measure detergent usage, the total volume of detergent measured, together with supporting data that includes one of the following:

(A) The beginning and ending meter readings for each meter being measured.

(B) Other comparable metered measurements.

(ii) For a facility which uses a gauge to measure the inventory of the detergent storage tank, the total volume of detergent must be calculated using the following equation:

$$\text{Detergent Volume} = (A) - (B) + (C) - (D)$$

Where:

A= Initiation detergent inventory of the tank

B = Final detergent inventory of the tank

C= Sum of any additions to detergent inventory

D = Sum of any withdrawals from detergent inventory for purposes other than the additization of gasoline.

The value of each variable in this equation must be separately recorded.

(3) The total volume of gasoline, in gallons, to which detergent has been added, together with supporting data that includes one of the following:

(i) The beginning and ending meter measurements for each meter being measured.

(ii) The metered batch volume measurements for each meter being measured.

(iii) Other comparable metered measurements.

(4) The actual detergent concentration, calculated as the total volume of the detergent added (pursuant to paragraph (b)(2) of this section) divided by the total volume of gasoline (pursuant to paragraph (b)(3) of this section). The concentration must be calculated and recorded

to four digits and rounded as specified in §1090.50. Recorded volumes of detergent must be expressed to the nearest gallon (or smaller units), except that detergent volumes of five gallons or less must be expressed to the nearest tenth of a gallon (or smaller units). However, if the blender's equipment cannot accurately measure to the nearest tenth of a gallon, then such volumes must be rounded downward to the next lower gallon.

(5) The initial detergent concentration rate, together with the date and description of each adjustment to any initially set concentration.

(6) If the detergent injector is set below the applicable LAC, or adjusted by more than 10 percent above the concentration initially set in the VAR Period, documentation establishing that the purpose of the change is to correct a batch misadditization prior to the end of the VAR Period and prior to the transfer of the batch to another party or to correct an equipment malfunction and the date and adjustments of the correction.

(7) Documentation reflecting the performance and results of the calibration, as required by §1090.1380, of detergent equipment.

(c) For non-automated facilities:

(1) The date of additization.

(2) The volume of added detergent.

(3) The volume of the gasoline to which the detergent has been added.

(4) The actual detergent concentration, calculated as the volume of added detergent (pursuant to paragraph (c)(2) of this section) divided by the volume of gasoline (pursuant to paragraph (c)(3) of this section). The concentration must be calculated and recorded to four digits and rounded as specified in §1090.50.

§1090.1245 Recordkeeping requirements for independent surveyors.

In addition to the requirements in §1090.1205, independent surveyors that conduct a survey program under subpart N of this part must keep all the information specified in this section, as applicable.

(a) Records related to the national fuels survey program.

(b) Records related to a geographically-focused E15 survey program.

(c) Records related to the national sampling oversight program.

§1090.1250 Recordkeeping requirements for auditors.

(a) In addition to the requirements in §1090.1205, auditors that perform review functions under this part must keep all the information specified in this section.

(b) Auditors must keep all records pertaining to the performance of an audit performed under this part.

(c) Auditors that perform attestation engagements under subpart R of this part must keep copies of the attestation report(s) prepared and all related records developed to prepare the attestation report(s).

§1090.1255 Recordkeeping requirements for transmix processors, transmix blenders and distributors.

(a) In addition to the requirements in §1090.1205, transmix processors, transmix processors, and distributors who produce gasoline or diesel fuel under subpart F of this part must keep records under this section in addition to any other records required to be kept under this subpart.

(b) Transmix processors and distributors must keep records that reflect the results of any sampling and testing required under subparts F and M of this part.

(c) Pipelines must keep records that demonstrate compliance with the interface handling practices in §1090.525.

(d) Fuel distributors that use the provisions of §1090.520 in lieu of complying with the requirements applicable to a transmix blender must keep records showing that their transmix meets the definition in §1090.80.

(e) Transmix processors must keep records showing the volumes of TGP recovered from transmix and the type and amount of any blendstock or PCG added to make gasoline from TGP under §1090.510.

(f) Transmix blenders must keep records showing compliance with the quality assurance program and/or sampling and testing requirements in §1090.505, and for each batch of gasoline with which transmix is blended, the volume of the batch, and the volume of transmix blended into the batch.

(g) Manufacturers and distributors of 500 ppm LM diesel fuel using transmix must keep the following records, as applicable:

(1) Copies of the compliance plan required under §1090.515(c).

(2) Documents demonstrating how the party complies with each applicable element of the compliance plan under §1090.515(c).

(3) Documents and copies of calculations used to determine compliance with the 500 ppm LM diesel fuel volume requirements under §1090.515(d).

(4) Documents or information that demonstrates that the 500 ppm LM diesel fuel was only used in locomotive or marine engines that are not required to use ULSD under 40 CFR 1033.815 and 40 CFR 1042.660.

Subpart M—Sampling, Testing, and Retention Requirements

§1090.1300 General provisions.

(a) This subpart is organized as follows:

(1) Sections 1090.1310 through 1090.1330 specify the scope of required testing, including special provisions that apply in several unique circumstances.

(2) Sections 1090.1335 through 1090.1345 specify handling procedures for collecting and retaining samples. Sections 1090.1350 through 1090.1375 specify the procedures for measuring the specified parameters. These procedures apply to anyone who performs testing under this subpart.

(3) Section 1090.1395 specifies the procedures for testing related to gasoline deposit control test procedure.

(b) If you need to meet requirements for a quality assurance program 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 certified butane you received from a supplier:

(1) If your testing period starts on March 1 and you use less than 500,000 gallons of 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 butane on May 30 and again ends after 90 days or after you use 500,000 gallons of butane, whichever occurs first.

(2) If your testing period starts on March 1 and you use 500,000 gallons of 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 butane on April 30 and again ends after 90 days or after you use 500,000 gallons of butane, whichever occurs first.

(c) Anyone performing tests on behalf of a manufacturer to demonstrate compliance with standards or other requirements under this part must meet the requirements of this subpart in the same way that the manufacturer needs to meet requirements for its own testing.

(d) Anyone performing tests under this subpart must apply good laboratory practices 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 accounting for all available relevant information.

(e) Subpart P of this part has provisions related to importation, including provisions that describe how to meet the sampling and testing requirements of this subpart.

(f) The following general provisions apply:

(1) A crosscheck program is an arrangement for laboratories to perform measurements from test samples prepared from a single homogeneous fuel batch to establish an accepted reference value for evaluating precision and accuracy. This subpart relies on inter-laboratory crosscheck programs sponsored by ASTM International or another voluntary consensus standards body, or on crosscheck programs conducted separately by one or more companies.

(2) 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.

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) Fuel manufacturers must perform the following measurements before the fuel, fuel additive, or regulated blendstock from a given batch leaves the fuel manufacturing facility, except as specified in §1090.1315:

(1) *Diesel fuel.* Perform testing for each batch of ULSD, 500 ppm LM diesel fuel, and ECA 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 to demonstrate compliance with sulfur standards for both summer and winter gasoline.

(c) The following testing provisions apply for gasoline and regulated gasoline blendstocks:

(1) Gasoline manufacturers producing BOB must prepare a hand-blended sample of oxygenated gasoline as specified in §1090.1340 and perform the following measurements:

(i) For Summer CG, measure RVP in the BOB.

(ii) For Summer RFG, measure RVP in the hand-blended sample.

(iii) Measure sulfur in both the BOB and the hand-blended sample and benzene in the hand-blended sample.

(2) Oxygenate producers must measure sulfur in each batch of oxygenate, except that DFE producers may meet the alternative requirements in §1090.1330.

(3) Ethanol denaturant producers that certify the denaturant under §1090.1330 must measure sulfur in each batch of denaturant.

(4) Producers of certified butane and pentane must perform sampling and testing to demonstrate compliance with purity specifications and sulfur and benzene standards as specified in §1090.1320.

(5) Transmix processors producing gasoline from TGP must test each batch of gasoline as specified in §§1090.510 and 1090.1325.

(d) Blending manufacturers producing gasoline by adding blendstock to PCG must comply with §1090.1320.

(e) For gasoline produced at a blending manufacturing facility or a transmix processing facility, fuel manufacturers must measure such gasoline for oxygenate and for distillation parameters (i.e., T10, T50, T90, final boiling point, and percent residue) in addition to other measurements to demonstrate compliance with applicable standards.

§1090.1315 In-line blending.

Fuel manufacturers using in-line blending equipment may qualify for a waiver from the requirement in §1090.1310(b) to test every batch of fuel before the fuel leaves the fuel manufacturing facility as follows:

(a) The waiver in this section applies if you use or intend to 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. It also applies for fuel manufacturers that produce batches of fuel that are too large to contain in available storage tanks.

(b) Waivers granted under 40 CFR part 80 are no longer valid. Any party who received an in-line blending waiver granted under 40 CFR part 80 may continue to operate under the waiver for 60 days after the effective date of this part. To request a waiver, send EPA 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 and grade of fuel you have blended over the preceding 3 years (or since starting the in-line blending operation if that is less than 3 years). Describe the physical layout of the blending operation and 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. For new installations, describe these as a planned operation with projected volumes by type and grade.

(2) Describe how you collect and test composite fuel samples in a way that is equivalent to measuring the fuel properties of a batch of blended fuel as specified in this subpart. 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 3 years where these quality assurance procedures led you to make corrections to your in-line blending operation.

(5) Describe any times from the previous 3 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 audit of your blending operation each calendar year that reviews procedures and documents to determine whether measured and calculated values properly represent the aggregate fuel properties for the blended fuel.

(d) You must update your in-line blending waiver request 60 days prior to making any material change to your in-line blending process.

(e) If we approve your request for a waiver 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 Adding blendstock to PCG.

The requirements of this section apply for refiners and blending manufacturers that add blendstock to PCG to produce a new batch of gasoline. Paragraph (c) of this section specifies an optional alternative approach for certified butane and certified pentane blenders. Section 1090.1325 describes additional provisions that apply to transmix processors.

(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 each batch of PCG before blending blendstocks to produce a new batch of gasoline.

(ii) Determine the volume of PCG that was blended with blendstock to produce a new batch of gasoline. Report the PCG as a negative batch as specified in §1090.905(c)(3)(i).

(iii) After adding blendstock to PCG, sample and test the sulfur and benzene content of the new batch of gasoline.

(iv) Determine the volume of the new batch of gasoline. Report the new batch of gasoline as a positive batch as specified in §1090.905(c)(3)(ii).

(v) Include the PCG batch and the new batch of gasoline in compliance calculations as specified in §1090.700(d)(4)(i).

(vi) The sample-retention requirements in §1090.1345 apply for both the new batch of gasoline and the associated PCG.

(2) *Compliance by addition.* (i) Sample and test the sulfur and benzene content of each batch of blendstock used to produce a new batch of gasoline from PCG.

(ii) Determine the volume of each batch of blendstock used to produce the new batch of gasoline.

(iii) Report each batch of blendstock as specified in §1090.905(c)(4).

(iv) Include each batch of blendstock in compliance calculations as specified in §1090.700(d)(4)(ii).

(v) The sample-retention requirements in §1090.1345 apply for the new batch of gasoline and for each blendstock.

(b) Regardless of which approach is used under paragraph (a) of this section, manufacturers must determine the volume of each blended batch of gasoline, and perform the following measurements for each blended batch of gasoline using the procedures specified in §1090.1350:

(1) Measure sulfur content, benzene content, oxygenate content, and for summer gasoline, RVP.

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

(c) Certified butane or certified pentane blenders that blend certified butane or certified pentane into PCG to make a new batch of gasoline may meet the sampling and testing requirements of this subpart instead of the requirements of paragraphs (a) and (b) of this section if the certified butane blender or certified pentane blender does all of the following:

(1) For summer gasoline, measure RVP of the blended fuel. The fuel manufacturer may rely on sulfur and benzene test results from the certified butane or certified pentane producer. Note that §1090.245(e) disallows adding certified butane and certified pentane to RFG.

(2) Before blending the certified butane or certified pentane with PCG, obtain a copy of the producer's test results indicating that the certified butane or certified pentane meets the standards in §1090.220 or §1090.225, respectively.

(3) The certified pentane blender must enter into a contract with the certified pentane producer to verify that the pentane producer has an adequate quality assurance program to ensure that the certified pentane received will not be contaminated in transit.

(4) The certified butane or certified pentane blender must conduct a quality assurance program to demonstrate that the butane or pentane has the properties specified in §1090.220 or §1090.225. The quality assurance program must be based on sampling the more frequent of

every 90 days or 500,000 gallons of certified butane or certified pentane received from each producer. The certified butane or certified pentane blender may rely on a third party to perform the testing.

§1090.1325 Adding blendstock to TGP.

The following provisions apply to transmix processors producing gasoline by adding blendstock to TGP:

(a) Perform testing for each batch of summer gasoline to demonstrate compliance with the applicable RVP standard in §1090.215.

(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 use to produce gasoline for reporting and compliance calculations by following the sampling and testing as specified in §1090.1320 and treating the TGP used to produce the gasoline as PCG.

(d) Sample and test the gasoline made from TGP and blendstock blend to demonstrate compliance with the 80 ppm sulfur per-gallon standard in §1090.205(b) and the applicable RVP standard in §1090.215.

(e) Transmix processors producing gasoline by adding TGP to PCG do not have to measure oxygenate in the finished gasoline if the records for each these of blendstocks show no oxygenate content.

(f) Transmix processors do not have to measure benzene in finished gasoline if the finished gasoline includes nothing other than TGP and PCG.

§1090.1330 Preparing denatured fuel ethanol.

DFE producers and importers may calculate the sulfur content of a batch of DFE instead of measuring every batch as follows:

(a) Determine the 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 determined under paragraphs (a) and (b) of this section.

HANDLING AND PREPARING SAMPLES

§1090.1335 Collecting and preparing samples for testing.

(a) *General provisions.* 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 pre-rinsing 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) *Manual sampling.* Perform manual sampling using one of the methods specified in ASTM D4057 (incorporated by reference in §1090.95) as follows:

(1) Use tap sampling or spot sampling to collect upper, middle, and lower samples. Adjust sampling for partially filled tanks as shown in Table 1 of ASTM D4057. If you test all the samples for a given fuel parameter, calculate the arithmetic average of the 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 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 use alternative sampling procedures as specified in ASTM D4057. This applies mostly for sampling with trucks, railcars, retail stations, and other downstream locations.

(4) Test results with manual sampling are valid only after you demonstrate homogeneity as specified in §1090.1337, with the following exceptions:

(i) The homogeneity testing requirement does not apply at downstream locations if it is not possible 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 each drawn sample for every parameter subject to a testing requirement and use the highest (or worst-case) test result for each parameter. This applies for meeting per-gallon and average standards and all other aspects of compliance.

(c) *Automatic sampling.* 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 0.03 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) *Sampling provisions related to measuring RVP of summer gasoline.* 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) If you measure RVP for multiple test samples to demonstrate compliance, do not calculate an average result. Rather, each tested sample must meet the RVP standard that applies.

(3) If you measure other fuel parameters for a given sample in addition to RVP testing, always measure RVP first.

§1090.1337 Demonstrating homogeneity.

(a) Use the procedures in this section as specified in §1090.1335 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 different tank segments of the stored fuel, fuel additive, or regulated blendstock as specified in §1090.1335(b). Consider the stored fuel to be homogeneous without testing for upright cylindrical tanks if the liquid depth (from the tank outlet) is less than 35 percent of the tank diameter.

(c) For testing to meet the gasoline standards in subpart C of this part, demonstrate homogeneity using two of the procedures specified in paragraph (c)(1) through (4) of this section. For summer gasoline, the homogeneity demonstration must include RVP measurements.

(1) Measure API gravity from each sample using ASTM D287, ASTM D1298, or ASTM D4052 (incorporated by reference in §1090.95).

(2) Measure sulfur from each sample as specified in this subpart.

(3) Measure RVP from each sample as specified in this subpart.

(4) Measure benzene from each sample as specified in this subpart.

(d) For testing to meet the diesel fuel standards in subpart D of this part, demonstrate homogeneity using either of the procedures specified in paragraph (c)(1) or (2) of this section.

(e) Consider the fuel batch to be homogeneous for a given parameter if the measured values for all tested samples vary by less than the published repeatability of the test method. If repeatability is a function of measured values, calculate repeatability using the average value of the measured parameter representing all tested samples. Calculate using the full precision specified for the test method, even if §1090.1350(c) describes a different precision.

§1090.1340 Preparing hand-blend samples from BOB.

(a) If you produce or import BOB and instruct downstream blenders to add oxygenate, you must 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. Prepare a worst-case hand blend sample as follows:

(1) Take steps to avoid introducing high or low bias in sulfur content when selecting from available samples to create the hand blend. For example, if there are three samples with discrete sulfur measurements, select the sample with the mid-range sulfur content. In other cases, randomly select the sample.

(2) If your instructions allow for downstream blenders to add more than one type or concentration of oxygenate, prepare a hand blend sample for summer gasoline intended for blending with ethanol using the lowest specified ethanol blend. For summer gasoline intended for blending only with oxygenate other than ethanol, and for all winter gasoline, blend at the lowest specified oxygenate concentration, regardless of the type of oxygenate. For example, if you give instructions for a given batch of BOB to perform downstream blending to make E10, E15, and an 8 percent blend with butanol, prepare a hand blend for testing winter gasoline with 8 percent butanol, and prepare an E10 hand blend for testing summer gasoline.

(b) Blend the fuel using the procedures specified in ASTM D7717 (incorporated by reference in §1090.95). The blended fuel must have an amount of oxygenate that is within 0.1 volume percent of the oxygenate concentration specified on the PTD for the BOB under §1090.1160(b)(1). For example, an E10 blend must have 10.0 ± 0.1 percent oxygenate.

(c) If you produce or import BOB and you blend in oxygenate before selling or transporting the fuel, you must instead draw samples from your blended fuel.

§1090.1345 Retaining samples.

(a) Fuel manufacturers, regulated blendstock producers, and independent surveyors must retain samples of fuel and regulated blendstocks tested under this subpart as follows:

(1) If you test gasoline or diesel fuel as required under this subpart, you must keep a representative fuel sample for at least 30 days after testing is complete, except that a longer sample retention of 120 days applies for blending manufacturers that either produce or modify gasoline.

(2) The nominal volume of 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 §1090.1340, keep a sample of the BOB. You may also keep a corresponding sample of either the blended fuel or a sample of the oxygenate for again creating a sample of blended fuel. If you do not keep a sample of the blended fuel or an oxygenate sample, testing with the retained BOB sample may include blending with any appropriate oxygenate.

(ii) For summer gasoline, keep an untested (or less tested) sample that is most like the tested sample, as applicable. 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 §1090.1330 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 follow our instructions and send it to EPA by a courier service (or equivalent). The instructions will describe where and when to send the sample. 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.

Fuel manufacturers 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 Measurement System specified in §§1090.1360 through 1090.1375 applies for all testing specified in this subpart for the following fuels and fuel parameters, except as specified in paragraph (b) of this section:

(1) Sulfur content of diesel fuel.

(2) Sulfur content of ECA marine fuel.

(3) RVP, sulfur, benzene, and oxygenate content of gasoline. The procedures for measuring sulfur in gasoline in this subpart also apply for testing sulfur in certified ethanol denaturant; however, demonstrating compliance for alternative procedures in §1090.1365 and statistical quality control in §1090.1375 do not apply for sulfur concentration above 80 ppm.

(4) Sulfur in butane.

(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 aromatic content of diesel fuel as specified in ASTM D1319 or ASTM D5186 (incorporated by reference in §1090.95). You may use an alternative procedure if you correlate your test results with ASTM D1319 or ASTM D5186.

(3) Measure the purity of butane and pentane as specified in ASTM D2163 (incorporated by reference in §1090.95).

(4) Measure benzene in butane and pentane as specified in ASTM D5134 (incorporated by reference in §1090.95).

(5) Measure sulfur in pentane as specified in ASTM D6667 (incorporated by reference in §1090.95).

(6) Measure distillation parameters of gasoline as specified in ASTM D86 (incorporated by reference in §1090.95). You may use an alternative procedure if you correlate your test results with ASTM D86.

(7) Measure the sulfur content of neat ethanol as specified in ASTM D5453 (incorporated by reference in §1090.95). You may use an alternative procedure if you correlate your test results with ASTM D5453.

(8) Measure the phosphorus content of gasoline as specified in ASTM D3231 (incorporated by reference in §1090.95).

(9) Measure the lead content of gasoline as specified in ASTM D3237 (incorporated by reference in §1090.95).

(10) Measure the sulfur content of gasoline additives and diesel fuel additives as specified in ASTM D2622 (incorporated by reference in §1090.95).

(11) [Reserved]

(12) Use referee procedures specified in §1090.1360(d) and the following additional methods to measure gasoline fuel parameters to meet the survey requirements of subpart N of this part:

Fuel parameter	Units	Test Method¹
Distillation (T50 and T90)	°C	ASTM D86
Aromatic content	volume percent	ASTM D5769
Olefin content	volume percent	ASTM D6550

¹ ASTM specifications are incorporated by reference in §1090.95.

(13) Updated versions of the test procedures specified in this section are acceptable as alternative procedures if both repeatability and reproducibility are the same as or better than the values specified in the earlier version.

(c) Record measured values with the following precision, with rounding as appropriate:

- (1) Record sulfur content to the nearest whole ppm.
 - (2) Record benzene to the nearest 0.01 volume percent.
 - (3) Record RVP to the nearest 0.01 psi.
 - (4) Record oxygenate content to the nearest 0.01 mass percent for each calibrated oxygenate.
 - (5) Record diesel aromatic content to the nearest 0.1 volume percent, or record cetane index to the nearest whole number.
 - (6) Record gasoline aromatic and olefin content to the nearest 0.1 volume percent.
 - (7) Record distillation parameters to the nearest whole degree.
- (d) For any measurements or calculations that depend on the volume of the test sample, correct the volume of the sample to a reference temperature of 15.5 °C (288.65 K). Use a correction equation that is appropriate for each tested compound. This applies for all fuels, blendstocks, and additives, except butane.

§1090.1355 Calculation adjustments and corrections.

Adjust measured values for special circumstances as follows:

- (a) Adjust measured values for total vapor pressure using the following equation:

$$\text{RVP (psi)} = 0.956 \cdot P_{\text{total}} - 0.347$$

Where:

P_{total} = 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), treat the PLOQ as your final result if your measured result is below the PLOQ.
- (2) If your measurement method involves a published procedure with a limited scope but no PLOQ, treat the lower bound of the scope as your final result if your measured result is less than that value.
- (3) If you establish a Laboratory Limit of Quantitation (LLOQ) below the lower bound of the scope of the procedure as specified in ASTM D6259 (incorporated by reference in §1090.95), treat the LLOQ as your final result if your measured result is less than the LLOQ. Note that this option is meaningful only if the LLOQ is less than a published PLOQ, or if there is no published PLOQ.

(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.

(d) If measured content of any oxygenate compound is less than 0.1 percent by mass, record the result as “None detected.”

§1090.1360 Performance-based Measurement System.

(a) The Performance-based Measurement System is an approach that allows for laboratory 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. These provisions do not apply to process stream analyzers used with in-line blending.

(b) Different requirements apply 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.

(c) The performance criteria of this section apply as follows:

(1) Section 1090.1365 specifies the initial qualifying criteria for all measurement procedures. You may use an alternative procedure only if testing shows that you meet the initial qualifying criteria

(2) Section 1090.1375 specifies ongoing quality testing requirements that apply for laboratories that use either referee procedures or alternative procedures.

(3) Streamlined requirements for alternative procedures apply for procedures adopted by a voluntary consensus standards body (VCSB). Compliance testing with non-VCSB procedures requires our advance approval. Procedures are considered non-VCSB testing as follows:

(i) Procedures developed by individual companies or other parties are considered “non-VCSB” procedures.

(ii) Draft procedures under development by a VCSB organization are considered non-VCSB procedures until they are approved for publication.

(iii) A published procedure is considered non-VCSB for testing with fuel parameters that fall outside the range of values covered in the research report of the ASTM D6708 (incorporated by reference in §1090.95) assessment comparing candidate alternative procedures to the referee procedure specified in paragraph (d) of this section.

(4) You may qualify updated versions of the referee procedures as alternative procedures under §1090.1365. You may ask EPA 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 §1090.1365 using the older, referenced version of the referee procedure.

(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 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.

(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). However, qualification testing may be necessary for updated versions of this procedure as specified in §1090.1365(a)(2).

(d) Referee procedures 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 §1090.1365. The following are the referee procedures:

Tested Product	Parameter	Referee Procedure ¹
ULSD, 500 ppm diesel fuel, ECA marine fuel, gasoline	Sulfur	ASTM D2622
Butane	Sulfur	ASTM D6667
Gasoline	oxygenate content	ASTM D5599
Gasoline	RVP	ASTM D5191, except as specified in §1090.1355(a)
Gasoline	benzene	ASTM D5769

¹ ASTM specifications are incorporated by reference in §1090.95.

§1090.1365 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 §1090.1360.

(a) The following general provisions apply for qualifying alternative procedures:

(1) Alternative procedures must have appropriate precision 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 specified 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 the same as or better than the values specified in the earlier version. For absolute fuel parameters, updated versions are qualified without testing if both repeatability and reproducibility are the same as or better than the values specified in the earlier version.

(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) If a procedure for measuring benzene or sulfur in gasoline has no specified Pooled Limit of Quantitation and no specified scope with a lower bound, you must establish a Laboratory Limit of Quantitation for your facility.

(5) Testing for method-defined fuel parameters must take place at a reference installation as specified in §1090.1370.

(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)(3) of this section. Take the following steps to qualify the measurement procedure for measuring a given fuel parameter:

(1) The fuel must meet the parameter specifications in Table 1 to this section. This may require that you modify the fuel you typically produce to be within the specified range. Absent a specification (maximum or minimum), select a fuel representing values that are typical for your 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 homogeneous fuel batch at least 20 times. Record each result in sequence. Do not omit any valid results unless you use good engineering judgment to determine that the omission is necessary and you document those results and the reason for excluding them. Perform this analysis over a 20-day period. You may make up to 4 separate measurements in a 24-hour period, as long as the interval between measurements is at least 4 hours. Do not measure RVP more than once from a single sample.

(3) Calculate the maximum allowable standard deviation, σ_{\max} using the following equation:

$$\sigma_{\max} = x_1 \cdot \frac{x_2}{x_3}$$

Where x_1 , x_2 , and x_3 have the values from the following table:

Table 1 to §1090.1365—Precision Criteria for Qualifying Alternative Procedures

Fuel, fuel additive, or regulated blendstock	Fuel parameter	Range	x ₁	x ₂ = Repeatability (r) or Reproducibility (R) ¹	x ₃	Fixed values of σ _{max}	Source ²
ULSD	sulfur	5 ppm minimum	1.5	r=1.33	2.77	0.72	ASTM D3120-08 (2014)
500 ppm LM diesel fuel	sulfur	350 ppm minimum	1.5	r=21.3	2.77	11.5	ASTM D2622-16
ECA marine fuel	sulfur	700 ppm minimum	1.5	37.1	2.77	20.1	ASTM D2622-16
Butane	sulfur	—	1.5	r = 0.1152·x	2.77	—	ASTM D6667-14
Gasoline	sulfur	—	1.5	r = 0.4998·x ^{0.54}	2.77	—	ASTM D7039-15a
Gasoline	oxygenate	—	0.3	R = 0.13·x ^{0.83}	1	—	ASTM D5599-17
Gasoline	RVP ³	—	0.3	R=0.40	1	0.12	ASTM D5191-15
Gasoline	benzene	—	0.1 5	R=0.221·x ^{0.67}	1	—	ASTM D5769-15

¹ Calculate repeatability and reproducibility using the average value determined from testing. Use units as specified in §1090.1350(c).

² ASTM publications are incorporated by reference in §1090.95. Note that the listed procedure may be different than the referee procedure identified in §1090.1360(d), or it may be an older version of the referee procedure.

³ Use only 1-liter containers for testing to qualify alternative methods.

(c) Alternative VCSB procedures for measuring absolute fuel parameters (sulfur) must meet accuracy criteria based on the following measurement procedure:

(1) Obtain a gravimetric sulfur standard to serve as representative reference samples. The 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 10 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) Demonstrate accuracy for measuring sulfur in gasoline, regulated gasoline blendstock, and gasoline fuel additives using test fuels to represent sulfur values from 1 to 10 ppm, 11 to 20 ppm, and 21 to 95 ppm. You may omit any of these ranges if you do not perform testing with fuel in that range. Calculate the maximum allowable difference between the average measured value and ARV for each applicable range using the following equation:

$$\text{Maximum Allowable Difference} = 0.75 \cdot \sigma_{\max}$$

Where,

σ_{\max} = the maximum allowable standard deviation from paragraph (b)(3) of this section using the sulfur content represented by ARV.

(ii) Demonstrate accuracy for measuring sulfur in diesel fuel using test fuels meeting the specifications in Table 2 to this section. For testing diesel-related blendstocks and additives, use representative test samples meeting the appropriate sulfur specification. Table 2 to this section also identifies the maximum allowable difference between average measured values and ARV corresponding to ARV at the upper end of the specified ranges. These values are based on calculations with the equation in paragraph (c)(3)(i) of this section, with parameter values set to be equal to the standard.

Table 2 to §1090.1365—Accuracy Criteria for Qualifying Alternative Procedures with Diesel Fuel and Diesel-Related Blendstocks and Additives

Fuel	Sulfur Content (ppm)	Illustrated Maximum Allowable Differences
ULSD	10-20	0.54
500 ppm LM diesel fuel	450-500	8.65
ECA marine fuel	900-1,000	15.1

(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 follow all the statistical protocols and meet all the criteria specified in Section 6 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 §1090.1360(d).

(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 statistically consistent to measuring with the reference test method.

(3) If an alternative VCSB procedure states that the procedure has a successful assessment relative to the referee procedures in this section under 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 EPA 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 your alternative procedure meets the specified requirements.

(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 either 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,” R_{xy} , as specified in ASTM D6708. The R_{xy} must be at or below 75 percent of the reproducibility of the referee procedure from §1090.1360(d).

(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)(3) 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 as follows:

(i) The auditor must qualify as an independent third party and meet the specifications for technical ability as specified in §1090.55.

(ii) 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.

(iii) The auditor must keep records related to the review for at least 5 years after sending you the report and upon request, provide those records for EPA review.

(8) Send EPA a written request to use the alternative procedure. Include the specified information and any additional information we need to evaluate your request. We will approve your request for a specific laboratory if you meet the specified requirements. 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 how to deal with invalid test results and describe what you need to do to be able to use the alternative procedure.

(h) Keep fuel samples from any qualification testing under this section for at least 180 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.

§1090.1370 Qualifying criteria for reference installations.

(a) A reference installation refers to a test facility that uses the referee test method specified in §1090.1360(d) 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 §1090.1360(d). This evaluation may result in an equation to correlate results between the two procedures. Once a facility qualifies as a reference installation, that qualification is valid for five years from the qualifying date, consistent with good laboratory practices.

(b) Qualify a reference installation for VCSB procedures by participating in an interlaboratory crosscheck program with at least 16 separate measurements that are not identified as outliers. This presumes that the results for the candidate reference installation are not outliers.

(c) Qualify a reference installation for non-VCSB procedures based on the following measurement protocol:

(1) Use the precision testing procedure specified in §1090.1365(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 given fuel parameter.

(2) You must correlate your test results for a given fuel parameter against the accepted reference values from a monthly crosscheck program based on Section 6.2.2.1 and Note 7 of ASTM D6299 (incorporated by reference in §1090.95) as follows:

(i) If there are multiple fuels available from the crosscheck program, select the fuel that has the closest value 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 certain 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 5 consecutive months must fall within the central 50 percent of the distribution of data at least 3 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 5 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 standard 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 5 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 5 months, except as follows:

(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 5-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 5-month demonstration period, you may consider the reference installation as meeting the requirement to be in statistical quality control for at least 5 months.

§1090.1375 Quality control procedures.

This section specifies ongoing quality testing requirements as part of the Performance-based Measurement System specified in §1090.1360.

(a) *General provisions.* You must perform testing to show that your test facility meets specified precision and accuracy criteria as follows:

(1) The testing requirement applies for the referee procedures in §1090.1360(d) and for alternate procedures that are qualified or approved under §1090.1365. The testing requirements apply separately for each test instrument at each test facility.

(2) If you fail to conduct 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 perform major maintenance such as overhauling an instrument or recalibrating it, confirm that the instrument still meets precision and accuracy criteria before you start testing again. Use the Q-procedure with the MR chart in ASTM D6299 (incorporated by reference in §1090.95).

(4) Keep records to document your testing under this section for 5 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 7 days, whichever is less.

(2) Perform precision testing using the control-chart procedures in ASTM D6299 (incorporated by reference in §1090.95). 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 ASTM D6299 to show that the long-term standard deviation for the test facility meets the precision criteria specified in §1090.1365(b).

(c) *Accuracy demonstration.* For absolute fuel parameters (VCSB and non-VCSB) and for method-defined fuel parameters using non-VCSB methods, you must show that you meet accuracy criteria as specified in this paragraph. For method-defined VCSB procedures, you may meet accuracy requirements as specified in this paragraph or by comparing your results to the accepted reference value in an inter-laboratory crosscheck program sponsored by ASTM International or another voluntary consensus standards body at least 3 times per year.

(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 meeting the specifications of ASTM D6299 (incorporated by reference in

§1090.95). 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.

(3) The following provisions apply for method-defined non-VCSB alternative procedures with high sensitivity to sample-specific bias:

(i) Procedures have high sensitivity if the closeness sum of squares (CSS) statistic exceeds the 95th percentile value, as specified in ASTM D6708 (incorporated by reference in §1090.95).

(ii) Create a check standard from production fuel representing the fuel you will routinely analyze. Determine the ARV of your check standard using the protocol in ASTM D6299 at a reference installation as specified in §1090.1370.

(iii) You must send EPA a fuel sample from every twentieth 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 the difference between your measured value for the check standard and the ARV is less than the value from the following equation: Δ_{\max}

$$\Delta_{\max} = 0.75 \cdot R \cdot \sqrt{1 + \frac{1}{L}}$$

Where,

R = the reproducibility of the referee procedure identified in §1090.1360(d), as noted in Table 1 to §1090.1365 or in the following table:

Tested Product	Referee Procedure	Reproducibility (R) ¹
ULSD, 500 ppm diesel fuel, ECA marine fuel, diesel fuel additives, gasoline, regulated gasoline blendstock, and gasoline fuel additives	ASTM D2622	$R = 0.4273 \cdot x^{0.8015}$
Butane	ASTM D6667	$R = 0.3130 \cdot x$

¹ Calculate reproducibility using the average value determined from testing. Use units as specified in §1090.1350(c).

L = the total number of test results used to determine the ARV of a consensus-named fuel. For testing locally named fuels for which no consensus-based ARV applies, use $L = \infty$.

1090.1380 Requirement for Automated Detergent Blending Equipment Calibration.

(a) Automated detergent blending facilities must calibrate their automated detergent blending equipment once in each calendar half-year, with the acceptable calibrations being no less than 120 days apart.

(b)(1) Equipment recalibration is also required each time the detergent package is changed, unless written documentation indicates that the new detergent package has the same viscosity as the previous detergent package.

(2) Detergent package change calibrations may be used to satisfy the semiannual requirement in paragraph (a) of this section, provided that the calibrations occur in the appropriate calendar half-year and are no less than 120 days apart.

GASOLINE DEPOSIT CONTROL TESTING

§1090.1395 Gasoline deposit control test procedures.

Gasoline detergent manufacturers must perform testing as specified in paragraph (a), (b), or (c) of this section to certify detergents and establish the lowest additive concentration (LAC) for the detergent.

(a) *Top Tier-Based Test Method.* Gasoline detergent manufacturers may perform testing to certify the detergent and establish the LAC for the 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 fuel manufacturing facility operations. Blendstocks may not come from chemical grade streams. Butane and pentane may be added 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 in §1090.230 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.

(vi) No detergent-active substance. A base fuel with typical nondetergent additives, such as antioxidants, corrosion inhibitors, and metal deactivators, may be used.

(2) Perform the 100-hour test for intake valve deposits with the base fuel to demonstrate that the intake valves accumulate at least 500 mg on average. 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 results in less than 50 mg average per intake valve., the tested detergent concentration is the LAC for the detergent.

(b) *CARB-Based Test Method.* Gasoline detergent manufacturers may perform testing to certify the detergent and establish the LAC for a detergent using the procedures specified by CARB in Title 13, California Code of Regulations, section 2257.

(1) A detergent certified under this option may be used at the LAC specified for use in the state of California in any gasoline in the United States.

(2) 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 under 40 CFR 79.21.

(c) *Alternative test methods.* (1) Gasoline detergent manufacturers may use an EPA-approved alternative test method to certify a detergent and establish the LAC for a detergent if the alternative test method can be correlated to any one of the following methods.

(i) The Top Tier-Based Test Method specified in paragraph (a) of this section.

(ii) The CARB-Based Test Method in paragraph (b) of this section.

(iii) The retired EPA BMW Test Method as follows:

(A) Prepare the test fuel with the following specification:

(1) Sulfur – minimum 340 ppm.

(2) T-90 – minimum 339 degrees Fahrenheit.

(3) Olefins – minimum 11.4 volume percent.

(4) Aromatics – minimum 31.1 volume percent.

(5) Ethanol – minimum 10 volume percent.

(6) Sulfur, T-90, olefins, and aromatics specifications must be met prior to the addition of ethanol.

(7) Di-tert-butyl disulfide may be added to the test fuel to help meet the sulfur specification.

(B) Using the test fuel meeting the requirements of paragraphs (c)(1)(iii)(A) of this section, test the test fuel with and without detergent in accordance with ASTM D5500 (incorporated by reference in §1090.95) and under the following conditions:

(1) The unadditized fuel's test results must meet or exceed 290 mg per valve on average.

(2) The required test fuel, including detergent additives, must produce the accumulation of less than 100 mg of intake valve deposits on average.

(3) The duration of the demonstration tests under ASTM D5500 may be less than the specified 10,000 miles, provided the results satisfy the standards of this paragraph.

(4) If the demonstration test results do not meet these criteria, then the formulated fuel may not be used for detergent certification testing.

(2) Alternative test methods for the certification of detergent additives must be correlated to one of the methods described in paragraph (c)(1) of this section a method described in the submission.

(3) Information describing the alternative test method and analysis demonstrating correlation must be submitted for EPA approval as specified in §1090.10.

Subpart N—Survey Provisions

§1090.1400 National fuels survey program participation.

(a) Gasoline manufacturers that elect to account for the addition of oxygenate added downstream under §1090.710 must participate in the national fuel survey program specified in this subpart.

(b) Parties required to participate in an E15 survey under §1090.1420(a) must participate in the national fuels survey specified in this subpart or a survey approved by EPA under §1090.1420(b) or (c).

(c) Other parties may elect to participate in the national fuel survey program for purposes of establishing an affirmative defense against violations of requirements and provisions under this part as specified in §1090.1720.

§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 §1090.1415.

§1090.1410 Independent surveyor requirements.

The independent surveyor conducting the survey program specified in §1090.1405 must meet all the requirements of this section. The independent surveyor must:

(a) Submit a proposed survey program plan under §1090.1415 to EPA for approval for each calendar year.

(b)(1) Obtain samples representative of the gasoline and diesel fuel offered for sale separately from all gasoline and diesel retail outlets in accordance with the survey program plan approved by EPA, or immediately notify EPA of any refusal of a retailer or WPC to allow samples to be taken.

(2) Obtain the number of samples representative of the number of gasoline retail outlets offering E15.

(3) Collect samples of gasoline produced at blender pump using “method 1” specified in NIST Handbook 158 (incorporated by reference, see §1090.95). All other samples of gasoline and diesel fuels must be collected using methods specified in subpart M of this part.

(4) Samples collected must be shipped within 2 business 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) 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 §1090.1415(e)(3), must also be analyzed for aromatics content, olefins content, and distillation characteristics (i.e., T50 and T90).

(3) 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 testing must be completed by the EPA-approved laboratory within 10 business days after receipt of the sample.

(d) Verify E15 labeling requirements at gasoline retail outlets that offer E15 for sale.

(e) Using procedures specified in an EPA-approved plan under §1090.1415, notify EPA, the retailer, and the branded fuel manufacturer (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 an RVP result that exceeds the applicable RVP standard in §1090.215.

(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 identified as “E15” yields an ethanol content result that exceeds 15 volume percent.

(5) A test result for a gasoline sample not identified as “E15” yields an ethanol content of more than 10 volume percent ethanol.

(f) Provide to EPA quarterly and annual summary survey reports that include the information specified in §1090.925.

(g) Maintain all records relating to the surveys conducted under this section as specified in §1090.1245.

(h) Permit any representative of EPA to monitor at any time the conducting of the survey, including sample collection, transportation, storage, and analysis.

§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 4 surveys each calendar year that 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 §1090.80, during each survey. These sampling strata must be further divided into discrete sampling areas or clusters. 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 program plan confidential from any party participating in the survey program 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 outlet selection.* (1) Gasoline and diesel retail outlets to be sampled in a sampling area must be selected from among all gasoline retail outlets in the United States that sell gasoline with the probability of selection proportionate to the volume of gasoline sold at the retail outlet. The sample of retail outlets must also include gasoline retail outlets with different brand names as well as those gasoline retail outlets that are unbranded.

(2) For any gasoline or diesel retail outlet from which a sample of gasoline was collected during a survey was reported to EPA under §1090.1410(e), that gasoline or diesel retail outlet 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 outlet when E15 is present, and separate samples must be taken that represent the gasoline contained in each storage tank at the gasoline retail outlet unless collection of separate samples is not practicable.

(4) At least one sample of a product dispensed as diesel fuel must be collected at each diesel fuel retail outlet when diesel fuel is present. Samples of diesel fuel may be collected at retail outlets that sell gasoline.

(e) *Number of samples.* (1) The number of retail outlets to be sampled must be independently calculated for the total number of gasoline retail outlets and the total number of

diesel fuel retail outlets. The same retail outlet may represent both a gasoline retail outlet and a diesel fuel retail outlet 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:

$$n = \left\{ \frac{(Z_{\alpha} + Z_{\beta})^2}{4 \cdot (\arcsin(\sqrt{\varphi_1}) - \arcsin(\sqrt{\varphi_0}))^2} \right\} \cdot F_a \cdot F_b \cdot Su_n \cdot St_n$$

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_{α} = Upper percentile point from the normal distribution to achieve a one-tailed 95% confidence level (5% α -level). Thus, Z_{α} equals 1.645.

Z_{β} = Upper percentile point to achieve 95% power. For purposes of this survey program, Z_{β} equals 1.645.

φ_1 = The maximum proportion of non-compliant outlets 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 outlets, within a stratum such that the region is considered non-compliant. For this survey, φ_1 will be 5%.

φ_0 = The underlying proportion of non-compliant outlets in a sample. For the first survey plan, φ_0 will be 2.3%. For subsequent survey plans, φ_0 will be the average of the proportion of outlets found to be non-compliant over the previous 4 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 4 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 outlet with test results reported to EPA under §1090.1410(e), based on the rate of resampling required during the previous 4 surveys. F_b must be greater than or equal to 1.1.

Su_n = Number of surveys per year. For purposes of this survey program, Su_n equals 4.

St_n = Number of sampling strata. For purposes of this survey program, St_n equals 3.

(3) The number of gasoline samples that also need to be tested for aromatics, olefins, and distillation parameters under §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 Su_n parameters.

(4) The number of samples determined under paragraphs (e)(2) and (3) of this section must be distributed approximately equally among the 4 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 program plan approval process in §1090.1425. In the survey program 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.

(4) Reports demonstrating the laboratory's performance in a laboratory cross-check program for the most recent 12 months prior to submission of the plan.

§1090.1420 Additional requirements for E15 misfueling mitigation surveying.

(a) *E15 misfueling mitigation survey requirement.* (1) Any gasoline manufacturer, oxygenate blender, or oxygenate producer that produces, 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) For oxygenate producers that produce or import DFE, the DFE that is produced or imported is deemed as intended for use in E15 unless an oxygenate producer demonstrates that it was not intended for such use. Oxygenate producers may demonstrate, at a minimum, that DFE is not intended for use in E15 by including language on PTDs stating that the DFE is not intended for use in E15, entering into contracts with oxygenate blenders to limit the use of their DFE to gasoline-ethanol blended fuels of no more than 10 volume percent, and limiting the concentration of their DFE to no more than 10 volume percent in their fuel additive registration under 40 CFR part 79.

(b) *Survey Option 1.* To comply with the E15 misfueling mitigation survey requirement specified in paragraph (a) of this section, any gasoline manufacturer, oxygenate blender, or oxygenate producer that produces, 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 survey program in accordance with 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. Such approval must be based on 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 manufacturer, 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 sections 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 manufacturer, oxygenate blender, or oxygenate producer that produces, 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.

§1090.1425 Survey plan approval process.

(a) A survey program plan that complies with the requirements in §1090.1415 must be submitted to EPA no later than October 15 of the year preceding the calendar year in which the survey will be conducted.

(b) The survey program plan must be signed by an RCO of the independent surveyor conducting the survey program.

(c) The survey program plan must be submitted as specified 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.

§1090.1430 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 the amount of compensation necessary to carry out the entire survey plan must either be paid to the independent surveyor or placed into an escrow account with instructions to the escrow agent to remit the compensation 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 compensation 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 EPA.

§1090.1435 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 any such failure is a prohibited act under 42 U.S.C. § 7545(c) and §1090.1700.

(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.

§1090.1440 National sampling oversight program requirements.

(a) *National sampling oversight program participation.* (1) Except for gasoline manufacturers that have an approved in-line blending waiver under §1090.1315, any gasoline manufacturer that elects to account for the addition of oxygenate added downstream under §1090.710 must participate in the national sampling oversight program in this section.

(2) Other gasoline manufacturers may elect to participate in the national sampling oversight program for purposes of establishing an affirmative defense to a violation under §1090.1720.

(3) Gasoline manufacturers that elect to participate in the national sampling oversight program must either test, or arrange to be tested, samples collected from their manufacturing facilities as specified in paragraph (c)(2) of this section and report results to the independent surveyor within 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 national oversight sampling program must be planned and conducted by an independent surveyor that meets the independence requirements in §1090.55 and the requirements of paragraph (c) of this section.

(2) The sampling program must be conducted at each manufacturing facility from all participating gasoline manufacturers.

(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 that meets the requirements of paragraph (d) of this section 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 manufacturing facility that participates in the national sampling oversight program.

(ii) Observe the gasoline manufacturer collect at least one sample representing summer gasoline and one sample representing winter gasoline for each gasoline manufacturing facility that participates in the national sampling oversight program. The independent surveyor must also obtain a portion of the sample collected by the gasoline manufacturer 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 gasoline manufacturer does not have a batch of certified gasoline available).

(iii) The independent surveyor must immediately notify EPA of any refusal of a gasoline manufacturer to allow portions of collected samples to be taken. Gasoline manufacturers participating in the national sampling oversight program that refuse to allow the independent surveyor to take portions of collected samples 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 under §1090.710.

(iv) Samples must be retained by the independent surveyor as specified in §1090.1345(a).

(v) Samples collected must be shipped via ground service within 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 under paragraph (c)(2) 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 10 business days after receipt of the sample.

(4) Using procedures specified in an EPA-approved plan under this section, notify EPA and the gasoline manufacturer within 24 hours after the EPA-approved laboratory has completed analysis when any of the following occur:

(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 an RVP result that exceeds the applicable RVP standard in §1090.215 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 manufacturer for all analyses specified in paragraph (c)(3) of this section within 5 business days of completion of the analysis.

(6) Compare test results of all samples collected under paragraph (c)(2) of this section and all test results obtained from the gasoline manufacturer from the same samples as specified in paragraph (a)(3) of this section and inform EPA and the gasoline manufacturer if the test result for any parameter tested under 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 under subpart J of this part.

(8) Maintain all records related to the sampling oversight program conducted under this section as specified in §1090.1245(c).

(9) Submit contracts to EPA under §1090.1430.

(10) Review the test performance index and precision ratio for each method and instrument the laboratory used to test the gasoline samples collected under this section as follows:

(i) For each test method and instrument, the surveyor must obtain the relevant records from the gasoline manufacturer to determine the site precision, either from an inter-laboratory crosscheck program or from ASTM D6299

(ii) Using relevant information obtained from the gasoline manufacturers, the surveyor must determine the appropriate Test Performance Index and Precision Ratio from ASTM D6792 Table 2 Guidelines for Action Based on TPI.

(iii) Report as part of the quarterly and annual reporting requirements in §1090.925 the determined site precision under §1090.1440(c)(10)(i) and the test performance index under §1090.1440(c)(10)(ii).

(iv) Gasoline manufacturers must supply copies of the necessary information to the independent surveyor to review the test performance index and precision ratio for each method and instrument used to test the gasoline samples collected under this section.

(11) 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 paragraph (c)(1) of this section 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 manufacturing facilities included in any national sampling oversight program plan confidential with minimal advanced notification

from any gasoline manufacturer prior to collecting a sample. However, this information may not be kept confidential from EPA.

(2) *Gasoline manufacturing facility selection.* (i) Each manufacturing facility of participating gasoline manufacturers must be sampled at least once during the summer season and once during the winter season. The plan must demonstrate how these facilities will be randomly selected within the summer and winter seasons.

(ii) In addition to the summer and winter sample collected at each manufacturing facility, additional oversight samples to ensure sampling oversight are required under paragraph (c) of this section. The independent surveyor must identify how these samples will be randomly distributed among participating facilities.

(3) *Number of samples.* (i) The number of manufacturing 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:

$$n = R * F_a * F_b * Su_n$$

Where:

n = Minimum number of samples in a year.

R = The number of participating gasoline manufacturing 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.

Su_n = Number of surveys per year. For purposes of this survey program, Su_n 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 manufacturing facilities.

(6) *Notification of test results.* The plan must include a description of how the independent surveyor will notify EPA and gasoline manufacturers of test results as required by paragraph (c)(4) of this section.

(7) *Submission.* Plans submitted under this section are subject to the requirements in §1090.1425.

Subpart O—Requirements for Retailers and Wholesale Purchaser-Consumers

§1090.1500 Overview.

(a) Retailers and WPCs must meet the labeling requirements in §§1090.1510 and 1090.1515, as applicable, and the refueling hardware requirements in §§1090.1550 through 1090.1565, as applicable.

(b) An alternative label design to those specified in this subpart may be used if the design is approved by EPA prior to use and meets all the following criteria:

- (1) The alternative label must be similar in substance and appearance to the EPA-required label.
- (2) The alternative label must contain the same informational elements.
- (3) The alternative label must be submitted as specified in §1090.10.

LABELING

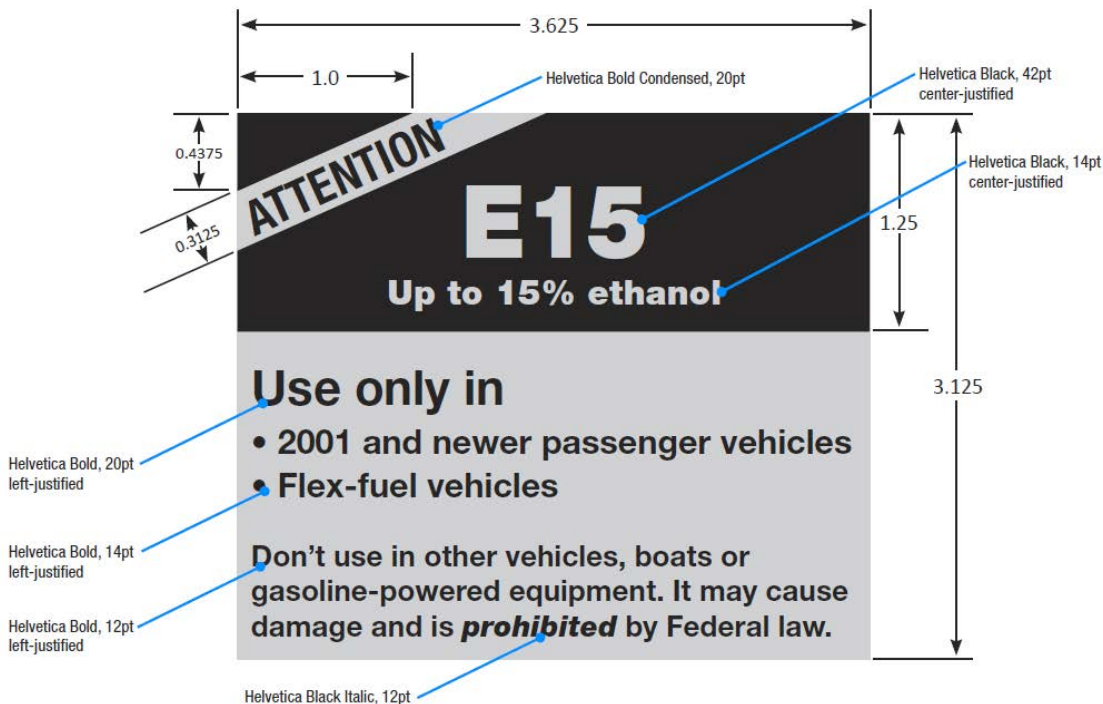
§1090.1510 E15 labeling provisions.

Any retailer or WPC 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.

Figure 1 of §1090.1510—E15 Label



§1090.1515 Diesel sulfur labeling provisions.

Any person dispensing heating oil, 500 ppm LM diesel fuel, or ECA marine fuel must apply labels to fuel dispensers as follows:

(a) Labels must be in a prominent location where the consumer will select or dispense either the corresponding fuel or heating oil. The label content must be in block letters of no less than 24-point bold type, printed in a color contrasting with the background.

(b) Labels must include the following statements, or equivalent alternative statements approved by EPA:

(1) For dispensing heating oil along with any kind of 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) For dispensing 500 ppm LM diesel fuel, apply the following label:

LOCOMOTIVE AND MARINE DIESEL FUEL (500 ppm Sulfur Maximum)

WARNING

Federal law prohibits use in nonroad engines or in highway vehicles or engines.

(3) For dispensing ECA marine fuel, apply the following label:

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.

Note: If a pump dispensing 500 ppm LM diesel fuel is labeled with the “LOW SULFUR LOCOMOTIVE AND MARINE DIESEL FUEL (500 ppm Sulfur Maximum)” label, the retailer or WPC does not need to replace this label.

REFUELING HARDWARE

§1090.1550 Requirements for gasoline dispensing nozzles used with motor vehicles.

(a) The following refueling hardware specifications apply for any nozzle installation used for dispensing gasoline into motor vehicles:

- (1) The outside diameter of the terminal end must not be greater than 21.3 mm.
- (2) The terminal end must have a straight section of at least 63 mm.
- (3) The retaining spring must terminate at least 76 mm from the terminal end.

(b) For nozzles that dispense gasoline into motor vehicles, the dispensing flow rate may not exceed a maximum value of 10 gallons per minute. The flow rate may be controlled through any means in the pump/dispenser system, as long as it does not exceed the specified maximum value. Any dispensing pump dedicated to heavy-duty vehicles or airplanes is exempt from this flow-rate requirement. Dispensing pumps primarily used with marine vessels must instead meet the requirements in §1090.1555.

§1090.1555 Requirements for gasoline dispensing nozzles used primarily with marine vessels.

The refueling hardware specifications of this section apply for any nozzle installation used primarily for dispensing gasoline into marine vessels. Note that nozzles meeting these specifications also meet the specifications of §1090.1550(a).

(a) The outside diameter of the terminal end must have a diameter of 20.93 ± 0.43 mm.

(b) The spout must include an aspirator hole for automatic shutoff positioned with a center that is 17.0 ± 0.3 mm from the terminal end of the spout.

(c) The terminal end must have a straight section of at least 63.4 mm with no holes or grooves other than the aspirator hole.

(d) The retaining spring (if applicable) must terminate at least 76 mm from the terminal end.

§1090.1560 Requirements related to dispensing natural gas.

(a) Except for pumps dedicated to heavy-duty vehicles, any pump installation used for dispensing natural gas into motor vehicles must have 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).

(b) Determine the vented volume using calculations based on the geometric shape of the nozzle and hose.

§1090.1565 Requirements related to dispensing liquefied petroleum gas.

(a) Except for pumps dedicated to heavy-duty vehicles, any pump installation used for dispensing liquefied petroleum gas into motor vehicles must have a nozzle that has no greater than 2.0 cm^3 dead space from which liquefied petroleum gas will be released when the nozzle disconnects from the vehicle.

(b) Determine the volume of the nozzle cavity using calculations based on the geometric shape of the nozzle, with an assumed flat surface where the nozzle face seals against the vehicle.

Subpart P—Importation and Exportation of Fuels, Fuel Additives, and Regulated Blendstocks

§1090.1600 General provisions for importers.

(a) This subpart specifies certain provisions that apply to any person who imports fuels, fuel additives, or regulated blendstocks.

(b) The party that is the importer of record for U.S. Customs Service is the importer for purposes of this part.

(c) For importers that import fuel at multiple import facilities in the same PADD, the facilities must be aggregated together for purposes of complying with average standards and reporting as an aggregated import facility.

(d) Importers must separately comply with any applicable certification or other requirements for U.S. Customs.

(e) Alternative testing requirements for importing gasoline or diesel fuel by rail or truck are specified in §1090.1620.

§1090.1605 Importation by marine vessel.

(a) Importers that import fuels using a marine vessel must certify gasoline, diesel fuel, ECA marine fuel, oxygenates, certified ethanol denaturant, certified butane, and certified pentane imported at each port, even if these products are transported by the same vessel making multiple stops.

(b)(1) Except as specified in paragraph (d) of this section, importers of gasoline, diesel fuel, ECA marine fuel, oxygenates, certified ethanol denaturant, certified butane, and certified pentane by marine vessel must certify the product while it is on board the vessel used to transport it to the United States, while certification sampling must be performed after the vessel's arrival at the port where the product will be offloaded.

(2) Importers must sample each compartment of the vessel and treat each ship compartment as a separate batch unless the importer collects samples from different ship compartments into a single, volume-weight composite sample using ASTM D4057 and demonstrates that the gasoline or diesel fuel is homogeneous across the compartments under §1090.1337.

(3) Importers must assure that all gasoline, diesel, oxygenates, and pentane meet all applicable per-gallon standards before offloading the product.

(4) Importers may not rely on testing conducted by a foreign supplier.

(c) Once gasoline, diesel fuel, ECA marine fuel, oxygenates, certified ethanol denaturant, certified butane, and certified pentane on a vessel have been certified under paragraph (b) of this section, the product may be transferred to shore tanks using smaller vessels or barges (lightered)

as a certified product. 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 gasoline 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.

(d) As an alternative to paragraphs (b) and (c) of this section, importers may offload gasoline into shore tanks containing gasoline, diesel into shore tanks containing diesel fuel, oxygenates into shore tanks containing oxygenates, and certified pentane into shore tanks containing certified pentane if the importer meets the following requirements:

(1) For gasoline, importers must offload gasoline into one or more empty shore tanks or tanks containing PCG that the importer owns.

(i) If importers offload gasoline into one or more empty shore tanks, they must sample and test the sulfur and benzene content, and RVP for summer gasoline, of each shore tank into which product was offloaded.

(ii) If importers offload gasoline into one or more shore tanks containing PCG, they must sample the PCG already in the shore tank prior to offloading gasoline from the marine vessel, test the sulfur and benzene content, and report this product as a batch with a negative volume. After offloading the gasoline into the shore tanks, the importer must sample and test the sulfur and benzene content, and RVP for summer gasoline, of each shore tank into which product was offloaded and report the volume and sulfur and benzene content as a positive batch.

(2) For diesel fuel, oxygenates, and certified pentane, importers must sample and test the product in each shore tank into which product was offloaded. Importers must assure that all these products meet all applicable per-gallon standards before introduction into commerce.

§1090.1610 General provisions for exporters.

Except as specified in this section and in subpart G of this part, 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.

(a) Fuels designated for export by a fuel manufacturer are not subject to the standards in this part, provided they are ultimately exported to a foreign country. However, such fuels must be designated at the fuel manufacturing 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) Fuels that have been classified as American Goods Returned to the U.S. 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) Such fuel was produced at a fuel manufacturing facility located within the United States and has not been mixed with gasoline produced at a fuel manufacturing facility located outside the United States.

(2) Such fuel must be included in compliance calculations by the producing gasoline manufacturer.

(3) All the fuel that was exported must ultimately be classified as American Goods Returned to the U.S. and none may be used in a foreign country.

(4) No fuel classified as American Goods Returned to the U.S. may be combined with any fuel produced at a foreign fuel manufacturing facility prior to importation into the United States.

§1090.1615 Gasoline treated as a blendstock.

(a) Importers may exclude GTAB from their compliance calculations if they meet the following criteria:

(1) The importer reports such GTAB to EPA under §1090.905(c)(7).

(2) Such GTAB is treated as blendstock at a related fuel manufacturing facility that produces gasoline using the GTAB.

(3) The related fuel manufacturing facility must report the gasoline produced using such GTAB and must include the gasoline produced using such GTAB in its compliance calculations.

(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)(1) The importer must complete all requirements for gasoline importers under §1090.105(a) except for the sampling, testing, and sample retention requirements in §1090.105(a)(5) for the GTAB at the time it is imported as if the GTAB were imported gasoline.

(2) Any GTAB that ultimately is not used to produce gasoline (e.g., a tank bottom of GTAB) must be treated as newly imported gasoline and must meet all applicable requirements for imported gasoline.

§1090.1620 Testing requirements for importing products by rail or truck.

Importers that import fuels, fuel additives, or regulated blendstocks by rail or truck may meet the sampling and testing requirements of subpart M of this part based on test results from the supplier if they meet the following requirements:

(a) The importer must get documentation of test results from the supplier for each batch of fuel in accordance with the following requirements:

(1) The testing must include measurements for all the fuel parameters specified in §1090.1310 using the measurement procedures specified in §1090.1350.

(2) Testing for a given batch must occur after the most recent delivery into the supplier's storage tank and before transferring product to the railcar or truck.

(b) The importer must conduct testing to verify test results from each supplier in accordance with the following requirements:

(1) Collect a sample at least once every 30 days or every 50 rail or truckloads from a given supplier, whichever is more frequent.

(2) Treat importation of gasoline and diesel fuel separately but treat rail and truckloads together if product is imported from a given supplier by rail and truck.

(3) Test quality assurance samples as specified in paragraph (a) of this section.

(c) If the importer fails to meet the requirements of paragraphs (a) and (b) of this section, they must perform testing as specified in §1090.1310 until EPA determines that the importer has adequately addressed the cause of the failure.

Subpart Q—Compliance and Enforcement Provisions

§1090.1700 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.

§1090.1705 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.

§1090.1710 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 such violation and the amount of economic benefit or savings resulting from each violation.

(b) *Average standards.* (1) Any person liable for the violation of an average standard under this part is subject to a separate day of violation for each and every day in the compliance period.

(2) 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) *Per-gallon standards.* (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 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 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.

(f) Violation of any misfueling prohibition under this part counts as a separate violation for each and every day the noncompliant fuel, fuel additive, or regulated blendstock remains in any engine, vehicle, or equipment.

(g) The presumed values of fuel parameters in paragraphs (g)(1) through (6) 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.

(4) For the PCG portion for PCG by subtraction under §1090.1320(a)(1): 0 ppm sulfur and 0 volume percent benzene.

(5) For fuel additives: 970 ppm sulfur.

(6) For regulated blendstocks: 970 ppm sulfur and 5 volume percent benzene.

§1090.1715 Liability provisions.

(a) Any person who violates any requirement in 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 person that produced, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, caused the transportation or storage of, or introduced into commerce 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 fuel manufacturer's corporate, trade, or brand name is displayed at a facility where a violation occurs, the fuel manufacturer is liable for the violation. This also applies where the displayed corporate, trade, or brand name is from the fuel manufacturer's marketing subsidiary.

§1090.1720 Affirmative defense provisions related to noncompliant fuels, fuel additives, or regulated blendstocks.

(a) Any person liable for a violation under §1090.1715(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 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 WPCs are not required to conduct sampling and testing of fuel as part of their quality assurance program.

(b) For a violation found at a facility operating under the corporate, trade, or brand name of a fuel manufacturer, or a fuel manufacturer's marketing subsidiary, the fuel manufacturer 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 retailer, distributor, reseller, oxygenate blender, carrier, retailer, or WPC in violation of a contractual agreement between the branded fuel manufacturer and the person designed to prevent such action, and despite periodic sampling and testing by the branded fuel manufacturer to ensure compliance with such contractual obligation.

(3) The action of any carrier or other distributor not subject to a contract with the fuel manufacturer, 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) Under paragraph (a) of this section, for any person to show that a violation was not caused by that person, or under 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, through 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 program under paragraph (a)(3) 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 this requirement by participating in a survey program that was in effect at the time of the violation that meets the requirements in subpart N of this part. In addition to participation in a survey program under subpart N of this part, gasoline manufacturers must also participate in the national sampling oversight program specified in §1090.1440 at the time of the violation.

(2) On each occasion when fuel, fuel additive, or regulated blendstock is found to be in noncompliance 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.

(e) In addition to the defenses provided in paragraphs (a) through (d) of this section, in any case in which an ethanol blender, distributor, reseller, carrier, retailer, or wholesale purchaser-consumer would be in violation under §1090.1715 as a result of gasoline that contains between 9 and 15 percent ethanol (by volume) but exceeds the applicable standard by more than 1.0 psi, the ethanol blender, distributor, reseller, carrier, retailer or wholesale purchaser-consumer will not be deemed in violation if such person can demonstrate, by showing receipt of a certification from

the facility from which the gasoline was received or other evidence acceptable to EPA, all of the following:

(1) The gasoline portion of the blend complies with the applicable RVP standard in §1090.215.

(2) The ethanol portion of the blend does not exceed 15 percent (by volume).

(3) No additional alcohol or other additive has been added to increase the RVP of the ethanol portion of the blend.

(4) In the case of a violation alleged against an ethanol blender, distributor, reseller, or carrier, if the demonstration required by paragraphs (e)(1), (2), and (3) of this section is made by a certification, it must be supported by evidence that the criteria in paragraphs (e)(1), (2), and (3) of this section have been met, such as an oversight program conducted by or on behalf of the ethanol blender, distributor, reseller or carrier alleged to be in violation, which includes periodic sampling and testing of the gasoline or monitoring the volatility and ethanol content of the gasoline. Such certification will be deemed sufficient evidence of compliance provided it is not contradicted by specific evidence, such as testing results, and provided that the party has no other reasonable basis to believe that the facts stated in the certification are inaccurate. In the case of a violation alleged against a retail outlet or wholesale purchaser-consumer facility, such certification will be deemed an adequate defense for the retailer or wholesale purchaser-consumer, provided that the retailer or wholesale purchaser-consumer is able to show certificates for all of the gasoline contained in the storage tank found in violation, and, provided that the retailer or wholesale purchaser-consumer has no reasonable basis to believe that the facts stated in the certifications are inaccurate.

Subpart R—Attestation Engagements

§1090.1800 General provisions.

(a) The following parties must arrange for attestation engagement using agreed-upon procedures as specified in this subpart:

(1) Gasoline manufacturers that produce or import gasoline subject to the requirements of subpart C of this part.

(2) Gasoline manufacturers that perform testing as specified in subpart M of this part, and gasoline manufacturers that rely on testing from independent laboratories.

(b) Auditors performing attestation engagements must meet the following requirements:

(1) The auditor may be an internal auditor that is employed by the fuel manufacturer and certified by the Institute of Internal Auditors. Internal auditors must perform the attestation engagement in accordance with the *International Standards for the Professional Practice of Internal Auditing (Standards)* (incorporated by reference in §1090.95).

(2) The auditor may be a certified public accountant, or firm of such accountants, that is independent of the gasoline manufacturer. Such auditors must meet independence requirements and must perform the attestation engagement in accordance with the *Statements on Standards for Attestation Engagements (SSAE) No. 18, Attestation Standards: Clarification and Recodification*, especially as noted in sections AT-C 105, 215, and 315 (incorporated by reference in §1090.95).

(3) The auditor must meet the independence requirements in §1090.55.

(4) The auditor must be registered under subpart I of this part.

(5) Any auditor suspended or debarred under 2 CFR part 1532 or 48 CFR part 9, subpart 9.4, is not qualified to perform attestation engagements under this subpart.

(c) Auditors must perform attestation engagements separately for each registered facility for which the gasoline manufacturer submitted reports to EPA for the compliance period.

(d) The following provisions apply to each attestation engagement performed under this subpart:

(1) The auditor must prepare a report identifying the applicable procedures specified in this subpart along with the auditor's corresponding findings for each procedure. The auditor must submit the report electronically to EPA by June 1 of the year following the compliance period.

(2) The auditor must identify any instances where compared values do not agree (or cannot be reconciled), or where specified values are outside of what this part allows.

(3) 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 gasoline manufacturers that rely on third-party laboratories for all testing, the laboratory analysis consists of the results provided by the third-party laboratory.

§1090.1805 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:

Population (N)	Sample Size
1-25	The smaller of N or 19
26-40	20
41-65	25
66 or more	29

(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.

(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. Auditors that determine a sample size using an alternate method must describe and justify the alternate method in the attestation report(s).

(b) Select specific data points for evaluation over the course of the compliance period in a way that leads to a simple random sample that properly represents the overall population for the data set.

§1090.1810 General procedures – gasoline manufacturers.

(a) *Registration and EPA reports.* Auditors must review registration and EPA reports as follows:

(1) Obtain copies of the gasoline manufacturer’s registration information submitted under subpart I of this part and all reports, except batch reports, submitted to EPA under subpart J of this part.

(2) For each gasoline manufacturing facility, confirm that the facility’s registration is accurate based on activities reported during the compliance period, including that the registration for the facility and any related updates were complete prior to conducting regulated activities at the facility.

(3) Confirm that the manufacturer submitted the reports required for activities the manufacturer performed during the compliance period.

(4) Obtain a written statement from the manufacturer's RCO that the submitted reports are complete and accurate.

(5) Report in the attestation report(s) the name of any commercial computer program used to track the data required by the regulations in this part, if any.

(6) Report as a finding in the attestation report(s) any instances where the manufacturer's registration information is inconsistent with registration requirements of subpart I of this part and where the manufacturer failed to submit a required report under subpart J of this part.

(b) *Inventory reconciliation analysis.* Auditors must perform an inventory reconciliation analysis as follows:

(1) For each product type produced at each facility, obtain copies of the gasoline manufacturer's inventory reconciliation analysis inventory at the beginning and end of the compliance period, receipts, production, shipments, transfers, and gain/loss.

(2) Foot and cross-foot the volumes.

(3) Compare the beginning and ending inventories to the manufacturer's inventory records.

(4) Report in the attestation report(s) the volume totals for each product type.

(c) *Listing of tenders.* Auditors must review a listing of tenders as follows:

(1) Obtain detailed listings of gasoline tenders from the manufacturer, by product type.

(2) Foot the listings of gasoline tenders.

(3) Compare the total volume from the gasoline tenders to the total shipment volume in the inventory reconciliation analysis for each product type.

(4) Report in the attestation report(s) the total volume for each product type.

(d) *Listing of batches.* Auditors must review listings of batches as follows:

(1) Obtain the batch reports submitted to EPA under subpart J of this part.

(2) Foot the batch volumes by product type.

(3) Compare the total volume from the batch reports to the total production or shipment volume from the inventory reconciliation analysis specified in paragraph (b) of this section.

(4) Report as a finding in the attestation report(s) any gasoline batches with parameter results that do not meet the per-gallon standards in subpart C of this part.

(e) *Test methods.* Auditors must follow the procedures specified in §1090.1845 to determine whether the manufacturer complies with the quality control requirements specified in §1090.1375 for gasoline and gasoline-related additives and blendstocks.

(f) *Detailed testing of BOB tenders.* Auditors must review BOB tenders as follows:

(1) Obtain a listing of BOB tenders from the manufacturer.

(2) Select a representative sample of PTDs from the listing of BOB tenders.

(3) Compare the date and volume in the listing of BOB tenders to the PTDs.

(4) Confirm that the PTDs associated with the selected BOB tenders contain all the applicable language requirements.

(5) Report as a finding in the attestation report(s) any batches where PTDs did not contain all applicable PTD language requirements under subpart K of this part.

(g) *Detailed testing of BOB batches.* Select a representative sample of batches of BOB from the batch reports submitted to EPA under subpart J of this part. For each selected BOB batch, obtain the volume documentation and laboratory analysis and do the following:

(1) Compare the reported volume for the selected BOB batch to the volume documentation.

(2) Compare the reported properties for the selected BOB batch to the laboratory analysis.

(3) Compare the reported test methods used for the selected BOB batch to the laboratory analysis.

(4) Determine the oxygenate type and amount that is required for blending with the BOB.

(5) Confirm that the oxygenate type and amount included in the BOB hand blend agrees within an acceptable range to the selected BOB batches.

(6) Confirm that the manufacturer participates in the national fuels survey program under subpart N of this part, if applicable.

(7) Report as a finding in the attestation report(s) when the volume documentation or laboratory analysis does not agree with the reported information for any batch.

(h) *Detailed testing of finished gasoline tenders.* Select a representative sample from the listing of finished gasoline tenders. For each sample, obtain the associated PTDs and perform the following:

(1) Compare the date and volume in the listing of finished gasoline tenders to the PTDs.

(2) Confirm that the PTDs associated with the selected finished gasoline tenders contain all the applicable language requirements.

(i) *Detailed testing of finished gasoline batches.* Select a representative sample from the finished gasoline batch reports submitted to EPA. For each sample, obtain the volume documentation and the laboratory analysis and perform the following:

(1) Compare the volume for the selected finished gasoline batches to the volume documentation.

(2) Compare the properties for the selected finished gasoline batches to the laboratory analysis.

(3) Compare the test methods used for the selected finished gasoline batches to the laboratory analysis.

§1090.1815 General procedures – gasoline importers.

(a) *Registration and EPA reports.* Auditors must review registration and EPA reports for gasoline imports as specified in §1090.1810(a).

(b) *Listing of imports.* Auditors must review a listing of imports as follows:

(1) Obtain detailed listings of gasoline imports from the importer, by product type

(2) Foot the listings of gasoline imports.

(3) Obtain listings of gasoline imports directly from the third-party U.S. Customs broker, by product type.

(4) Foot the listings of gasoline imports from the third-party U.S. Customs broker.

(5) Compare the total volume from the importer's listings of gasoline imports to the listings from the customs broker.

(6) Report in the attestation reports the total imported volume for each product type.

(7) Report as a finding in the attestation reports if the total volume from the importer's listing of gasoline imports does not agree with the listings from the customs broker.

(c) *Listing of batches.* Auditors must review listings of batches as specified in §1090.1810(d).

(d) *Test methods.* Auditors must follow the procedures specified in §1090.1845 to determine whether the importer complies with the quality control requirements specified in §1090.1375 for gasoline.

(e) *Detailed testing of BOB imports.* Select a representative sample from the listing of BOB imports from the importer. For each sample, obtain the U.S. Customs Entry Summaries and the associated PTDs and perform the following:

(1) Compare the date and location that the import arrived in the United States to the U.S. Customs Entry Summaries.

(2) Compare the volume in the listing of BOB imports from the importer to the U.S. Customs Entry Summaries.

(3) Confirm that the PTDs associated with the selected BOB imports contain all the applicable language requirements.

(f) *Detailed testing of BOB batches.* Select a representative sample from the BOB batch reports submitted to EPA. For each sample, obtain the volume inspection reports and the laboratory analysis and perform the following:

(1) Compare the volume for the selected BOB batches to the volume inspection reports.

(2) Compare the properties for the selected BOB batches to the laboratory analysis.

(3) Compare the test methods used for the selected BOB batches to the laboratory analysis.

(4) Determine the oxygenate type and amount that is required for blending with the BOB.

(5) Confirm that the oxygenate type and amount included in the BOB hand blend agrees within an acceptable range to the selected BOB batches.

(6) Confirm that the importer is a member of the RFG survey association, if applicable.

(g) *Detailed testing of finished gasoline imports.* Select a representative sample from the listing of finished gasoline imports. For each sample, obtain the U.S. Customs Entry Summaries and the associated PTDs and perform the following:

(1) Compare the date and location that the import arrived in the United States to the U.S. Customs Entry Summaries.

(2) Compare the volume in the listing of BOB imports from the importer to the U.S. Customs Entry Summaries.

(3) Confirm that the PTDs associated with the selected finished gasoline imports contain all the applicable language requirements.

(h) *Detailed testing of finished gasoline batches.* Select a representative sample from the finished gasoline batch reports submitted to EPA. For each sample, obtain the volume inspection reports and the laboratory analysis and perform the following:

(1) Compare the volume for the selected finished gasoline batches to the volume inspection reports.

(2) Compare the properties for the selected finished gasoline batches to the laboratory analysis.

(3) Compare the test methods used for the selected finished gasoline batches to the laboratory analysis.

(i) *Additional procedures for certain gasoline imported by rail or truck.* The following additional procedures apply for importing gasoline into the United States by rail or truck under the sampling and testing option in §1090.1620:

(1) From the listing of batches obtained under paragraph (c) of this section, select a representative sample of import batches and perform the following for each sample:

(i) Identify the point of sampling and testing associated with each selected BOB and finished gasoline batch in the tank activity records from the supplier.

(ii) Confirm that the sampling and testing occurred after the most recent delivery into the supplier's storage tank and before transferring product to the railcar or truck.

(2) Obtain a detailed listing of the importer's quality assurance program sampling and testing results and the corresponding laboratory analysis. Determine whether the frequency of the sampling and testing meets the requirements in §1090.1620(b). Select a representative sample from the importer's sampling and testing records under the quality assurance program and perform the following for each sample:

(i) Determine whether the importer analyzed the test sample, and whether they performed the analysis using the methods specified in subpart M of this part.

(ii) Review the terminal test results corresponding to the time of collecting the quality assurance test samples. Compare the terminal test results with the test results from the quality assurance program, noting any parameters with differences that are greater than the reproducibility of the applicable method specified in subpart M of this part.

§1090.1820 Additional procedures for gasoline treated as blendstock.

In addition to any applicable procedures required under §§1090.1810 and 1090.1815, auditors must perform the procedures in this section for gasoline manufacturers that import GTAB under §1090.1615.

(a) *Listing of GTAB imports.* Auditors must review a listing of GTAB imports as follows:

(1) Obtain a detailed listing of GTAB imports from the importer and a listing of GTAB imports directly from the third-party U.S. Customs broker.

(2) Foot the listing of GTAB imports from the importer.

(3) Foot the listing of GTAB imports from the third-party U.S. Customs broker.

(4) Compare the volume totals per the listing of GTAB imports from the importer to the listing from the third-party U.S. Customs broker.

(5) Report as a finding in the attestation report(s) the volume totals for the GTAB imported and the corresponding facilities at which the GTAB was blended.

(b) *Listing of GTAB batches.* Auditors must review a listing of GTAB batches as follows:

(1) Obtain the GTAB batch reports submitted under subpart J of this part.

(2) Foot the volumes obtained from the GTAB batch reports.

(3) Compare the volume totals from the importer's listing of GTAB imports in paragraph (b)(1) of this section to the volume totals on the GTAB batch reports.

(4) Report as a finding in the attestation report(s) any instance where the volume totals from the importer's listing of GTAB imports in paragraph (b)(1) of this section do not agree with the volume totals on the GTAB batch reports.

(c) *Review of GTAB imports.* Auditors must conduct a review of a representative sample of GTAB imported batches as follows:

(1) Select a representative sample of GTAB batches from the listing of GTAB imports obtained in paragraph (a)(1) of this section.

(2) For each selected GTAB batch, obtain the U.S. Customs Entry Summaries.

(3) Compare the dates and locations that the selected GTAB batches arrived in the United States to the U.S. Customs Entry Summaries.

(4) Compare the volumes of the selected GTAB batches to the U.S. Customs Entry Summaries.

(5) Report as a finding in the attestation report(s) any instance where the date, location, or volume of the selected GTAB batches do not agree with the U.S. Customs Entry Summaries.

(d) *Review of GTAB batch reports.* Auditors must review reports submitted under subpart J of this part for batches of GTAB as follows:

(1) Select a representative sample of reported GTAB batches from the batch reports obtained under paragraph (b)(1) of this section.

(2) For each selected GTAB batch, obtain the volume inspection reports.

(3) Compare the volume for the selected GTAB batches to the volume inspection reports.

(4) Report as a finding in the attestation report(s) any instance where the reported volume for a selected GTAB batch does not agree with the volume inspection reports.

(e) *GTAB tracing*. Auditors must trace and review the movement of GTAB from importation to use to produce gasoline as follows:

(1) Compare the volume total on the GTAB batch reports obtained under paragraph (b)(1) of this section to the GTAB volume total in the manufacturer's inventory reconciliation analysis under §§1090.1810(b) and 1090.1815(b), as applicable.

(2) For each selected GTAB batch under paragraph (d) of this section:

(i) Obtain tank activity records that describe the movement of the selected GTAB batch from importation to use to produce gasoline.

(ii) Identify each selected GTAB batch in the tank activity records and trace each selected GTAB batch to subsequent reported batches of gasoline.

(iii) Agree the location of the facility where gasoline was produced from GTAB to the location that the GTAB arrived in the United States, or to the facility directly receiving the GTAB from the import facility.

(iv) Determine the status of the tank(s) before receiving the GTAB batch (e.g., empty tank, tank containing blendstock, tank containing GTAB, tank containing PCG).

(v) Take the following additional steps if the tank contained PCG before receiving the GTAB batch:

(A) Obtain and review a copy of the documented tank mixing procedures.

(B) Determine the volume and properties of the tank bottom that was PCG before adding GTAB.

(C) Confirm that the gasoline manufacturer determined the volume and properties of the BOB or finished gasoline produced using GTAB by excluding the volume and properties of any PCG, and that the gasoline manufacturer separately reported the PCG volume and properties to EPA.

(D) Compare the volumes and properties for the BOB or finished gasoline produced using GTAB to the volumes and properties the gasoline manufacturer reported to EPA.

(3) Report as a finding in the attestation report(s) any instance where the reviewed information does not agree with the reported information.

§1090.1825 Additional procedures for PCG used to produce gasoline.

In addition to any applicable procedures required under §§1090.1810 and 1090.1815, auditors must perform the procedures in this section for gasoline manufacturers that produce gasoline from PCG under §1090.1320.

(a) *Listing of PCG batches.* Auditors must review a listing of PCG batches as follows:

(1) Obtain the batch reports for PCG submitted under subpart J of this part.

(2) Foot the volumes per the PCG batch reports.

(3) Compare the volume total for the PCG batch reports to the receipt volume total in the inventory reconciliation analysis specified in §1090.1810(b).

(4) Report as a finding in the attestation report(s) any instance where the volume total for the PCG batch reports does not agree with the receipt volume total in the inventory reconciliation analysis specified in §1090.1810(b).

(b) *Detailed testing of PCG batches.* Auditors must review a detailed listing of PCG batches as follows:

(1) Select a representative sample from the PCG batch reports.

(2) For each selected PCG batch, obtain the volume documentation, laboratory analysis, associated PTDs, and tank activity records.

(3) Identify each selected PCG batch in the tank activity records and trace each selected PCG batch to subsequent reported batches of gasoline.

(4) Report as a finding in the attestation report(s) any instances where the reported PCG batch volume was adjusted from the original receipt volume, such as for exported PCG.

(5) Compare the volume for the selected PCG batches to the volume documentation.

(6) Compare the product type and grade for the selected PCG batches to the associated PTDs.

(7) Compare the properties for the selected PCG batches to the laboratory analysis.

(8) Compare the test methods used for the selected PCG batches to the laboratory analysis.

(9) Report as a finding in the attestation report(s) any instances where the obtained volume documentation, laboratory analysis, associated PTDs, and tank activity records does not agree with the PCG batch information in reports submitted under subpart J of this part.

§1090.1830 Alternative procedures for certified butane blenders.

Auditors must use the procedures of this section instead of or in addition to the procedures in §§1090.1810 and 1090.1815, as applicable, for certified butane blenders that blend certified butane into PCG under the provisions of §1090.1320.

(a) *Registration and EPA reports.* Auditors must review registration and EPA reports as follows:

(1) Obtain copies of the certified butane blender's registration information submitted under subpart I of this part and all reports submitted under subpart J of this part.

(2) Obtain a detailed listing of all receipts of certified butane.

(3) For each certified butane blending facility, confirm that the facility's registration is accurate based on activities reported during the compliance period, including that the registration for the facility and any related updates were completed prior to conducting regulated activities at the facility.

(4) Confirm that the certified butane blender submitted all the reports required under subpart J of this part for activities the certified butane blender performed during the compliance period.

(5) Obtain a written statement from the certified blender's RCO that the submitted reports are complete and accurate.

(6) Report in the attestation report(s) the name of any commercial computer program used to track the data required by the regulations in this part, if any.

(7) Report as a finding in the attestation report(s) any instances where the certified butane blender's registration information is inconsistent with registration requirements of subpart I of this part and where the certified butane blender failed to submit a required report under subpart J of this part.

(b) *Inventory reconciliation analysis.* Auditors must complete an inventory reconciliation analysis review as follows:

(1) Obtain an inventory reconciliation analysis from the certified butane blender for each blending facility related to all certified butane movements, including beginning inventory at the beginning and end of the compliance period, receipts, blending/production volumes, shipments, transfers, and gain/loss.

(2) Foot and cross-foot the volumes.

(3) Compare the beginning and ending inventory to the certified butane blender's inventory records.

(4) Compare the total certified butane volume from the batch reports to the inventory reconciliation analysis.

(5) Compare the total volume of certified butane blended from the batch reports to the inventory reconciliation analysis.

(6) Report in the attestation report(s) the total volume of certified butane received and blended.

(7) Report as a finding in the attestation report(s) when the reported volume(s) of certified butane does not agree with the inventory reconciliation analysis.

(c) *Listing of certified butane receipts.* Auditors must review a listing of certified butane receipts as follows:

(1) Obtain a detailed listing of all certified butane batches received at the blending facility.

(2) Foot the listing of certified butane batches received.

(3) Compare the total volumes from batch reports for certified butane received at the blending facility to the certified butane blender's listing of certified butane batches received.

(4) Report as a finding in the attestation report when the total volume from the batch reports does not agree with the total volume in the listing of the certified butane batches received.

(d) *Detailed testing of certified butane batches.* Auditors must perform a detailed testing of certified butane batches as follows:

(1) Select a representative sample of certified butane receipts from the certified butane batches reported to EPA.

(2) For each selected certified butane batch, obtain the volume documentation and laboratory analysis.

(3) Compare the volume for the selected certified butane batches to the volume documentation.

(4) Compare the properties for the selected certified butane batches to the laboratory analysis.

(5) Compare the test methods used for the selected certified butane batches to the laboratory analysis.

(6) Confirm that the butane meets the standards for certified butane.

(e) *Quality control review.* Auditors must obtain the certified butane blender's sampling and testing results for certified butane received and determine if the frequency of the sampling and testing meets the requirements in §1090.1300(b).

§1090.1835 Alternative procedures for certified pentane blenders.

(a) Auditors must use the procedures of this section to perform attestation engagements for certified pentane blenders instead of or in addition to the general procedures in §1090.1810, as applicable.

(b) Auditors must apply the procedures in §1090.1830 by substituting "pentane" for "butane" in all cases.

§1090.1840 Additional procedures related to compliance with gasoline average standards.

Auditors must perform the procedures of this section for gasoline manufacturers that comply with the standards in subpart C of this part using the procedures specified in subpart H of this part.

(a) *Annual compliance demonstration review.* Auditors must review a gasoline manufacturer's annual compliance demonstration as follows:

(1) Obtain the annual compliance reports for sulfur and benzene average standard compliance and associated batch reports submitted under subpart J of this part.

(2)(i) For gasoline refiners and blending manufacturers, compare the gasoline production volume from the annual compliance reports to the inventory reconciliation analysis under §1090.1810(b).

(ii) For gasoline importers, compare the gasoline import volume from the annual compliance reports to the corresponding volume from the listing of imports under §1090.1815(b).

(3) Report as a finding in the attestation report(s) when the production volume reported in the annual compliance report does not agree with the volume from the inventory reconciliation analysis.

(4) For each facility, recalculate the following and report in the attestation report(s) the recalculated values:

(i) Annual average benzene concentration.

(ii) Compliance benzene value and compliance sulfur value.

(iii) Number of credits generated during the compliance period, or number of banked or traded credits needed to meet standards for the compliance period.

(iv) Number of credits from the preceding compliance period that are expired or otherwise no longer available for the compliance period.

(5) Report in the attestation report(s) whether the gasoline manufacturer had a deficit for the compliance period being reviewed or the preceding compliance period.

(6) Report as a finding in the attestation report(s) if the recalculated values disagree with the reported values in the annual compliance reports.

(b) *Credit transaction review.* Auditors must review a gasoline manufacturer's credit transactions as follows:

(1) Obtain the gasoline manufacturer's credit transaction reports submitted under subpart J of this part and contracts or other information that documents all credit transfers.

(2) For each reported transaction, compare the supporting documentation with the credit transaction reports for the following elements:

(i) Creation year.

(ii) Credit type.

(iii) Quantity.

(iv) The name of the other company participating in the credit transfer.

(v) Transaction type.

(3) Report as a finding in the attestation report(s) any instances where the credit transaction reports disagree with the supporting documentation for the credit transaction.

(c) *Facility-level credit reconciliation.* Auditors must perform a facility-level credit reconciliation separately for each facility for a gasoline manufacturer as follows:

(1) Using the recalculated values in paragraph (a)(4) of this section, compare the ending balance of credits to the corresponding value from the annual compliance reports.

(2) Report as a finding in the attestation report(s) when the recalculated ending balance disagrees with the reported ending balance and by how much the two disagree.

(d) *Company-level credit reconciliation.* Auditors must perform a company-level credit reconciliation as follows:

(1) Obtain a credit reconciliation listing company-wide credits aggregated by facility for the compliance period.

(2) Foot and cross-foot the credit quantities.

(3) Compare the beginning balance of credits, the ending balance of credits, and the associated credit activity at company level in accordance with the credit reconciliation obtained in paragraph (d)(1) of this section and reported credit information.

(4) Report the beginning and ending balance of credits at company level.

§1090.1845 Procedures related to meeting performance-based measurement and statistical quality control for test methods.

(a) *General provisions.* (1) Auditors must conduct the procedures of this section for gasoline manufacturers that produced gasoline during the compliance period.

(2) In the case of quality control testing at a third-party laboratory, the auditors may perform a single attestation engagement on the third-party laboratory for multiple gasoline manufacturers if the auditor directly reviewed the information from the third-party laboratory.

(b) *Non-referee method review.* For each test method used to measure a parameter for gasoline as specified in a report submitted under subpart J of this part that is not one of the referee methods listed in §1090.1360(d), the auditor must:

(1) Obtain supporting documentation showing that the laboratory has qualified the test method by meeting the precision and accuracy criteria specified under §1090.1365.

(2) Report in the attestation report(s) a list of the alternative methods used.

(3) Report as a finding in the attestation report(s) any of these test methods that have not been qualified by the facility.

(4) If an auditor has previously reviewed supporting documentation under this paragraph for an alternative method, the auditor does not have to review the supporting document again.

(c) *Reference installation review.* For each reference installation used by the gasoline manufacturer during the compliance period, the auditor must review the following:

(1) Obtain supporting documentation demonstrating that the reference installation followed the qualification procedures specified in §1090.1370(b)(1) and (2) and the quality control procedures specified in §1090.1370(b)(3).

(2) Report as a finding in the attestation report(s) any of the qualification procedures that were not completed by the facility.

(d) *Instrument control review.* For each test instrument used to test gasoline parameters for batches selected as part of a representative sample under §1090.1810, auditors must review whether test instruments were in control as follows:

(1) Obtain statistical quality assurance data and control charts demonstrating ongoing quality testing to meet the accuracy and precision requirements specified in §1090.1375.

(2) Report as a finding in the attestation report(s) any instruments for which the facility failed to perform statistical quality assurance monitoring as required by §1090.1375.

§1090.1850 Procedures related to in-line blending waivers.

In addition to any other procedure required under this subpart, auditors must perform the procedures specified in this section for gasoline refiners that rely on the in-line blending waiver under §1090.1315.

(a) Obtain a copy of the gasoline refiner's in-line blending waiver submission and EPA's approval letter.

(b) Confirm that the refiner uses the in-line blending waiver only for qualified operations as specified in §1090.1315(a).

(c) Confirm that the sampling procedures and composite calculations conform to specifications as specified in §1090.1315(b)(2).

(d) Review the refiner's procedure for defining a batch for compliance purposes. Review available test data demonstrating that the test results from in-line blending correctly characterize the fuel parameters for the designated batch.

(e) Confirm that the refiner corrected their operations because of previous audits, if applicable.

(f) Confirm that the equipment and procedures are not materially changed from refiner's in-line blending waiver. Report in the attestation report whether the refiner has failed to update their in-line blending waiver based on a material change in equipment or procedure.

(g) Report in the attestation report(s) whether the refiner has complied with all provisions related to the refiner's in-line blending waiver.