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# Fuels Regulatory Streamlining Technical Amendments Discussion

## Draft Regulations

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## Draft Regulations

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 introduced into commerce 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. A party that produces and distributes 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 sulfur content for fuel used in marine vessels, including separate standards for marine 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. A party that must meet the 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. A party that must meet the 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 fuel 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) 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 (*e.g.*, in-line blending waivers for gasoline as specified in paragraph (b)(8) of this section), any approval granted under 40 CFR part 80 continues to be in effect under this part. For example, if EPA approved the use of an alternative label 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, a regulated party 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.

(6) A party may comply with the PTD requirements of 40 CFR part 80 instead of the requirements of subpart L of this part until May 1, 2021.

(7) A party may comply with the automatic sampling provisions of 40 CFR 80.8 instead of the requirements in § 1090.1335(c) until January 1, 2022.

(8) A gasoline manufacturer may operate under an in-line blending waiver issued under 40 CFR part 80 until January 1, 2022, or until EPA approves a revised in-line blending waiver under § 1090.1315, whichever is earlier. The following provisions apply:

(i) A gasoline manufacturer operating under an in-line blending waiver under 40 CFR 80.65 must monitor and test for sulfur content, benzene content, and for summer gasoline, RVP,

and may discontinue monitoring and testing for other properties that are included in their in-line blending waiver.

(ii) The auditing requirements in § 1090.1850 do not apply to an in-line blending waiver issued under 40 CFR part 80.

(c) The following requirements apply for the 2021 compliance period:

(1) The NSTOP specified in § 1090.1450 must begin no later than June 1, 2021.

(2) A gasoline manufacturer that accounts for oxygenate added downstream under § 1090.710 is deemed compliant with the requirement to participate in the NSTOP specified in § 1090.710(a)(3) until June 1, 2021, if the gasoline manufacturer meets all other applicable requirements specified in § 1090.710.

(3) The independent surveyor conducting the NSTOP must submit the proof of contract required under § 1090.1400(b) no later than April 15, 2021.

(4) The independent surveyor may collect only one summer or winter gasoline sample for each participating fuel manufacturing facility instead of the minimum two samples required under § 1090.1450(c)(2)(i). ~~Fuel manufacturers with waivers previously approved under § 1090.1315 do not need to update their waivers under § 1090.1315(e) if such an update would only encompass changes needed to comply with the provisions of § 1090.1315(a)(7) through (14).~~

(d) The provisions of § 1090.1315(a)(7) through (14) apply beginning March 1, 2025. Fuel manufacturers may comply with those new provisions before March 1, 2025.

### **§ 1090.10 Contacting EPA.**

A party must submit all reports, registrations, and documents for approval required under this part electronically to EPA using forms and procedures specified by EPA via the following website: *<https://www.epa.gov/fuels-registration-reporting-and-compliance-help>*.

### **§ 1090.15 Confidential business information.**

(a) Except as specified in paragraphs (b) through (d) of this section, any information submitted under this part claimed as confidential remains subject to evaluation by EPA under 40 CFR part 2, subpart B.

(b) The following information contained in submissions under this part is not entitled to confidential treatment under 40 CFR part 2, subpart B or 5 U.S.C. 552(b)(4):

- (1) Submitter's name.
- (2) The name and location of the facility, if applicable.
- (3) The general nature of a request.
- (4) The relevant time period for a request, if applicable.

(c) The following information incorporated into EPA determinations on submissions under this part is not entitled to confidential treatment under 40 CFR part 2, subpart B or 5 U.S.C. 552(b)(4):

- (1) Submitter's name.
- (2) The name and location of the facility, if applicable.
- (3) The general nature of a request.
- (4) The relevant time period for a request, if applicable.
- (5) The extent to which EPA either granted or denied the request and any relevant terms and conditions.

(d)(1) The following information contained in any enforcement action taken under this part is not entitled to confidential treatment under 40 CFR part 2, subpart B:

(i) The company's name.

(ii) The facility's name.

(iii) Any EPA-issued company and facility identification numbers.

(iv) The time or time period when any violation occurred.

(v) The quantity of fuel, fuel additive, or regulated blendstock affected by the violation.

(vi) Information relating to the exceedance of the fuel standard associated with the violation.

(vii) Information relating to the generation, transfer, or use of credits associated with the violation.

(viii) Any other information relevant to describing the violation.

(2) Enforcement actions within the scope of paragraph (d)(1) of this section include notices of violation, settlement agreements, administrative complaints, civil complaints, criminal information, and criminal indictments.

(e) EPA may disclose the information specified in paragraphs (b) through (d) of this section on its website, or otherwise make it available to interested parties, without additional notice, notwithstanding any claims that the information is entitled to confidential treatment under 40 CFR part 2, subpart B and 5 U.S.C. 552(b)(4).

**§ 1090.20 Approval of submissions under this part.**

(a) EPA may approve any submission required or allowed under this part if the request for approval satisfies all specified requirements.

(b) EPA may impose terms and conditions on any approval of any submission required or allowed under this part.

(c) EPA will deny any request for approval if the submission is incomplete, contains inaccurate or misleading information, or does not meet all specified requirements.

(d) EPA may revoke any prior approval under this part for cause. For cause includes, but is not limited to, any of the following:

(1) The approval has proved inadequate in practice.

(2) The party fails to notify EPA if information that the approval was based on substantively changed after the approval was granted.

(e) EPA may also revoke and void any approval under this part effective from the approval date for cause. Cause for voiding an approval includes, but is not limited to, any of the following:

(1) The approval was not fully or diligently implemented.

(2) The approval was based on false, misleading, or inaccurate information.

(3) Failure of a party to fulfill or cause to be fulfilled any term or condition of an approval under this part.

(f) Any person that has an approval revoked or voided under this part is liable for any resulting violation of the requirements of this part.

(g) It is unlawful to knowingly submit incomplete, false, or misleading information, which could result in criminal penalties for such unlawful conduct, including the possibility of fines, imprisonment, or both under title 18 of the U.S. Code.

## § 1090.50 Rounding.

(a) 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.~~

(b) Do not round intermediate values to transfer data unless the rounded number has at least 6 significant digits.

(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 significant digits may be used, consistent with the accuracy and repeatability specifications of the procedures specified in subpart N of this part.

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

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

(2)(i) Round batch volumes between 1,000 and 11,000 gallons to the nearest 10 gallons.

(ii) Round batch volumes above 11,000 gallons to the nearest 100 gallons.



## **§ 1090.55 Requirements for independent parties.**

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

(a) *Independence.* The independent third party, their 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 each person involved in the specified activities in this part that the independent third party is hired to perform for a regulated party, except that an internal auditor may instead meet the requirements in § 1090.1800(b)(1)(i).

(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 independent third party under the provisions of this part, may be employed, currently or previously, by the regulated party for any duration within the 12 months 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 their 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.

(b) *Technical ability.* The third party must meet all the following requirements in order to demonstrate their technical capability to perform specified activities under this part:

(1) An independent surveyor that conducts a survey under subpart O of this part must have personnel familiar with petroleum marketing, the sampling and testing of gasoline and diesel fuel at retail ~~stations~~outlets, and the designing of surveys to estimate compliance rates for fuel parameters nationwide. The independent surveyor must demonstrate this technical ability in plans submitted under subpart O of this part.

(2) A laboratory 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. The independent third party must demonstrate work experience and a good working knowledge of the VCSB methods specified in §§ 1090.~~1335~~, 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) Any person auditing in-line blending operations must ~~demonstrate work experience~~ and be ~~proficient~~familiar with the procedures referenced in § 1090.1335(c) and the VCSB~~applicable~~ methods specified in ~~§§ 1090.1365 and § 1090.1370~~1360.

(c) *Suspension and disbarment.* Any person suspended or disbarred under 2 CFR part 1532 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 that is produced by a transmix processor under § 1090.515.

*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 in order to comply with the maximum benzene average standards under § 1090.210(b).

*Anhydrous ethanol* means ethanol that contains no more than 1.0 volume percent water.

*Auditor* means any person that conducts audits under subpart S 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 can be characterized by~~ a homogeneous set of properties. ~~This also includes fuel, fuel additive, or regulated blendstock for which homogeneity testing is not required under § 1090.1337(a).~~

*Biodiesel* means a diesel fuel composed of mono-alkyl esters made from nonpetroleum feedstocks.

*Blender pump* means any fuel dispenser where PCG is blended with E85 (made only with PCG and DFE) or DFE to produce gasoline that has an ethanol content greater than that of the PCG. A fuel dispenser that produces gasoline with anything other than PCG and DFE (*e.g.*, natural gas liquids) is a fuel blending facility.

*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 fuel or fuel additive) 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 C<sub>4</sub>H<sub>10</sub>.

*Butane blending facility* means a fuel manufacturing facility where butane is blended into PCG.

*California diesel* means diesel fuel designated by a diesel fuel manufacturer as for use in California.

*California gasoline* means gasoline designated by a gasoline manufacturer as for use 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) that meets 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) that meets 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) that meets the definition of “Category 3” in 40 CFR part 1042.901.

*CBOB* means a BOB produced or imported for use outside of an RFG covered area.

*Certified butane* means butane that is certified to meet the requirements in § 1090.250.

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

*Certified butane producer* means a regulated blendstock producer that certifies butane as meeting the requirements in § 1090.250.

*Certified ethanol denaturant* means ethanol denaturant that is certified to meet the requirements in § 1090.275.

*Certified ethanol denaturant producer* means any person that certifies ethanol denaturant as meeting the requirements in § 1090.275.

*Certified non-transportation 15 ppm distillate fuel or certified NTDF* has the meaning given in 40 CFR 80.1401.

*Certified pentane* means pentane that is certified to meet the requirements in § 1090.255.

*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 § 1090.255.

*Compliance period* means the calendar year (January 1 through December 31).

*Conventional gasoline (CG)* means gasoline that is not certified to meet the requirements for RFG in § 1090.220.

*Crosscheck program* means 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 accuracy of individual laboratories and measurement systems.

*Days* means calendar days, including weekends and holidays.

*Denatured fuel ethanol (DFE)* means anhydrous ethanol that contains a denaturant to make it unfit for human consumption, that is produced or imported for use in gasoline, and that meets the standards and requirements in § 1090.270.

*Detergent* means any chemical compound or combination of chemical compounds that is added to gasoline to control deposit formation and meets the requirements in § 1090.260.

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-other~~ 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 who 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. A detergent manufacturer is a fuel additive manufacturer.

*Detergent-additized gasoline* or *detergent gasoline* means any gasoline that contains a detergent.

*Diesel fuel* means any of the following:

- (1) Any fuel commonly or commercially known as diesel fuel.

(2) Any fuel (including NP diesel fuel or a fuel blend that contains NP diesel fuel) that is intended or used to power a vehicle or engine that is designed to operate using diesel fuel.

(3) Any fuel that conforms to any version of 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.

*Diesel fuel manufacturer* means a fuel manufacturer that owns, leases, operates, controls, or supervises a fuel manufacturing facility where diesel fuel is produced or imported.

*Distillate fuel* means diesel fuel and other petroleum fuels with a T90 temperature below 700 °F 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. T90 temperature is based on the distillation test method specified in § 1090.1350.

*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 fuel manufacturing facility gate at which it was certified (*e.g.*, fuel at facilities of distributors, pipelines, terminals, carriers, retailers, oxygenate blenders, and WPCs).

*E0* means 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~~and 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. E85 is not gasoline.

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

*Ethanol* means an alcohol of the chemical formula C<sub>2</sub>H<sub>5</sub>OH.

*Ethanol denaturant* means PCG, gasoline blendstocks, or natural gas 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.

*Fuel additive* means has the same meaning as *additive* in 40 CFR 79.2(e).

*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 (as defined in 40 CFR 59.680).

*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, imported, or recertified. Fuel manufacturing facilities include refineries, fuel blending facilities, transmix processing facilities, import facilities, and any facility where fuel is recertified.

*Fuel manufacturing facility gate* means the point where the fuel leaves the fuel manufacturing facility at which the fuel manufacturer certified the fuel.

*Gasoline* means any of the following:

- (1) Any fuel commonly or commercially known as gasoline, including BOB.
- (2) Any fuel intended or used to power a vehicle or engine designed to operate on gasoline.
- (3) Any fuel that conforms to any version of the specifications of ASTM D4814 ~~(incorporated by reference in § 1090.95)~~ and is made available for use in a vehicle or engine designed to operate on gasoline.

*Gasoline before oxygenate blending (BOB)* means gasoline for which a gasoline manufacturer has accounted for oxygenate added downstream under § 1090.710. BOB is 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 that owns, leases, operates, controls, or supervises a fuel manufacturing facility where gasoline is produced, imported, or recertified.

*Gasoline regulated blendstock* means a regulated blendstock that is used or intended for use as a component of gasoline.

*Gasoline treated as blendstock (GTAB)* means a gasoline regulated blendstock that is imported and used to produce gasoline as specified in § 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. (Note: This part regulates global marine fuel only if it qualifies as a distillate fuel.)

*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 O of this part.

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

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

*Marine engine* has the meaning given ~~under~~in 40 CFR 1042.901.

*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 (CH<sub>3</sub>OH) by volume.

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

*Natural gas liquids (NGLs)* means natural gasoline or other mixtures of hydrocarbons (primarily but not limited to 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.

*Non-automated detergent blending facility* means any facility (including a truck or individual storage tank) at which detergent additive is blended using a hand blending technique or any other non-automated method.

*Nonpetroleum (NP) diesel fuel* means renewable diesel fuel or biodiesel. NP diesel fuel also includes other renewable fuel under 40 CFR part 80, subpart M, that is used or intended for use to power a vehicle or engine that is designed to operate using diesel fuel or that is made available for use in a vehicle or engine designed to operate using diesel fuel.

*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, 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.

*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:

<b>PADD</b>	<b>Regional description</b>	<b>State or territory</b>
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, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Wisconsin.
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 C<sub>5</sub>H<sub>12</sub>.

*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 a refined petroleum products pipeline system.

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

*Previously certified gasoline (PCG)* means CG, RFG, or BOB that has been certified as a batch by a gasoline manufacturer.

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

*RBOB* means a BOB produced or imported for use in an RFG covered area.

*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 (RFG)* means gasoline that is certified under § 1090.1000(b) and that meets ~~each of~~ the standards and requirements in § 1090.220.

*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 a retailer or WPC, and whose assets or facilities are not substantially owned, leased, or controlled by such manufacturer.

*Residual fuel* means a petroleum fuel with a T90 temperature at or above 700 °F. For example, No. 5 fuels and No. 6 fuels are residual fuels. Residual fuel grades are specified in

ASTM D396 and ISO 8217. T90 temperature is based on the distillation test method specified in § 1090.1350.

*Responsible corporate officer (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 fuel is sold or offered for sale for use in motor vehicles, nonroad engines, nonroad vehicles, or nonroad equipment, including locomotive 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 § 1090.285 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 42 U.S.C. 7545(k)(6) as listed in § 1090.285.

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

*Sampling strata* means the three types of areas sampled during a survey, which

~~include~~are the following:

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

*State Implementation Plan (SIP)* means a plan approved or promulgated under 42 U.S.C. 7410 or 7502.

*Summer gasoline* means gasoline that is subject to the RVP standards in § 1090.215.

*Summer season or high ozone season* means the period from June 1 through September 15 for retailers and WPCs, and May 1 through September 15 for all other persons, or an RVP control period specified in a SIP if it 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 of gasoline and distillate fuel 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.

*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 under § 1090.500.

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



*Transmix gasoline product (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 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. A transmix processor is a fuel manufacturer.

*Ultra-low-sulfur diesel (ULSD)* means diesel fuel that is certified to meet the standards 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~~additive reconciliation (VAR) ~~Period~~period means the following:

(1) For an automated detergent blending facility, the VAR period is 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~~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.

(2) For a non-automated detergent blending facility, the VAR ~~Period~~period constitutes the blending of one batch of gasoline.

*Voluntary consensus standards body (VCSB)* means 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.

*Wholesale purchaser-consumer (WPC)* means any person that is an ultimate consumer of fuels and who purchases or obtains fuels for use in motor vehicles, nonroad vehicles, nonroad engines, or nonroad equipment, including locomotive 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 § 1090.215.

*Winter season* means any duration 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 parties.

(a) *Types of provisions.* The term “provision” includes all aspects of the regulations in this part. As specified in this section, regulatory provisions include standards, requirements, and prohibitions, along with a variety of other types of provisions.

(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. 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 must not do. 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) *Subject to.* 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 exempt 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 are not exhaustive.

**§ 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.
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.
NFSP	national fuels survey program.
NGL	natural gas liquids.
NIST	National Institute for Standards and Technology.
NSTOP	national sampling and testing oversight program.
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 distillate product.
TGP	transmix gasoline product.
U.S.	United States.
U.S.C.	United States Code.
ULSD	ultra-low-sulfur diesel fuel.
<b>VAR</b>	<b><u>volume additive reconciliation.</u></b>
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. 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 also available from the sources listed in this section. This material is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

(b) American Institute of Certified Public Accountants, 220 Leigh Farm Rd., Durham, NC 27707–8110, (888) 777–7077, or [www.aicpa.org](http://www.aicpa.org).

(1) AICPA Code of Professional Conduct, updated through June 2020; IBR approved for § 1090.1800(b).

(2) Statements on Quality Control Standards (SQCS) No. 8, QC Section 10: A Firm's System of Quality Control, current as of July 1, 2019; IBR approved for § 1090.1800(b).

(3) Statement on Standards for Attestation Engagements No. 18, Attestation Standards: Clarification and Recodification, Issued April 2016; IBR approved for § 1090.1800(b).

(c) ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–2786, or [www.astm.org](http://www.astm.org).

(1) ASTM D86–20a, Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure, approved July 1, 2020 (“ASTM D86”); IBR approved for § 1090.1350(b).

(2) ASTM D287–12b (Reapproved 2019), Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method), approved December 1, 2019 (“ASTM D287”); IBR approved for § 1090.1337(d).

(3) ASTM D975–~~20a~~23a, Standard Specification for Diesel Fuel, approved ~~June~~January 1, ~~2020~~2021 (“ASTM D975”); IBR approved for § 1090.80.

(4) 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(b).

(5) 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(d).

(6) ASTM D1319–19, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption, approved August 1, 2019 (“ASTM D1319”); IBR approved for § 1090.1350(b).

(7) ASTM D2163–14 (Reapproved 2019), Standard Test Method for Determination of Hydrocarbons in Liquefied Petroleum (LP) Gases and Propane/Propene Mixtures by Gas Chromatography, approved May 1, 2019 (“ASTM D2163”); IBR approved for § 1090.1350(b).

(8) 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 §§ 1090.1350(b), 1090.1360(d), ~~1090.1365(b)~~, and 1090.1375(c).

~~(9) ASTM D3120–08 (Reapproved 2019), Standard Test Method for Trace Quantities of Sulfur in Light Liquid Petroleum Hydrocarbons by Oxidative Microcoulometry, approved May 1, 2019 (“ASTM D3120”); IBR approved for § 1090.1365(b).~~

~~(9) [Reserved]~~

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

(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(b).

(12) ASTM D3606–20e1, Standard Test Method for Determination of Benzene and Toluene in Spark Ignition Fuels by Gas Chromatography, approved July 1, 2020 (“ASTM D3606”); IBR approved for § 1090.1360(c).

(13) ASTM D4052–18a, Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter, approved December 15, 2018 (“ASTM D4052”); IBR approved for § 1090.1337(d).

(14) ASTM D4057–~~1922~~, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, approved ~~July~~May 1, ~~2019~~2022 (“ASTM D4057”); IBR approved for §§ 1090.1335(b) and 1090.1605(b).

(15) ASTM D4177–~~16e1~~22e1, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved ~~October~~July 1, ~~2016~~2022 (“ASTM D4177”); IBR approved for §§ 1090.1315(a) and 1090.1335(c).

(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(b).

(17) ASTM D4806–20, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, approved May 1, 2020 (“ASTM D4806”); IBR approved for § 1090.1395(a).

(18) ASTM D4814–~~20a~~23a, Standard Specification for Automotive Spark-Ignition Engine Fuel, approved ~~April~~December 1, ~~2020~~2023 (“ASTM D4814”); IBR approved for §§ 1090.80 and 1090.1395(a).

(19) 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(b).

(20) ASTM D5186–20, Standard Test Method for Determination of the Aromatic Content and Polynuclear Aromatic Content of Diesel Fuels By Supercritical Fluid Chromatography, approved July 1, 2020 (“ASTM D5186”); IBR approved for § 1090.1350(b).



(21) ASTM D5191–20, Standard Test Method for Vapor Pressure of Petroleum Products and Liquid Fuels (Mini Method), approved May 1, 2020 (“ASTM D5191”); IBR approved for §§§ 1090.1360(d) and ~~1090.1365(b)~~.

(22) ASTM D5453–19a, 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 July 1, 2019 (“ASTM D5453”); IBR approved for § 1090.1350(b).

(23) ASTM D5500–20a, Standard Test Method for Vehicle Evaluation of Unleaded Automotive Spark-Ignition Engine Fuel for Intake Deposit Formation, approved June 1, 2020 (“ASTM D5500”); IBR approved for § 1090.1395(c).

(24) ASTM D5599–~~1822~~, Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection, approved ~~June~~April 1, ~~2018~~2022 (“ASTM D5599”); IBR approved for §§§ 1090.1360(d) and ~~1090.1365(b)~~.

(25) ASTM D5769–20, Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry, approved June 1, 2020 (“ASTM D5769”); IBR approved for §§ 1090.1350(b), ~~1090.1360(d)~~, and 1090.~~1365(b)~~1360(d).

(26) ASTM D5842–19, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement, approved November 1, 2019 (“ASTM D5842”); IBR approved for § 1090.1335(d).

(27) ASTM D5854–19a, Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products, approved May 1, 2019 (“ASTM D5854”); IBR approved for § 1090.1315(a).

(28) ASTM D6201–19a, Standard Test Method for Dynamometer Evaluation of Unleaded Spark-Ignition Engine Fuel for Intake Valve Deposit Formation, approved December 1, 2019 (“ASTM D6201”); IBR approved for § 1090.1395(a).

(29) ASTM D6259–15 (Reapproved 2019), Standard Practice for Determination of a Pooled Limit of Quantitation for a Test Method, approved May 1, 2019 (“ASTM D6259”); IBR approved for § 1090.1355(b).

(30) ASTM D6299–~~2023a~~, Standard Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance, approved ~~May~~December 1, ~~2020~~2023 (“ASTM D6299”); IBR approved for §§ 1090.1370(c), 1090.1375(a), (b), and (c), and 1090.1450(c).

(31) ASTM D6550–20, Standard Test Method for Determination of Olefin Content of Gasolines by Supercritical-Fluid Chromatography, approved July 1, 2020 (“ASTM D6550”); IBR approved for § 1090.1350(b).

(32) ASTM D6667–14 (Reapproved 2019), Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, approved May 1, 2019 (“ASTM D6667”); IBR approved for §§ 1090.1360(d), ~~1090.1365(b),~~ and 1090.1375(c).

(33) ASTM D6708–19a, 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 November 1, 2019 (“ASTM D6708”); IBR approved for §§ 1090.1360(c), 1090.1365(d) and (f), and 1090.1375(c).

(34) ASTM D6729–14, Standard Test Method for Determination of Individual Components in Spark Ignition Engine Fuels by 100 Metre Capillary High Resolution Gas Chromatography, approved October 1, 2014 (“ASTM D6729”); IBR approved for § 1090.1350(b).

(35) ASTM D6730–19, Standard Test Method for Determination of Individual Components in Spark Ignition Engine Fuels by 100-Metre Capillary (with Precolumn) High-Resolution Gas Chromatography, approved July 1, 2019 (“ASTM D6730”); IBR approved for § 1090.1350(b).

(36) ASTM D6751–~~2023a~~, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, approved ~~January~~April 1, ~~2020~~2023 (“ASTM D6751”); IBR approved for § 1090.1350(b).

(37) ASTM D6792–17, Standard Practice for Quality Management Systems in Petroleum Products, Liquid Fuels, and Lubricants Testing Laboratories, approved May 1, 2017 (“ASTM D6792”); IBR approved for § 1090.1450(c).

~~(38) ASTM D7039–15a (Reapproved 2020), 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 May 1, 2020 (“ASTM D7039”); IBR approved for § 1090.1365(b).~~

(38) [Reserved]

(39) 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(b).

(40) ASTM D7777–13 (Reapproved 2018)e1, Standard Test Method for Density, Relative Density, or API Gravity of Liquid Petroleum by Portable Digital Density Meter, approved October 1, 2018 (“ASTM D7777”); IBR approved for § 1090.1337(d).

(d) Environmental Protection Agency, Air and Radiation Docket and Information Center, WJC West Building, Room 3334, 1301 Constitution Ave. NW, Washington, DC 20460, (202) 566–1742.

(1) CARB Test Method, 13 CA ADC § 2257; California Code of Regulations Title 13. Motor Vehicles, Division 3. Air Resources Board, Chapter 5. Standards for Motor Vehicle Fuels, Article 1. Standards for Gasoline, Subarticle 1. Gasoline Standards that Became Applicable Before 1996, § 2257. Required Additives in Gasoline; amendment filed May 17, 1999.

(2) [Reserved]

(e) The Institute of Internal Auditors, 1035 Greenwood Blvd., Suite 401, Lake Mary, FL 32746, (407) 937–1111, or [www.theiia.org](http://www.theiia.org).

(1) International Standards for the Professional Practice of Internal Auditing (Standards), Revised October 2016; IBR approved for § 1090.1800(b).

(2) [Reserved]

(f) National Institute of Standards and Technology, 100 Bureau Dr., Stop 1070, Gaithersburg, MD 20899–1070, (301) 975–6478, or [www.nist.gov](http://www.nist.gov).

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

(2) [Reserved]

## **Subpart B—General Requirements and Provisions for Regulated Parties**

### **§ 1090.100 General provisions.**

This subpart provides an overview of the general requirements and 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 example, a fuel manufacturer that also transports fuel must meet the requirements applicable to a fuel manufacturer and a distributor. A regulated party is 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 M 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 R 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) *Importers.* In addition to the requirements of paragraphs (a) through (c) of this section and § 1090.105, an importer must also comply with subpart Q of this part.

## § 1090.105 Fuel manufacturers.

This section provides an overview of general requirements applicable to a fuel manufacturer. A gasoline manufacturer must comply with the requirements of paragraph (a) of this section. A diesel fuel or IMO marine fuel manufacturer must comply with the requirements of paragraph (b) of this section.

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

(1) *Producing compliant gasoline.* A gasoline manufacturer must produce or import gasoline that meets the standards of subpart C of this part and must comply with the ABT requirements in subpart H of this part.

(2) *Registration.* A gasoline manufacturer must register with EPA under subpart I of this part.

(3) *Reporting.* A gasoline manufacturer must submit reports to EPA under subpart J of this part.

(4) *Certification and designation.* A gasoline manufacturer must certify and designate the gasoline they produce under subpart K of this part.

(5) *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 L of this part.

(6) *Sampling, testing, and sample retention.* A gasoline manufacturer must conduct sampling, testing, and sample retention in accordance with subpart N of this part.

(7) *Surveys.* A gasoline manufacturer may participate in applicable fuel surveys under subpart O of this part.

(8) *Annual attest engagement.* A gasoline manufacturer must submit annual attest engagement reports to EPA under subpart S of this part.

(b) *Diesel fuel and IMO marine fuel manufacturers.* A diesel fuel or IMO marine fuel manufacturer must comply with the following requirements, as applicable:

(1) *Producing compliant diesel fuel and ECA marine fuel.* A diesel fuel or ECA marine fuel manufacturer must produce or import diesel fuel or ECA marine fuel that meets the requirements of subpart D of this part.

(2) *Registration.* A diesel fuel or ECA marine fuel manufacturer must register with EPA under subpart I of this part.

(3) *Reporting.* A diesel fuel manufacturer must submit reports to EPA under subpart J of this part.

(4) *Certification and designation.* A diesel fuel or ECA marine fuel manufacturer must certify and designate the diesel fuel or ECA marine fuel they produce under subpart K of this part. A distillate global marine fuel manufacturer must designate the distillate global marine fuel they produce under subpart K of this part.

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

(6) *Sampling, testing, and retention requirements.* A diesel fuel or ECA marine fuel manufacturer must conduct sampling, testing, and sample retention in accordance with subpart N of this part.

(7) *Surveys.* A diesel fuel manufacturer may participate in applicable fuel surveys under subpart O of this part.

(8) *Distillate global marine fuel manufacturers.* A distillate global marine fuel manufacturer does not need to comply with the requirements of paragraphs (b)(1) ~~through~~, (2), (3), and (6) of this section for global marine fuel that is exempt from the standards in subpart D of this part, as specified in § 1090.650.

**§ 1090.110 Detergent blenders.**

A detergent blender must comply with the requirements of this section.

(a) *Gasoline standards.* A detergent blender 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 L of this part.

~~(c) *Recordkeeping.* A detergent blender must demonstrate compliance with the requirements in § 1090.260(a) as specified in § 1090.1240.~~

~~(c)~~ *Equipment calibration.* A detergent blender at an automated detergent blending facility must calibrate their detergent blending equipment in accordance with subpart N of this part.

**§ 1090.115 Oxygenate blenders.**

An oxygenate blender must comply with the requirements of this section.

(a) *Gasoline standards.* An oxygenate blender must comply with the applicable requirements of subpart C of this part.

(b) *Registration.* An oxygenate blender 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 L of this part.

(d) *Oxygenate blending requirements*. An oxygenate blender must follow the blending instructions specified by the gasoline manufacturer under § 1090.710(a)(5) unless the oxygenate blender recertifies BOBs under § 1090.740.

### **§ 1090.120 Oxygenate producers.**

This section provides an overview of general requirements applicable to an oxygenate producer (*e.g.*, a DFE or isobutanol producer). A DFE producer must comply with the requirements for an oxygenate producer in paragraph (a) of this section and the additional requirements specified in paragraph (b) of this section.

(a) *Oxygenate producers*. An oxygenate producer must comply with the following requirements:

(1) *Gasoline standards*. An oxygenate producer must comply with the applicable requirements of subpart C of this part.

(2) *Registration*. An oxygenate producer must register with EPA under subpart I of this part.

(3) *Reporting*. An oxygenate producer must submit reports to EPA under subpart J of this part.

(4) *Certification and designation*. An oxygenate producer must certify and designate the oxygenate they produce under subpart K of this part.

(5) *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 L of this part.

(6) *Sampling, testing, and retention requirements*. An oxygenate producer must conduct sampling, testing, and sample retention in accordance with subpart N of this part.

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

(1) Use denaturant that complies with the requirements specified in §§ 1090.270(b) and 1090.275.

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

#### **§ 1090.125 Certified butane producers.**

A certified butane producer must comply with the requirements of this section.

(a) *Gasoline standards*. A certified butane producer must comply with the applicable requirements of subpart C of this part.

(b) *Certification and designation*. A certified butane producer must certify and designate the certified butane they produce under subpart K of this part.

(c) *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 L of this part.

(d) *Sampling, testing, and retention requirements*. A certified butane producer must conduct sampling, testing, and sample retention in accordance with subpart N of this part.

### **§ 1090.130 Certified butane blenders.**

A certified butane blender that blends certified butane into PCG is a gasoline manufacturer that may comply with the requirements of this section in lieu of the requirements in § 1090.105.

(a) *Gasoline standards.* A certified butane blender must comply with the applicable requirements of subpart C of this part.

(b) *Registration.* A certified butane blender must register with EPA under subpart I of this part.

(c) *Reporting.* A certified butane blender must submit reports to EPA under subpart J of this part.

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

(e) *Sampling and testing requirements.* A certified butane blender must comply with the alternative sampling and testing approach in § 1090.1320(b).

(f) *Survey.* A certified butane blender may participate in ~~the~~ applicable fuel surveys ~~of~~under subpart O of this part.

(g) *Annual attest engagement.* A certified butane blender must submit annual attest engagement reports to EPA under subpart S of this part.

### **§ 1090.135 Certified pentane producers.**

A certified pentane producer must comply with the requirements of this section.

(a) *Gasoline standards.* A certified pentane producer must comply with the applicable requirements of subpart C of this part.

(b) *Registration.* A certified pentane producer must register with EPA under subpart I of this part.

(c) *Reporting.* A certified pentane producer must submit reports to EPA under subpart J of this part.

(d) *Certification and designation.* A certified pentane producer must certify and designate the certified pentane they produce under subpart K of this part.

(e) *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 L of this part.

(f) *Sampling, testing, and retention requirements.* A certified pentane producer must conduct sampling, testing, and sample retention in accordance with subpart N of this part.

#### **§ 1090.140 Certified pentane blenders.**

A certified pentane blender that blends certified pentane into PCG is a gasoline manufacturer that may comply with the requirements of this section in lieu of the requirements in § 1090.105.

(a) *Gasoline standards.* A certified pentane blender must comply with the applicable requirements of subpart C of this part.

(b) *Registration.* A certified pentane blender must register with EPA under subpart I of this part.

(c) *Reporting.* A certified pentane blender must submit reports to EPA under subpart J of this part.

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

(e) *Sampling, testing, and retention requirements.* A certified pentane blender must comply with the alternative sampling and testing approach in § 1090.1320(b).

(f) *Survey.* A certified pentane blender may participate in ~~the~~ applicable fuel surveys ~~of~~under subpart O of this part.

(g) *Annual attest engagement.* A certified pentane blender must submit annual attest engagement reports to EPA under subpart S of this part.

#### **§ 1090.145 Transmix processors.**

A transmix processor must comply with the requirements of this section.

(a) *Transmix requirements.* A transmix processor must comply with the transmix requirements of subpart F of this part.

(b) *Registration.* A transmix processor must register with EPA under subpart I of this part.

(c) *Certification and designation.* A transmix processor must certify and designate the fuel they produce under subpart K of this part.

(d) *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 provide to the transferee PTDs under subpart L of this part.

(e) *Sampling, testing, and retention requirements.* A transmix processor must conduct sampling, testing, and sample retention in accordance with subparts F and N of this part.

(f) *Reporting.* A transmix processor must submit reports to EPA under subpart J of this part.

(g) *Annual attest engagement.* A transmix processor must submit annual attest engagement reports to EPA under subpart S of this part.

**§ 1090.150 Transmix blenders.**

A transmix blender must comply with the requirements of this section.

(a) *Transmix requirements.* A transmix blender must comply with the transmix requirements of subpart F of this part.

(b) *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 provide to the transferee PTDs under subpart L of this part.

(c) *Sampling, testing, and retention requirements.* A transmix blender must conduct sampling, testing, and sample retention in accordance with subparts F and N of this part.

**§ 1090.155 Fuel additive manufacturers.**

This section provides an overview of general requirements applicable to a fuel additive manufacturer. A gasoline additive manufacturer must comply with the requirements of paragraph (a) of this section. A diesel fuel additive manufacturer must comply with the requirements of paragraph (b) of this section. A certified ethanol denaturant producer must comply with the requirements of paragraph (c) of this section.

(a) *Gasoline additive manufacturers.* A gasoline additive manufacturer must meet the following requirements:

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

(2) *Certification.* A gasoline additive manufacturer must certify the gasoline additives they produce under subpart K of this part.

(3) *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 L of this part.

(4) *Gasoline detergent manufacturers*. A gasoline detergent manufacturer must comply with the following requirements:

(i) *Part 79 registration and LAC determination*. A gasoline detergent manufacturer must register gasoline detergent(s) under 40 CFR 79.21 at a concentration that is greater than or equal to the LAC reported by the gasoline detergent manufacturer under 40 CFR 79.21(j). Note: 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 detergent standards*. Report the LAC determined under § 1090.260(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 L of this part.

(iv) *Sampling, testing, and retention requirements*. A gasoline detergent manufacturer that registers detergents must conduct sampling, testing, and sample retention in accordance with subpart N of this part.

(b) *Diesel fuel additive manufacturers*. A diesel fuel additive manufacturer must meet the following requirements:

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

(2) *Certification.* A diesel fuel additive manufacturer must certify the diesel fuel additives they produce under subpart K of this part.

(3) *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 L of this part.

(c) *Certified ethanol denaturant producers and importers.* A certified ethanol denaturant producer or importer must meet the following requirements:

(1) *Certification.* A certified ethanol denaturant producer or importer must certify that certified ethanol denaturant meets the requirements in § 1090.275 using the procedures specified at § 1090.1000(g).

(2) *Registration.* A certified ethanol denaturant producer or importer 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 L of this part.

**§ 1090.160 Distributors, carriers, and resellers.**

A distributor, carrier, or reseller must comply with the requirements of this section.

(a) *Gasoline and diesel standards.* A distributor, carrier, or reseller must comply with the applicable requirements of subparts C and D of this part.



(b) *Registration.* A distributor or carrier must register with EPA under subpart I of this part if they are part of the 500 ppm LM diesel fuel distribution chain ~~under~~in a compliance plan submitted under § 1090.515(g).

(c) *PTDs.* On each occasion when a distributor, carrier, or reseller transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs under subpart L of this part.

#### **§ 1090.165 Retailers and WPCs.**

A retailer or WPC must comply with the requirements of this section.

(a) *Gasoline and diesel standards.* A retailer or WPC must comply with the applicable requirements of subparts C and D of this part.

(b) *Labeling.* A retailer or WPC that dispenses fuels requiring a label under this part must display fuel labels under subpart P of this part.

(c) *Fuels made through fuel dispensers.* A retailer or WPC that produces gasoline (*e.g.*, E15) through a fuel dispenser with anything other than PCG and DFE is also a blending manufacturer and must comply with the applicable requirements in § 1090.105.

#### **§ 1090.170 Independent surveyors.**

An independent surveyor that conducts fuel surveys must comply with the requirements of this section.

(a) *Survey provisions.* An independent surveyor must conduct fuel surveys under subpart O of this part.

(b) *Registration.* An independent surveyor must register with EPA under subpart I of this part.

(c) *Reporting.* An independent surveyor must submit reports to EPA under subpart J of this part.

(d) *Sampling, testing, and retention requirements.* An independent surveyor must conduct sampling, testing, and sample retention in accordance with subpart N of this part.

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

#### **§ 1090.175 Auditors.**

An auditor that conducts an audit for a responsible party under this part must comply with the requirements of this section.

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

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

(c) *Attest engagement.* An auditor must conduct audits under subpart S of this part.

(d) *Independence requirements.* In order to perform an annual attest engagement under subpart S of this part, an auditor must meet the independence requirements in § 1090.55 unless they are a certified internal auditor under § 1090.1800(b)(1)(i).

#### **§ 1090.180 Pipeline operators.**

A pipeline operator must comply with the requirements of this section.

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

(b) *PTDs.* On each occasion when a pipeline operator transfers custody or title to any fuel, fuel additive, or regulated blendstock, the transferor must provide to the transferee PTDs under subpart L of this part.

(c) *Transmix requirements.* A pipeline operator 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 additives, and gasoline regulated 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 additives, and gasoline regulated blendstocks on a per-gallon basis. A gasoline manufacturer, gasoline additive manufacturer (*e.g.*, an oxygenate or certified ethanol denaturant producer), or gasoline regulated blendstock producer (*e.g.*, a certified butane or certified pentane producer) must demonstrate compliance with the per-gallon standards in this subpart by measuring fuel parameters in accordance with subpart N of this part.

(c)(1) Except as specified in paragraph (c)(2) of this section, 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. A fuel manufacturer must demonstrate compliance with average standards by measuring fuel parameters in accordance with subpart N of this part and by determining compliance under subpart H of this part.

(2) The sulfur average standard in § 1090.205(a) and the benzene average standards in § 1090.210(a) and (b) do not apply to gasoline produced by the following:

(i) Truck and rail importers using the provisions of § 1090.1610 to meet the alternative per-gallon standards of §§ 1090.205(d) and 1090.210(c).

(ii) Certified butane blenders.

(iii) Certified pentane blenders.

(iv) Transmix blenders.

(v) Transmix processors that produce gasoline from only TGP or both TGP and PCG.

(d) No person may produce, import, sell, offer for sale, distribute, offer to distribute, supply, offer for supply, dispense, store, transport, or introduce into commerce any gasoline, gasoline additive, or gasoline regulated 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.

(f) No fuel or fuel additive manufacturer may introduce into commerce gasoline or gasoline additives (including oxygenates) that are not “substantially similar” under 42 U.S.C. 7545(f)(1) or permitted under a waiver granted under 42 U.S.C. 7545(f)(4).

**§ 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.* A gasoline manufacturer 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. A

gasoline manufacturer must not account for the downstream addition of oxygenates in determining compliance with this 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 rail or truck.* (1) An importer that imports gasoline by rail or truck under § 1090.1610 must comply with a maximum sulfur per-gallon standard of 10 ppm instead of the standards in paragraphs (a) through (c) of this section.

(2) An importer that imports gasoline by rail or truck but does not comply with the alternative sampling and testing requirements in § 1090.1610 must conduct sampling, testing, and sample retention in accordance with subpart N of this part and comply with the sulfur standards in paragraphs (a) and (b) 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.* A gasoline manufacturer must meet a benzene average standard of 0.62 volume percent for each compliance period.

(b) *Maximum benzene average standard.* A gasoline manufacturer 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 rail or truck.* (1) An importer that imports gasoline by rail or truck under § 1090.1610 must comply with a 0.62 volume percent benzene per-gallon standard instead of the standards in paragraphs (a) and (b) of this section.

(2) An importer that imports gasoline by rail or truck that does not comply with the alternative sampling and testing requirements in § 1090.1610 must conduct sampling, testing, and sample retention in accordance with subpart N of this part and comply with the benzene 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)(1) *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 lower maximum RVP per-gallon standards specified in paragraphs (a)(2) through (5) of this section.

(2) *Federal 7.8 maximum RVP per-gallon standard.* ~~Gasoline~~(i) Except as specified in paragraph (a)(2)(ii) of this section, 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:

**Table 1 to Paragraph (a)(2)(i)—Federal 7.8 psi RVP Areas**

Area designation	State	Counties
Denver-Boulder-Greeley-Ft. Collins-Loveland	Colorado	Adams Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer, <sup>1</sup> Weld. <sup>2</sup>
Reno	Nevada	Washoe.
Portland	Oregon	Clackamas (only the Air Quality Maintenance Area), Multnomah (only the Air Quality Maintenance Area), Washington (only the Air Quality Maintenance Area).

Area designation	State	Counties
Salem	Oregon	Marion (only the Salem Area Transportation Study), Polk (only the Salem Area Transportation Study).
Beaumont-Port Arthur	Texas	Hardin, Jefferson, Orange.
Salt Lake City	Utah	Davis, Salt Lake.

<sup>1</sup> 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.)

<sup>2</sup> 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.

(ii) Gasoline designated as 9.0 psi summer gasoline may be located in areas described in Table 1 to paragraph (a)(2)(i) of this section during the month of May.

(3) *RFG maximum RVP per-gallon standard.* Gasoline designated as Summer RFG or located in an RFG covered area during the summer season must meet a maximum RVP per-gallon standard of 7.4 psi.

(4) *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.

(5) *SIP-controlled gasoline.* Gasoline designated as SIP-controlled gasoline or used 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) Except as specified in paragraph (b)(3) of this section, any gasoline subject to a federal 9.0 psi or 7.8 psi maximum RVP per-gallon standard in paragraph (a)(1) or (2) 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 paragraph (a)(1) or (2) of this section prior to the addition of ethanol and must contain ethanol at a concentration of at least 9 volume percent and no more than 15 volume percent.

(3) RFG and SIP-controlled gasoline that does not allow for the ethanol 1.0 psi waiver does not qualify for the special regulatory treatment specified in paragraph (b)(1) of this section.

(c) *Exceptions.* The RVP per-gallon standard in paragraph (a) of this section for the area in which the gasoline is located does not apply to that gasoline if the person(s) who produced, imported, sold, offered for sale, distributed, offered to distribute, supplied, offered for supply, dispensed, stored, transported, or introduced the gasoline into commerce 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~~outlet or WPC 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 RFG standards.**

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

(b) *Benzene standards.* RFG or RBOB must comply with the benzene average standards in § 1090.210(a) and (b).

(c) *RVP standard.* Summer RFG or Summer RBOB must comply with the RFG RVP standard in § 1090.215(a)(3).

(d) *Heavy metals standard.* RFG or RBOB 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 must not be blended with Summer RFG or Summer RBOB under

§ 1090.1320-~~(b)~~.

**§ 1090.225 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).

**§ 1090.230 Limitation on use of gasoline-ethanol blends.**

(a) No person may sell, introduce, cause, or permit the sale or introduction of gasoline containing greater than 10 volume percent ethanol (*e.g.*, E15) 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 engine, vehicle, 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.

**§ 1090.250 Certified butane standards.**

Butane designated as certified butane under § 1090.1000(e) for use under the butane blending provisions of § 1090.1320(b) must meet the following per-gallon standards:

(a) *Butane content.* Minimum 85 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.

**§ 1090.255 Certified pentane standards.**

Pentane designated as certified pentane under § 1090.1000(f) for use under the pentane blending provisions of § 1090.1320(b) 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.

**§ 1090.260 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 that meets the requirements of paragraph (b) of this section at a rate at least as high as the detergent's LAC over the VAR period.

(b) The LAC of the detergent must be determined by the gasoline detergent manufacturer using one of the following methods:

(1) The detergent must comply with one of the deposit control testing 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). A party compliant with this paragraph (b)(2) is exempt from the port fuel injector deposit control requirements of 40 CFR 80.165(a).

(3) A gasoline detergent manufacturer must produce detergents consistent with their detergent certifications for detergents certified prior to January 1, 2021, and with the specific composition information submitted as part of the registration of detergents under 40 CFR 79.21(j) thereafter.

**§ 1090.265 Gasoline additive standards.**

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

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

(2) *Sulfur content.* The gasoline 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 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 that is not otherwise subject to any other requirement in this part and only blends a gasoline 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 additive blending, except the downstream sulfur per-gallon standard in § 1090.205(c), if all the following conditions are met:

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

(2) The fuel additive blender does not add any other blendstock into the gasoline except for oxygenates that meet the requirements in § 1090.270.

(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 a gasoline manufacturer under this part.

(d) Any gasoline additive used or intended for use to comply with the gasoline deposit control requirement in § 1090.260(a) must meet the gasoline deposit control standards under § 1090.260(b).

**§ 1090.270 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 § 1090.275 may be used as denaturants.

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

**§ 1090.275 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.* In addition to the requirements of paragraph (a) of this section, certified ethanol denaturant must meet the following requirements:

(1) *Sulfur content per-gallon standard.* Maximum 330 ppm. If the certified ethanol denaturant producer represents a batch of denaturant as having a maximum sulfur content less than 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.

**§ 1090.285 RFG covered areas.**

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

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

**Table 1 to Paragraph (a)—RFG Covered Areas Under 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, <sup>1</sup> Riverside <sup>2</sup>	
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)	

<b>Area designation</b>	<b>State</b>	<b>Counties</b>	<b>Independent cities</b>
	New Jersey	Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union	
	New York	Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester	
Philadelphia-Wilmington-Trenton	Delaware	Kent, New Castle	
	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, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, Waller	
Milwaukee-Racine	Wisconsin	Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha	

<sup>1</sup> 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.

<sup>2</sup> 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):

**Table 2 to Paragraph (b)—Additional RFG Covered Areas Under 42 U.S.C. 7545(k)(10)(D)**

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.



<b>Area designation</b>	<b>State or district</b>	<b>Counties</b>	<b>Independent cities</b>
Sacramento Metro	California	Sacramento, Yolo, El Dorado (except Lake Tahoe and its drainage area), Placer, <sup>1</sup> Solano, <sup>2</sup> Sutter <sup>3</sup>	
San Joaquin Valley	California	Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare, Kern <sup>4</sup>	
Eastern Kern County	California	Kern County <sup>5</sup>	
Dallas	Texas	Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, Wise	
Denver-Boulder-Greeley-Ft. Collins-Loveland	Colorado	Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer County <sup>6</sup> , Weld County <sup>7</sup>	

<sup>1</sup> 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.

<sup>2</sup> 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 Putos Rancho to the northwest corner of Section 4, T. 5 N., R. 1 W.; thence east along a line common to T. 5 N. and T. 6 N. to the northeast corner of Section 3, T. 5 N., R. 1 E.; thence south along section lines to the southeast corner of Section 10, T. 3 N., R. 1 E.; thence east along section lines to the south 1/4 corner of Section 8, T. 3 N., R. 2 E.; thence east to the boundary between Solano and Sacramento Counties.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> That portion of the county (with the exception of that portion in Hydrologic Unit Number 18090205 the Indian Wells Valley) east and south 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.

<sup>6</sup> That portion of the county that lies south of a line described as follows: Beginning at a point on Larimer County's eastern boundary and Weld County's western boundary intersected by latitude 40 degrees, 42 minutes, and 47.1 seconds north, proceed west to a point defined by the intersection of latitude 40 degrees, 42 minutes, 47.1 seconds north and longitude 105 degrees, 29 minutes, and 40.0 seconds west, proceeding south on longitude 105 degrees, 29 minutes, 40.0 seconds west to the intersection with latitude 40 degrees, 33 minutes and 17.4 seconds north, proceeding west on latitude 40 degrees, 33 minutes, 17.4 seconds north until this line intersects Larimer County's western boundary and Grand County's eastern boundary.

<sup>7</sup> That portion of the county that lies south of a line described as follows: Beginning at a point on Weld County's eastern boundary and Logan County's western boundary intersected by latitude 40 degrees, 42 minutes, 47.1 seconds north, proceeding west on latitude 40 degrees, 42 minutes, 47.1 seconds north until this line intersects Weld County's western boundary and Larimer County's eastern 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):

**Table 3 to Paragraph (c)—RFG Covered Areas Under 42 U.S.C. 7545(k)(6)(A)(i)**

<b>Area designation at the time of opt-in</b>	<b>State</b>	<b>Counties</b>	<b>Independent cities</b>
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, <sup>1</sup> Oldham <sup>2</sup>	
Kent and Queen Anne's Counties	Maryland	Kent, Queen Anne's	
Statewide	Massachusetts	All	
Strafford, Merrimack, Hillsborough, Rockingham Counties	New Hampshire	Hillsborough, Merrimack, Rockingham, Strafford	
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	
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.

<sup>1</sup> 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.

<sup>2</sup> 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 areas 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).

**§ 1090.290 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 will 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 do all the following:

(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 required 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 required by 42 U.S.C. 7545(k)(6)(B)(i). EPA must do all the following:

(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 required by 42 U.S.C. 7545(k)(6)(B)(iii).

(b) *Opting out of RFG.* 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) *Eligibility for opting out of RFG.* The governor of the state in which a 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.* EPA may approve a request from a state asking for either the removal of an RFG opt-in area (or portion of an RFG opt-in area), or the removal of a covered area (or portion of a covered area) under 42 U.S.C. 7545(k)(10)(D) that meets the criteria in paragraph (c) of this section, from the list of RFG covered areas in § 1090.285 if it meets the requirements of paragraph (d)(1) of this section. If EPA approves such a request, an effective date will be set as specified in paragraph (d)(2) 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.

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

(i) A geographic description of each RFG area (or portion of each RFG area) that is covered by the request.

(ii) A description of all the means 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 an RFG area covered by the request where emissions reductions from RFG are relied upon as specified in paragraph (d)(1)(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 the governor's authorized representative, must submit additional information upon request by EPA.

(2)(i) Except as specified in paragraph (d)(2)(ii) of this section, EPA will set an effective date of the RFG opt-out as requested by the governor, or the governor's authorized representative, 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, EPA will set an effective date of the RFG opt-out as requested by the governor, or the governor's authorized representative, 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)(2)(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 an RFG opt-out request and its effective date.

(5) Upon the effective date for the removal of an RFG area (or portion of an RFG area) included in an approved request, such geographic area will no longer be considered an RFG covered area.

(e) *Revising list of RFG covered areas.* EPA will periodically publish a final rule revising the list of RFG covered areas in § 1090.285.

**§ 1090.295 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 RVP 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 the governor's 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) that is covered by the request.

(2) A description of all the means 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 the governor's 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 RVP standard as requested by the governor, or the governor's authorized representative, 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, EPA will set an effective date of the relaxation of the federal 7.8 psi RVP standard as requested by the governor, or the governor's authorized representative, 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 federal 7.8 psi gasoline relaxation request and its effective date.

(e) Upon the effective date for the relaxation of the federal 7.8 psi RVP standard in a subject area (or portion of a subject area) included in an approved request, such geographic area 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 RVP standard in § 1090.215(a)(2).

#### **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) A diesel fuel manufacturer or diesel fuel additive manufacturer must demonstrate compliance with the standards in this subpart by measuring fuel parameters in accordance with subpart N of this part.

(d) All 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 does not meet any standard set forth in this subpart.

(2) Notwithstanding paragraph (e)(1) of this section, an importer 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 each new batch of diesel fuel under § 1090.1000(c) and demonstrates that it complies with the standards in this subpart by measuring fuel parameters in accordance with subpart N of this part before custody or title to each new batch of diesel fuel is transferred.

(f) No fuel or fuel additive manufacturer may introduce into commerce diesel fuel or diesel fuel additives that are not “substantially similar” under 42 U.S.C. 7545(f)(1) or permitted under a waiver granted under 42 U.S.C. 7545(f)(4).

(g) Distillate global marine fuel that does not qualify for an exemption under § 1090.650 is subject to the standards, requirements, and prohibitions that apply for ULSD under this part.

(h) 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) *Overview.* Except as specified in § 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 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 of 35 volume percent.

**§ 1090.310 Diesel fuel additives standards.**

(a) Except as specified in paragraph (b) and (c) of this section, diesel fuel additives blended into diesel fuel that is subject to the standards in § 1090.305 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 diesel fuel in a quantity less than 1.0 volume percent of the resultant mixture of additive and diesel fuel.

(2) The PTD for the diesel fuel additive complies with the requirements in § 1090.1120(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 within 500 ppm LM diesel fuel or ECA marine fuel.

### **§ 1090.315 Heating oil, kerosene, ECA marine fuel, and jet fuel provisions.**

Heating oil, kerosene, ECA marine fuel, and jet fuel must not be sold for use in motor vehicles or nonroad equipment and are not subject to the ULSD standards in § 1090.305 unless the fuel is also designated as ULSD under § 1090.1015(a).

### **§ 1090.320 500 ppm LM diesel fuel standards.**

(a) *Overview.* 500 ppm LM diesel fuel produced or distributed by a transmix processor or pipeline operator under § 1090.515 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(c).

### **§ 1090.325 ECA marine fuel standards.**

(a) *Overview.* Except as specified in paragraph (c) of this section, ECA marine fuel must meet the per-gallon standards of this section.

(b) *Sulfur standard.* Maximum sulfur content of 1,000 ppm.

(c) *Exceptions.* The standards in paragraph (b) of this section do not apply to the following:



(1) Residual fuel made available for use in a steamship or C3 marine vessel if the U.S. government exempts or excludes the vessel from MARPOL Annex VI fuel standards. 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.

(2) Distillate global marine fuel that is exempt under § 1090.650.

#### **Subpart E [Reserved]**

#### **Subpart F—Transmix and Pipeline Interface Provisions**

##### **§ 1090.500 Gasoline produced from blending transmix into PCG.**

(a) *Applicability.* (1) Except as specified in paragraph (a)(2) of this section, a transmix blender that blends transmix into PCG must comply with the requirements of this section.

(2) 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 requirements in this section.

(b) *Requirements.* (1) The distillation end-point of the resultant transmix-blended gasoline must not exceed 437 degrees Fahrenheit.

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

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

(4) The transmix blender must maintain and follow a written quality assurance program that meets the requirements of paragraph (c) of this section.

(5) In the event that the test result for any sample collected under the quality assurance program specified in paragraph (c) of this section indicates that the gasoline does not comply with any of the applicable standards in this part, the transmix blender must do all the following:

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

(ii) Take reasonable steps to determine the cause of the noncompliance and prevent future instances of noncompliance.

(iii) Notify EPA of the noncompliance.

(iv) If the transmix was blended by a computer controlled in-line blending system, increase the rate of sampling and testing to a 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.

(c) *Quality assurance program.* (1) The quality assurance program must be designed to assure that the type and amount of transmix blended into PCG will not cause violations of the applicable fuel quality standards.

(2) Except as specified in paragraph (c)(3) of this section, as a part of the quality assurance program, a transmix blender must collect samples of gasoline after blending transmix and test the samples to ensure the end-point temperature of the resultant transmix-blended gasoline does not exceed 437 degrees Fahrenheit, using one of the following sampling methods:

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

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

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

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

(ii) 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.

(iii) A transmix blender that petitions 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.

#### **§ 1090.505 Gasoline produced from TGP.**

(a) *General provisions.* (1) A transmix processor or blending manufacturer that produces gasoline from TGP must meet the requirements of this section.

(2) A transmix processor must not use any feedstock other than transmix to produce TGP.

(3) A transmix processor or blending manufacturer 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. A transmix processor or blending manufacturer may also blend fuel additives into gasoline in accordance with §§ 1090.260 and 1090.265.

*(b) Demonstration of compliance with sulfur per-gallon standard.* (1) A transmix processor or blending manufacturer that produces gasoline with TGP must meet one of the following sulfur standards for each batch of gasoline they produce, as applicable:

(i) Each batch of gasoline produced from only TGP or both TGP and PCG must comply with the downstream sulfur per-gallon standard in § 1090.205(c).

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

(2) A transmix processor or blending manufacturer that produces gasoline with TGP must demonstrate compliance with the applicable sulfur standard in paragraph (b)(1) of this section by measuring the sulfur content of each batch of gasoline they produce in accordance with subpart N of this part.

*(c) Demonstration of compliance with sulfur and benzene average standards.* (1) A transmix processor or blending manufacturer that produces gasoline with TGP must exclude TGP and PCG used to produce gasoline under the provisions of this section from their compliance calculations to demonstrate compliance with the sulfur and benzene average standards in §§ 1090.205(a) and 1090.210(a) and (b), respectively. A transmix processor or

blending manufacturer that exclusively produces gasoline from only TGP or both TGP and PCG is deemed to be in compliance with the sulfur and benzene average standards in §§ 1090.205(a) and 1090.210(a) and (b), respectively.

(2) A transmix processor or blending manufacturer that produces gasoline with TGP must include all blendstocks other than TGP and PCG in their compliance calculations to demonstrate compliance with the sulfur and benzene average standards in §§ 1090.205(a) and 1090.210(a) and (b), respectively.

(3) A transmix processor or blending manufacturer that produces gasoline by adding blendstock to TGP must comply with § 1090.1325.

(d) *Demonstration of compliance with RVP standard.* A transmix processor or blending manufacturer that produces gasoline with TGP must demonstrate that each batch of gasoline they produce meets the applicable RVP standard in § 1090.215 by measuring the RVP of each batch in accordance with subpart N of this part.

(e) *Distillation point determination.* A transmix processor or blending manufacturer that produces gasoline with TGP must determine the following distillation parameters for each batch of gasoline they produce in accordance with subpart N of this part:

- (1) T10.
- (2) T50.
- (3) T90.
- (4) End-point.
- (5) Distillation residue.

**§ 1090.510 Diesel and distillate fuel produced from TDP.**

(a) A transmix processor must not use any feedstock other than transmix to produce TDP.

(b) A transmix processor must demonstrate that each batch of diesel fuel or distillate fuel produced from TDP meets the applicable standard in subpart D of this part and must comply with all other requirements applicable to a diesel fuel or distillate fuel manufacturer under this part.

(c) A transmix processor that produces 500 ppm LM diesel fuel from TDP must also comply with the requirements in § 1090.515.

**§ 1090.515 500 ppm LM diesel fuel produced from TDP.**

(a) *Applicability.* A transmix processor that produces 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.* A transmix processor 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) *Volume requirements.* A party that handles 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 (e)(1) of this section.
- (2) The addition of ULSD to a retail outlet or WPC 500 ppm LM diesel fuel storage tank under paragraph (e)(2) of this section.

(d) *Use restrictions.* 500 ppm LM diesel fuel may only be used in locomotive or marine engines that are not required to use ULSD under 40 CFR 1033.815 or 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 other nonroad vehicle or engine, or in any motor vehicle engine.

(e) *Segregation requirement.* A transmix processor or distributor must segregate 500 ppm LM diesel fuel from other fuels except as follows:

(1) A pipeline operator 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) A WPC or retailer 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 resultant mixture must be designated as 500 ppm LM diesel fuel.

(f) *Party limit.* No more than 4 separate parties may handle the 500 ppm LM diesel fuel between the producer and the ultimate consumer.

(g) *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 in order to comply with the segregation requirement in paragraph (e) 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 will handle the 500 ppm LM diesel fuel through to the ultimate consumer.

(4) Identify all ultimate consumers that will be 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.

**§ 1090.520 Handling practices for pipeline interface that is not transmix.**

(a) Subject to the limitations in paragraph (b) of this section, a pipeline operator 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, a pipeline operator must 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, a pipeline operator must not cut pipeline interface from a batch of RFG shipped adjacent to a batch of conventional gasoline into the batch of RFG.

**Subpart G—Exemptions, Hardships, and Special Provisions**

**§ 1090.600 General provisions.**

(a) Gasoline, diesel fuel, or IMO marine fuel subject to an exemption under this subpart is exempt from the standards and provisions of this part as specified in this subpart.



(b) Fuel that does not meet 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) Fuel, fuel additive, and regulated blendstock that is 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 engines, are exempt from the standards specified in this part:

(1) Tactical military vehicles, engines, or equipment, including locomotive or 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 or 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 that meet the requirements of subpart L 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 dispenser stand, fueling truck, or tank that is labeled with the appropriate designation of the fuel.

(4) It must not be used in any vehicles, engines, or equipment, including locomotive and marine engines, other than those specified in paragraph (a) of this section.

**§ 1090.610 Temporary research, development, and testing exemptions.**

(a) *Requests for an exemption.* (1) 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.

(2) Any person that is performing emissions certification testing for a motor vehicle or motor vehicle engine under 42 U.S.C. 7525 or nonroad engine or nonroad vehicle under 42 U.S.C. 7546 is exempt from the provisions of this part for the fuel they are using for emissions certification testing if they have an exemption under 40 CFR parts 85 and 86 to perform such testing.

(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 that the exemption is for an appropriate R&D purpose.

(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.

(5) Meet the requirements specified in paragraphs (c) and (d) of this section.

(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 is unable to 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, and 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 that meets the requirements of subparts C and D of this part, as applicable, and how fuel dispensers will be labeled to ensure that the fuel is not dispensed for use in motor vehicles or nonroad engines, vehicles, or equipment, including locomotive or marine engines, that are part of the R&D test program.

(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 (c), 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 the requirements of subpart L of this part.

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

(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 retail outlet or 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 approval may include such terms and conditions as EPA determines necessary to monitor the exemption and to carry out the purposes of this part, 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 an approval for 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 the requirements of this section.

(3) 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.

(f) *Notification of completion.* Any person with an approved exemption under this section must notify EPA in writing within 30 days after completion of the R&D program.

**§ 1090.615 Racing and aviation exemptions.**

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

(b) The fuel, fuel additive, or regulated blendstock is identified on PTDs and on any fuel dispenser from which the fuel, fuel additive, or regulated blendstock 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, fuel additive, or regulated blendstock is completely segregated from all other non-exempt fuel, fuel additive, or regulated blendstock throughout production, distribution, and sale to the ultimate consumer.

(d) The fuel, fuel additive, or regulated blendstock 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 or marine engines, except for those used only in aircraft or 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 ECA marine fuel for use only in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands.

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

(c) The fuel is accompanied by PTDs that meet the requirements of subpart L of this part.

(d) The fuel is completely segregated from non-exempt fuel at all points from the point the fuel is designated as exempt fuel for use only 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 segregated from fuel that is not California gasoline or diesel fuel at all points in the distribution system.

(3) Except for as specified in paragraph (d) or (e) of this section, designated California gasoline or diesel fuel must ultimately be used only in the state of California.

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

(6) California gasoline or diesel fuel must 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 must do one of the following:

(1) Comply with the sampling and testing provisions specified in subpart N of this part, as applicable.

(2) Sample and test using methods approved in Title 13 of the California Code of Regulations.

(3) Sample and test per a current and valid protocol agreement between the fuel manufacturer and the California Air Resources Board or by Executive Order from the California Air Resources Board. Such protocols or Executive Orders must be provided to EPA upon request.

(d) *California gasoline used outside of California.* California gasoline may be used in any part of the United States outside of the state of California if the manufacturer or distributor of the California gasoline does one of the following:

(1) Recertifies the California gasoline as gasoline under this part and includes the recertified gasoline in their average standard compliance calculations.



(2) Designates the California gasoline as gasoline under this part without recertification and does all the following:

(i) Demonstrates that the fuel meets all applicable requirements for California reformulated gasoline under Title 13 of the California Code of Regulations.

(ii) Properly redesignates the fuel under § 1090.1010(b)(2)(vi).

(iii) Generates PTDs under subpart L of this part.

(iv) Keeps records under subpart M of this part.

(v) Does not include the California gasoline in their average standard compliance calculations.

(e) *California diesel used outside of 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 the fuel does all the following:

(1) The manufacturer or distributor properly redesignates the fuel under § 1090.1015(b)(3)(iii).

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

(3) The manufacturer or distributor keeps records under subpart M 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 if all the following requirements are met:

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

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

(c) The summer gasoline is accompanied by PTDs that meet the requirements of subpart L of this part.

(d) The summer gasoline is completely segregated from non-exempt gasoline at all points from the point the summer gasoline is designated as exempt fuel for use only 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 temporary shortfalls in the supply of the fuel in a state or region of the United States for which the shortfall is unable to 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 shows how compliance will be achieved as expeditiously as possible.

(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 and accurate to the best of their knowledge.

**§ 1090.640 Exemptions from the gasoline deposit control requirements.**

(a) Gasoline that is used to produce E85 is exempt from the gasoline deposit control requirements in § 1090.260.

(b) Any person that uses the exemption in paragraph (a) of this section 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.**

(a) Fuel, fuel additive, and regulated blendstock that is exported for sale outside of the United States is exempt from the standards in subparts C and D of this part if all the following requirements are met:

(1) The fuel, fuel additive, or regulated blendstock is designated for export by the fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer.

(2) The fuel, fuel additive, or regulated blendstock designated for export is accompanied by PTDs that meet the requirements of subpart L of this part.

(3) The fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer keeps records that demonstrate that the fuel, fuel additive, or regulated blendstock was ultimately exported from the United States.

(4) The fuel, fuel additive, or regulated blendstock is completely segregated from non-exempt fuels, fuel additives, and regulated blendstocks from the point the fuel, fuel additive, or regulated blendstock is designated for export to the point where it is ultimately exported from the United States.

(5) Fuel, fuel additive, or regulated blendstock certified and designated for export may be certified for use in the United States if all the applicable requirements of this part are met.

(b) Any fuel dispensed from a retail outlet within the geographic boundaries of the United States is not exempt under this section.

**§ 1090.650 Distillate global marine fuel exemption.**

(a) The standards of subpart D of this part do not apply to distillate 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) Exempt distillate global marine fuel under paragraph (a) of this section must meet all the following requirements:

(1) The fuel must not exceed 0.50 weight percent sulfur (5,000 ppm).

(2) The fuel must be accompanied by PTDs as specified in § 1090.1115.

(3) The fuel must be designated as specified in § 1090.1015.

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

(5) The fuel must not be used in vehicles, engines, or equipment other than those referred to in paragraph (a) of this section.

(c)(1) Fuel that does not meet the requirements 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 distillate global marine fuel without meeting the applicable recordkeeping requirements in subpart M of this part must 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.* For each of their facilities, a gasoline manufacturer 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.

(1) *Compliance sulfur value calculation.* (i) The compliance sulfur value is determined as follows:

$$CSV_y = S_{tot,y} + DS_{(y-1)} + DS_{Oxy\_Total} - Cs$$

Where:

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

$S_{tot,y}$  = The total amount of sulfur produced in compliance period y, per paragraph (a)(1)(ii) of this section, in ppm-gallons.

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

$D_{S\_Oxy\_Total}$  = The total sulfur deficit from BOB recertification, per § 1090.740(b)(2), in ppm-gallons.

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

(ii) The total amount of sulfur produced is determined as follows:

$$S_{tot,y} = \sum_{i=1}^n (V_i \cdot S_i)$$

Where:

$V_i$  = 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.

If the calculation of  $S_{tot,y}$  results in a negative number, replace it with zero.

(2) *Sulfur compliance calculation.* (i) Compliance with the sulfur average standard in § 1090.205(a) is achieved if the following equation is true:

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

(ii) Compliance 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 the following equation is true:

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

(b) *Compliance with the benzene average standards.* For each of their facilities, a gasoline manufacturer must demonstrate compliance with the benzene average standard in § 1090.210(a) by using the equations in paragraphs (b)(1) and (2) of this section and with the maximum benzene average standard in § 1090.210(b) by using the equations in paragraphs (b)(3) and (4) of this section.

(1) *Compliance benzene value calculation.* (i) The compliance benzene value is determined as follows:

$$CBV_y = B_{tot,y} + D_{Bz,(y-1)} + D_{Bz\_Oxy\_Total} - C_{Bz}$$

Where:

$CBV_y$  = Compliance benzene value for compliance period y, in benzene gallons.

$B_{tot,y}$  = The total amount of benzene produced in compliance period y, per paragraph (b)(1)(ii) of this section, in benzene gallons.

$D_{Bz,(y-1)}$  = Benzene deficit from the previous compliance period, per § 1090.715(a)(2), in benzene gallons.

$D_{Bz\_Oxy\_Total}$  = The 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.

(ii) The total amount of benzene produced is determined as follows:

$$B_{tot,y} = \sum_{i=1}^n \left( \frac{V_i \cdot B_i}{100} \right)$$

$V_i$  = 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.

If the calculation of  $B_{\text{tot},y}$  results in a negative number, replace it with zero.

(2) *Benzene average compliance calculation.* (i) Compliance with the benzene average standard in § 1090.210(a) is achieved if the following equation is true:

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

(ii) Compliance 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 incurs a deficit under § 1090.715 if the following equation is true:

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

(3) *Average benzene concentration calculation.* The average benzene concentration is determined as follows:

$$B_{a,y} = \frac{\sum_{i=1}^n (V_i \cdot B_i)}{\sum_{i=1}^n V_i}$$

Where:

$B_{a,y}$  = Average benzene concentration for compliance period  $y$ , in volume percent benzene.



(4) *Maximum benzene average compliance calculation.* Compliance with the maximum benzene average standard in § 1090.210(b) is achieved for compliance period y if the following equation is true:

$$B_{a,y} \leq 1.30 \text{ vol\%}$$

(5) *Rounding and reporting benzene values.* (i) The total amount of benzene produced, as calculated in paragraph (b)(1)(ii) of this section, must be rounded to the nearest whole benzene gallon in accordance with § 1090.50.

(ii) The average benzene concentration, as calculated in paragraph (b)(3) 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 that complies with the requirements in § 1090.710 may include the volume of oxygenate added at a downstream location and the effects of such blending on sulfur content and benzene content in compliance calculations under this subpart.

(d) *Inclusions.* A gasoline manufacturer 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 under § 1090.1320(a)(1), include the PCG batch as a batch with a negative volume, positive sulfur content, and positive benzene content and include the new batch of gasoline as a batch with a positive volume, positive sulfur content, and positive

benzene content in compliance calculations under this section. Any negative compliance sulfur value or compliance benzene value must be reported as zero and not as a negative result.

(ii) For PCG by addition under § 1090.1320(a)(2), include only the blendstock added to make the new batch of gasoline as a batch with a positive volume, positive sulfur content, and positive benzene content 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)(i) Inclusion of a particular batch of gasoline for compliance calculations for a compliance period 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. 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.

(ii) For PCG by subtraction under § 1090.1320(a)(1), include PCG in the compliance period in which it was blended with blendstock. This may necessitate reporting a portion of the volume of PCG received in one compliance period as a separate PCG batch in the following compliance period.

(e) *Exclusions.* A gasoline manufacturer must exclude the following products from their compliance calculations:

- (1) Gasoline that was not produced by the gasoline manufacturer.
- (2) Blendstock, unless the blendstock is added to PCG or TGP under § 1090.1320 or § 1090.1325, respectively.
- (3) PCG, except as specified in paragraph (d)(4)(i) of this section.
- (4) Certified butane and certified pentane blended under § 1090.1320(b).

(5) TGP.

(6) GTAB that meets the requirements in § 1090.1615(a).

(7) Gasoline imported by truck or rail using the provisions of § 1090.1610 to meet the alternative per-gallon standards of §§ 1090.205(d) and 1090.210(c).

(8) Gasoline exempt under subpart G of this part from the average standards of subpart C of this part (*e.g.*, California gasoline, racing fuel, etc.).

**§ 1090.705 Facility level compliance.**

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

(b) A gasoline importer must comply with average standards at the company level, except that aggregation of all import facilities within a PADD as a single facility is required for compliance with the maximum benzene average standard in § 1090.210(b).

**§ 1090.710 Downstream oxygenate accounting.**

The requirements of this section apply to BOB for which a gasoline manufacturer accounts for the effects of the oxygenate blending that occurs downstream of the fuel manufacturing facility in the gasoline manufacturer's average standard compliance calculations under this subpart. This section also includes requirements for oxygenate blenders 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 must meet all the following requirements:

(1) Produce or import BOB such that 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) For each batch of BOB produced or imported, create a hand blend in accordance with § 1090.1340 and determine the properties of the hand blend using the methods specified in subpart N of this part.

(3) Participate in the NSTOP specified in § 1090.1450 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 on the PTD for the BOB each oxygenate type and amount (or range of amounts) for which the hand blend was certified for compliance under § 1090.1340.

(6) Participate in the NFSP under subpart O of this part.

(b) *Requirements for oxygenate blenders.* An oxygenate blender must add oxygenate of each type and amount (or within the range of amounts) as specified on the PTD for all BOB received, 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 must not include the volume, sulfur content, 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 recertify BOB for use as gasoline without the addition of the specified type and amount of oxygenate if the provisions of § 1090.740 are met. A person who recertifies BOB for use as gasoline without the addition of the specified type and amount of oxygenate is a gasoline manufacturer and must meet all applicable requirements for a gasoline manufacturer specified in this part.

**§ 1090.715 Deficit carryforward.**

(a) A gasoline manufacturer incurs a compliance deficit if they exceed the average standard specified in subpart C of this part for a given compliance period. The deficit incurred must be determined as specified in paragraph (a)(1) of this section for sulfur and paragraph (a)(2) of this section for benzene.

(1) The sulfur deficit incurred 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 for compliance period y, in ppm-gallons.

$CSV_y$  = Compliance sulfur value for compliance period y, per § 1090.700(a)(1), in ppm-gallons.

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

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

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

(2) The benzene deficit incurred 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 for compliance period y, in benzene gallons.

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

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

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

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

(b) A gasoline manufacturer 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.

(c) A gasoline manufacturer that incurs a deficit under this section must satisfy that deficit and demonstrate compliance with the annual average standards during the next compliance period regardless of whether the gasoline manufacturer produces gasoline during next compliance period.

**§ 1090.720 Credit use.**

(a) *General credit use provisions.* Only a gasoline manufacturer may generate, use, transfer, or own credits generated under this subpart, as specified in § 1090.725(a)(1). Credits may be used by a gasoline manufacturer to comply with the average standards specified in subpart C of this part. A gasoline manufacturer may also bank credits for future use, transfer

credits to another facility within the company (*i.e.*, intracompany trading), or transfer credits to another gasoline manufacturer, if all applicable requirements of this subpart are met.

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

(c) *Limitations on credit use.* (1) Credits that have expired must 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 incurring a compliance deficit under § 1090.715.

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

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

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

(d) *Credit reporting.* A gasoline manufacturer that generates, transacts, or uses credits under this subpart must report to EPA as specified in § 1090.905 using forms and procedures specified by EPA.

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

#### **§ 1090.725 Credit generation.**

(a) *Parties that may generate credits.* (1) No person other than a gasoline manufacturer may generate credits for use towards an average standard specified in subpart C of this part.

(2) No credits may be generated for gasoline produced by any of the following activities:

(i) Transmix processing.

(ii) Transmix blending.

(iii) Oxygenate blending.

(iv) Certified butane blending.

(v) Certified pentane blending.

(vi) Importation of gasoline by rail and truck using the alternative sampling and testing requirements in § 1090.1610.

(3) No sulfur credits may be generated at a facility if that facility used sulfur credits in that same compliance period.

(4) No benzene credits may be generated at a facility if that facility used benzene credits in that same compliance period.

(b) *Credit year.* Credits generated under this section must be identified by the compliance period 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 sulfur credits generated is determined as follows:

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

Where:

$C_{S,y}$  = Sulfur credits generated for compliance period y, in ppm-gallons.

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

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



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

CSV<sub>y</sub> = Compliance sulfur value for compliance period y, per § 1090.700(a)(1), in ppm-gallons.

(2) The value of C<sub>s,y</sub> must be positive to generate credits.

(3) 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 benzene credits generated is determined as follows:

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

Where:

C<sub>Bz,y</sub> = Benzene credits generated for compliance period y, in benzene gallons.

V<sub>i</sub> = 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.

CBV<sub>y</sub> = Compliance benzene value for compliance period y, per § 1090.700(b)(1)(i), in benzene gallons.

(2) The value of C<sub>Bz,y</sub> must be positive to generate credits.

(3) 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) *Credit generation limitation.* A gasoline manufacturer may only generate credits after they have finished producing or importing gasoline for the compliance period.

(f) *Credit generation reporting.* A gasoline manufacturer that generates credits under this section must report to EPA all credit generation information as specified in § 1090.905 using forms and procedures specified by EPA.

**§ 1090.730 Credit transfers.**

A gasoline manufacturer may only transfer or obtain credits from another gasoline manufacturer to meet an average standard specified in subpart C of this part if all applicable requirements 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 in accordance with the limitations on credit use specified in § 1090.720(c).

(c) Any credit transfer must take place no later than the deadline specified in § 1090.900(c) following the compliance period in which 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”) must only be made to a gasoline manufacturer that intends to use the credit (“transferee”). If the transferee is unable to 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 (*i.e.*, intracompany transfers), the transferor must supply to the transferee records as specified in § 1090.1210(g) indicating the

year(s) 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 must 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 must not be used to achieve compliance with an average standard under this part, 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) 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) A gasoline manufacturer may recertify a BOB that another gasoline manufacturer has specified blending instructions for oxygenate(s) under § 1090.710(a)(5) for a different type or amount of oxygenate, including gasoline recertification to contain no oxygenate, if the recertifying gasoline manufacturer meets all the requirements of this section.

(2) A gasoline manufacturer must comply with applicable requirements of this part and incur deficits to be included in their compliance calculations in § 1090.700 for each facility at which the gasoline manufacturer recertifies BOB.

(3) Unless otherwise required under this part, a gasoline manufacturer that recertifies 1,000,000 or less gallons of BOB under this section at a facility does not need to obtain credits to satisfy deficits incurred under this section or arrange for an auditor to conduct audits under subpart S of this part for that facility. The gasoline manufacturer must still comply with all other applicable provisions of this part (*e.g.*, register and submit reports under subparts I and J of this part, respectively).

(4) A party that only recertifies BOB that contains a greater amount of a specified oxygenate (*e.g.*, a party adds 15 volume percent DFE instead of 10 volume percent to an E10 BOB) or a different oxygenate at an equal or greater amount (*e.g.*, a party adds 16 volume percent isobutanol instead of 10 volume percent to an E10 BOB) does not incur deficits under this section, does not need to submit reports under subpart J of this part, and does not need to arrange for an auditor to conduct an audit under subpart S of this part. The party must still comply with all other applicable provisions of this part (*e.g.*, register and keep records under subparts I and M of this part, respectively).

(b) A gasoline manufacturer that recertifies a BOB under this section must calculate sulfur and benzene deficits for each batch and the total deficits for sulfur and benzene as follows:

(1) *Sulfur deficits from downstream BOB recertification.* Calculate the sulfur deficit from BOB recertification for each individual batch of BOB recertified as follows:

$$D_{S\_Oxy\_Batch} = 11\text{ppm} \cdot V_{\text{Base}} \cdot \left[ \frac{1}{(1 - (PTD_{\text{Oxy}} - \text{ACTUAL}_{\text{Oxy}}))} - 1 \right]$$

Where:

$D_{S\_Oxy\_Batch}$  = Sulfur deficit resulting from recertifying the batch of BOB, in ppm-gallons.

$V_{Base}$  = The volume of BOB 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.

$ACTUAL_{Oxy}$  = The volume fraction of oxygenate that was actually added to the BOB. If no oxygenate was added to the BOB, then  $ACTUAL_{Oxy} = 0$ .

(2) *Total sulfur deficit from downstream BOB recertification.* Calculate the total sulfur deficit from downstream BOB recertification for each facility as follows:

$$D_{S\_Oxy\_Total,y} = \sum_{i=1}^n D_{S\_Oxy\_Batch\_i}$$

Where:

$D_{S\_Oxy\_Total,y}$  = The total sulfur deficit from downstream BOB recertification for compliance period y, in ppm-gallons.

$D_{S\_Oxy\_Batch\_i}$  = The sulfur deficit for batch i of recertified BOB, per paragraph (b)(1) of this section, in ppm-gallons.

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

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

(3) *Benzene deficits from downstream BOB recertification.* Calculate the benzene deficit from BOB recertification for each individual batch of BOB recertified as follows:

$$D_{Bz\_Oxy\_Batch} = 0.0068 \cdot V_{Base} \cdot \left[ \frac{1}{(1 - (PTD_{Oxy} - ACTUAL_{Oxy}))} - 1 \right]$$

Where:

$D_{Bz\_Oxy\_Batch}$  = Benzene deficit resulting from recertifying the batch of BOB, in benzene gallons.

$V_{Base}$  = The volume of BOB 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.

$ACTUAL_{Oxy}$  = The volume fraction of oxygenate that was actually added to the BOB. If no oxygenate was added to the BOB, then  $ACTUAL_{Oxy} = 0$ .

(4) *Total benzene deficit from downstream BOB recertification.* Calculate the total benzene deficit from downstream BOB recertification for each facility as follows:

$$D_{Bz\_Oxy\_Total,y} = \sum_{i=1}^n D_{Bz\_Oxy\_Batch,i}$$

Where:

$D_{Bz\_Oxy\_Total,y}$  = The total benzene deficit from downstream BOB recertification for compliance period y, in benzene gallons.

$D_{Bz\_Oxy\_Batch,i}$  = The benzene deficit for batch i of recertified BOB, per paragraph (b)(3) of this section, in benzene gallons.

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

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

(5) *Deficit rounding.* The deficits calculated in paragraphs (b)(1) through (4) of this section must be rounded and reported to the nearest sulfur ppm-gallon or benzene gallon in accordance with § 1090.50, as applicable.

(c) A gasoline manufacturer does 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 must not be carried forward under § 1090.715.

**§ 1090.745 Informational annual average calculations.**

(a) A gasoline manufacturer must calculate and report annual average sulfur and benzene concentrations for each of their facilities as specified in this section. The values calculated and reported under this section are not used to demonstrate compliance with average standards under this part.

(b) A gasoline manufacturer must calculate and report their unadjusted average sulfur concentration as follows:

$$S_{a,y} = \frac{\sum_{i=1}^n (V_i \cdot S_i)}{\sum_{i=1}^n V_i}$$

Where:

$S_{a,y}$  = The facility unadjusted average sulfur concentration for compliance period y, in ppm. Round and report  $S_{a,y}$  to two decimal places.

$V_i$  = 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.

(c) A gasoline manufacturer must calculate and report their net average sulfur concentration as follows:

$$S_{NET,y} = \frac{CSV_y}{\sum_{i=1}^n V_i}$$

Where:

$S_{NET,y}$  = The facility net average sulfur concentration for compliance period y, in ppm.

Round and report  $S_{NET,y}$  to two decimal places.

$CSV_y$  = Compliance sulfur value for compliance period y, per § 1090.700(a)(1), in ppm-gallons.

(d) A gasoline manufacturer must calculate and report their net average benzene concentration as follows:

$$B_{NET,y} = \frac{CBV_y}{\sum_{i=1}^n V_i}$$

Where:

$B_{NET,y}$  = The facility net average benzene concentration for compliance period y, in volume percent benzene. Round and report  $B_{NET,y}$  to two decimal places.

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

## **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.

(ii) Diesel fuel manufacturers.

(iii) ECA marine fuel manufacturers.

(iv) Certified butane blenders.



- (v) Certified pentane blenders.
- (vi) Transmix processors.
- (2) Oxygenate blenders.
- (3) Oxygenate producers, including DFE producers.
- (4) Certified pentane producers.
- (5) Certified ethanol denaturant producers.
- (6) Distributors, carriers, and pipeline operators that are part of the 500 ppm LM fuel distribution chain under a compliance plan submitted under § 1090.515(g).
- (7) Independent surveyors.
- (8) Auditors.
- (9) Third parties that submit reports on behalf of any regulated party under this part. Such parties must register and associate their registration with the regulated party 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, a party not currently registered with EPA must register with EPA no later than 60 days in advance of the first date that such party engages in any activity under this part requiring registration under paragraph (a) of this section.

(2) *Existing registrants.* Any party that is already registered with EPA under 40 CFR part 80 as of January 1, 2021, is deemed to be registered for purposes of this part, except that such party is responsible for reviewing and updating their registration information consistent with the requirements of this part, as specified in 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) *RCO submission.* Registration information must be submitted by 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.

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

(f) *Company and facility identification.* EPA will provide registrants with company and facility identifiers to be used for recordkeeping and reporting under this part.

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

#### **§ 1090.805 Contents of registration.**

(a) *General information required for all registrants.* A party required to register under this part must submit all the following general information to EPA:

(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 (*i.e.*, not a post office box).

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

(iv) Name(s), title(s), telephone number(s), and email address(es) of an RCO and their delegate, if applicable.

(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, email address, and telephone number for the facility.

(iv) The type of facility.

(3) *Location of records.* For each separate facility, or for each importer's operations in a single PADD, all the following information:

(i) Whether records are kept on-site or off-site of the facility, or for an importer, 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.* In addition to the information in paragraph (a) of this section, a certified pentane producer must also submit the following information:

(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 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 certified pentane to be in violation of the standards in this part.

**§ 1090.810 Voluntary cancellation of company or facility registration.**

(a) *Criteria for voluntary 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 voluntary 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 part.

(4) Will still be required to meet any applicable requirements under this part (*e.g.*, the recordkeeping provisions under subpart M of this part).

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

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

(2) Provide any required information and correct any identified deficiencies.

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

(4) Submit updated information as needed.

**§ 1090.815 Deactivation (involuntary cancellation) of registration.**

(a) *Criteria for deactivation.* EPA may deactivate the registration of any party, or any of a party's facilities, 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 their account or engaged in any registration or reporting activity within the most recent 24 months.

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

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

(4) Any required 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 (42 U.S.C. 7414 or 7542) 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 under subpart M of this part.

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

(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 RCO identifying the reasons or deficiencies for which EPA intends to deactivate the party's registration. The party will have 30 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, EPA may deactivate the party's registration without further notice to the party.

(c) *Immediate deactivation.* In instances in which public health, public interest, or safety requires, EPA may deactivate the registration of the party without any notice to the party. EPA will provide written notification to the RCO identifying the reason(s) 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 meet any applicable requirements under this part (*e.g.*, the recordkeeping provisions under subpart M of this part).

(e) *Re-registration.* If a party whose registration has been deactivated wishes to re-register, they must do all the following:

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

(2) Provide any required information and correct any identified deficiencies.

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

(4) Remedy the circumstances that caused the party to be deactivated in the first place.

(5) 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 the 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 company or 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 company or facility.

(3) A letter, signed by an RCO from the company that currently owns or will own the company or facility and, if possible, an RCO from the company that previously registered the company or facility that details the effective date of the transfer of ownership of the company 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 in this part or in reporting formats and procedures, whichever is more precise.

(3) Reported volumes must be temperature-corrected in accordance with § 1090.1350(d).

(4) Report values as specified in § 1090.1335(e).

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

(c) *Report deadlines.* All annual, batch, and credit transaction 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 paragraph (a)(4) in § 1090.925.

(d) *RCO submission.* Reports must be signed and submitted by an RCO or their delegate of the RCO.

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

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

(1) *Company-level reporting.* For the company, as applicable:

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

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

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

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



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

(D) Any other information as EPA may require in order to administer reporting systems.

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

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

(ii) The compliance sulfur value, per § 1090.700(a)(1), in ppm-gallons.

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

(iv) Provide information for sulfur credits, and separately by compliance period of creation, as follows:

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

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

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

(D) The sulfur credit deficit that will be carried over into the next compliance period.

(E) The total sulfur deficit from downstream BOB recertification, per § 1090.740(b)(2).

(v) The unadjusted average sulfur concentration, per § 1090.745(b), in ppm.

(vi) The net average sulfur concentration, per § 1090.745(c), in ppm.

(vii) Any other information as EPA may require in order to administer reporting systems.

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

(1) *Company-level reporting.* For the company, as applicable:

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

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

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

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

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

(D) Any other information as EPA may require in order to administer reporting systems.

(2) *Facility-level reporting.* For each fuel manufacturing facility or importer, as applicable:

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

(ii) The compliance benzene value, per § 1090.700(b)(1)(i), in benzene gallons.

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

(iv) The average benzene concentration, per § 1090.700(b)(3), in percent volume. For an importer, report the average benzene concentration for each aggregated import facility.

(v) The net average benzene concentration, per § 1090.745(d), in percent volume.

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

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

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

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

(D) The benzene credit deficit that will be carried over into the next compliance period.

(E) The total benzene deficit from downstream BOB recertification, per § 1090.740(b)(4).

(vii) Any other information as EPA may require in order to administer reporting systems.

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

(1) For all gasoline for which the gasoline manufacturer has not accounted for oxygenate added downstream under § 1090.710:

(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, in gallons.

(v) The designation of the gasoline as RFG, CG, RFG “Intended for Oxygenate Blending”, or CG “Intended for Oxygenate Blending”.

(vi) The tested sulfur content of the batch separately for per-gallon and average compliance, in ppm, and the test method used to measure the sulfur content.

(vii) The tested benzene content of the batch, as a volume percentage, 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.

(B) The tested RVP of the batch, in psi, and the test method used to measure the RVP. If the gasoline is Summer RFG that is designated as “Intended for Oxygenate Blending” under § 1090.1010(a)(4), report the tested RVP for the hand blend.

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

(2) For BOB for which the gasoline manufacturer has accounted for oxygenate added downstream under § 1090.710:

(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, in gallons. This volume is the sum of the produced or imported BOB volume plus the anticipated volume from the addition of oxygenate downstream that the gasoline manufacturer specified 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 BOB:

(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.

(B) The tested RVP for the neat CBOB or hand blend of RBOB and oxygenate prepared under § 1090.1340, in psi, and the test method used to measure the RVP.

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

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

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

(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, as a negative number in gallons.

(E) The designation of the PCG.

(F) The tested sulfur content of the batch, in ppm, and the test method used to measure the sulfur content. If the PCG is a BOB, report the tested sulfur content of the hand blend prepared under § 1090.1340.

(G) The tested benzene content of the batch, as a volume percentage, and the test method used to measure the benzene content. If the PCG is a BOB, report the tested benzene content of the hand blend prepared under § 1090.1340.

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

~~(1) The applicable RVP standard, as specified in § 1090.215.~~

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

(H) [Reserved]

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

(J) Identification of the batch as PCG.

(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(s) added to PCG by a gasoline manufacturer complying by addition under § 1090.1320(a)(2), report each blendstock as a separate batch and all the following:

(i) For the blendstock, the sulfur content and benzene content of the batch.

(ii) For batches produced by adding blendstock to PCG, the sulfur content, oxygenate type and amount (unless not required under § 1090.1310(e)), and for summer gasoline, RVP, of the batch.

(5) For certified butane blended by a certified butane blender or certified pentane blended by a certified pentane blender:

(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 volume of certified butane or certified pentane blended, 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 certified butane or certified pentane supplier.

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

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

(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, in gallons.

(D) The designation of the blended product.

(E) For a new batch of gasoline (*e.g.*, a blended gasoline containing certified butane and PCG) that is summer gasoline or summer BOB, the tested RVP of the batch, in psi, and the test method used to measure the RVP.

(6) For gasoline produced by adding any blendstocks to TGP:

(i) For each batch of gasoline produced with TGP, the sulfur content and for summer gasoline, RVP, of the batch.

(ii) For blendstocks added to TGP, a transmix processor or blending manufacturer must treat the TGP like PCG and report 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, in gallons.

(v) The designation of the product as GTAB.

(8) For each batch of gasoline produced by a transmix processor or blending manufacturer from only TGP or both TGP and PCG under § 1090.505:

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

(ii) The batch number.

(iii) The date the batch was produced.

(iv) The batch volume, in gallons.

(v) The designation of the gasoline.

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

(vii) For summer gasoline:

(A) The applicable RVP standard in § 1090.215.

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

(9) Any other information as EPA may require in order to administer reporting systems.

(d) *Credit transactions.* Any party that is required to demonstrate annual compliance under paragraph (a) or (b) of this section must submit information related to individual transactions involving sulfur and benzene credits, including all the following:

(1) The generation, purchase, sale, or retirement of such credits.

(2) If any credits were obtained from or transferred to other fuel manufacturers, and for each other party, their 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 in order to administer reporting systems.



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

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

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

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

(ii) The batch number assigned by the recertifying party.

(iii) The date the batch was recertified.

(iv) The batch volume, 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 11 ppm.

(vii) A benzene content of 0.68 volume percent.

(viii) The type and content of each oxygenate, 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)(3).

(2) A party that recertifies a BOB under § 1090.740 with more oxygenate than specified by the BOB manufacturer does not need to report the batch.

(b) *Annual sulfur and benzene compliance reporting.* A party 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.* A party 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.**

An oxygenate producer, for each of their production facilities, or an importer for the oxygenate they import, 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 § 1090.275.
  - (ii) Denatured ethanol from non-certified ethanol denaturant.
  - (iii) A specified oxygenate other than ethanol (*e.g.*, isobutanol).
- (4) The volume of the batch, in gallons.
- (5) The ~~tested~~-sulfur content of the batch, in ppm, and the ~~test~~-method used to ~~measure~~determine the sulfur content.

- (d) Any other information as EPA may require in order to administer reporting systems.

### **§ 1090.920 Reports by certified pentane producers.**

A certified pentane producer 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, in gallons.

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

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

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

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

(c) Any other information as EPA may require in order to administer reporting systems.

**§ 1090.925 Reports by independent surveyors.**

(a) *General procedures.* An independent surveyor must meet the following requirements:

(1) Electronically submit any plans, notifications, or reports required under this part using forms and procedures specified by EPA.

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

(3) Include EPA-issued company identifiers on each report required under this section.

(4) Submit quarterly reports required under paragraphs (b) and (d) of this section by the following deadlines:

**Table 1 to Paragraph (a)(4)—Quarterly Reporting Deadlines**

<b>Calendar quarter</b>	<b>Time period covered</b>	<b>Quarterly report deadline</b>
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) *NFSP quarterly reporting.* An independent surveyor conducting the NFSP under § 1090.1405 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 specified in the survey plan.

(ii) The displayed fuel manufacturer brand name at the retail outlet, if any.

(iii) The physical location (*i.e.*, address) of the retail outlet.

(2) For each gasoline sample collected by the independent surveyor:

(i) A description of the labeling of the fuel dispenser(s) (*e.g.*, “E0”, “E10”, “E15”, etc.) from which the independent surveyor collected the sample.

(ii) The date and time the independent surveyor collected the sample.

(iii) The test results for the 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 type and amount of each oxygenate, 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, 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.*, “ULSD”) from which the independent surveyor collected the sample.

(ii) The date and time the independent surveyor collected the sample.

(iii) The tested sulfur content of the sample, and the test method used, as determined by the independent surveyor, in ppm.

(4) Any other information as EPA may require in order to administer reporting systems.

(c) *NFSP annual reporting.* An independent surveyor conducting the NFSP under § 1090.1405 must submit the following information annually by March 31.

(1) An identification of the parties that participated in the survey during the compliance period.

(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 in order to administer reporting systems.

(d) *NSTOP quarterly reporting*. An independent surveyor conducting the NSTOP under § 1090.1450 must submit the following information quarterly, as applicable:

(1) For each gasoline manufacturing facility sampled by the independent surveyor:

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

(ii) [Reserved]

(2) For each gasoline sample collected by the independent surveyor:

(i) The designation of the gasoline.

(ii) The date and time the independent surveyor collected the sample.

(iii) The batch number or the sample identification number as assigned by the independent surveyor in a consistent manner and as specified in the survey plan.

(iv) A description of any instance in which the gasoline manufacturer did not follow the applicable sampling procedures.

(v) The test results for the sample, and the test methods used, as determined by the independent surveyor, including the following parameters:

(A) The sulfur content, in ppm.

(B) The benzene content, in volume percent.

(C) The RVP in psi, if tested.

(vi) The test results for the sample, and the test methods used, as determined by the gasoline manufacturer, including the following parameters:

(A) The sulfur content, in ppm.

(B) The benzene content, in volume percent.

(C) The RVP in psi, if tested.

(vii) If available, the test results for the sample, and the test methods used, as determined by EPA's National Vehicle and Fuel Emissions Laboratory, including the following parameters:

(A) The sulfur content, in ppm.

(B) The benzene content, in volume percent.

(C) The RVP in psi, if tested.

(viii) The determined site precision under § 1090.1450(c)(10)(i) and the test performance index under § 1090.1450(c)(10)(ii) for each method and instrument that the gasoline manufacturer used to test the sample.

(ix) The reproducibility of each method that the gasoline manufacturer used to test the sample.

(x) Any applicable correlation equations used to compare the gasoline manufacturer's test results to the independent surveyor's test results.

(3) Any other information as EPA may require in order to administer reporting systems.

**§ 1090.930 Reports by auditors.**

(a) Attest engagement reports required under subpart S of this part must be submitted by an independent auditor registered with EPA and associated with a company, or companies, through registration under subpart I of this part. Each attest engagement must clearly identify the company and compliance level (*e.g.*, facility), time period, and scope 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 S of this part and the attest engagement report must clearly identify the methodologies followed and any findings, exceptions, and variances.

(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) The auditor must submit written acknowledgement from the RCO that the gasoline manufacturer has reviewed the attest engagement report.

**§ 1090.935 Reports by diesel fuel manufacturers.**

(a) *Batch reporting.* (1) For each compliance period, a ULSD manufacturer must submit the following information:

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

(ii) The highest sulfur content observed for a batch of ULSD produced during the compliance period on a company level, in ppm.

(iii) The average sulfur concentration of all batches produced during the compliance period on a company level, in ppm.

(iv) A list of all batches of ULSD that exceeded the sulfur standard in § 1090.305(b) by facility. For each such batch, report the following:

(A) The batch number.



- (B) The date the batch was produced.
- (C) The volume of the batch, in gallons.
- (D) The sulfur content of the batch, in ppm.
- (E) The corrective action taken, if any.
- (b) [Reserved]

## **Subpart K—Batch Certification and Designation**

### **§ 1090.1000 Batch certification requirements.**

(a) *General provisions.* (1) A fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer must certify batches of fuel, fuel additive, or regulated blendstock as specified in this section.

(2) A fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer does not need to certify fuel, fuel additive, or regulated blendstock that is exempt under subpart G of this part.

(3)(i) For purposes of this part, the volume of a batch is one of the following:

(A) 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.

(B) The entire volume of a tank or vessel may be certified as a single batch. In such cases, any heel left in the tank or vessel after shipments of the batch becomes PCG.

(ii) If a volume of fuel, fuel additive, or regulated blendstock is placed in a tank, certified (if not previously certified), and is not altered in any manner, then it is considered to be the same batch even if several shipments or transfers are made out of that tank.

(iii) Batch volumes must be temperature-corrected in accordance with § 1090.1350(d).

(4) For fuel produced at a facility that has an in-line blending waiver under § 1090.1315, the volume of the batch is the volume of product that is homogeneous under the requirements in § 1090.1337 and is produced during a period not to exceed 10 days.

(5) A fuel manufacturer must certify each batch of fuel at the facility where the fuel is produced or at a facility that is under the complete control of the fuel manufacturer before they transfer custody or title of the fuel to any other person.

(6) No person may sell, offer for sale, distribute, offer to distribute, supply, offer for supply, dispense, store, transport, or introduce into commerce gasoline, diesel fuel, or ECA marine fuel that is not certified under this section.

(b) *Gasoline.* (1) A gasoline manufacturer must certify gasoline as specified in paragraph (b)(2) of this section prior to introduction into commerce.

(2) To certify batches of gasoline, a gasoline manufacturer must comply with 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 N of this part. A transmix processor 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 § 1090.1020.

(iv) Designate batches of gasoline as specified in § 1090.1010.

(3) PCG may be mixed with other PCG without re-certification if the resultant mixture complies with the applicable standards in subpart C of this part and is accurately and clearly designated under § 1090.1010. Resultant mixtures of PCG 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 comply with one of the following:

(i) Designate the resultant mixture as meeting the least stringent RVP designation of any batch that is mixed. For example, a distributor that 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 N of this part and designate the new batch under § 1090.1010 to reflect the RVP of the resultant mixture.

(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 ensure that the gasoline meets the applicable RVP standard in § 1090.215.

(c) *Diesel fuel and ECA marine fuel.* (1) A diesel fuel or ECA marine fuel manufacturer must certify diesel fuel or ECA marine fuel as specified in paragraph (c)(2) of this section prior to introducing the fuel into commerce.

(2) To certify batches of diesel fuel or ECA marine fuel, a diesel fuel or ECA marine fuel manufacturer must comply with 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 N of this part. A transmix processor 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 § 1090.1020.

(iv) Designate batches of diesel fuel as specified in § 1090.1015.

(d) *Oxygenates*. (1) An oxygenate producer must certify oxygenates intended to be blended into gasoline as specified in paragraph (d)(2) of this section.

(2) To certify batches of oxygenates, an oxygenate producer must comply with all the following:

(i) Register with EPA as an oxygenate producer under subpart I of this part prior to producing or importing oxygenate intended for blending into gasoline.

(ii) Ensure that each batch of oxygenate meets the requirements in § 1090.270 by using the applicable procedures specified in subpart N of this part.

(iii) Assign batch numbers as specified in § 1090.1020.

(iv) Designate batches of oxygenate as intended for blending with gasoline as specified in § 1090.1010(c).

(e) *Certified butane*. (1) A certified butane producer 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, a certified butane producer must comply with all the following:

(i) Ensure that each batch of certified butane meets the requirements in § 1090.250 by using the applicable procedures specified in subpart N of this part.

(A) Testing must occur after the most recent delivery into the certified butane producer's storage tank.

(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 § 1090.1010(d).

(f) *Certified pentane.* (1) A certified pentane producer 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, a certified pentane producer must comply with all 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 § 1090.255 by using the applicable procedures specified in subpart N of this part.

(A) Testing must occur after the most recent delivery into the certified pentane 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 § 1090.1020.

(iv) Designate batches of certified pentane as intended for blending with gasoline as specified in § 1090.1010(d).

(g) *Certified ethanol denaturant.* (1) A certified ethanol denaturant producer must certify certified ethanol denaturant intended to be used to make DFE that meets the requirements in § 1090.275 as specified in paragraph (g)(2) of this section.

(2) To certify batches of certified ethanol denaturant, a certified ethanol denaturant producer must comply with all 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 § 1090.275 by using the applicable procedures specified in subpart N of this part.

(iii) Assign batch numbers as specified in § 1090.1020.

(iv) Designate batches of certified ethanol denaturant as intended for blending with gasoline as specified in § 1090.1010(e).

**§ 1090.1005 Designation of batches of fuels, fuel additives, and regulated blendstocks.**

(a) A fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer must designate batches of fuel, fuel additive, or regulated blendstock as specified in this subpart.

(b) A fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer must designate the fuel, fuel additive, or regulated blendstock prior to the fuel, fuel additive, or regulated blendstock leaving the facility where it was produced and must include the designations on PTDs as specified in this subpart.

(c) By designating a batch of fuel, fuel additive, or regulated blendstock under this subpart, the designating party is acknowledging that the batch 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.

**§ 1090.1010 Designation requirements for gasoline and regulated blendstocks.**

(a) *Designation requirements for gasoline manufacturers.* A gasoline manufacturer must accurately and clearly designate each batch of gasoline as follows:

(1) A gasoline manufacturer must designate each batch of gasoline as one of the following fuel types:

(i) Winter RFG.

(ii) Summer RFG.

(iii) Winter RBOB.

(iv) Summer RBOB.

(v) Winter CG.

(vi) Summer CG.

(vii) Winter CBOB.

(viii) Summer CBOB.

(ix) Exempt gasoline under subpart G of this part (including additional identifying information).

(x) California gasoline.

(2) A gasoline manufacturer must further designate gasoline designated as Summer CG or Summer CBOB as follows:

(i) 7.8 psi Summer CG or Summer CBOB, respectively.

(ii) 9.0 psi Summer CG or Summer CBOB, respectively.

(iii) SIP-controlled Summer CG or Summer CBOB, respectively.

(3) A CBOB or RBOB manufacturer 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(a)(5).

(4) In addition to any other applicable designation in this paragraph (a), gasoline designed for downstream oxygenate blending for which the gasoline manufacturer has not accounted for oxygenate added downstream under § 1090.710 must be designated as “Intended for Oxygenate Blending”, along with a designation indicating the type(s) and amount(s) of oxygenate to be blended with the gasoline.

*(b) Designation requirements for gasoline distributors and certain gasoline blending manufacturers.* A gasoline distributor, certified butane blender, certified pentane blender, or party that recertifies BOB under § 1090.740 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) A distributor must accurately and clearly classify each batch or portion of a batch of gasoline as specified by the gasoline manufacturer in paragraph (a) of this section.

(2) Except as specified in paragraph (b)(2)(vii) of this section, a distributor, certified butane blender, certified pentane blender, or party that recertifies BOB under § 1090.740 may redesignate a batch or portion of a batch of gasoline without recertifying the batch or portion of a batch as follows:



(i) Winter RFG or Winter RBOB may be redesignated as either Winter CG or Winter CBOB.

(ii) Winter CG or Winter CBOB may be redesignated as either Winter RFG or Winter RBOB.

(iii) Summer RFG, Summer RBOB, Summer CG, or Summer CBOB may be redesignated without recertification to a less stringent RVP designation. 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, Summer RBOB, Summer CG, or Summer CBOB may be redesignated without recertification as either Winter RFG, Winter RBOB, Winter CG, or Winter CBOB.

(v) Summer CG, Summer CBOB, or any winter gasoline may be redesignated to either Summer RFG or Summer RBOB, provided the RVP is determined using the applicable procedures specified in subpart N of this part and the new batch meets the RFG RVP standard specified in § 1090.215(a)(3).

(vi)(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 § 1090.625(d) are met.

(B) California gasoline that is not redesignated under paragraph (b)(2)(vi)(A) of this section may instead be recertified as gasoline under § 1090.1000(b).

(vii) CG or RFG must not be redesignated as BOB.

(3) A distributor, certified butane blender, certified pentane blender, or party that recertifies BOB under § 1090.740 that redesignates a batch or portion of a batch 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.* An oxygenate producer 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.* A certified butane or certified pentane producer must accurately and clearly designate each batch of certified butane or certified pentane as one of the following types:

(1) Certified butane.

(2) Certified pentane.

(e) *Designation requirements for certified ethanol denaturant.* A certified ethanol denaturant producer must accurately and clearly designate batches of certified ethanol denaturant as “certified ethanol denaturant”.

(f) *Designation requirements for TGP.* A transmix processor must accurately and clearly designate any TGP that they transfer to any other person as “TGP”.

#### **§ 1090.1015 Designation requirements for diesel and distillate fuels.**

(a) *Designation requirements for diesel and distillate fuel manufacturers.* (1) Except as specified in paragraph (a)(3) of this section, a diesel fuel or distillate fuel manufacturer must accurately and clearly designate each batch of diesel fuel or distillate fuel as at least one of the following fuel types:

(i) ULSD. A diesel fuel manufacturer may also designate ULSD as 15 ppm MVNRLM diesel fuel.

(ii) 500 ppm LM diesel fuel.

(iii) Heating oil.

(iv) Jet fuel.

(v) Kerosene.

(vi) ECA marine fuel.

(vii) Distillate global marine fuel.

(viii) Certified NTDF.

(ix) Exempt diesel fuel or distillate fuel under subpart G of this part (including additional identifying information).

(2) Only a fuel manufacturer that complies with the requirements in § 1090.515 may designate fuel as 500 ppm LM diesel fuel.

(3) Any batch of diesel fuel or distillate fuel that is certified and designated as ULSD may also be designated as heating oil, kerosene, ECA marine fuel, jet fuel, or distillate global marine fuel if it is also suitable for such use.

(b) *Designation requirements for distributors of diesel and distillate fuels.* A distributor of diesel and distillate fuels must accurately and clearly designate each batch of diesel fuel or distillate fuel for which they transfer custody as follows:

(1) A distributor must accurately and clearly designate such diesel fuel or distillate fuel by sulfur content while it is in their custody (*e.g.*, as 15 ppm or 500 ppm).

(2) A distributor must accurately and clearly designate such diesel fuel or distillate fuel as specified by the diesel fuel or distillate fuel manufacturer under paragraph (a) of this section.

(3) A distributor 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 500 ppm LM diesel fuel, heating oil, kerosene, ECA marine fuel, jet fuel, or distillate global marine fuel without recertification if all applicable requirements under this part are met for the new fuel designation.

(iii) California diesel may be redesignated as ULSD if the requirements specified in § 1090.625(e) are met.

(iv) Heating oil, kerosene, ECA marine fuel, or jet fuel may be redesignated as ULSD if the fuel meets the ULSD standards in § 1090.305 and was designated as ULSD under paragraph (a) of this section.

(v) 500 ppm LM diesel fuel may be redesignated as ECA marine fuel, distillate global marine fuel, or heating oil. Any person that redesignates 500 ppm LM diesel fuel to ECA marine fuel or distillate global marine fuel must maintain records from the producer of the 500 ppm LM diesel fuel (*i.e.*, PTDs accompanying the fuel under § 1090.1115) to demonstrate compliance with the 500 ppm sulfur standard in § 1090.320(b).

(vi) Fuel designated as certified NTDF may be redesignated as ULSD without recertification if the applicable requirements of 40 CFR 80.1408 are met.

(c) *ULSD designation limitation.* No person may designate distillate fuel with a sulfur content greater than the sulfur standard in § 1090.305(b) as ULSD.

### **§ 1090.1020 Batch numbering.**

(a) A fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer 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.*, 4321–54321–20–000001, 4321–54321–20–000002, etc.). EPA assigns company and facility registration numbers as specified in subpart I of this part.

(b) Certified butane or certified pentane blended with PCG during a period of up to one month may be included in a single batch for purposes of reporting to EPA.

(c) A gasoline manufacturer that recertifies BOBs under § 1090.740 may include up to a single month's volume as a single batch for purposes of reporting to EPA.

### **Subpart L—Product Transfer Documents**

#### **§ 1090.1100 General requirements.**

(a) *General provisions.* (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 to the ultimate end user at a retail outlet or WPC facility, the transferor must provide the transferee PTDs that include 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 § 1090.1010 or distillate-related products specified in § 1090.1015.

(b) *Use of codes.* Except for transfers to a truck carrier, retailer, or WPC, product codes may be used to convey the information required under this subpart, if such codes are clearly understood by each transferee.

(c) *Part 80 PTD requirements.* For fuel, fuel additive, or regulated blendstock subject to 40 CFR part 80, subpart M, a party must also include the applicable PTD information required under 40 CFR 80.1453.

**§ 1090.1105 PTD requirements for exempt fuels.**

(a) In addition to the information required under § 1090.1100, on each occasion when any person transfers custody or title to any exempt fuel under subpart G of this part, other than when fuel is sold or dispensed to the ultimate end user at a retail outlet or WPC facility, the transferor must provide the transferee PTDs that include the following statements, as applicable:

(1) *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.”

(2) *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.”

(3) *Racing fuel language*. For fuels used for racing purposes specified in § 1090.615: “This fuel is for racing purposes only.”

(4) *Aviation fuel language*. For fuels used in aircraft specified in § 1090.615: “This fuel is for aviation use only.”

(5) *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.”

(6) *California gasoline language*. For California gasoline specified in § 1090.625: “California gasoline”.

(7) *California diesel language*. For California diesel specified in § 1090.625: “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.”

(9) *Exported fuel language*. For exported fuels specified in § 1090.645: “This fuel is for export from the United States only.”

(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”.

**§ 1090.1110 PTD requirements for gasoline, gasoline additives, and gasoline regulated blendstocks.**

(a) *General requirements.* On each occasion when any person transfers custody or title of any gasoline, gasoline additive, or gasoline regulated blendstock, other than when fuel is sold or dispensed to the ultimate end user at a retail outlet or WPC facility, the transferor must provide the transferee PTDs that include the following information:

(1) All applicable information required under § 1090.1100 and this section.

(2) An accurate and clear statement of the applicable designation of the gasoline, gasoline additive, or gasoline regulated blendstock under § 1090.1010.

(b) *BOB language requirements.* For batches of BOB, in addition to the information required under paragraph (a) of this section, the following information must be included on the PTD:

(1) *Oxygenate type(s) and amount(s).* Statements specifying each oxygenate type and amount (or range of amounts) for which the BOB was certified under § 1090.710(a)(5).

(2) *Summer BOB language requirements.* (i) Except as specified in paragraph (b)(2)(ii) of this section, for batches of summer BOB, identification of the product with one of the following statements indicating the applicable RVP standard in § 1090.215:

(A) “9.0 psi CBOB. This product does not meet the requirements for summer reformulated gasoline.”

(B) “7.8 psi CBOB. This product does not meet the requirements for summer reformulated gasoline.”

(C) “RBOB. This product meets the requirements for summer reformulated or conventional gasoline.”



(ii) For BOBs designed to produce a finished gasoline that must meet an RVP 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.

(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 PTD:

(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 standard in § 1090.215(a)(1): “9.0 psi Gasoline.”

(B) For gasoline that meets the 7.8 psi RVP standard in § 1090.215(a)(2): “7.8 psi Gasoline.”

(C) For gasoline that meets the RFG 7.4 psi RVP standard in § 1090.215(a)(3): “Reformulated Gasoline.”

(ii) For finished gasoline that meets an RVP 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 between 10 and 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, on each occasion when any person transfers custody or title to any gasoline

detergent, the transferor must provide to the transferee PTDs that include the following information:

(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 § 1090.260.

(f) *Gasoline additives language requirements.* In addition to any other PTD requirements of this subpart, on each occasion when any person transfers custody or title to any gasoline additive that meets the requirements in § 1090.265(a), the transferor must provide to the transferee PTDs that include the following information:

(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 certified ethanol denaturant that meets the requirements in § 1090.275, the transferor must provide to the transferee PTDs that include 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. If the certified ethanol denaturant manufacturer represents a batch of denaturant as having a maximum sulfur content

lower than 330 ppm, the PTD must instead state that lower sulfur maximum (*e.g.*, has a sulfur content of 120 ppm or less).

(h) *Butane and pentane language requirements.* (1) In addition to any other PTD requirements of this subpart, on each occasion when any person transfers custody or title to any certified butane or certified pentane, the transferor must provide to the transferee PTDs that include the following information:

(i) The certified butane or certified pentane producer company name and, for the certified pentane producer, the facility registration number issued by EPA.

(ii) One of the following statements, as applicable:

(A) “Certified pentane for use by certified pentane blenders.”

(B) “Certified butane for use by certified butane blenders.”

(2) PTDs must be transferred from each party transferring certified butane or certified pentane for use by a certified butane or certified pentane blender to each party that receives the certified butane or certified pentane through to the certified butane or certified pentane blender, respectively.

(i) *TGP language requirements.* In addition to any other PTD requirements of this subpart, on each occasion when any person transfers custody or title to any TGP, the transferor must provide to the transferee PTDs that include the following information:

(1) The following statement: “Transmix Gasoline Product—not for use as gasoline.”

(2) [Reserved]

**§ 1090.1115 PTD requirements for distillate and residual fuels.**

(a) *General requirements.* On each occasion when any person transfers custody or title of any distillate or residual fuel, other than when fuel is sold or dispensed to the ultimate end user at

a retail outlet or WPC facility, the transferor must provide the transferee PTDs 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 § 1090.1015 (*e.g.*, “ULSD”, “500 ppm LM diesel fuel”, or “ECA marine fuel”).

(3) If the fuel does not meet the sulfur standard in § 1090.305(b) for ULSD, 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 batches of 500 ppm LM diesel fuel, in addition to the information required under paragraph (a) of this section, PTDs must include the following information:

(1) The following statement: “500 ppm sulfur (maximum) LM diesel fuel. For use only in accordance with a compliance plan under 40 CFR 1090.515(g). Not for use in highway vehicles or other nonroad vehicles and engines.”

(2) [Reserved]

(c) *ECA marine fuel language requirements.* For batches of ECA marine fuel, in addition to the information required under paragraph (a) of this section, PTDs must include the following information:

(1) 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.”

(2) A party may replace the required statement in paragraph (c)(1) 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.”

(3) Under 40 CFR 1043.80, a fuel supplier (*i.e.*, the person who transfers custody or title of marine fuel onto a vessel) must provide bunker delivery notes to vessel operators.

(d) *Distillate global marine fuel language requirements.* For batches of distillate global marine fuel, in addition to the information required under paragraph (a) of this section, PTDs must include the following information:

(1) The following statement: “5,000 ppm sulfur (maximum) Distillate Global Marine Fuel. For use only in steamships or Category 3 marine vessels outside of an Emission Control Area (ECA), consistent with MARPOL Annex VI.”

(2) [Reserved]

**§ 1090.1120 PTD requirements for diesel fuel additives.**

In addition to any other PTD requirements in this subpart, on each occasion when 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 PTDs that include the following information:

(a) For diesel fuel additives that comply with the sulfur standard in § 1090.310(a), the following statement: “The sulfur content of this diesel fuel additive does not exceed 15 ppm.”

(b) For diesel fuel additives that meet the requirements in § 1090.310(b), the transferor must provide to the transferee PTDs that identify the additive as such, and comply with 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 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 for use of the diesel fuel additive package in diesel fuel, in volume percent.

(iii) The contribution to the sulfur content of the fuel (in ppm) that would result if the diesel fuel additive package is used at the maximum recommended concentration.

(c) For diesel fuel additives that are sold in containers for use by the ultimate consumer of diesel fuel, each transferor must display on the additive container, in a legible and conspicuous manner, one of the following statements, as applicable:

(1) For diesel fuel additives that comply with the 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 diesel fuel additives that do not comply with the sulfur standard in § 1090.310(a), the following statement: “This diesel fuel additive does not comply with federal ultra-low sulfur content requirements.”

#### **§ 1090.1125 Alternative PTD language.**

(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 M—Recordkeeping**

#### **§ 1090.1200 General recordkeeping requirements.**

(a) *Length of time records must be kept.* Records required under 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) *Overview.* Any party subject to the requirements and provisions of this part must keep records containing the information specified in this section.

(b) *PTDs.* Any party that transfers custody or title of any fuel, fuel additive, or regulated blendstock must maintain the PTDs for which the party is the transferor or transferee.

(c) *Sampling and testing.* Any party that performs any sampling and testing on any fuel, fuel additive, or regulated blendstock must keep records of 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, all the results must be retained.

(4) The methodology used for any testing under this part.

(5) Records related to performance-based measurement and statistical quality control under §§ 1090.1360 through 1090.1375.

(6) Records related to gasoline deposit control testing under § 1090.1395.

(7) Records demonstrating the actions taken to stop the sale of any fuel, fuel additive, or regulated blendstock that is 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) *Registration.* Any party required to register under subpart I of this part 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) *Reporting.* Any party required to submit reports under subpart J of this part 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.

(f) *Exemptions.* Any party that produces or distributes exempt fuel, fuel additive, or regulated blendstock under subpart G of this part must keep the following records:

(1) Records demonstrating the designation of the fuel, fuel additive, or regulated blendstock under subparts G and K of this part.

(2) Copies of PTDs generated or accompanying the exempt fuel, fuel additive, or regulated blendstock.

(3) Records demonstrating that the exempt fuel, fuel additive, or regulated blendstock was actually used in accordance with the requirements of the applicable exemption(s) under subpart G of this part.

**§ 1090.1210 Recordkeeping requirements for gasoline manufacturers.**

(a) *Overview.* In addition to the requirements in § 1090.1205, a gasoline manufacturer must keep records for each of their facilities that include the information in this section.

(b) *Batch records.* For each batch of gasoline, a gasoline manufacturer must keep records of 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 N of this part.

(2) The batch volume.

(3) The batch number.

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

(5) The designation of the batch under § 1090.1010.

(6) The PTDs for any gasoline produced or imported.

(7) The PTDs for any gasoline received.

(c) *Downstream oxygenate accounting.* For BOB for which the gasoline manufacturer has accounted for oxygenate added downstream under § 1090.710, a gasoline manufacturer must keep records of the following information:

(1) The test results for hand blends prepared under § 1090.1340.

(2) Records that demonstrate that the gasoline manufacturer participates in the NFSP under § 1090.1405.

(3) Records that demonstrate that the gasoline manufacturer participates in the NSTOP under § 1090.1450.

(4) Compliance calculations specified in § 1090.700 based on an assumed addition of oxygenate.

(d) *PCG and TGP.* For new batches of gasoline produced by adding blendstock to PCG or TGP, a gasoline manufacturer must keep records of the following information:

(1) Records that reflect the storage and movement of the PCG or TGP and blendstock within the fuel manufacturing facility to the point such PCG or TGP is used to produce gasoline or BOB.

(2) For new batches of gasoline produced by adding blendstock to PCG or TGP under § 1090.1320(a)(1) or § 1090.1325, respectively, keep records of the following additional information:

(i) The results of tests to determine the sulfur content, benzene content, oxygenate(s) content, and in the summer, RVP, for the PCG or TGP and volume of the PCG or TGP when received at the fuel manufacturing facility.

(ii) Records demonstrating which specific batches of PCG or TGP were used in each new batch of gasoline.

(iii) Records demonstrating which blendstocks were used in each new batch of gasoline.

(iv) Records of the test results for sulfur content, benzene content, oxygenate(s) content, distillation parameters, and in the summer, RVP, for each new batch of gasoline.

(3) For new batches of gasoline produced by adding blendstock to PCG or TGP under § 1090.1320(a)(2), keep records of the following additional information:

(i) Records of the test results for sulfur content, benzene content, oxygenate(s) content, and in the summer, RVP, of each blendstock used to produce the new batch of gasoline.

(ii) Records of the test results for sulfur content and in the summer, RVP, of each new batch of gasoline.

(iii) Records demonstrating which blendstocks were used in each new batch of gasoline.

(e) *Certified butane and certified pentane blenders.* For certified butane or certified pentane blended into gasoline or BOB under § 1090.1320, a certified butane or certified pentane blender must keep records of the following information:

(1) The volume of certified butane or certified pentane added.

(2) The purity and properties of the certified butane or certified pentane specified in § 1090.250 or § 1090.255, respectively.

(f) *Importation of gasoline treated as blendstock.* For any imported GTAB, an importer must keep records of documents that reflect the storage and physical movement of the GTAB from the point of importation to the point of blending to produce gasoline or the point at which the GTAB was certified as gasoline.

(g) *ABT.* A gasoline manufacturer must keep records of the following information related to their ABT activities under subpart H of this part, 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 compliance period of generation.

(3) The number of credits generated by the gasoline manufacturer under § 1090.725, separately by facility and compliance period 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 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 compliance period of generation.

(6) The number of credits that will be carried over into the next compliance period, separately by facility and compliance period of generation.

(7) The number of credits used, separately by facility and compliance period of generation.

(8) Contracts or other commercial documents that establish each transfer of credits from the transferor to the transferee.

(9) Documentation that supports the number of credits transferred between facilities within the same company (*i.e.*, intracompany transfers).

**§ 1090.1215 Recordkeeping requirements for diesel fuel, ECA marine fuel, and distillate global marine fuel manufacturers.**

(a) *Overview.* In addition to the requirements in § 1090.1205, a diesel fuel or ECA marine fuel manufacturer must keep records for each of their facilities that include the information in this section.

(b) *Batch records.* For each batch of ULSD, 500 ppm LM diesel fuel, or ECA marine fuel, a diesel fuel or ECA marine fuel manufacturer must keep records of the following information:

- (1) The batch volume.
- (2) The batch number.
- (3) The date the batch was produced or imported.
- (4) The designation of the batch under § 1090.1015.

(5) All documents and information created or used for the purpose of batch designation under § 1090.1015, including PTDs for the batch.

(c) *Distillate global marine fuel manufacturers.* For distillate global marine fuel, a distillate global marine fuel manufacturer must keep records of the following information:

- (1) The designation of the fuel as distillate global marine fuel.
- (2) The PTD for the distillate global marine fuel.

**§ 1090.1220 Recordkeeping requirements for oxygenate blenders.**

(a) *Overview.* In addition to the requirements in § 1090.1205, an oxygenate blender that blends oxygenate into gasoline must keep records that include the information in this section.

(b) *Oxygenate blenders.* For each occasion that an oxygenate blender blends oxygenate into gasoline, the oxygenate blender must keep records of 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 requirement 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 manufacturers.* In addition to the requirements in § 1090.1205, a gasoline additive manufacturer must keep records of the following information 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) 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) *Parties that take custody of gasoline additives.* 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 gasoline additive blender that adds the additive to gasoline—must keep records of the following information:

(1) The PTD for each batch of gasoline additive.

(2) The treatment rate at which the additive was added to gasoline, as applicable.

(3) The volume of gasoline that was treated with the additive, as applicable. A new record must be initiated in each case where a new batch of additive 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) *Oxygenate producers.* In addition to the requirements in § 1090.1205, an oxygenate producer must keep records of the following information for each batch of oxygenate:

(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), if the sulfur content of the batch was determined by analytical testing.

(b) *DFE producers*. In addition to the requirements of paragraph (a) of this section, a DFE producer must keep records of the following information for each batch of DFE if the sulfur content of the batch was determined under § 1090.1330:

(1) The name and title of the person who calculated the sulfur content of the batch.

(2) The date the calculation was performed.

(3) The calculated sulfur content.

(4) The sulfur content of the neat (un-denatured) ethanol.

(5) The date each batch of neat ethanol was produced.

(6) The neat ethanol batch number.

(7) The neat ethanol batch volume.

(8) As applicable, the neat ethanol production quality control records, or the test results on the neat ethanol, including all the following:

(i) The location, date, time, and storage tank or truck identification for each sample collected.

(ii) The name and title of the person who collected the sample and the person who performed the test.

(iii) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test.

(iv) Any record that contains a test result for the sample that is not identical to the result recorded in paragraph (b)(8)(iii) of this section.

(v) The test methodology used.

(9) The sulfur content of each batch of denaturant used, and the volume percent at which the denaturant was added to neat (un-denatured) ethanol to produce DFE.

(10) The PTD for each batch of denaturant used.

(c) *Parties that take custody of oxygenate.* All parties that take custody of oxygenate—from the oxygenate producer through to the oxygenate blender—must keep records of the following information:

(1) The PTD for each batch of oxygenate.

(2) [Reserved]

**§ 1090.1235 Recordkeeping requirements for ethanol denaturant.**

(a) *Certified ethanol denaturant producers.* In addition to the requirements in § 1090.1205, a certified ethanol denaturant producer must keep records of the following information for each batch of certified ethanol denaturant:

(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.

(b) *Parties that take custody of ethanol denaturants.* All parties that take custody of denaturant designated as suitable for use in the production of DFE under § 1090.270(b) must keep records of the following information:

(1) The PTD for each batch of denaturant.

(2) The volume percent at which the denaturant was added to ethanol, as applicable.

**§ 1090.1240 Recordkeeping requirements for gasoline detergent blenders.**

(a) *Overview.* In addition to the requirements in § 1090.1205, a gasoline detergent blender must keep records that include the information in this section.

(b) *Gasoline detergent blenders.* A gasoline detergent blender must keep records of the following information:

(1) The PTD for each detergent used.

(2) For an automated detergent blending facility, the following information:

(i) The dates of the VAR ~~Period~~period.

(ii) The total volume of detergent blended into gasoline, as determined using one of the following methods, as applicable:

(A) For a facility that uses in-line meters to measure the amount of detergent blended, the total volume of detergent measured, together with supporting data that includes one of the following:

(1) The beginning and ending meter readings for each meter being measured.

(2) Other comparable metered measurements.

(B) For a facility that uses a gauge to measure the inventory of the detergent storage tank, the total volume of detergent must be calculated as follows:

$$V_D = DI_i - DI_f + DI_a - DI_w$$

Where:

$V_D$  = Volume of detergent.

$DI_i$  = Initial detergent inventory of the tank.

$DI_f$  = Final detergent inventory of the tank.

$DI_a$  = Sum of any additions to detergent inventory.

$DI_w$  = Sum of any withdrawals from detergent inventory for purposes other than the additization of gasoline.

(C) The value of each variable in the equation in paragraph (b)(2)(ii)(B) of this section must be separately recorded. 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 is unable to accurately measure to the nearest tenth of a gallon, then such volumes must be rounded downward to the next lower gallon.

(iii) The total volume of gasoline to which detergent has been added, together with supporting data that includes one of the following:

(A) The beginning and ending meter measurements for each meter being measured.

(B) The metered batch volume measurements for each meter being measured.

(C) Other comparable metered measurements.

(iv) The actual detergent concentration, calculated as the total volume of detergent added (as determined under paragraph (b)(2)(ii) of this section) divided by the total volume of gasoline (as determined under paragraph (b)(2)(iii) of this section). The concentration must be calculated and recorded to four digits and rounded as specified in § 1090.50.

(v) The initial detergent concentration rate, together with the date and description of each adjustment to any initially set concentration.

(vi) 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~~period, documentation establishing that the purpose of the change is to correct a batch misadditization prior to the end

of the VAR ~~Period~~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.

(vii) Documentation reflecting the performance and results of the calibration of detergent equipment under § 1090.1390.

(3) For a non-automated detergent blending facility, keep records of the following information:

(i) The date of additization.

(ii) The volume of detergent added.

(iii) The volume of gasoline to which the detergent was added.

(iv) The actual detergent concentration, calculated as the volume of detergent added (per paragraph (b)(3)(ii) of this section) divided by the volume of gasoline (per paragraph (b)(3)(iii) 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.**

(a) *Overview.* In addition to the requirements in § 1090.1205, an independent surveyor must keep records that include the information in this section.

(b) *Independent surveyors.* An independent surveyor must keep records of the following information, as applicable:

(1) Records related to the NFSP under § 1090.1405.

(2) Records related to a geographically-focused E15 survey program under § 1090.1420(b).

(3) Records related to the NSTOP under § 1090.1450.

**§ 1090.1250 Recordkeeping requirements for auditors.**

(a) *Overview.* In addition to the requirements in § 1090.1205, an auditor must keep records that include the information in this section.

(b) *Auditors.* An auditor must keep records of the following information:

(1) Documents pertaining to the performance of each audit performed under subpart S of this part, including all correspondence between the auditor and the fuel manufacturer.

(2) Copies of each attestation report prepared and all related records developed to prepare the attestation report.

**§ 1090.1255 Recordkeeping requirements for transmix processors, transmix blenders, transmix distributors, and pipeline operators.**

(a) *Overview.* In addition to the requirements in § 1090.1205, a transmix processor, transmix blender, transmix distributor, or pipeline operator must keep records that include the information in this section.

(b) *Transmix.* (1) A transmix processor or transmix distributor must keep records that reflect the results of any sampling and testing required under subpart F or M of this part.

(2) A transmix processor 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 § 1090.505.

(3) A transmix processor that adds blendstock to TGP or PCG must keep records under § 1090.1210(d).

(4) A transmix blender must keep records showing compliance with the quality assurance program and/or sampling and testing requirements in § 1090.500, 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.

(c) *500 ppm LM diesel fuel.* A manufacturer or distributor of 500 ppm LM diesel fuel using transmix must keep records of the following information, as applicable:

(1) Copies of the compliance plan required under § 1090.515(g).

(2) Documents demonstrating how the party complies with each applicable element of the compliance plan under § 1090.515(g).

(3) Documents and copies of calculations used to determine compliance with the 500 ppm LM diesel fuel volume requirements under § 1090.515(c).

(4) Documents or information that demonstrates that the 500 ppm LM diesel fuel was only used in locomotive and marine engines that are not required to use ULSD under 40 CFR 1033.815 and 40 CFR 1042.660, respectively.

(d) *Pipeline operators.* A pipeline operator must keep records that demonstrate compliance with the interface handling practices in § 1090.520.

## **Subpart N—Sampling, Testing, and Retention**

### **§ 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 1090.1390 specifies the requirements for calibrating automated detergent blending equipment.

(4) 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 a 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 acting on behalf of a regulated party to demonstrate compliance with requirements under this part must meet the requirements of this subpart in the same way that the party needs to meet those requirements for its own testing. The regulated party and the third



party will both be liable for any violations arising from the third party's failure to meet the requirements of this subpart.

(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.

(1) You may exclude outlier data points for quality testing under § 1090.1375 as described in ASTM D6299 (incorporated by reference in § 1090.95), subject to the following conditions:

(i) The justification for exclusion must be an assignable cause that is not part of the normal process and does not result from common causes.

(ii) You must meet requirements for documenting and supporting exclusion of data points as described in § 1090.1375(a)(5).

(2) [Reserved]

(e) Subpart Q of this part has provisions related to importation, including additional provisions that specify how to meet the sampling and testing requirements of this subpart.

## **Scope of Testing**

### **§ 1090.1310 Testing to demonstrate compliance with standards.**

(a) Perform testing as needed to certify fuel, fuel additive, or regulated blendstock as specified in subpart K of this part. This section specifies additional test requirements.

(b) A fuel manufacturer, fuel additive manufacturer, or regulated blendstock producer must perform the following measurements before fuel, fuel additive, or regulated blendstock

from a given batch leaves the facility, except as specified in [paragraph \(f\) of this section and § 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 gasoline to demonstrate compliance with sulfur standards and perform testing for each batch of summer gasoline to demonstrate compliance with RVP standards.

(c) The following testing provisions apply for gasoline, oxygenate, certified ethanol denaturant, certified butane, and certified pentane:

(1) A gasoline manufacturer producing BOB for which oxygenate added downstream is accounted for under § 1090.710 must prepare a hand blend as specified in § 1090.1340 and perform the following measurements:

(i) Measure the sulfur content of both the BOB and the hand blend.

(ii) Except as specified in § 1090.1325(c), measure the benzene content of the hand blend.

(iii) For Summer CG, measure the RVP of the BOB.

(iv) For Summer RFG, measure the RVP of the hand blend.

(2) A gasoline manufacturer producing gasoline for which oxygenate added downstream is not accounted for under § 1090.710 (*e.g.*, E0 or so-called suboctane gasoline) must perform the following measurements:

(i) Measure the sulfur content of the gasoline.

(ii) Except as specified in § 1090.1325(c), measure the benzene content of the gasoline.

(iii) For Summer CG and Summer RFG, measure the RVP of the gasoline.

(iv) For Summer RFG that is designated as “Intended for Oxygenate Blending” under § 1090.1010(a)(4), create a hand blend as specified in § 1090.1340 and measure the RVP of the hand blend.

(v) For gasoline blended with oxygenate, measure the oxygenate content of the gasoline.

(3) An oxygenate producer must measure the sulfur content of each batch of oxygenate, except that a DFE producer may meet the alternative requirements in § 1090.1330.

(4) An ethanol denaturant producer that certifies denaturant under § 1090.1330 must measure the sulfur content of each batch of denaturant.

(5) A certified butane or certified pentane producer must perform sampling and testing to demonstrate compliance with purity specifications and sulfur and benzene standards as specified in § 1090.1320.

(6) A transmix processor producing gasoline from TGP must test each batch of gasoline for parameters required to demonstrate compliance with § 1090.505 as specified in § 1090.1325.

(d) A blending manufacturer producing gasoline by adding blendstock to PCG must comply with § 1090.1320.

(e) For gasoline produced at a fuel blending facility or a transmix processing facility, a gasoline manufacturer must measure such gasoline for oxygenate and for distillation parameters (*i.e.*, T10, T50, T90, final boiling point, and percent residue). However, a fuel manufacturer or transmix processor does not need to measure the oxygenate content of gasoline if PCG, transmix, TGP, and blendstocks used to produce the batch did not contain any oxygenates, based on the following documentation:

(1) For PCG, documentation consists of oxygenate content identified on PTDs.

(2) For transmix, TGP, and blendstocks, documentation consists of affidavits or oxygenate test results from the person providing the transmix or blendstock stating that these products do not contain oxygenate.

(f) Refiners and blending manufacturers may meet the testing requirements of paragraph (b) of this section by loading gasoline or diesel fuel onto a marine vessel, subject to the following conditions:

(1) The marine vessel remains within 15 miles of the fuel manufacturing facility after loading.

(2) Each vessel compartment is sampled for meeting certification testing requirements as described in § 1090.1605(b)(1).

(3) No additional loading occurs after sampling is complete.

(4) The refiner or blending manufacturer ensures that the fuel meets all applicable per-gallon standards before the fuel leaves the area specified in paragraph (f)(1) of this section.

#### **§ 1090.1315 In-line blending.**

A fuel manufacturer 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~~. This section describes in-line blending waiver provisions that apply instead of or in addition to the requirements in § 1090.1335(c).

(a) Submit a request signed by the RCO, or their delegate, to EPA 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 it 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. Describe clearly which portions of your blending operation are the subject of your waiver request.

(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. Also describe how your procedures 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. Explain how you will ensure that all fuel will meet all applicable per-gallon standards. Describe any experiences from the previous 3 years where these quality assurance procedures led you to make corrections to your in-line blending operation. Describe how you will deal with release of fuel that fails to meet a per-gallon standard.

(5) Describe any times from the previous 3 years that you modified fuel after it left your facility. Describe how you modified the fuel and why that was necessary.

(6) Describe how you will meet the auditing requirements specified in § 1090.1850 and any additional, facility-specific considerations that relate to those auditing requirements.

(7) Describe which blendstock parameters you intend to measure for managing the blending process and the typical sampling frequency for those measurements.

(8) Describe any circumstances in which it is not possible to achieve a sampling frequency corresponding to a margin of error of 0.01. Also describe how you will adjust target values to account for the greater measurement variability. For example, if the greater margin of error corresponds to a 2 percent increase in measurement variability, adjust measured values of all parameters subject to per-gallon and average standards upward by 2 percent.

(9) Describe an alternative plan to meet requirements to test head, middle, and tail samples for small batches. For example, your alternative plan may allow you to collect a single sample anytime during the blend for a batch involving less than eight hours of blending or less than 1 million gallons of fuel, or it may allow you to collect two evenly distributed samples during the blend for a batch involving less than sixteen hours of blending or less than 2 million gallons of fuel.

(10) Describe your plans to meet requirements to test head, middle, and tail samples in cases where unforeseen circumstances cause the batch to be complete before blending the anticipated batch volume. You must make best efforts to collect the required samples. Any failure to perform required tests must not occur in more than 10 percent of in-line blending batches for the calendar year.

(11) Describe contingency plans for alternative sampling and testing in cases involving failure of the automatic compositor or other essential equipment. Where possible, this should include collecting a second composite sample with a redundant system.

(12) Describe any contingency plans for an alternative sampling demonstration if an automatic sampling test result fails to meet a per-gallon standard. For example, you may certify the batch based on manual sampling in a tank if you collect the whole batch in the tank before it leaves the fuel manufacturing facility gate. Similarly, as long as the fuel remains at the facility,

you may certify the batch based on secondary automatic sampling as fuel comes out of a holding tank that you use to collect the fuel that failed to meet standards.

(13) In the case of in-line blending into a marine vessel, describe an alternative, equivalent method for meeting the requirement in § 1090.1335(c)(4) to collect head-middle-tail samples.

(b) You must arrange for an audit of your blending operation each calendar year as specified in § 1090.1850. The audit must review procedures and documents to determine whether measured and calculated values properly represent the aggregate fuel properties for the blended fuel.

~~(c)~~ The following provisions apply for amending an approved waiver under this section:

(1) You must submit an updated in-line blending waiver request to EPA 60 days before making any material change to your in-line blending process. Examples of material changes include changing analyzer hardware or programming, changing the location of the analyzer, changing the piping configuration, changing the mixing control hardware or programming logic, changing sample compositors or compositor settings, or expanding fuel blending capacity. Changing the name of the company or business unit is an example of a change that is not material.

(2) The request must include a description of the intended changes and a comparison document that comprehensively identifies the proposed changes to the waiver.

(3) Your updated inline blending waiver request is automatically approved effective 60 days after EPA acknowledges receiving the request if there is no EPA response to the request.

Such a response may be in the form of denying the request, identifying deficiencies, or requiring additional information.

(d) If EPA approves your request for a waiver under this section, you may need 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 a refiner or blending manufacturer that adds blendstock to PCG to produce a new batch of gasoline. Paragraph (b) of this section specifies an alternative approach for a certified butane or certified pentane blender. Section 1090.1325 describes additional provisions that apply to a transmix processor.

(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) Determine the sulfur content, benzene content, and oxygenate content of the PCG before blending blendstocks to produce a new batch of gasoline as follows:

(A) Sample and test the sulfur content, benzene content, and oxygenate content of each batch of PCG: using the procedures in § 1090.1350. Demonstrate homogeneity as specified in § 1090.1337. The blending manufacturer does not need to test PCG for oxygenate content if they can demonstrate that the PCG does not contain oxygenates as specified in paragraph (a)(1)(i)(C) of this section or § 1090.1310(e)(1).

(B) If the PCG is a BOB, prepare a hand blend under § 1090.1340 and test the hand blend for sulfur content and benzene content.



(C) The blending manufacturer may use the PCG manufacturer's certification test results if the PCG was received directly from the PCG manufacturer by an in-tank transfer or tank-to-tank transfer within the same terminal as long as the results are from the PCG that is being transferred.

(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 content, benzene content, and for summer gasoline, RVP, 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 content and benzene content of each batch of blendstock used to produce a new batch of gasoline from PCG using the procedures in § 1090.1350. The homogeneity requirements for gasoline specified in § 1090.1337 apply to blendstock and GTAB collected with manual sampling.

(ii) Determine the volume of each batch of blendstock used to produce the new batch of gasoline.

(iii) Determine the volume of each blended batch of gasoline, and measure the sulfur content and for summer gasoline, RVP, for each blended batch of gasoline using the procedures specified in § 1090.1350. Testing the blended batch of gasoline for sulfur content, however, is

not required if the fuel manufacturer tests the added blendstock and determines that both the blendstock and PCG meet the fuel manufacturing facility gate sulfur per-gallon standard in § 1090.205(b).

(iv) Report each batch of blendstock as specified in § 1090.905(c)(4).

(v) Include each batch of blendstock in compliance calculations as specified in § 1090.700(d)(4)(ii).

(vi) The sample retention requirements in § 1090.1345 apply for the new batch of gasoline and for each blendstock.

(b) A certified butane or certified pentane blender that blends certified butane or certified pentane into PCG to make a new batch of gasoline may comply with the following requirements instead of the requirements of paragraph (a) of this section:

(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 § 1090.220(e) disallows adding certified butane or certified pentane to Summer RFG or Summer RBOB.

(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 § 1090.250 or § 1090.255, respectively.

(3) The certified pentane blender must enter into a contract with the certified pentane producer to verify that the certified 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 certified butane or certified pentane meets the standards

specified in § 1090.250 or § 1090.255, respectively. 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 distributor. The certified butane or certified pentane blender may rely on a third party to perform the testing.

(c) This paragraph describes provisions that apply in cases where PCG is a BOB for which the PCG manufacturer accounted for oxygenate added downstream under § 1090.710 and the blending manufacturer makes a new batch that includes less oxygenate than was specified for the BOB by the PCG manufacturer. A blending manufacturer in this circumstance does not qualify for the small volume blender exemption for BOB recertification under § 1090.740(a)(3) and must comply with all the following.

(1) Calculate and incur sulfur and benzene deficits under the BOB recertification provisions ~~in~~of § 1090.740.

(2) Comply with either the compliance by subtraction requirements of paragraph (a)(1) of this section or the compliance by addition requirements of paragraph (a)(2) of this section. For compliance by subtraction, test the PCG without adding oxygenate (*i.e.*, test the PCG “neat”), and report the PCG volume without adjusting for the volume of oxygenate that the PCG manufacturer specified under § 1090.740.

#### **§ 1090.1325 Adding blendstock or PCG to TGP.**

The following provisions apply to a transmix processor or blending manufacturer producing gasoline by adding blendstock or PCG to TGP:

(a) Determine the volume, sulfur content, and benzene content of each blendstock batch used to produce gasoline for reporting and compliance calculations by following the sampling

and testing requirements in § 1090.1320 and treating the TGP used to produce the gasoline as PCG.

(b) Sample and test the gasoline made from TGP and PCG or blendstock to demonstrate compliance with the fuel manufacturing facility gate sulfur per-gallon standard in § 1090.205(b) and the applicable RVP standard in § 1090.215.

(c) A transmix processor producing gasoline by only adding TGP to PCG does not have to measure the benzene content of the finished gasoline.

#### **§ 1090.1330 Preparing denatured fuel ethanol.**

Instead of measuring every batch, a DFE producer or importer may calculate the sulfur content of a batch of DFE 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 on the PTD for the batch. If the sulfur content is specified as a range, use the maximum specified value.

(c) Calculate the weighted sulfur content of the DFE using the values determined under paragraphs (a) and (b) of this section.

#### **Handling and Preparing Samples**

##### **§ 1090.1335 Collecting, preparing, and testing samples.**

(a) *General provisions.* Use good laboratory practice to collect samples to represent the batch you are testing. For example, take steps to ensure that a batch is always well mixed before sampling. Also, 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.

Follow the procedures in paragraph (b) of this section for manual sampling. Follow the

procedures in paragraph (c) of this section for automatic sampling. Additional requirements for measuring RVP are specified in paragraph (d) of this section. A description of how to determine compliance based on single or multiple tests on single or multiple samples is specified in paragraph (e) of this section.

(b) *Manual sampling.* Perform manual sampling using one of the methods specified in ASTM D4057 (incorporated by reference in § 1090.95) to demonstrate compliance with standards as follows:

(1) Collect a “running” or “all-levels” sample from the top of the tank. 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.

(2)(i) Use tap sampling (or other spot sampling) to collect upper, middle, and lower samples ~~if a running or all-levels sample is impractical for a given storage configuration.~~ Collect samples that most closely match the recommendations in ~~Table 5 of~~ ASTM D4057. Adjust spot sampling for partially filled tanks as shown in Table 1, Table 5, or Table 56 of ASTM D4057, as applicable.

~~(ii) Spot sampling must not be used for certification testing unless the tank contains less than 10 feet of product.~~

(3) If the procedures 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 primarily for sampling with trucks, railcars, retail ~~stations~~outlets, and other downstream locations.

(4) Test results with manual sampling are valid only after you demonstrate homogeneity as specified in §1090.1337-~~6~~. Once a batch of fuel meets homogeneity specifications, you may

use any properly drawn sample to represent the batch, subject to the hand-blending provisions of § 1090.1340. The entire batch volume is noncompliant if a sample does not meet all applicable per-gallon standards.

(5) Except as specified for marine vessels in § 1090.1605, you must not do certification testing with a composite sample from manual sampling.

(c) *Automatic sampling.* ~~(1) For in-line blending waivers under § 1090.1315, follow all specifications for Perform~~ automatic sampling as specified in ~~EPA's approval letter instead of~~ ~~ASTM D4177 (incorporated by reference in § 1090.95), with the additional specifications described in addition to the specifications in this~~ paragraph (c)(2) ~~of this section.~~ Automatic sampling is ~~also appropriate for a configuration involving~~ intended to apply for in-line blending, including configurations that involve a pipeline filling a tank that will be certified as compliant before it leaves the fuel manufacturing facility gate.

~~(2) Perform~~ (1) Follow all specifications for automatic sampling ~~as specified in ASTM D4177 (incorporated by reference~~ this paragraph (c) unless EPA approves a different sampling strategy for in- ~~§-line blending waivers under § 1090.95), with the following additional specifications:~~ 1315.

(i) ~~2~~ Configure the system to ensure a well-mixed stream at the sampling point. Align the start and end of sampling with the start and end of creating the batch.

~~(ii) The default-~~ 3) Set a sampling frequency ~~must follow the recommended approach of at least based on collecting 9,604 samples~~ grabs or a smaller number of grabs that still achieves a margin of error of 0.01 or less as described in Section 19.1.3 of ASTM D4177. Keep records to represent a batch. Less frequent ~~show that the sampling is acceptable as long as~~ frequency meets

the ~~interval between samples does not exceed 20 seconds throughout the batch.~~specified margin of error.

(~~iii~~4) Collect three samples for individual measurements in addition to the composite sample. Draw head, middle, and tail samples, where the head sample comes after flowing less than 15, 50, and 85 percent of the ~~estimated~~anticipated batch volume, ~~respectively.~~the middle sample comes from the middle third of the anticipated batch volume, and the tail sample comes from the final third of the anticipated batch volume.

(~~iv~~5) If the composite sample does not meet all applicable per-gallon standards, the entire batch volume of the batch is noncompliant. If one or more separate samples do not meet all applicable per-gallon standards, the volume of noncompliant fuel is the volume starting with the last valid passing result before the failing result (or the start of the batch), up to the first valid passing result after the failing result (or the end of the batch).

(6) EPA may approve a different sampling strategy under an approved in-line blending waiver under § 1090.1315 if it is appropriate for a given facility or for a small-volume 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 other fuel parameters for a given sample in addition to RVP testing, always measure RVP first.

(e) *Testing and reporting to demonstrate compliance with standards.* (~~1~~) Perform testing as specified in this subpart- and report values to demonstrate compliance with standards as follows:

(21) For parameters subject to per-gallon standards, report the highest measured value (or the lowest measured value for testing related to cetane index or other parameters that are subject to a standard representing a minimum value). This applies for repeat tests on a given sample and for testing multiple samples (including head, middle, and tail samples from automatic sampling).

~~A batch is noncompliant if any tested sample does not meet all applicable per gallon standards.~~

(32) In the case of automatic sampling for parameters subject to average standards, report the result from the composite sample to represent the batch for demonstrating compliance with the average standard. For any repeat testing with the composite sample, calculate the arithmetic average from all tests to represent the batch.

(43) In the case of manual sampling for parameters subject to average standards, determine the value representing the batch as follows:

(i) For testing with only a single sample, report that value to represent the batch. If there are repeat tests with that sample, report the arithmetic average from all tests to represent the sample.

(ii) For testing with more than one sample, report the arithmetic average from all tested samples to represent the batch. If there are repeat tests for any sample, calculate the arithmetic average of those repeat tests to determine a single value to represent that sample before calculating the average value to represent the batch.

**§1090.1337 Demonstrating homogeneity.**

(a) Certification test results corresponding to manual sampling as specified in §1090.1335(b) are valid only if collected samples meet the homogeneity specifications in this section, except that the homogeneity testing requirement does not apply in the following cases:

(1) There is only a single sample using the procedure specified in § 1090.1335(b)(2).



(2) Upright cylindrical tanks that have a liquid depth of less than 10 feet.

~~(3) You draw spot or tap~~(3) Horizontal tanks with circular or elliptical cross section with a volume less than 42,000 gallons used for storing ethanol denaturant. Draw samples from the approximate mid-depth of the product level.

(4) You draw spot samples as specified in paragraph (c) of this section, test each sample for every parameter subject to a testing requirement, and use the worst-case test result for each parameter for purposes of reporting, meeting per-gallon and average standards, and all other aspects of compliance.

~~(4) Sampling~~(5) Your tank configuration depends on roof sampling for homogeneity demonstration, but inclement weather prevents collecting roof samples and EPA has already approved a plan for a mixing procedure to ensure a homogeneous batch for your specific tank configuration. EPA approval of the mixing procedure will include consideration of product type, fill level, and other relevant parameters for specific tank configurations and batch characteristics. Keep records to document EPA approval of the mixing procedure, your actions to follow the approved mixing procedure, and the forcing weather event or other circumstances.

(6) Sampling occurs at a downstream location where it is not possible to collect separate samples and steps are taken to ensure that the batch is well mixed.

(7) The product being tested is certified butane or certified pentane.

~~(b)(1) Testing performed-~~ Any test to establish homogeneity is ~~not~~ considered a certification ~~testing, except~~ test relative to a per-gallon standard for a given parameter if the test result is the worst-case value from all testing performed for the batch. Report the highest measured value as specified in ~~paragraph (b)(2) of this section.~~

~~(2) Homogeneity testing may be used as certification testing if any of the following criteria are met:~~

~~(i) All tested samples meet all applicable per gallon standards.~~

~~(ii) The testing meets the requirement in §§ 1090.1335(b)(2)(ii). (iii) The testing follows the procedures specified in paragraph (a)(3) of this section.c)(2).~~

(c) Use spot sampling as specified in §1090.1335(b)(2) for homogeneity testing. ~~Tap sampling is acceptable if spot sampling is impractical for a given facility.~~

(d) Demonstrate homogeneity for gasoline, GTAB, and TGP using two of the procedures specified in this paragraph (d) with each sample. For summer gasoline, the homogeneity demonstration must include RVP measurement.

(1) Measure density or API gravity using ASTM D287, ASTM D1298, ASTM D4052, or ASTM D7777 (incorporated by reference in §1090.95).

(2) Measure the sulfur content as specified in §1090.1360.

(3) Measure the benzene content as specified §1090.1360.

(4) Measure the RVP as specified in §1090.1360.

(e) ~~For testing to meet the~~Homogeneity requirements apply as follows for other products:

(1) Demonstrate homogeneity for diesel fuel ~~standards in subpart D of this part,~~  
~~demonstrate homogeneity~~ using one of the procedures specified in paragraph (d)(1) or (2) of this section.

(2) Demonstrate homogeneity for certified ethanol denaturant and oxygenate based on measured sulfur content as specified in § 1090.1360, except that no homogeneity testing is required for DFE if you calculate sulfur content as described in § 1090.1330.

(f) Consider the batch to be homogeneous for a given parameter if the measured values for all tested samples vary by lessno more than the published reproducibility of the test method multiplied by 0.75 ( $R \times 0.75$ ). If reproducibility is a function of measured values, calculate reproducibility using the average value of the measured parameter representing all tested samples. Calculate using all meaningful significant figures as specified for the test method, even if § 1090.1350(c) describes a different precision. For cases that do not require a homogeneity demonstration under paragraph (a) of this section, the lack of homogeneity demonstration does not prevent a quantity of fuel, fuel additive, or regulated blendstock from being considered a batch for demonstrating compliance with the requirements of this part. The following additional provisions apply for special cases:

(1) Do not use test results for a given parameter to demonstrate homogeneity if multiple measured values are at or below the PLOQ for the test method, the laboratory's LLOQ, or the valid range of the test method, as applicable, unless you are unable to get test results using other parameters.

(2) If you have homogeneity test results for more than the required number of parameters and not all parameters meet the criteria, all testing results except density or API gravity must meet the applicable homogeneity criteria to demonstrate that the batch is homogeneous.

(3) If using ASTM D4052 (incorporated by reference in § 1090.95) for measuring density or API gravity to demonstrate homogeneity through December 31, 2026, you may calculate the homogeneity criterion based on the reproducibility of the test method at the limit of the valid range for testing, even if measured results extend beyond the valid range.

**§ 1090.1340 Preparing a hand blend from BOB.**

(a) If you produce or import BOB and instruct downstream blenders to add oxygenate, you must meet the requirements of this subpart by blending oxygenate that reflects the anticipated sulfur content and benzene content of the oxygenate for blending into a BOB sample. To do this, prepare each hand blend 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 hand ~~blend~~blends as follows:

~~(1) Take~~(1) Select samples as follows to prepare the hand blend:

(i) Except as specified in paragraph (a)(1)(ii) of this section, take steps to avoid introducing high or low bias in sulfur content when selecting from available samples to prepare 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.

(ii) If you omit the homogeneity demonstration under § 1090.1337(a)(4), prepare hand blends from each of the tested BOB samples. This generally requires one hand blend from the three BOB samples representing upper, middle, and lower portions of an upright storage tank as described in § 1090.1335(b)(2).

(2) If your instructions allow for a downstream blender to add more than one type or concentration of oxygenate, prepare the hand blend as follows:

(i) For summer gasoline intended for blending with ethanol, use the lowest specified ethanol blend.

(ii) For all winter gasoline and for summer gasoline intended for blending only with oxygenate other than ethanol, use the lowest specified oxygenate concentration, regardless of the type of oxygenate.

(iii) As an 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) Prepare the hand blend using the procedures specified in ASTM D7717 (incorporated by reference in § 1090.95). The hand blend must have an amount of oxygenate that does not exceed the oxygenate concentration specified on the PTD for the BOB under § 1090.1110(b)(1).

**§ 1090.1345 Retaining samples.**

(a) Retain samples as follows:

(1) A fuel manufacturer, regulated blendstock producer, or independent surveyor must keep representative samples of gasoline, diesel fuel, or oxygenate that is subject to certification testing requirements under this subpart for at least 30 days after testing is complete, except that a longer sample retention of 90 days applies for a blending manufacturer that produces gasoline.

(2) A certified pentane producer must keep representative samples of certified pentane for at least 30 days after testing is complete.

(3) A blending manufacturer required to test blendstock under § 1090.1320(a)(2) must keep representative samples of the blendstock and the new batch of gasoline for at least 90 days after testing is complete.

(4) An oxygenate producer or importer must keep oxygenate samples as follows:

(i) 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.

(ii) 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.

(5) The nominal volume of retained liquid 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 blend, select a representative sample as follows:

(i) If you are required to test a hand blend under § 1090.1340, keep a sample of the BOB and a sample representative of the oxygenate used to prepare the hand blend.

(ii) ~~For summer gasoline, keep~~Keep an untested ~~(or less tested)~~ sample that is ~~most~~ representative of the ~~tested sample, as applicable. In all other cases, keep the tested (or most tested) sample batch.~~

(b) [Reserved]

(c) Keep records of all calculations, test results, and test methods for the batch associated with each stored sample.

(d) If EPA requests a test sample, you must follow EPA's instructions and send it to EPA by a courier service (or equivalent). The instructions will describe where and when to send the sample. For each test sample, you must identify the test results and test methods used.

(e) You are responsible for meeting the 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.

A fuel manufacturer, fuel additive manufacturer, regulated blendstock producer, or independent surveyor meets the requirements of this subpart based on laboratory measurements of the specified fuel parameters. Test procedures for these measurements apply as follows:

(a) Except as specified in paragraph (b) of this section, 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:

(1) Sulfur content of diesel fuel.

(2) Sulfur content of ECA marine fuel.

(3) RVP, sulfur content, benzene content, 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 content of 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 that meets ASTM D6751 (incorporated by reference in § 1090.95).

(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. There is no aromatics-related test requirement for biodiesel that meets ASTM D6751.

(3) Measure the purity of butane as specified in ASTM D2163 (incorporated by reference in § 1090.95). Measure the purity of pentane as specified in ASTM D2163 or ASTM D5134 (incorporated by reference in § 1090.95).

(4) Measure the benzene content of butane and pentane as specified in ASTM D2163, ASTM D5134, ASTM D6729, or ASTM D6730 (incorporated by reference in § 1090.95).

(5) Measure the sulfur content of pentane as specified in ASTM D5453 (incorporated by reference in § 1090.95).

(6) Measure distillation parameters 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. You may use an alternative procedure if you adequately 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) 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 O of this part:



**Table 1 to Paragraph (b)(11)—Additional Survey Test Methods**

<b>Fuel parameter</b>	<b>Units</b>	<b>Test method<sup>1</sup></b>
Distillation	°C	ASTM D86.
Aromatic content	volume percent	ASTM D5769.
Olefin content	volume percent	ASTM D6550.

<sup>1</sup> ASTM specifications are incorporated by reference, see § 1090.95.

(12) Updated versions of the test procedures specified in this section are acceptable as alternative procedures if both repeatability and reproducibility are the same or better than the values specified in the earlier version.

(c) Record measured values with the following precision, with rounding in accordance with § 1090.50:

(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 measurement or calculation that depends on the volume of the test sample, correct the volume of the sample to a reference temperature of 15.56 °C. 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 as follows:

(a) Adjust measured values for total vapor pressure as follows:

$$\text{RVP (psi)} = 0.956 \cdot P_{\text{total}} - 0.347$$

Where:

$P_{\text{total}}$  = Measured total vapor pressure, in psi.

(b) For measuring the sulfur content and benzene content of gasoline, adjust a given test result upward in certain circumstances, as follows:

(1) If your measurementtest 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 measurementtest 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 the sulfur content of ULSD at a downstream location, subtract 2 ppm from the result.

(d) For measuring the benzene content of butane and pentane, report a zero value if the test result is at or below the PLOQ or Limit of Detection (LOD) that applies for the test method.

(e) If measured content of any oxygenate compound is less than 0.20 percent by mass, record the result as “None detected.”

**§ 1090.1360 Performance-based Measurement System.**

(a) The Performance-based Measurement System (PBMS) 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.

(1) Absolute fuel parameters are those 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. The following are absolute fuel parameters:

(i) Sulfur. This applies for measuring sulfur in butane, gasoline, and all grades and types of anydiesel fuel, ~~fuel additive, or regulated blendstock.~~

(ii) [Reserved]

(2) 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 a laboratory that uses either referee procedures or alternative procedures.

(3) Streamlined requirements for alternative procedures apply for procedures adopted by a voluntary consensus standards body (VCSB). Certification testing with non-VCSB procedures requires advance approval by EPA. 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 use updated versions of the referee procedures as alternative procedures subject to the limitations of § 1090.1365(a)(2). 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 repeatability and reproducibility compared to the version specified in § 1090.95. If the updated procedure has worse repeatability or reproducibility 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) Any laboratory may use the specified referee procedure without qualification testing. To use alternative procedures at a given laboratory, 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 required in this part.

(ii) Qualification testing is not required for a laboratory that measures the benzene content of 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:

**Table 1 to Paragraph (d)—Referee Procedures for Qualifying Alternative Procedures**

<b>Tested product</b>	<b>Parameter</b>	<b>Referee procedure<sup>1</sup></b>
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.

<sup>1</sup> ASTM specifications are incorporated by reference, see § 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. For referee procedures and for alternative procedures for method-defined fuel parameters that you have qualified for your laboratory, updated versions of those same procedures are qualified without further testing, as long as the 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 laboratory where the testing occurred. At a given laboratory, qualifying a test method applies for all associated instruments used for certification testing to certify fuel.

(4) If a procedure for measuring benzene or sulfur in gasoline has no specified PLOQ and no specified scope with a lower bound, you must establish a LLOQ for your laboratory.

(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 (b). 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 paragraph (b)(3) of 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 as follows:

$$\sigma_{\max} = X_1 \cdot \frac{X_2}{X_3}$$

Where:

$\sigma_{\max}$  = Maximum allowable standard deviation.

$x_1$ ,  $x_2$ , and  $x_3$  have the values from the following table:

**Table 1 to Paragraph (b)(3)—Precision Criteria for Qualifying Alternative Procedures**

Fuel, fuel additive, or regulated blendstock	Fuel parameter	Range	x <sub>1</sub>	x <sub>2</sub> = Repeatability (r) or reproducibility (R) <sup>1</sup>	x <sub>3</sub>	Fixed values of σ <sub>max</sub>	Source <sup>2</sup>
ULSD	Sulfur	5 ppm minimum	1.5	r = 1.33	2.77	0.72	ASTM D3120–08 (R2019).
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	r = 37.1	2.77	20.1	ASTM D2622–16.
Butane	Sulfur		1.5	r = 0.1152·x	2.77		ASTM D6667–14 (R2019).
Gasoline	Sulfur		1.5	r = 0.4998·x <sup>0.54</sup>	2.77		ASTM D7039–15a (R2020).
Gasoline	oxygenate		0.3	R = 0.13·x <sup>0.83</sup>	1		ASTM D5599–18.
Gasoline	RVP <sup>3</sup>		0.3	R = 0.40 psi	1	0.12	ASTM D5191–2015.
Gasoline	Benzene		0.15	R = 0.221·x <sup>0.67</sup>	1		ASTM D5769–20.

<sup>1</sup> Calculate repeatability and reproducibility using the average value determined from testing. Use units as specified in § 1090.1350(c).

<sup>2</sup> ~~ASTM publications are incorporated by reference, see § 1090.95.~~<sup>2</sup> 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.

<sup>3</sup> 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 gravimetric sulfur standards 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 the sulfur content of 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, ~~gasoline regulated blendstock,~~ and ~~gasoline additivebutane~~ using ~~test fuelssamples~~ 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 as follows:

$$\Delta_{\max} = 0.75 \cdot \sigma_{\max}$$

Where:

$\Delta_{\max}$  = Maximum allowable difference.

$\sigma_{\max}$  = 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 paragraph 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 Paragraph (c)(3)(ii)—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 procedure 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. 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 laboratories 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 (e)(1) and (2) of this section.

(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 (e)(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 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 in § 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 their inspection of your laboratories and their 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 provide those records to EPA upon request.

(8) Send EPA a written request to use the alternative procedure. Include the specified information and any additional information EPA needs to evaluate your request.

(g) 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 laboratory that uses the referee procedure 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 laboratory qualifies as a reference installation, that qualification is valid for five years from the qualifying date, consistent with good laboratory practices.

(b) You may 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) You may qualify a reference installation for VCSB or 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 laboratory 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 § 1090.1365(c)(3)(ii) 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 § 1090.1365(c)(3)(ii) 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. 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 laboratory 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 laboratory.

(2) If you fail to conduct specified testing, your test instrument 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 instrument 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 instrument and perform testing to show that the test instrument again meets the specified criteria.

(3) If you perform major maintenance such as overhauling an instrument, confirm that the instrument still meets precision and accuracy criteria before you start testing again based on the procedures specified in ASTM D6299 (incorporated by reference in § 1090.95).

(4) Keep records to document your testing under this section for 5 years.

(5) Keep records to document any test results excluded for being out of control under Section 8.5 of ASTM D6299 (incorporated by reference in § 1090.95). Identify the assignable cause and include any appropriate additional supporting justification.

(b) *Precision demonstration.* Show that you meet precision criteria as follows:

(1) Meeting the precision criteria of this paragraph (b) qualifies your test instrument for performing up to 20 tests or 7 days, whichever is less. Include all tests except for testing to meet precision or accuracy requirements.

(2) Perform precision testing using the control-chart procedures in ASTM D6299. If you opt to use procedure 2A (Q-Procedure) or 2B (dynamically updated exponentially weighted moving average), 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.

(3) Use I charts and MR charts as specified in ASTM D6299 to show that the standard deviation for the test instrument 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 (c). For method-defined VCSB procedures, you



may meet accuracy requirements as specified in this paragraph (c) or by comparing your results to the accepted reference value in an inter-laboratory crosscheck program ~~sponsored by ASTM International or another VCSB at least 3 times per year~~ as described in paragraph (d) of this section.

(1) Meeting the accuracy criteria of this paragraph (c) qualifies your test instrument 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. 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. EPA may return one of your samples to you for further testing; if this occurs, 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:

$$\Delta_{max} = 0.75 \cdot R \cdot \sqrt{1 + \frac{1}{L}}$$

Where:

$\Delta_{max}$  = Maximum allowable difference.

R = Reproducibility of the referee procedure identified in § 1090.1360(d), as noted in

Table 1 to paragraph (b)(3) of § 1090.1365 or in the following table:

**Table 1 to Paragraph (c)(4)—Criteria for Qualifying Alternative Procedures**

Tested product	Referee procedure <sup>1</sup>	Reproducibility (R) <sup>2</sup>
ULSD, 500 ppm diesel fuel, ECA marine fuel, diesel fuel additive, gasoline, gasoline regulated blendstock, and gasoline additive	ASTM D2622	$R = 0.4273 \cdot x^{0.8015}$
Butane	ASTM D6667	$R = 0.3130 \cdot x$

<sup>1</sup> ASTM specifications are incorporated by reference, see § 1090.95.

<sup>2</sup> 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  $L = \infty$ .

[\(d\) Demonstrating accuracy by participating in crosscheck programs. You may meet accuracy requirements under paragraph \(c\) of this section by comparing your results to the accepted reference value in an inter-laboratory crosscheck program sponsored by ASTM](#)

International or another VCSB at least three times per year (two times per year for RVP), subject to the following provisions:

(1) Your results do not align with the crosscheck program if the measured value fails to meet any of the following criteria:

(i) Comparison to the ARV involves a difference greater than the maximum allowable difference in paragraph (c)(4) of this section.

(ii) Comparison to the ARV involves a difference greater than the accuracy threshold specified in the test method, if applicable.

(iii) The measured value lies outside of two Z scores.

(2) If your results do not align with the crosscheck program for a certain parameter, perform a root cause analysis and document your findings. You continue to meet accuracy requirements under this section for the affected parameter only if you demonstrate compliance based on in-house testing as described in paragraph (c) of this section and you have results that align with a later crosscheck program. Starting 35 days after you initially find that your results do not align with a crosscheck program, the presumed values specified in § 1090.1710(g) apply for your testing for the affected parameter unless you correct the problem and have test results showing that you again meet accuracy requirements under this section.

## **Testing Related to Gasoline Deposit Control**

### **§ 1090.1390 Requirement for ~~Automated Detergent Blending Equipment~~**

#### **~~Calibration~~automated detergent blending equipment calibration.**

(a) An automated detergent blending facility 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) 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. Calibrating after changing the detergent package may be used to satisfy the semiannual recalibration 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.

**§ 1090.1395 Gasoline deposit control test procedures.**

A gasoline detergent manufacturer must perform testing using one of the methods specified in this section to establish the lowest additive concentration (LAC) for the detergent.

(a) *Top Tier-Based Test Method.* Use 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 must 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 the following properties:

(i) 8.0–10.0 volume percent ~~DFE~~Ethanol that meets the requirements in § 1090.270 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 Test Method.* Use the procedures specified by CARB in Title 13, California Code of Regulations, section 2257 (incorporated by reference in § 1090.95).

(1) A detergent tested under this option or certified under 40 CFR 80.163(d) prior to January 21, 2021, may be used at the LAC specified for use in the state of California in any gasoline in the United States.

(2) 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) *EPA BMW method.* Use the procedures specified in ASTM D5500 (incorporated by reference in § 1090.95), as follows:

(1) Prepare the test fuel with the following specification:

(i) Sulfur—minimum 340 ppm.

(ii) T90—minimum 171 °C.

- (iii) Olefins—minimum 11.4 volume percent.
- (iv) Aromatics—minimum 31.1 volume percent.
- (v) Ethanol—minimum 10 volume percent.
- (vi) Sulfur, T90, olefins, and aromatics specifications must be met before adding ethanol.
- (vii) Di-tert-butyl disulfide may be added to the test fuel.

(2) The duration of testing may be less than 10,000 miles. Measured deposits must meet the following specified values to qualify the test fuel and establish a detergent's LAC:

(i) Measured deposits for the fuel without detergent must be at least 290 mg per valve on average.

(ii) Measured deposits for the fuel with detergent must be less than 100 mg per valve on average.

(d) *Alternative test methods.* (1) An EPA-approved alternative test method may be used if the alternative test method can be correlated to any of the methods specified in paragraphs (a) through (c) of this section.

(2) Information describing the alternative test method and analysis demonstrating correlation must be submitted for EPA approval as specified in § 1090.10.

## **Subpart O—Survey Provisions**

### **§ 1090.1400 General provisions.**

(a) *Program plan approval process.* (1) A program plan that complies with the requirements in § 1090.1415 or § 1090.1450 must be submitted to EPA no later than October 15 of the year preceding the calendar year in which the program will be conducted.

(2) The program plan must be signed by an RCO of the independent surveyor conducting the program.

(3) The program plan must be submitted as specified in § 1090.10.

(4) EPA will send a letter to the party submitting the program plan that indicates whether EPA approves or disapproves the plan.

(b) *Independent surveyor contract.* (1) 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.

(2) 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.

**§ 1090.1405 National fuels survey program.**

(a) *Program participation.* (1) A gasoline manufacturer that elects to account for oxygenate added downstream under § 1090.710 must participate in the national fuels survey program (NFSP) specified in this paragraph (b) of this section.

(2) A party required to participate in an E15 survey under § 1090.1420(a) must participate in the NFSP specified in paragraph (b) of this section or a survey program approved by EPA under § 1090.1420(b) or (c).

(3) Other parties may elect to participate in the NFSP for purposes of establishing an affirmative defense against violations of requirements and provisions under this part as specified in § 1090.1720.

(b) *Program requirements.* The NFSP must meet all the following requirements:

(1) The survey program must be planned and conducted by an independent surveyor that meets the independence requirements in § 1090.55 and the requirements specified in § 1090.1410.

(2) The survey program must be conducted by collecting samples representative of gasoline and diesel retail outlets in the United States as specified in § 1090.1415.

**§ 1090.1410 Independent surveyor requirements.**

The independent surveyor conducting the NFSP must meet all the following requirements:

(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 (including diesel fuel made available at retail to nonroad vehicles, engines, and equipment) 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 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 fuel must be collected using the methods specified in subpart N of this part.



(4) Samples must be shipped via ground service to an EPA-approved laboratory within 2 business days of being collected.

(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 under § 1090.1415(e)(3), must also be analyzed for aromatics content, olefins content, and distillation parameters.

(3) Diesel samples must be analyzed for sulfur content.

(4) All samples must be tested by an EPA-approved laboratory using the test methods specified in subpart N 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 the downstream sulfur per-gallon standard in § 1090.205(c).

(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 the sulfur standard in § 1090.305(b).

(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.

(6) Any notification to EPA under paragraph (d) of this section must include the retail outlets contact information including name, title, mailing address, telephone number, and email address of a representative of the retail outlet, if available.

(f) Provide quarterly and annual summary reports that include the information specified in § 1090.925(b) and (c), respectively.

(g) Keep records related to the NFSP as specified in § 1090.1245(b)(1).

(h) Submit contracts to EPA as specified in § 1090.1400(b).

(i) 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 program plan design requirements.**

The survey program plan must include all the following:

(a) *Number of surveys.* The survey program plan must include 4 surveys each calendar year that 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 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 program plan must include procedures to keep the identification of the sampling areas that are included in the plan confidential from any participating party 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 or diesel was collected during a survey and 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 program plan for each calendar year is calculated as follows:

$$n = \left\{ \frac{(Z_{\alpha} + Z_{\beta})^2}{4 \cdot (\arcsin(\sqrt{\phi_1}) - \arcsin(\sqrt{\phi_0}))^2} \right\} \cdot F_a \cdot F_b \cdot S_{u_n} \cdot S_{t_n}$$

Where:

$n$  = Minimum number of samples in a year-long survey series. However,  $n$  must be greater than or equal to 2,000 for the number of diesel samples or 5,000 for the number of gasoline samples.

$Z_{\alpha}$  = Upper percentile point from the normal distribution to achieve a one-tailed 95% confidence level (5%  $\alpha$ -level). For purposes of this survey program,  $Z_{\alpha}$  equals 1.645.

$Z_{\beta}$  = Upper percentile point to achieve 95% power. For purposes of this survey program,  $Z_{\beta}$  equals 1.645.

$\phi_1$  = The maximum proportion of non-compliant outlets for a region to be deemed compliant. This 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).

$\phi_0$  = The underlying proportion of non-compliant outlets in a sample. For the first survey program plan,  $\phi_0$  will be 2.3%. For subsequent survey program plans,  $\phi_0$  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 samples that could not be included in the survey (*e.g.*, due to technical or logistical

considerations), 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.

$S_{u_n}$  = Number of surveys per year. For purposes of this survey program,  $S_{u_n}$  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  $S_{u_n}$  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 NFSP must be approved annually as part of the survey program plan approval process in § 1090.1400(a). In the survey program plan submitted to EPA, the independent surveyor must include the following information regarding any laboratory they intend 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 crosscheck program for the most recent 12 months prior to submission of the survey program plan.

(g) *Submission.* Survey program plans submitted under this section must be approved annually under § 1090.1400(a).

**§ 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 an oxygenate producer that produces or imports DFE, the DFE is deemed as intended for use in E15 unless the oxygenate producer demonstrates that it was not intended for such use. The oxygenate producer 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 ethanol, and limiting the concentration of their DFE to no more than 10 volume percent ethanol in their fuel additive registration under 40 CFR part 79.

(b) *Survey Option 1.* The gasoline manufacturer, oxygenate blender, or oxygenate producer 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 that meets all the following requirements:

(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, oxygenate blender, or oxygenate producer introduces E15 into commerce:

- (i) One survey during the period of January 1 through March 31.
- (ii) One survey during the period of April 1 through June 30.
- (iii) One survey during the period of July 1 through September 30.
- (iv) One survey during the period of October 1 through December 31.

(2) The survey program plan must meet all the requirements of this subpart, except for §§ 1090.1405(a) and (b)(2), 1090.1410(c)(2) and (3), and 1090.1415(b), (d)(1), (2), and (4), and (e). In lieu of meeting these sections, the survey program plan 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.* The gasoline manufacturer, oxygenate blender, or oxygenate producer must participate in the NFSP under § 1090.1405.

**§ 1090.1450 National sampling and testing oversight program.**

(a) *Program participation.* (1) Except for a gasoline manufacturer that has an approved in-line blending waiver under § 1090.1315 that covers all gasoline produced at their facility, a gasoline manufacturer that elects to account for oxygenate added downstream under § 1090.710 must participate in the national sampling and testing oversight program (NSTOP) in this section.

(2) Other gasoline manufacturers may elect to participate in the NSTOP for purposes of establishing an affirmative defense to a violation under § 1090.1720. A gasoline manufacturer that has an approved in-line blending waiver under § 1090.1315 does not need to participate in the NSTOP in order to establish an affirmative defense to a violation under § 1090.1720.

(3) A gasoline manufacturer that elects to participate in the NSTOP must test, or arrange to be tested, samples collected from their gasoline 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 that the sample was collected.

(b) *Program requirements.* The NSTOP must meet all the following requirements:

(1) The NSTOP 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 NSTOP must be conducted at each gasoline manufacturing facility from all participating gasoline manufacturers.

(c) *Independent surveyor requirements.* The independent surveyor conducting the NSTOP must meet all the following requirements:

(1) Submit a proposed NSTOP 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 participating gasoline manufacturing facility. If the fuel manufacturer only produces fuel during either the summer or winter season, obtain at least one sample during the season that the fuel manufacturer produces fuel.

(ii)(A) Observe the gasoline manufacturer collect at least one sample representing each gasoline required under paragraph (c)(2)(i) of this section for each participating gasoline manufacturing facility and evaluate whether the gasoline manufacturer collected representative sample(s) in accordance with applicable sampling procedures specified in § 1090.1335.



Immediately notify EPA and the gasoline manufacturer if the applicable sampling procedures are not followed.

(B) 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.

(C) 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 samples to be taken. A gasoline manufacturer that refuses to allow the independent surveyor to take portions of collected samples is no longer considered by EPA to be participating in the NSTOP and must not account for oxygenate added downstream under § 1090.710.

(iv) Samples must be retained by the independent surveyor as specified in § 1090.1345(a)(1).

(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 parameters, aromatics, and olefins.

(ii) Summer gasoline samples must be analyzed for oxygenate content, sulfur content, benzene content, distillation parameters, aromatics, olefins, and RVP. Summer gasoline samples that represent gasoline exempt from RVP standards under § 1090.630 do not need to be analyzed for RVP.

(iii) All samples must be tested by an EPA-approved laboratory using test methods specified in subpart N of this part.

(iv) All analyses must be completed by the EPA-approved laboratory within 10 business days after receipt of the sample.

(v) A gasoline manufacturer must analyze gasoline samples for sulfur content, benzene content, and for summer gasoline, RVP. Summer gasoline samples that represent gasoline exempt from RVP standards under § 1090.630 do not need to be analyzed for RVP.

(4) Using procedures specified in the 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 that exceeds the fuel manufacturing facility gate sulfur per-gallon standard in § 1090.205(b).

(ii) A test result for a gasoline sample yields an RVP that exceeds the applicable RVP standard in § 1090.215.

(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 notify 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 N of this part.

(7) Provide quarterly reports to EPA that include the information specified in § 1090.925(d).

(8) Keep records related to the NSTOP as specified in § 1090.1245(b)(3).

(9) Submit contracts to EPA as specified in § 1090.1400(b).

(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 (incorporated by reference in § 1090.95).

(ii) Using relevant information obtained from the gasoline manufacturers, the surveyor must determine the appropriate Test Performance Index (TPI) and Precision Ratio (PR) from Table 2 Guidelines for Action Based on TPI in ASTM D6792 (incorporated by reference in § 1090.95).

(iii) A gasoline manufacturer must supply copies of the necessary information to the independent surveyor to review the TPI and PR 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 NSTOP, including sample collection, transportation, storage, and analysis.

(d) *NSTOP plan requirements.* The NSTOP plan specified in paragraph (c)(1) of this section must include, at a minimum, all the following:

(1) *Advance notice of sampling.* The NSTOP plan must include procedures on how to keep the identification of the gasoline manufacturing facilities included in the NSTOP plan confidential with minimal advanced notification from any participating gasoline manufacturer prior to collecting a sample. However, this information must not be kept confidential from EPA.

(2) *Gasoline manufacturing facility selection.* (i) Each participating gasoline manufacturing facility must be sampled at least once during each season they produce fuel. 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 season samples collected at each participating gasoline manufacturing facility, additional oversight samples are required under paragraph (d)(3)(ii) of this section. The independent surveyor must identify how these samples will be randomly distributed among participating gasoline manufacturing facilities.

(3) *Number of samples.* (i) The number of gasoline manufacturing facilities to be sampled must be calculated for the total number of samples to be collected for the next calendar year as part of the NSTOP plan.

(ii) The minimum number of samples to be included in the NSTOP plan for each calendar year is calculated as follows:

$$n = R * F_a * F_b * S_{un}$$

Where:

n = Minimum number of samples in a year.

R = The number of participating gasoline manufacturing facilities.

F<sub>a</sub> = Adjustment factor for the number of extra samples required to compensate for samples that could not be included in the NSTOP (*e.g.*, due to technical or logistical

considerations), based on the number of additional samples required during the previous 2 calendar years.  $F_a$  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 program,  $F_b$  equals 1.25.

$Su_n$  = Number of samples required per participating facility per year. For purposes of this program,  $Su_n$  equals 2.

(4) *Laboratory designation.* Any laboratory that the independent surveyor intends to use to test samples collected as part of the NSTOP must be approved annually as part of the program plan approval process in § 1090.1400(a). The independent surveyor must include the following information regarding each 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) Records demonstrating the laboratory's performance in a laboratory crosscheck 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 gasoline manufacturing facilities.

(6) *Notification of test results.* The NSTOP plan must include a description of how the independent surveyor will notify EPA and gasoline manufacturers of test results under paragraph (c)(4) of this section.

(7) *Submission.* NSTOP plans submitted under this section must be approved annually under § 1090.1400(a).

## **Subpart P—Retailer and Wholesale Purchaser-Consumer Provisions**

### **§ 1090.1500 Overview.**

(a) A retailer or WPC must comply with 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 requirements:

(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 as the EPA-required label.

(3) The alternative label must be submitted as specified in § 1090.10.

## **Labeling**

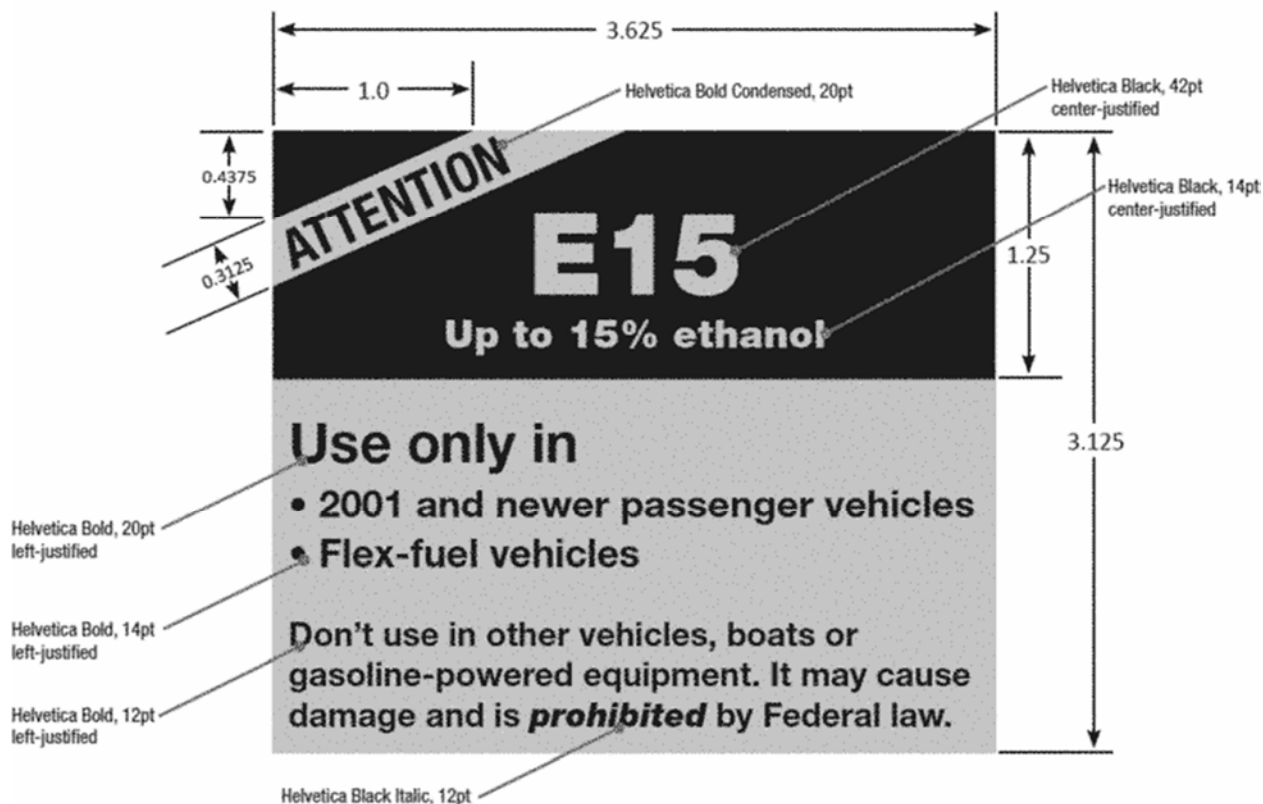
### **§ 1090.1510 E15 labeling provisions.**

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 paragraph 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 to paragraph (b)—E15 Label**



**§ 1090.1515 Diesel sulfur labeling provisions.**

A retailer or WPC 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.**

The following requirements apply for any nozzle installation used for dispensing gasoline into motor vehicles:

(a) Nozzles must meet the following hardware specifications:



- (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) The dispensing flow rate must 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.

**§ 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  $20.93 \pm 00.43$  mm.
- (b) The spout must include an aspirator hole for automatic shutoff positioned with a center that is  $17.0 \pm 01.3$  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 that meets the requirements of 40 CFR 86.1813–17(f)(1).

(b) Determine the amount of natural gas vented 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<sup>3</sup> 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 Q—Importer and Exporter Provisions**

**§ 1090.1600 General provisions for importers.**

(a) This subpart contains provisions that apply to any person who imports fuel, fuel additive, or regulated blendstock.

(b)(1) Except as specified in paragraph (b)(2) of this section, all applicable gasoline and diesel standards in subparts C and D of this part apply to imported gasoline and diesel.

(2) A gasoline importer that imports gasoline at multiple import facilities must comply with the gasoline average standards in §§ 1090.205(a) and 1090.210(a) as specified in § 1090.705(b), unless the importer complies with the provisions of § 1090.1610 to meet the alternative per-gallon standards for rail and truck imports specified in §§ 1090.205(d) and 1090.210(c).

(c) An importer must separately comply with any applicable certification or other requirements for U.S. Customs.

(d) Alternative testing requirements for an importer that imports gasoline or diesel fuel by rail or truck are specified in § 1090.1610.

#### **§ 1090.1605 Importation by marine vessel.**

An importer that imports fuel, fuel additive, or regulated blendstock using a marine vessel must comply with the requirements of this section.

(a) The importer must certify each fuel, fuel additive, or regulated blendstock imported at each port, unless the fuel is certified at the first port of entry in the United States and then transported by the same vessel to subsequent ports without picking up additional fuel.

(b) Except as specified in paragraph (d) of this section, the importer must certify each fuel, fuel additive, or regulated blendstock while it is on-board the vessel used to transport it to the United States. Certification sampling must be performed after the vessel's arrival at the port where the fuel, fuel additive, or regulated blendstock will be offloaded.

(1) The importer must sample each compartment of the vessel and use one of the following methods to meet testing requirements:

(i) Treat each compartment as a separate batch. Each individual compartment is deemed to meet the homogeneity requirements of § 1090.1337.

(ii) ~~Combine~~ Measure RVP for each collected sample, as needed; for all other measurements, combine samples from separate compartments into a single, vessel--volumetric composite sample using the procedures in Section 9.2.4 of ASTM D4057 (incorporated by reference in § 1090.95). Test results from the composite sample are valid only after if single samples ~~are~~ collected from each affected compartment and meet the homogeneity ~~is demonstrated for all samples as specified in specifications of~~ §1090.1337.

(2) The importer must ensure that all applicable per-gallon standards are met before offloading the fuel, fuel additive, or regulated blendstock.

(3) The importer must not rely on testing conducted by a foreign supplier.

(c) Once the fuel, fuel additive, or regulated blendstock on a vessel has been certified under paragraph (b) of this section, it may be transferred to shore tanks using smaller vessels or barges (lightered) as a certified fuel, fuel additive, or regulated blendstock. These lightering transfers may be to terminals located in any harbor and are not restricted to terminals located in the harbor where the vessel is anchored. For example, certified gasoline could be transferred from an import vessel 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 scenario, transfers of certified gasoline to a lightering vessel must be accompanied by PTDs that meet the requirements of subpart L of this part.

(d) As an alternative to paragraphs (b) and (c) of this section, the importer may offload fuel, fuel additive, or regulated blendstock into shore tanks that contain the same fuel, fuel additive, or regulated blendstock if the importer meets the following requirements:

(1) For gasoline, the importer must offload gasoline into one or more empty shore tanks or tanks containing PCG that the importer owns.

(i) If the importer offloads gasoline into one or more empty shore tanks, they must sample and test the sulfur content and benzene content, and for summer gasoline, RVP, of each shore tank into which the gasoline was offloaded.

(ii) If the importer offloads 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 content and benzene content, and report this PCG as a negative batch as specified in § 1090.905(c)(3)(i). After offloading the gasoline into the shore tanks, the importer must sample and test the sulfur content, benzene content, and for summer gasoline, RVP, of each shore tank into which the gasoline was offloaded and report the volume, sulfur content, and benzene content as a positive batch.

(iii) Include the PCG in the shore tank before offloading and the volume and properties after offloading in compliance calculations as specified in § 1090.700(d)(4)(i).

(iv) The sample retention requirements in § 1090.1345 apply to the samples taken prior to offloading and those taken after offloading.

(2) For all other fuel, fuel additive, or regulated blendstock, the importer must sample and test the fuel, fuel additive, or regulated blendstock in each shore tank into which it was offloaded. The importer must ensure that all applicable per-gallon standards are met before the fuel, fuel additive, or regulated blendstock is shipped from the shore tank.

#### **§ 1090.1610 Importation by rail or truck.**

(a) An importer that imports fuel, fuel additive, or regulated blendstock by rail or truck must meet the sampling and testing requirements of subpart N of this part by sampling and testing each compartment of the truck or railcar unless they do one of the following:

(1) *Use supplier results.* The importer may rely on test results from the supplier for fuel, fuel additive, or regulated blendstock imported by rail or truck if the importer meets all the following requirements:

(i) The importer obtains documentation of test results from the supplier for each batch of fuel, fuel additive, or regulated blendstock in accordance with the following requirements:

(A) The testing includes measurements for all the ~~fuel~~ parameters specified in § 1090.1310 using the measurement procedures specified in § 1090.1350.

(B) Testing for a given batch occurs after the most recent delivery into the supplier's storage tank and before transferring the fuel, fuel additive, or regulated blendstock to the railcar or truck.

(ii) The importer conducts testing to verify test results from each supplier as follows:

(A) Collect a sample at least once every 30 days or every 50 rail or truckloads from a given supplier, whichever is more frequent. Test the sample as specified in paragraphs

(a)(1)(i)(A) and (B) of this section.

(B) Treat importation of each fuel, fuel additive, or regulated blendstock separately, but treat railcars and truckloads together if the fuel, fuel additive, or regulated blendstock is imported from a given supplier by rail and truck.

(2) *Certify in a storage tank.* The importer may transfer the fuel, fuel additive, or regulated blendstock imported by rail or truck into storage tanks that also contain the same product if the importer meets the following requirements:

(i) For gasoline, the importer transfers gasoline into one or more empty tanks or tanks containing PCG that the importer owns.

(A) If the importer transfers gasoline into one or more empty tanks, they must sample and test the sulfur content, benzene content, and for summer gasoline, RVP, of each tank into which the gasoline was transferred.

(B) If the importer transfers gasoline into one or more tanks containing PCG, they must sample the PCG already in the tank prior to transferring gasoline from the truck or train, test the sulfur content and benzene content, and report this PCG as a negative batch as specified in §

1090.905(c)(3)(i). After transferring the gasoline into the tanks, the importer must sample and test the sulfur content, benzene content, and for summer gasoline, RVP, of each tank into which the gasoline was transferred and report the volume, sulfur content, and benzene content as a positive batch.

(C) Include the PCG in the tank before transferring and the volume and properties after transferring in compliance calculations as specified in § 1090.700(d)(4)(i).

(D) The sample retention requirements in § 1090.1345 apply to the samples taken prior to transferring and those taken after transferring.

(ii) For all other fuel, fuel additive, or regulated blendstock, the importer must sample and test the fuel, fuel additive, or regulated blendstock in each tank into which it was transferred. The importer must ensure that all applicable per-gallon standards are met before the fuel, fuel additive, or regulated blendstock is shipped from the tank.

(b) If an importer that elects to comply with paragraph (a)(1) or (2) of this section fails to meet the applicable requirements, they must meet the sampling and testing requirements of subpart N of this part for each compartment of the truck or railcar until EPA determines that the importer has adequately addressed the cause of the failure.

**§ 1090.1615 Gasoline treated as a blendstock.**

(a) An importer may exclude GTAB from their compliance calculations if they meet all the following requirements:

(1) The importer reports the GTAB to EPA under § 1090.905(c)(7).

(2) The GTAB is treated as blendstock at a related gasoline manufacturing facility that produces gasoline using the GTAB.

(3) The related gasoline manufacturing facility must report the gasoline produced using the GTAB and must include the gasoline produced using the GTAB in their compliance calculations.

(b) After importation, the title of the GTAB must not be transferred to another party until the GTAB has been either certified as gasoline under subpart K of this part or used to produce gasoline that meets all applicable standards and requirements under this part.

(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 treat the GTAB as if it were imported gasoline and complete all requirements for a gasoline manufacturer under § 1090.105(a) (except for the sampling, testing, and sample retention requirements in § 1090.105(a)(6)) for the GTAB at the time it is imported.

(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.

**§ 1090.1650 General provisions for exporters.**

Except as specified in this section and in subpart G of this part, fuel produced, imported, distributed, or offered for sale in the United States is subject to the standards and requirements of this part.

(a) Fuel designated for export by a fuel manufacturer is not subject to the standards in this part, provided all the requirements in § 1090.645 are met.

(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 under this part even if it will later be exported.

(c) Fuel that has been classified as American Goods Returned to the United States by the U.S. Customs Service under 19 CFR part 10 is not considered to be imported for purposes of this part, provided all the following requirements are met:

(1) The fuel was produced at a fuel manufacturing facility located within the United States and has not been mixed with fuel produced at a fuel manufacturing facility located outside the United States.

(2) The fuel must be included in compliance calculations by the producing fuel manufacturer.

(3) All the fuel that was exported must ultimately be classified as American Goods Returned to the United States and none may be used in a foreign country.

(4) No fuel classified as American Goods Returned to the United States may be combined with any fuel produced at a foreign fuel manufacturing facility prior to reentry into the United States.

## **Subpart R—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 under 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 each day of such violation and the amount of economic benefit or savings resulting from the violation.

(b)(1) Any person liable for the violation of an average standard under this part is subject to a separate day of violation for each 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 day in any compliance period in which invalid credits are generated, transferred, used, or made available for use.

(c)(1) Any person liable under this part for a violation of a per-gallon standard, or for causing another party to violate a per-gallon standard, is subject to a separate day of violation for

each 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 day such provision remains unfulfilled.

(e) Failure to meet separate requirements of this part count as separate violations.

(f) Violation of any misfueling prohibition under this part counts as a separate violation for each day the noncompliant fuel, fuel additive, or regulated blendstock remains in 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 comply with the sampling or testing requirements and must be reported, unless EPA, in its sole discretion, approves a different value. EPA may consider any relevant information to determine whether a different value is appropriate.

(1) For gasoline: 339 ppm sulfur, 1.64 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: 339 ppm sulfur.

(6) For regulated blendstocks: 339 ppm sulfur and 1.64 volume percent benzene.

**§ 1090.1715 Liability provisions.**

(a) Any person who violates any prohibited act or 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 any violation of this part that 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.**

(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) If PTD requirements of this part apply, the PTDs account for the fuel, fuel additive, or regulated blendstock found to be in violation and indicate that the violating fuel, fuel additive, or regulated blendstock 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) A retailer or WPC is 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 under 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 fuel, fuel additive, or regulated blendstock despite specifications or inspections of procedures and equipment that are reasonably calculated to prevent such action.

(c) For any person to show under paragraph (a) of this section that a violation was not caused by that person, or to show under paragraph (b) of this section 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)(i) 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 the NFSP under § 1090.1405 that was in effect at the time of the violation.

(ii) In addition to the requirements of paragraph (d)(1)(i) of this section, a gasoline manufacturer must also participate in the NSTOP specified in § 1090.1450 at the time of the violation.

(2) On each occasion when a 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 fuel, fuel additive, or regulated blendstock 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 periodic sampling and testing 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 the fuel, fuel additive, or regulated blendstock 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 oxygenate blender, distributor, reseller, carrier, retailer, or WPC 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 oxygenate blender, distributor, reseller, carrier, retailer, or WPC 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 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 oxygenate blender, distributor, reseller, or carrier, if the demonstration required by paragraphs (e)(1) through (3) of this section is made by a certification, it must be supported by evidence that the criteria in paragraphs (e)(1) through (3) of this section have been met, such as an oversight program conducted by or on behalf of the oxygenate 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 WPC facility, such certification will be deemed an adequate defense for the retailer or WPC, provided that the retailer or WPC is able to show certificates for all the gasoline contained in the storage tank found in violation, and, provided that the retailer or WPC has no reasonable basis to believe that the facts stated in the certifications are inaccurate.



## Subpart S—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) A gasoline manufacturer that produces or imports gasoline subject to the requirements of subpart C of this part.

(2) A gasoline manufacturer that performs testing as specified in subpart N of this part or that relies on testing from a third-party laboratory.

(3) A gasoline manufacturer that transacts sulfur or benzene credits under this part.

(b) An auditor performing attestation engagements must meet the following requirements:

(1) The auditor must meet one of the following professional qualifications:

(i) The auditor may be an internal auditor that is employed by the fuel manufacturer and certified by the Institute of Internal Auditors. Such an auditor 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).

(ii) The auditor may be a certified public accountant, or firm of such accountants, that is independent of the gasoline manufacturer. Such an auditor must comply with the *AICPA Code of Professional Conduct*, including its independence requirements, the *AICPA Statements on Quality Control Standards (SQCS) No. 8, A Firm's System of Quality Control* (both incorporated by reference in § 1090.95), and applicable rules of state boards of public accountancy. Such an auditor must also perform the attestation engagement in accordance with the *AICPA 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).

(2) The auditor must meet the independence requirements in § 1090.55.

(3) The auditor must be registered with EPA under subpart I of this part.

(4) 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) An auditor must perform attestation engagements separately for each gasoline manufacturing facility for which the gasoline manufacturer submitted reports to EPA under subpart J of this part 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 where specified values do not meet applicable requirements under this part.

(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 a laboratory 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 a gasoline manufacturer that relies on a third-party laboratory for 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:

**Table 1 to Paragraph (a)(1)—Sample Size Determination**

<b>Population</b>	<b>Sample size</b>
1–25	The smaller of the population 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. An auditor that determines a sample size using an alternate method must describe and justify the alternate method in the attestation report.

(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 for gasoline manufacturers.**

An auditor must perform the procedures in this section for a refiner, blending manufacturer, or transmix processor that produces gasoline.

(a) *Registration and EPA reports.* An auditor 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 under subpart J of this part.

(2) For each gasoline manufacturing facility, confirm that the facility's registration is accurate based on the 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 and report any discrepancies.

(3) Confirm that the gasoline manufacturer submitted all the reports required under subpart J of this part for activities they performed during the compliance period and report any exceptions.

(4) Obtain a written statement from the gasoline manufacturer's RCO that the submitted reports are complete and accurate.

(5) Report in the attestation report the name of any commercial computer program used to track the data required under this part, if any.

(b) *Inventory reconciliation analysis.* An auditor must perform an inventory reconciliation analysis review as follows:

(1) Obtain an inventory reconciliation analysis from the gasoline manufacturer for each product type produced at each facility (*e.g.*, RFG, CG, RBOB, CBOB), including the 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 inventory to the manufacturer's inventory records for each product type and report any variances.

(4) Report in the attestation report the volume totals for each product type on the basis of which gasoline batches are reported.

(c) *Listing of tenders.* An auditor must review a listing of tenders as follows:

(1) Obtain detailed listings of gasoline tenders from the gasoline manufacturer, by product type.

(2) Foot the listings of gasoline tenders.

(3) Compare the total volume from the gasoline tenders to the total volume shipped in the inventory reconciliation analysis for each product type and report any variances.

(d) *Listing of batches.* An auditor must review listings of batches as follows:

(1) Obtain the batch reports submitted 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)(4) of this section for each product type and report any variances.

(4) Report as a finding in the attestation report any gasoline batch with reported values that do not meet a per-gallon standard in subpart C of this part.

(e) *Test methods.* An auditor must follow the procedures specified in § 1090.1845 to determine whether the gasoline manufacturer complies with the applicable quality control requirements specified in § 1090.1375.

(f) *Detailed testing of BOB tenders.* An auditor must review a detailed listing of BOB tenders as follows:

(1) Select a representative sample from the listing of BOB tenders.

(2) Obtain the associated PTD for each selected sample.

(3) Using a unique identifier, confirm that the correct PTDs are obtained for the samples and compare the volume on the listing of each selected BOB tender to the associated PTD and report any exceptions.

(4) Confirm that the PTD associated with each selected BOB tender contains all the applicable language requirements under subpart L of this part and report any exceptions.

(g) *Detailed testing of BOB batches.* An auditor must review a detailed listing of BOB batches as follows:

(1) Select a representative sample from the BOB batch reports submitted under subpart J of this part.

(2) Obtain the volume documentation and laboratory analysis for each selected BOB batch.

(3) Compare the reported volume for each selected BOB batch to the volume documentation and report any exceptions.

(4) Compare the reported properties for each selected BOB batch to the laboratory analysis and report any exceptions.

(5) Compare the reported test methods used for each selected BOB batch to the laboratory analysis and report any exceptions.

(6) Determine each oxygenate type and amount that is required for blending with the BOB.

(7) Confirm that each oxygenate type and amount included in the BOB hand blend agrees with the manufacturer's blending instructions for each selected BOB batch and report any exceptions.

(8) Confirm that the manufacturer participates in the NFSP under § 1090.1405, if applicable.

(9) For a blending manufacturer, confirm that the laboratory analysis includes test results for oxygenate content, if applicable, and distillation parameters (*i.e.*, T10, T50, T90, final boiling point, and percent residue). For a blending manufacturer not required to measure oxygenate content, confirm that records demonstrate that the PCG or blendstock contained no oxygenate, no oxygenate was added to the final gasoline batch, and the blending manufacturer did not account for oxygenate added downstream under § 1090.710.

(h) *Detailed testing of finished gasoline tenders.* An auditor must review a detailed listing of finished gasoline tenders as follows:

(1) Select a representative sample from the listing of finished gasoline tenders.

(2) Obtain the associated PTD for each selected sample.

(3) Using a unique identifier, confirm that the correct PTDs are obtained for the samples and compare the volume on the listing for each finished gasoline tender to the associated PTD and report any exceptions.

(4) Confirm that the PTD associated with each selected finished gasoline tender contains all the applicable language requirements under subpart L of this part and report any exceptions.

(i) *Detailed testing of finished gasoline batches.* An auditor must review a detailed listing of finished gasoline batches as follows:

(1) Select a representative sample of finished gasoline batches from the batch reports submitted under subpart J of this part.

(2) Obtain the volume documentation and laboratory analysis for each selected finished gasoline batch.

(3) Compare the reported volume for each selected finished gasoline batch to the volume documentation and report any exceptions.

(4) Compare the reported properties for each selected finished gasoline batch to the laboratory analysis and report any exceptions.

(5) Compare the reported test methods used for each selected finished gasoline batch to the laboratory analysis and report any exceptions.

(6) For a blending manufacturer, confirm that the laboratory analysis includes test results for oxygenate content, if applicable, and distillation parameters (*i.e.*, T10, T50, T90, final boiling point, and percent residue). For a blending manufacturer not required to measure oxygenate content, confirm that records demonstrate that the PCG or blendstock contained no oxygenate, no oxygenate was added to the final gasoline batch, and the blending manufacturer did not account for oxygenate added downstream under § 1090.710.

(j) *Detailed testing of blendstock batches.* In the case of adding blendstock to TGP or PCG under § 1090.1320(a)(2), an auditor must review a detailed listing of blendstock batches as follows:

(1) Select a representative sample of blendstock batches from the batch reports submitted under subpart J of this part.

(2) Obtain the volume documentation and the laboratory analysis for each selected blendstock batch.



(3) Compare the reported volume for each selected blendstock batch to the volume documentation and report any exceptions.

(4) Compare the reported properties for each selected blendstock batch to the laboratory analysis and report any exceptions.

(5) Compare the reported test methods used for each selected blendstock batch to the laboratory analysis and report any exceptions.

(6) For blending a manufacturer not required to measure oxygenate content, confirm that records demonstrate that the PCG or blendstock contained no oxygenate, no oxygenate was added to the final gasoline batch, and the blending manufacturer did not account for oxygenate added downstream under § 1090.710.

**§ 1090.1815 General procedures for gasoline importers.**

An auditor must perform the procedures in this section for a gasoline importer.

(a) *Registration and EPA reports.* An auditor must review registration and EPA reports for a gasoline importer as specified in § 1090.1810(a).

(b) *Listing of imports.* An auditor 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 from the importer.

(3) Obtain listings of gasoline imports directly from the third-party customs broker, by product type.

(4) Foot the listings of gasoline imports from the third-party customs broker.

(5) Compare the total volume from the importer's listings of gasoline imports to the listings from the third-party customs broker for each product type and report any variances.

(6) Report in the attestation report the total imported volume for each product type.

(c) *Listing of batches.* An auditor must review listings of batches as follows:

(1) Obtain the batch reports submitted 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 volume per the listings of gasoline imports obtained under paragraph (b)(1) of this section for each product type and report any variances.

(4) Report as a finding in the attestation report any gasoline batches with parameter results that do not meet the per-gallon standards in subpart C of this part.

(d) *Test methods.* An auditor 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, gasoline additives, and gasoline regulated blendstocks.

(e) *Detailed testing of BOB imports.* An auditor must review a detailed listing of BOB imports as follows:

(1) Select a representative sample from the listing of BOB imports from the importer and obtain the associated U.S. Customs Entry Summary and PTD for each selected BOB import.

(2) Using a unique identifier, confirm that the correct U.S. Customs Entry Summaries are obtained for the samples and compare the location that each selected BOB import arrived in the United States and volume on the listing of BOB imports from the importer to the U.S. Customs Entry Summary and report any exceptions.

(3) Using a unique identifier, confirm that the correct PTDs are obtained for the samples. Confirm that the PTD contains all the applicable language requirements under subpart L of this part and report any exceptions.

(f) *Detailed testing of BOB batches.* An auditor must review a detailed listing of BOB batches as follows:

(1) Select a representative sample of BOB batches from the batch reports submitted under subpart J of this part and obtain the volume inspection report and laboratory analysis for each selected BOB batch.

(2) Compare the reported volume for each selected BOB batch to the volume inspection report and report any exceptions.

(3) Compare the reported properties for each selected BOB batch to the laboratory analysis and report any exceptions.

(4) Compare the reported test methods used for each selected BOB batch to the laboratory analysis and report any exceptions.

(5) Determine each oxygenate type and amount that is required for blending with each selected BOB batch.

(6) Confirm that each oxygenate type and amount included in the BOB hand blend agrees within an acceptable range to each selected BOB batch and report any exceptions.

(7) Confirm that the importer participates in the NFSP under § 1090.1405, if applicable.

(g) *Detailed testing of finished gasoline imports.* An auditor must review a detailed listing of finished gasoline imports as follows:

(1) Select a representative sample from the listing of finished gasoline imports from the importer and obtain the associated U.S. Customs Entry Summary and PTD for each selected finished gasoline import.

(2) Using a unique identifier, confirm that the correct U.S. Customs Entry Summaries are obtained for the samples and compare the location that each selected finished gasoline import

arrived in the United States and volume on the listing of finished gasoline imports from the importer to the U.S. Customs Entry Summary and report any exceptions.

(3) Using a unique identifier, confirm that the correct PTDs are obtained for the samples. Confirm that the PTD contain all the applicable language requirements under subpart L of this part and report any exceptions.

(h) *Detailed testing of finished gasoline batches.* An auditor must review a detailed listing of finished gasoline batches as follows:

(1) Select a representative sample of finished gasoline batches from the batch reports submitted under subpart J of this part and obtain the volume inspection report and laboratory analysis for each selected finished gasoline batch.

(2) Compare the reported volume for each selected finished gasoline batch to the volume inspection report and report any exceptions.

(3) Compare the reported properties for each selected finished gasoline batch to the laboratory analysis and report any exceptions.

(4) Compare the reported test methods used for each selected finished gasoline batch to the laboratory analysis and report any exceptions.

(i) *Additional procedures for certain gasoline imported by rail or truck.* An auditor must perform the following additional procedures for an importer that imports gasoline into the United States by rail or truck under § 1090.1610:

(1) Select a representative sample from the listing of batches obtained under paragraph (c)(1) of this section and perform the following for each selected batch:

(i) Identify the point of sampling and testing associated with each selected 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)(i) Obtain a detailed listing of the importer's quality assurance program sampling and testing results.

(ii) Determine whether the frequency of the sampling and testing meets the requirements in § 1090.1610(a)(2).

(iii) Select a representative sample from the importer's sampling and testing records under the quality assurance program and perform the following for each selected batch:

(A) Obtain the corresponding laboratory analysis.

(B) Determine whether the importer analyzed the test sample, and whether they performed the analysis using the methods specified in subpart N of this part.

(C) 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 N 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, an auditor must perform the procedures in this section for a gasoline manufacturer that imports GTAB under § 1090.1615.

(a) *Listing of GTAB imports.* An auditor must review a listing of GTAB imports as follows:

(1) Obtain a detailed listing of GTAB imports from the GTAB importer.

(2) Foot the listing of GTAB imports from the GTAB importer.

(3) Obtain a listing of GTAB imports directly from the third-party customs broker.

(4) Foot the listing of GTAB imports from the third-party customs broker and report any variances.

(5) Compare the total volume from the GTAB importer's listing of GTAB imports to the listing from the third-party customs broker.

(6) Report in the attestation report the total imported volume of GTAB and the corresponding facilities at which the GTAB was blended.

(b) *Listing of GTAB batches.* An auditor 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 batch volumes.

(3) Compare the total volume from the GTAB batch reports to the total volume from the listing of GTAB imports in paragraph (a)(6) of this section and report any variances.

(c) *Detailed testing of GTAB imports.* An auditor must review a detailed listing of GTAB imports as follows:

(1) Select a representative sample from the listing of GTAB imports obtained under paragraph (a)(1) of this section.

(2) For each selected GTAB batch, obtain the U.S. Customs Entry Summaries.

(3) Using a unique identifier, confirm that the correct U.S. Customs Entry Summaries are obtained for the samples. Compare the volumes and locations that each selected GTAB batch arrived in the United States to the U.S. Customs Entry Summary and report any exceptions.

(d) *Detailed testing of GTAB batches.* An auditor must review a detailed listing of GTAB batches as follows:

(1) Select a representative sample from the GTAB batch reports obtained under paragraph (b)(1) of this section.

(2) For each selected GTAB batch sample, obtain the volume inspection report.

(3) Compare the reported volume for each selected GTAB batch to the volume inspection report and report any exceptions.

(e) *GTAB tracing*. An auditor must trace and review the movement of GTAB from importation to gasoline production as follows:

(1) Compare the volume total on each GTAB batch report obtained under paragraph (b)(1) of this section to the GTAB volume total in the gasoline manufacturer's inventory reconciliation analysis under § 1090.1810(b).

(2) For each selected GTAB batch under paragraph (d)(1) of this section:

(i) Obtain tank activity records that describe the movement of each selected GTAB batch from importation to gasoline production.

(ii) Identify each selected GTAB batch in the tank activity records and trace each selected GTAB batch to subsequent reported batches of BOB or finished gasoline.

(iii) Match the location of the facility where gasoline was produced from each selected GTAB batch to the location where each selected GTAB batch arrived in the United States, or to the facility directly receiving the GTAB batch from the import facility.

(iv) Determine the status of the tank(s) before receiving each selected GTAB batch (*e.g.*, empty tank, tank containing blendstock, tank containing GTAB, tank containing PCG).

(v) If the tank(s) contained PCG before receiving the selected GTAB batch, take the following additional steps:

(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 under subpart J of this part and report any discrepancies.

**§ 1090.1825 Additional procedures for PCG used to produce gasoline.**

In addition to any applicable procedures required under § 1090.1810, an auditor must perform the procedures in this section for a gasoline manufacturer that produces gasoline from PCG under § 1090.1320.

(a) *Listing of PCG batches.* An auditor must review a listing of PCG batches as follows:

(1) Obtain the PCG batch reports submitted under subpart J of this part.

(2) Foot the batch volumes.

(3) Compare the volume total for each PCG batch report to the receipt volume total in the inventory reconciliation analysis specified in § 1090.1810(b) and report any variances.

(b) *Detailed testing of PCG batches.* An auditor must review a detailed listing of PCG batches as follows:

(1) Select a representative sample from the PCG batch reports obtained under paragraph (a)(1) of this section.

(2) Obtain the volume documentation, laboratory analysis, associated PTDs, and tank activity records for each selected PCG batch.



(3) Identify each selected PCG batch in the tank activity records and trace each selected PCG batch to subsequent reported batches of BOB or finished gasoline and report any exceptions.

(4) For each selected PCG batch, report as a finding in the attestation report 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 each selected PCG batch to the volume documentation and report any exceptions.

(6) Compare the product type and grade for each selected PCG batch to the associated PTDs and report any exceptions.

(7) Compare the reported properties for each selected PCG batch to the laboratory analysis and report any exceptions.

(8) Compare the reported test methods used for each selected PCG batch to the laboratory analysis and report any exceptions.

**§ 1090.1830 Alternative procedures for certified butane blenders.**

An auditor must use the procedures in this section instead of or in addition to the applicable procedures in § 1090.1810 for a certified butane blender that blends certified butane into PCG under § 1090.1320(b).

(a) *Registration and EPA reports.* An auditor 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, including the batch reports for the butane received and blended.

(2) For each 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 and report any discrepancies.

(3) Confirm that the certified butane blender submitted all the reports required under subpart J of this part for activities they performed during the compliance period and report any exceptions.

(4) Obtain a written statement from the certified butane blender's RCO that the submitted reports are complete and accurate.

(5) Report in the attestation report the name of any commercial computer program used to track the data required under this part, if any.

(b) *Inventory reconciliation analysis.* An auditor must perform an inventory reconciliation analysis review as follows:

(1) Obtain an inventory reconciliation analysis from the certified butane blender for each butane blending facility related to all certified butane movements, including the 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 and report any variances.

(4) Compare the total volume of certified butane received from the batch reports obtained under paragraph (a)(1) of this section to the inventory reconciliation analysis and report any variances.

(5) Compare the total volume of certified butane blended from the batch reports to the inventory reconciliation analysis and report any variances.

(6) Report in the attestation report the total volume of certified butane received and blended.

(c) *Listing of certified butane receipts.* An auditor must review a listing of certified butane receipts as follows:

(1) Obtain a detailed listing of all certified butane batches received at the butane blending facility from the certified butane blender.

(2) Foot the listing of certified butane batches received.

(3) Compare the total volume from batch reports for certified butane received at the butane blending facility to the certified butane blender's listing of certified butane batches received and report any variances.

(d) *Detailed testing of certified butane batches.* An auditor must review a detailed listing of certified butane batches as follows:

(1) Select a representative sample from the certified butane batch reports submitted under subpart J of this part.

(2) Obtain the volume documentation and laboratory analysis for each selected certified butane batch.

(3) Compare the reported volume for each selected certified butane batch to the volume documentation and report any exceptions.

(4) Compare the reported properties for each selected certified butane batch to the laboratory analysis and report any exceptions.

(5) Compare the reported test methods used for each selected certified butane batch to the laboratory analysis and report any exceptions.

(6) Confirm that the butane meets the standards for certified butane under subpart C of this part and report any exceptions.

(e) *Quality control review.* An auditor 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 § 1090.1320(b)(4) and report any discrepancies.

**§ 1090.1835 Alternative procedures for certified pentane blenders.**

(a) An auditor must use the procedures in this section instead of or in addition to the applicable procedures in § 1090.1810 for a certified pentane blender that blends certified pentane into PCG under § 1090.1320(b).

(b) An auditor 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.**

An auditor must perform the procedures in this section for a gasoline manufacturer that complies with the standards in subpart C of this part using the procedures specified in subpart H of this part.

(a) *Annual compliance demonstration review.* An auditor must review annual compliance demonstrations as follows:

(1) Obtain the annual compliance reports for sulfur and benzene and associated batch reports submitted under subpart J of this part.

(2)(i) For a gasoline refiner or blending manufacturer, compare the gasoline production volume from the annual compliance report to the inventory reconciliation analysis under § 1090.1810(b) and report any variances.

(ii) For a gasoline importer, compare the gasoline import volume from the annual compliance report to the corresponding volume from the listing of imports under § 1090.1815(b) and report any variances.

(3) For each facility, recalculate the following and report in the attestation report the recalculated values:

(i) Compliance sulfur value, per § 1090.700(a)(1), and compliance benzene value, per § 1090.700(b)(1)(i).

(ii) Unadjusted average sulfur concentration, per § 1090.745(b), and average benzene concentration, per § 1090.700(b)(3).

(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 being reviewed.

(v) Net average sulfur concentration, per § 1090.745(c), and net average benzene concentration, per § 1090.745(d).

(4) Compare the recalculated values in paragraph (a)(3) of this section to the reported values in the annual compliance reports and report any exceptions.

(5) Report in the attestation report whether the gasoline manufacturer had a deficit for both the compliance period being reviewed and the preceding compliance period.

(b) *Credit transaction review.* An auditor must review 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. Also obtain records that support intracompany transfers.

(2) For each reported transaction, compare the supporting documentation with the credit transaction reports for the following elements and report any exceptions:

(i) Compliance period of creation.

(ii) Credit type (*i.e.*, sulfur or benzene) and number of times traded.

(iii) Quantity.

(iv) The name of the other company participating in the credit transfer.

(v) Transaction type.

(c) *Facility-level credit reconciliation.* An auditor must perform a facility-level credit reconciliation separately for each gasoline manufacturing facility as follows:

(1) Obtain the credits remaining or the credit deficit from the previous compliance period from the gasoline manufacturer's credit transaction information for the previous compliance period.

(2) Compute and report as a finding the net credits remaining at the end of the compliance period.

(3) Compare the ending balance of credits or credit deficit recalculated in paragraph (c)(2) of this section to the corresponding value from the annual compliance report and report any variances.

(4) For an importer, the procedures of this paragraph (c) apply at the company level.

(d) *Company-level credit reconciliation.* An auditor 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 and report the beginning balance of credits, the ending balance of credits, the associated credit activity at the company level in accordance with the credit reconciliation listing, and the corresponding credit balances and activity submitted under subpart J of this part.

(e) *Procedures for gasoline manufacturers that recertify BOB.* An auditor must perform the following procedures for a gasoline manufacturer that recertifies a BOB under § 1090.740 and incurs a deficit:

(1) Perform the procedures specified in § 1090.1810(a) to review registration and EPA reports.

(2) Obtain the batch reports for recertified BOB submitted under subpart J of this part.

(3) Select a representative sample of recertified BOB batches from the batch reports.

(4) For each sample, obtain supporting documentation.

(5) Confirm the accuracy of the information reported and report any exceptions.

(6) Recalculate the deficits in accordance with the provisions of § 1090.740 and report any discrepancies.

(7) Confirm that the deficits are included in the annual compliance demonstration calculations and report any exceptions.

**§ 1090.1845 Procedures related to meeting performance-based measurement and statistical quality control for test methods.**

(a) *General provisions.* (1) An auditor must conduct the procedures specified in this section for a gasoline manufacturer.

(2) An auditor performing the procedures specified in this section must meet the laboratory experience requirements specified in § 1090.55(b)(2).

(3) In cases where the auditor employs, contracts, or subcontracts an external specialist, all the requirements in § 1090.55 apply to the external specialist. The auditor is responsible for overseeing the work of the specialist, consistent with applicable professional standards specified in § 1090.1800.

(4) In the case of quality control testing at a third-party laboratory, the auditor 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. A third-party laboratory may also arrange for an auditor to perform a single attestation engagement on the third-party laboratory and make that available to gasoline manufacturers that have testing performed by the third-party laboratory.

(b) *Non-referee method qualification 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 procedures listed in § 1090.1360(d), the auditor must review the following:

(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 a list of the alternative methods used.

(3) Confirm that the gasoline manufacturer supplied the supporting documentation for each test method specified in paragraph (b)(1) of this section and report any exceptions.

(4) If an auditor has previously reviewed supporting documentation under this paragraph (b) for an alternative method at the facility, 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(c)(1) and (2) and the quality control procedures specified in § 1090.1370(c)(3).

(2) Confirm that the facility completed the qualification procedures and report any exceptions.

(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, the auditor must review whether test instruments were in control as follows:

(1) Obtain a listing from the laboratory of the instruments and period when the instruments were used to measure gasoline parameters during the compliance period for batches selected as part of the representative sample under § 1090.1810.

(2) Obtain statistical quality assurance data and control charts demonstrating ongoing quality testing to meet the accuracy and precision requirements specified in § 1090.1375 or 40 CFR 80.47, as applicable.

(3) Confirm that the facility performed statistical quality assurance monitoring of its instruments under § 1090.1375 and report any exceptions.

(4) Report as a finding in the attestation report the instrument lists obtained under paragraph (d)(1) of this section and the compliance period when the instrument control review was completed.

**§ 1090.1850 Procedures related to in-line blending waivers.**

In addition to any other procedure required under this subpart, an auditor must perform the procedures specified in this section for a gasoline manufacturer that relies on an in-line blending waiver under § 1090.1315.

(a) Obtain a copy of the gasoline manufacturer's in-line blending waiver submission and EPA's approval letter.

(b) Confirm that the sampling procedures and composite calculations conform to specifications as specified in § 1090.1315(a)(2).

(c) Review the gasoline manufacturer'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.

(d) Confirm that the gasoline manufacturer corrected their operations because of previous audits, if applicable.

(e) Confirm that the equipment and procedures are not materially changed from the gasoline manufacturer's in-line blending waiver. In cases of material change in equipment or procedure, confirm that the gasoline manufacturer updated their in-line blending waiver and report any exceptions.

(f) Perform any additional procedures unique to the blending operation, as specified in the in-line blending waiver, and report any findings, variances, or exceptions, as applicable.

(g) Confirm that the gasoline manufacturer has complied with all provisions related to their in-line blending waiver and report any exceptions.