

# Fuels Regulatory Streamlining - Discussion Draft Regulations

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Assessment and Standards Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency

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## Subpart A—General Provisions

### §1090.1 Applicability and relationship to other parts.

(a) This part describes requirements intended to ensure a suitable fuel quality for the gasoline and diesel fuel used by a wide range of engines, vehicles, and equipment throughout the United States. Additional requirements apply for residual fuel used in certain marine applications. The regulation includes several standards for fuel parameters that directly or indirectly affect emissions, air quality, and public health. There are also standards and blending requirements for additives and other fuel products that are part of the final fuel as dispensed to provide power for engines, vehicles, and equipment. This part also includes various requirements for registration, sampling, testing, reporting, and other compliance measure to implement the standards effectively.

(b) 40 CFR part 79 describes the requirements for the registration of fuel and fuel additives under the Clean Air Act section 211(a), (b), and (e). Parties that have requirements under this part may also need to comply with the requirements for the registration of fuel and fuel additives under 40 CFR part 79.

(c) 40 CFR part 80, subpart M, describes the program requirements for the Renewable Fuels Standard (RFS).

### §1090.2 Fuels regulated under this part.

This section describes how fuels qualify as gasoline, diesel fuel, and ECA marine fuel, which are subject to regulation under this part. It also describes how EPA applies requirements to fuel products that are added to these fuels.

(a) Gasoline. This part defines “gasoline” broadly. Any fuel meeting one or more of the following criteria is gasoline:

(1) Any fuel marketed or commercially known as gasoline is “gasoline.”

(2) Any fuel intended or used to power a gasoline-fueled engine is gasoline, except that gaseous fuels are not gasoline.

(3) A fuel is gasoline if it conforms to the performance specifications of ASTM D4814 (incorporated by reference in §1090.95).

(4) Any blendstock that becomes gasoline solely upon the addition of oxygenate, commonly referred to as a BOB.

(b) Diesel fuel. This part defines “diesel fuel” broadly, based on the three criteria in this paragraph (b). Note that heating oil, jet fuel, and kerosene are not diesel fuel unless they meet the criteria of paragraph (b)(1) or (2) of this section. Similarly, heating oil, jet fuel, and kerosene

become diesel fuel if they are blended with diesel fuel and the blended product meets the definition of diesel fuel. Any fuel meeting one or more of the following criteria is diesel fuel.

(1) Any fuel marketed or commercially known as diesel fuel is “diesel fuel.” Fuels marketed or commercially known as bio-diesel or renewable diesel also qualify as “diesel fuel.”

(2) Except as specified in this paragraph (b)(2), any fuel intended or used to power a diesel-fueled engine is “diesel fuel.” The following fuels are not diesel fuel under this paragraph (b)(2):

(i) Residual fuel.

(ii) Gaseous fuel.

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

(c) ECA marine fuel. MARPOL Annex VI is an international treaty that sets maximum fuel sulfur levels for fuel used in vessels navigating in a designated Emission Control Area (ECA). This usage standard and related recordkeeping requirements are described in 40 CFR part 1043. This part sets a corresponding sulfur standard that applies to anyone who produces or handles ECA marine fuel.

(1) ECA marine fuel is any diesel fuel, other distillate fuel, or residual fuel intended or used in steamships or Category 3 marine vessels while the vessels are operating within ECA boundaries. ULSD or 500 ppm LM diesel may be used as ECA marine fuel or as a blendstock to produce ECA marine fuel.

(2) ECA marine fuel does not include fuel used in exempted steamships (or other exempted or excluded vessels) or fuel that exceeds the fuel sulfur limits while operating in an ECA or an ECA associated area if allowed by the U.S. government consistent with MARPOL Annex VI Regulation 3 or Regulation 4.

(d) Fuel products. Fuel products are compounds (or mixtures of compounds) that are used or intended for use as components of fuels subject to standards under this part, but which are not gasoline, diesel fuel, or ECA marine fuel. Fuel products are subclassified as either additive, oxygenate, or blendstock, as follows:

(1) Additive. An additive is a liquid substance registered under 40 CFR part 79 and that is added to a fuel or blendstock that amounts to less than 1.0 volume percent of the finished fuel, or a nonliquid substance added to fuel or blendstock that amounts to less than 1.0 mass percent of the finished fuel. Examples of additives include detergents for preventing engine deposits, dye, odorant, ethanol denaturant, octane enhancers for gasoline, and cetane enhancers for diesel fuel.

(2) Oxygenate. Oxygenate is a fuel product, consisting of one or more oxygenated compounds. For purposes of this part, oxygenates are not additives.

(3) Blendstock. Blendstock is any fuel product that is not an additive or oxygenate.

(i) Examples of gasoline-related blendstocks include butane, pentane, transmix gasoline products (TGP), reformate, and naphtha.

(ii) Examples of diesel-related blendstocks include kerosene blended into diesel fuel and transmix diesel products (TDP).

(iii) Note that imported gasoline and diesel fuel that do not meet the standards set forth in this Part may be treated as blendstock if the limited criteria in §1090.XXX are met.

(e) Other fuels. Fuels not qualifying as gasoline, diesel fuel, or ECA marine fuel may need to meet certain reporting, recordkeeping, labeling or other requirements under this part even though they are not subject to standards.

### **§1090.5 Implementation dates.**

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

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

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

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

(3) The Performance Based Management System in 40 CFR 80.47 included a grandfather date of October 28, 2013, to waive precision and accuracy demonstrations for laboratories that had already been using the specified referee test methods. The protocol for qualifying alternative test procedures in subpart M of this part includes no such “grandfather” date. To use alternative test procedures at a given facility, you must therefore perform the specified testing to demonstrate compliance with precision and accuracy requirements, even if you have been using those test procedures under 40 CFR part 80. Any testing to establish the precision and accuracy of alternative test procedures under 40 CFR part 80 continues to be valid under this part.

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

### **§1090.10 Contacting EPA.**

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

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

(a) Clearly show what information is considered confidential by marking, circling, bracketing, stamping, or some other method.

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

(c) If a second copy is submitted to EPA without the confidential information, EPA will assume it contains nothing confidential whenever information needs to be released from it.

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

### **§1090.45 Batch Numbering.**

Every batch of fuel or fuel product produced or imported shall be assigned a number (the "batch number"), consisting of the EPA-assigned company registration number of the part that produced or imported the fuel or fuel product, the EPA facility registration number where the fuel or fuel product was produced, the last two digits of the year in which the batch was produced, and a unique number for the batch, beginning with the number one (1) for the first batch produced or imported each calendar year and each subsequent batch during the calendar year being assigned the next sequential number (e.g., 4321-54321-95-000001, 4321-54321-95-000002, etc.).

### **§1090.50 Definitions.**

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

Act means the Clean Air Act, as amended (42 U.S.C. 7401-7671q).

Additive has the meaning given in §1090.2.

Additive blender means anyone who blends additive into fuel in the United States, or anyone who owns, leases, operates, controls, or supervises such an operation in the United States.

Additive producer means anyone who produces additive in the United States, or imports additive into the United States. Provisions may apply separately to U.S. additive producers and foreign additive producers.

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

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

Averaging standard means a fuel standard that involves demonstrating compliance on average over an averaging period. Fuel that is subject to an averaging standard for a given fuel parameter may also be subject to a less stringent per-gallon standard.

Batch means a quantity of fuel or fuel product that is homogenous with regard to a specified set of parameters.

Blender-grade butane means butane that meets the requirements in §1090.XXX and is combined with previously certified gasoline by a butane blender under §1090.XXX to produce gasoline.

Blender-grade pentane means pentane that meets the requirements in §1090.XXX and is combined with previously certified gasoline by a pentane blender under §1090.XXX to produce gasoline.

Blender pump-refinery means any facility where previously certified gasoline is blended with a fuel that contains more than 15 volume percent ethanol (including denatured fuel ethanol) to produce gasoline that has an ethanol content greater than that the previously certified gasoline.

Blendstock has the meaning given in §1090.2.

Blendstock for oxygenate blending (BOB) means a form of gasoline that will or might be blended with oxygenate before being dispensed into a vehicle's fuel tank. BOB is gasoline whether or not it is blended with oxygenate before reaching the ultimate consumer.

Butane blender means a refiner or refinery that produces gasoline by blending blender-grade butane with gasoline, and that uses the provisions in §1090.135 to meet some of the applicable sampling and testing requirements.

California fuel or fuel product means any fuel or fuel product the refiner or importer designates for use only in California and is actually used in California. This part includes provisions that apply for California gasoline and California diesel fuel.

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

Category 3 marine vessel means, for the purpose of this subpart, vessels that are propelled by engines meeting the definition of “Category 3” in 40 CFR part 1042.901.

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

Cetane index or “Calculated cetane index” means a number representing the ignition properties of diesel fuel oils from API gravity and mid-boiling point, as determined by ASTM D976.

Consensus named fuels means homogeneous quantities of fuel that have been analyzed by a number of different laboratories (by sending around small samples). The average concentration of some parameter of interest across all of the different laboratories is then used as the “consensus name” for that material.

Conventional blendstock for oxygenate blending (CBOB) means BOB that could become conventional gasoline solely upon the addition of a specified type and percentage of oxygenate.

Conventional gasoline (CG) means any gasoline not designated as reformulated gasoline.

Days means calendar days, including weekends and holidays.

Denatured fuel ethanol (DFE) means an alcohol of the chemical formula  $C_2H_6O$  which contains a denaturant to make it unfit for human consumption, that is produced or imported for use in gasoline.

Deposit control effectiveness means the ability of a detergent additive package to prevent the formation of deposits in gasoline engines.

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

Detergent additive package means any chemical compound or combination of chemical compounds, including carrier oils, that may be added to gasoline, or to post-refinery component blended with gasoline, in order to control deposit formation. Carrier oil means an oil that may be added to the package to mediate or otherwise enhance the detergent chemical’s ability to control deposits. A detergent additive package may contain non-detergent-active components such as corrosion inhibitors, antioxidants, metal deactivators, and handling solvents.

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

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

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

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

Detergent-additized gasoline (also called detergent gasoline) means any gasoline that contains a detergent additive that meets the requirements of §1090.340.

Diesel fuel has the meaning given in §1090.2.

Diesel-fueled means relating to a type of vehicle or engine that is subject to EPA certification requirement related to testing with a test fuel specified in 40 CFR 1065.703.

Diesel-related means relating to diesel fuel or diesel-fueled vehicles.

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

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

Downstream location means any point in the fuel distribution system that is downstream of refineries and import facilities, for example, diesel fuel at facilities of distributors, carriers, retailers, kerosene blenders, and wholesale purchaser-consumers.

E0 means a gasoline that contains no ethanol.

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

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

ECA marine fuel has the meaning given in §1090.2.

Ethanol blender means any person who owns, leases, operates, controls, or supervises an ethanol blending plant.

Ethanol blending plant means any refinery at which gasoline is produced solely through the addition of ethanol to gasoline, and at which the quality or quantity of gasoline is not altered in any other measure.

Ethanol denaturant means previously certified gasoline (including previously certified blendstocks for oxygenate blending), gasoline blendstocks, or natural gasoline liquids that are added to neat (un-denatured) ethanol to make it unfit for human consumption in accordance with the requirements of the Alcohol and Tobacco Tax and Trade Bureau of the U.S. Treasury Department.

EX means a gasoline-ethanol blend that contains less than 9 volume percent ethanol where X equals the maximum volume percent ethanol in the gasoline-ethanol blend.

EXX means a gasoline-ethanol blend above E15 where XX equals the maximum volume percent ethanol in the gasoline-ethanol blend.

Flex-fuel engine has the same meaning as flexible-fuel engine under 40 CFR §1054.801.

Flex-fuel vehicle has the meaning given in 40 CFR §86.1803-01.

Foot (or crossfoot) means to add a series of numbers, generally in columns (or rows), to a total amount. When applying the attestation procedures in this subpart F, the attester may foot to subtotals on a sample basis in those instances where subtotals (e.g., page totals) exist. In such instances, the total should be footed from the subtotals and the subtotals should be footed on a test basis using no less than 25% of the subtotals

Fuel means gasoline, diesel fuel, or ECA marine fuel. See §1090.2.

Fuel dispenser means the apparatus used to dispense fuel into motor vehicles or nonroad vehicles, engines or equipment, or into a portable fuel container as defined at §59.680.

Fuel product has the meaning given in §1090.2.

Gasoline has the meaning given in §1090.2.

Gasoline treated as blendstock (GTAB) means imported gasoline that is excluded from the import facility's compliance calculations, but is treated as blendstock in a related refinery that includes the GTAB in its refinery compliance calculations in accordance with §1090.XXX.

Gasoline-fueled means relating to a type of vehicle or engine that is subject to EPA certification requirements related to testing with a test fuel specified in 40 CFR 1065.710.

Gasoline-related means relating to gasoline or gasoline-fueled vehicles.

Gravimetric standard means a test material made by adding a carefully weighed quantity of the analyte to a measure quantity of another substance known not to contain any of the analyte, resulting in a solution with an accurately known concentrate of the analyte.

Hand blending detergent facility means any facility (including, but not limited to, a truck or individual storage tank) at which detergent is blended with gasoline or post-refinery component by the manual addition of detergent, or at which detergent is blended with these substances by any means that is not automated.

Heating oil means a combustible product, other than kerosene or jet fuel, that is commonly or commercially known as heating oil and that is intended for use in furnaces, boilers, and similar applications.

Importer means anyone who imports fuel, blendstock, additives, or oxygenate into the United States. This applies regardless of any past or future fuel modification with a blendstock, oxygenate, or additive. Note that foreign additive producers and others do not become “importers” when they import an additive.

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

Interface means a volume of petroleum product generated in a pipeline between two adjacent volumes of non-identical petroleum product that consists of a mixture of the two adjacent products.

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

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

Laboratory analysis means the original test result for each analysis that was used to determine a product’s properties. For laboratories using test methods that must be correlated to the standard test method, the correlation factors and results shall be included as part of the laboratory analysis. Where assumed properties used (e.g., for butane) the assumed properties may serve as the test results.

Lead additive means any substance containing lead or lead compounds.

Lead additive manufacturer means any person who produces a lead additive or sells a lead additive under his own name.

Leaded gasoline means gasoline which is produced with the use of any lead additive or which contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon.

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

Locally-named reference materials means gasoline or diesel fuels that are usually from the regular production of the facility where they are used in laboratory quality control efforts and have been analyzed using the designated method (either by the facility's lab or by a reference lab) to obtain an estimate of their concentration.

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

Lower 48 means the 48 contiguous states and the District of Columbia.

Marine diesel engine means, for the purposes of this subpart, a diesel engine installed on a Category 1 (C1) or Category 2 (C2) marine vessel.

Methanol means any fuel sold for use in motor vehicles and commonly known or commercially sold as methanol or MXX, where XX is the percent methanol (CH<sub>3</sub>OH) by volume.

Method-defined fuel parameter means a fuel parameter for which an EPA-prescribed primary test method or designated method defines the regulatory standard. Examples of method-defined fuel parameters include olefin content in gasoline, Reid vapor pressure (RVP) of gasoline, distillation parameters of gasoline, benzene content of gasoline, aromatic content of gasoline, and diesel fuel, and oxygen/oxygenates content of gasoline.

Natural gas means a fuel whose primary constituent is methane.

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

Non-detergent-additized gasoline means any gasoline that does not contain a detergent additive that meets the requirements of §1090.340.

Non-finished-gasoline petroleum products means liquid petroleum products that have boiling ranges greater than 75 degrees Fahrenheit, but less than 450 degrees Fahrenheit, as per ASTM D 86 or equivalent.

Non-petroleum diesel (NP diesel) means a diesel fuel that contains at least 80 percent mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats.

Nonroad diesel engine means an engine that is designed to operate with diesel fuel that meets the definition of nonroad engine in 40 CFR 1068.30, including locomotive and marine diesel engines.

Oxygenate has the meaning given in §1090.2.

Oxygenate blender means anyone who adds oxygenate to gasoline in the United States.

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

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

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

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

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

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

PADD means the Petroleum Administration for Defense Districts. For the purposes of this part, the PADDs are defined in §1090.2035.

Pentane blender means a refiner or refinery that produces gasoline by blending blender-grade pentane with conventional gasoline, CBOB, reformulated gasoline, or RBOB, and that uses the provisions in §1090.135 to meet some of the applicable sampling and testing requirements.

Per-gallon standard means a fuel standard that specifies a maximum or minimum value for any physical parameter that applies to every gallon of fuel or fuel product.

Performance-based Analytical Test Method Approach means a measurement system based upon established performance criteria for accuracy and precision with use of analytical test

methods. As used in this subpart, this is a measurement system used by laboratories to demonstrate that a particular analytical test method is acceptable for demonstrating compliance.

Pipeline interface means the mixture between different fuels that abut each other during shipment by pipeline. Depending on the components in the mixture, pipeline interface may be transmix or may be designated as gasoline or diesel fuel by a pipeline operator without further processing or testing pursuant to §1090.505.

Precision means the degree of agreement in a set of measurements performed on the same property of identical test material.

Previously certified gasoline (PCG) means gasoline or a BOB that has previously been included in a batch for purposes of complying with the standards of this part that apply to refiners and importers.

Previously designated diesel fuel (PDD) means diesel fuel that has been previously designated and included by a refiner or importer in a batch for purposes of complying with the standards and requirements of subpart I of this part.

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

Reference installations means designated test method installations that are used to qualify the accuracy of other method-defined parameter instruments. Reference installations of the designated test method will be used to elevate the accuracy of other method-defined alternative test methods and to establish correlation equations if necessary.

Refiner means any person who owns, leases, operates, controls, or supervises a refinery.

Refinery means any facility, including but not limited to, a plant, tanker truck, or vessel where gasoline or diesel fuel is produced, including any facility at which blendstocks are combined to produce gasoline or diesel fuel, or at which blendstock is added to gasoline or diesel fuel.

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

Reformulated gasoline (RFG) means summer gasoline that is certified to meet the requirements for reformulated gasoline under §1090.XXX.

Reformulated gasoline blendstock for oxygenate blending (RBOB) means BOB that could become reformulated gasoline solely upon the addition of a specified type and percentage of oxygenate.

Regulatory control period means the period from May 1 to September 15 of any calendar year or a period in any State Implementation Plan (SIP) approved or promulgated under 42 U.S.C. §§ 7410 and 7502, whichever is the longer period of time.

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

Repeatability of a test method means the amount of random error which is expected to affect the results obtained for a given test substance, when the test is replicated by a single operator in a given laboratory within a short period of time, using the same apparatus under constant operating conditions. Quantitatively, it is the difference between two such single results that would be exceeded in the long run in only one out of twenty normal and correct replications of the test method.

Reporting period means the time period relating to the reports filed with EPA by a regulated party required to submit a report pursuant to subpart J of this part, and generally is the calendar year.

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

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

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

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

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

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

Round (rounded, rounding) has the meaning given in §1090.XXX.

RVP is Reid Vapor Pressure of the target gasoline in terms of pounds per square inch.

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

This document is a staff-level working draft, developed in preparation for EPA's Fuels Regulatory Streamlining Workshop.
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(1) Densely populated areas.

(2) Transportation corridors.

(3) Rural areas.

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

Summer gasoline means gasoline that is subject to volatility standards under §1090.315, and may be conventional gasoline or reformulated gasoline.

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

Tank truck means a truck and/or trailer used to transport or cause the transportation of gasoline or diesel fuel, that meets the definition of motor vehicle in section 216(2) of the Clean Air Act.

Tender means the transfer of ownership or physical custody of a volume of gasoline or other petroleum product all of which has the same identification (reformulated gasoline, conventional gasoline, RBOB, and other non-finished-gasoline petroleum products), and characteristics (time and place of use restrictions for reformulated gasoline and RBOB).

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

(1) Pipeline interface.

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

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

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

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

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

Transmix gasoline product (TGP) means the gasoline blendstock that is produced when transmix is separated into TGP, TDP, and other fuel blendstocks at a transmix processing facility.

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

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

Ultra low-sulfur diesel (ULSD) means diesel fuel certified to meet the 15 ppm sulfur standard specified at §1090.XXX. ULSD may be used in motor vehicles engines, nonroad engines (including locomotive and marine), or stationary engines.

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

Volume records shall include summaries of gasoline produced or imported that account for the volume of each type of gasoline produced or imported. The volumes shall be based on tank gauges or meter reports and temperature adjusted to 60 degrees Fahrenheit.

Voluntary consensus-based standards body (VCSB) means a domestic or international organization that plans, develops, establishes, or coordinates voluntary consensus standards using agreed-upon procedures and which possesses the attributes of openness, balance of interest, due process, and consensus, as explained in OMB Circular A-119 and the National Technology Transfer and Advancement Act of 1995, P.L. 104-113, sec. 12(d).

Wholesale purchaser-consumer means any person that is an ultimate consumer of gasoline, diesel fuel, methanol, natural gas, or liquefied petroleum gas and which purchases or obtains gasoline, diesel fuel, natural gas or liquified petroleum gas from a supplier for use in motor vehicles or nonroad engines, including locomotive engines or marine engines and, in the case of gasoline, diesel fuel, methanol or liquified petroleum gas, receives delivery of that product into a storage tank of at least 550-gallon capacity substantially under the control of that person.

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

Winter season means any period of time outside of the summer season as defined in this section.

**§1090.55 Rounding.**

Complying with this part requires rounding final values, such as sulfur test results and volume of gasoline. Intermediate values may be rounded when transferring data as long as you maintain at least six significant digits (which requires more than six decimal places for values less than 0.1), or all significant digits if fewer than six digits are available.

(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 as described in 40 CFR 1065.20(e)(1) through (6). This convention is consistent with ASTM E29 and NIST SP 811.

(b) 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.

(c) You may use measurement devices that incorporate internal rounding, consistent with the provisions of this paragraph (c). You may use devices that use any rounding convention if they report six or more significant digits. You may use devices that report fewer than six digits, consistent with good engineering judgment and the accuracy, repeatability, and noise specifications of this part.

**§1090.95 Incorporation by reference.**

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

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

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

(2) [Reserved]

(c) American Institute of Certified Public Accountants, 220 Leigh Farm Road, Durham, North Carolina 27707-8110, or [www.aicpa.org](http://www.aicpa.org), or (888) 777-7077.

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

(2) [Reserved]

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

(1) NIST Handbook 158, 2016 Edition, Field Sampling Procedures for Fuel and Motor Oil Quality Testing—A Handbook for Use by Fuel and Oil Quality Regulatory Officials, April 2016, IBR approved for §1090.XXX.

(2) [Reserved]

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

(1) ASTM D287-12b, Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method), approved June 1, 2012, IBR approved for §1090.XXX.

(2) ASTM D975-17a, Standard Specification for Diesel Fuel Oils, approved December 15, 2017, IBR approved for §1090.XXX.

(3) 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, IBR approved for §1090.XXX.

(4) ASTM D1319-15, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption, approved December 1, 2015 (“ASTM D1319”); IBR approved for §1090.XXX.

(5) 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.XXX.

(6) ASTM D4052-16, Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter, approved December 1, 2016, IBR approved for §1090.XXX.

(7) ASTM D4057-12, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, approved December 1, 2012 (“ASTM D4057”); IBR approved for §1090.XXX.

- (8) ASTM D4177-16e1 Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved October 1, 2016 (“ASTM D4177”); IBR approved for §1090.XXX.
- (9) ASTM D4806-13a, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, approved June 15, 2013 (“ASTM D4806”); IBR approved for §1090.1330.
- (10) ASTM D4806-17, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, approved July 1, 2017 (“ASTM D4806”); IBR approved for §1090.XXX.
- (11) ASTM D4814-13b, Standard Specification for Automotive Spark-Ignition Engine Fuel, approved December 1, 2013 (“ASTM D4814”); IBR approved for §1090.1330.
- (12) ASTM D4814-17, Standard Specification for Automotive Spark-Ignition Engine Fuel, approved May 1, 2017 (“ASTM D4814”); IBR approved for §§1090.definitions and §1090.XXX.
- (13) ASTM D5191-15, Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method), approved October 1, 2015 (“ASTM D5191”); IBR approved for §1090.XXX.
- (14) ASTM D5500-16, Standard Test Method for Vehicle Evaluation of Unleaded Automotive Spark-Ignition Engine Fuel for Intake Valve Deposit Formation, approved October 1, 2016 (“ASTM D5500”); IBR approved for §1090.XXX.
- (15) ASTM D5599-17, Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection, approved May 1, 2017 (“ASTM D5599”); IBR approved for §1090.XXX.
- (16) ASTM D5769-15, Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry, approved October 1, 2010 (“ASTM D5769”); IBR approved for §1090.XXX.
- (17) ASTM D5842-17, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement, approved July 1, 2017 (“ASTM D5842”); IBR approved for §1090.XXX.
- (18) ASTM D5854-96 (Reapproved 2015), Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products, approved April 1, 2015 (“ASTM D5854”); IBR approved for §1090.XXX.
- (19) ASTM D6201-04 (Reapproved 2014), Standard Test Method for Dynamometer Evaluation of Unleaded Spark-Ignition Engine Fuel for Intake Valve Deposit Formation, approved October 1, 2014 (“ASTM D6201”); IBR approved for §1090.XXX.

(20) ASTM D6299-17a, Standard Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance, approved November 15, 2017 (“ASTM D6299”); IBR approved for §1090.XXX.

(21) ASTM D6667-14, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, approved October 1, 2014 (“ASTM D6667”); IBR approved for §1090.XXX.

(22) ASTM D7717-11 (Reapproved 2017), Standard Practice for Preparing Volumetric Blends of Denatured Fuel Ethanol and Gasoline Blendstocks for Laboratory Analysis, approved May 1, 2017 (“ASTM D7717”); IBR approved for §1090.XXX.

## **Subpart B—Regulated Parties**

### **§1090.100 Generally applicable provisions.**

This subpart is designed to provide general guidance regarding certain requirements and provisions for parties regulated under this part. Regulated parties are required to comply with all applicable requirements in this part, regardless of whether or not they are identified in this subpart. The following requirements apply to all parties in the fuel and fuel product distribution chain:

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

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

### **§1090.105 Refiners and importers.**

This section outlines requirements applicable to refiners and importers of fuels under this part. Gasoline refiners and importers must comply with the requirements in paragraph (a) of this section and diesel refiners and importers must comply with the requirements in paragraph (b) of this section. Refiners and importers must comply with the following:

(a) Gasoline refiners and importers. Generally, all gasoline refiners and importers must comply with the following requirements:

(1) Certification and designation of batches of gasoline. Refiners and importers of gasoline (including BOB) must certify the batch of gasoline before the gasoline leaves the refinery gate or import facility according to the requirements of subpart C of this part and designate the batch of gasoline as the appropriate type of gasoline according to the requirements of subpart K of this part.

(2) Averaging, banking, and trading requirements. Gasoline refiners and importers must comply with averaging standards of subpart C of this part using the averaging, banking, and trading provisions of subpart H of this part.

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

(4) Product transfer documents. On each occasion when a gasoline refiner or importer transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee product transfer documents according to the requirements of subpart K of this part.

(5) Reporting. Gasoline refiners and importers must submit to EPA reports in accordance with the requirements of subpart J of this part.

(6) Sampling, testing, and sample retention. Gasoline refiners and importers must conduct sampling, testing, and sample retention in accordance with the requirements of subpart M of this part.

(7) Surveys. Gasoline refiners and importers may participate in the applicable fuel surveys of subpart N of this part.

(8) Hardship provisions. Gasoline refiners and importers may petition for a waiver to the gasoline standards in subpart C of this part due to hardship, as applicable under subpart P of this part.

(9) Annual attest engagement. Gasoline refiners and importers must submit annual attest engagement reports to EPA according to the requirements of subpart T of this part.

(b) Diesel refiners and importers. Refiners and importers of ULSD, 500 ppm LM diesel fuel, and ECA marine fuel (including biodiesel and renewable diesel) must comply with all of the following requirements, as applicable:

(1) Certification and designation of batches of diesel. Refiners and importers of ULSD, 500 ppm LM diesel fuel, and ECA marine fuel must certify the batch of fuel prior to leaving the refinery gate or import facility according to requirements of subpart D of this part and designate the batch of ULSD, 500 ppm LM diesel fuel, and ECA marine fuel as the appropriate type of fuel according to the requirements of subpart K of this part.

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

(3) Product transfer documents. On each occasion when a diesel refiner or importer transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee product transfer documents according to the requirements of subpart K of this part.

(4) Sampling, testing, and retention requirements. Diesel refiners and importers must conduct sampling, testing, and sample retention in accordance with the requirements of subpart M of this part.

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

(6) Hardship provisions. Diesel refiners and importers may petition for a waiver to the diesel standards in subpart D of this part due to hardship, as applicable under subpart P of this part.

**§1090.110 Importers.**

In addition to the requirements that apply to importers based on the fuel or fuel product being imported as described in this subpart B, importers must also comply with the requirements of subpart R of this part.

**§1090.115 Gasoline detergent additive manufacturer.**

A gasoline detergent additive manufacturer must comply with the following:

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

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

(c) Product transfer documents. Comply with the detergent additive PTD requirements contained in §1090.XXX.

(d) Sampling, testing, and retention requirements. In order to certify new gasoline detergents, gasoline detergent additive manufacturers must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

**§1090.120 Gasoline detergent blender.**

A gasoline detergent additive blender must comply with the following:

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

(b) Product transfer documents. On each occasion when a gasoline detergent blender transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

**§1090.125 Gasoline detergent-additized post refinery component carrier.**

A gasoline detergent-additized post refinery component carrier must comply with the following:

(a) Product transfer documents. On each occasion when a gasoline detergent-additized post refinery component carriers transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

#### **§1090.130 Oxygenate blender.**

An oxygenate blender must comply with the following:

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

(b) Registration. Oxygenate blenders must register with EPA according to the requirements of subpart I of this section.

(c) Product transfer documents. On each occasion when an oxygenate blender transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

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

#### **§1090.135 Oxygenate producer.**

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

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

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

(c) Reporting. Oxygenate producers and importers must submit reports to EPA in accordance with subpart J of this part.

(d) Product transfer documents. On each occasion when an oxygenate producer transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

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

(f) Additional requirements for denatured fuel ethanol producers. In addition to the requirements and provisions specified in paragraphs (a) through (f) of this section, DFE producers must:

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

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

#### **§1090.140 Blender grade Butane producer.**

The following requirements apply to producers of blender-grade butane:

(a) Gasoline standards. Blender grade butane producers must comply with the requirements of subpart C of this part.

(b) Product transfer documents. On each occasion when a blender grade butane producer transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee product transfer documents according to the requirements of subpart K of this part.

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

#### **§1090.145 Butane blender.**

Butane blenders that blend blender-grade butane into previously certified gasoline are gasoline refiners and may comply with the following requirements in lieu of the requirements for gasoline refiners in §1090.XXX:

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

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

(c) Reporting. Butane blenders must submit to EPA reports in accordance with subpart L.

(d) Sampling, testing, and retention requirements. Butane blenders must conduct sampling, testing, and sample retention in accordance with subpart M.

(e) Product transfer documents. When blender-grade butane is blended with previously certified gasoline, PTDS that accompany the gasoline blended with butane must comply with all appropriate requirements of subpart K of this part.

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

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

#### **§1090.150 Blender grade pentane producer.**

The following requirements apply to producers of blender-grade pentane:

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

(b) Registration. Blender grade pentane producers must register with EPA according to the requirements of subpart I of this part.

(c) Reporting. Blender grade pentane producers must submit to EPA reports in accordance with subpart J of this part.

(d) Product transfer documents. On each occasion when a blender grade pentane producer transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

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

#### **§1090.155 Pentane blender.**

Pentane blenders that blend blender-grade pentane into previously certified gasoline are gasoline refiners and may comply with the following requirements in lieu of the requirements for gasoline refiners in §1090.XXX:

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

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

(c) Reporting. Pentane blenders must submit reports to EPA in accordance with subpart L of this part.

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

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

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

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

#### **§1090.160 Transmix processor.**

(a) Transmix requirements. Transmix processors may comply with the transmix requirements of subpart E of this part in lieu of the requirements for refiners in §1090.XXX.

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

(c) Product transfer documents. On each occasion when a transmix processor transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

(d) Sampling, testing, and retention requirements. Transmix processors must conduct sampling, testing, and sample retention in accordance with subpart M of this part.

(e) Reporting. Pentane blenders must submit reports to EPA in accordance with subpart L of this part.

#### **§1090.165 Transmix blenders.**

(a) Transmix requirements. Transmix blenders may comply with the transmix requirements of subpart E of this part in lieu of the requirements for refiners in §1090.XXX.

(b) Product transfer documents. On each occasion when a transmix blender transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

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

(d) Reporting. Pentane blenders must submit reports to EPA in accordance with subpart L of this part.

**§1090.170 Additive manufacturers.**

(a) Gasoline additive manufacturers. Gasoline additive manufacturers that produce additives with a maximum allowed treatment rate of less than 1.0 volume percent must meet the following requirements. Gasoline detergent additives have additional requirements described in §1090.XXX.

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

(2) Product transfer documents. On each occasion when a gasoline additive manufacturer transfers custody or title to any gasoline additive, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

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

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

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

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

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

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

(3) Product transfer documents. On each occasion when a certified ethanol denaturant producer transfers custody or title to any fuel or fuel product, the transferor shall provide to the transferee PTDs according to the requirements of subpart K of this part.

**§1090.175 Distributors, carriers, and resellers.**

(1) Registration. Distributors, carriers, and resellers must register with EPA according to the requirements of subpart I of this part if they are part of the 500 ppm LM diesel fuel distribution chain under a compliance plan submitted under §1090.XXX.

(2) Recordkeeping. In addition to the general requirements that apply to all parties described in §1090.100, distributors, carriers, and resellers may have specific PTD requirements

described in subpart K of this part. For example, a distributor that adds diluent to a gasoline detergent additive may have to modify the PTD for the gasoline detergent additive to prescribe a new treatment rate under §1090.XXX.

#### **§1090.180 Retailers and wholesale purchaser-consumers.**

In addition to the general requirements applicable to all parties in §1090.100, retailers and wholesale purchaser-consumers that dispense fuels requiring a label under this part must display fuel labels in accordance with the requirements of subpart O of this part.

#### **§1090.185 Independent surveyors.**

The following requirements apply to independent surveyors that conduct fuel surveys as required by subpart N of this part:

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

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

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

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

#### **§1090.190 Independent laboratories.**

The following requirements apply to independent laboratories that conduct compliance testing for parties that produce fuel or fuel products subject to the requirements of this part.

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

(b) Independence requirements. In order to conduct sampling and testing for a responsible party under this part the independent laboratory must meet the independence requirements of §1090.XXX.

#### **§1090.195 Independent auditors.**

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

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

(b) Reporting. Independent auditors must submit to EPA reports in accordance with subpart J of this part.

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

(d) Independence requirements. In order to perform an annual attest engagement required by subpart T of this part, independent auditors must meet the independence requirements of §1090.XXX.

#### **§1090.200 Pipeline Operators.**

(a) Pipeline operators must maintain PTDs for the fuel and fuel products that they take custody of that are subject to the standards of subpart C of this part and for heating oil.

(b) Pipeline operators that use the provisions of §1090.505 to designate batches of pipeline interface as gasoline or diesel fuel must maintain the records specified in subpart L of this part regarding this designation and initiate a product transfer document for the subject pipeline interface batch pursuant to the requirements of subpart K of this part.

## Subpart C—Gasoline Standards

### §1090.300 Gasoline certification.

Refiners and importers must certify gasoline under this section prior to the gasoline leaving the refinery or import facility.

(a) Certified gasoline. Gasoline and BOB that complies with the applicable standards specified in this subpart and that meets all other relevant requirements prescribed under this part shall be deemed certified gasoline.

(b) Winter gasoline. During the winter season, certified gasoline that complies with the applicable standards specified in this subpart and that meets all other relevant requirements prescribed in this part shall be deemed reformulated gasoline and suitable for use in the RFG areas described in §1090.XXX.

(c) Summer gasoline. During the summer season, only certified gasoline that meets the RVP requirements described at §1090.XXX and that complies with all other relevant requirements prescribed under this part shall be deemed summer reformulated gasoline and suitable for use in the RFG areas described in §1090.XXX. All other certified summer gasoline is deemed summer conventional gasoline.

### §1090.301 Lead and phosphorous limits.

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

- (a) Lead content. 0.05 grams maximum.
- (b) Phosphorus content. 0.005 grams maximum.

### §1090.305 Sulfur standards.

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

- (a) Annual refiner and importer sulfur average standard.
  - (1) Refiners and importers must meet an annual sulfur average standard of 10.00 parts per million (ppm), in accordance with section §1090.XXX.
  - (2) The averaging period is a calendar year (January 1 through December 31).
- (b) Per-gallon refinery and import facility gate sulfur standards. Refiners and importers shall not produce gasoline that exceeds a per-gallon sulfur standard of 80 ppm.

(c) Downstream per-gallon sulfur cap standard. The sulfur content of gasoline at any location downstream of a refinery or import facility shall not exceed 95 ppm, on a per-gallon basis.

(d) Alternative standard for importers that import gasoline by truck. In lieu of the annual average sulfur standard in paragraph (a) of this section and the refinery gate sulfur per gallon cap standard in paragraph (b) of this section, importers that import gasoline by truck may comply with a 10 ppm per-gallon sulfur standard. Note that the alternative sulfur sampling and testing requirements for importers that import gasoline by truck are contained in §1090.1810.

### **§1090.310 Benzene standards.**

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

(a) Annual refiner and importer benzene average standard.

(1) Refiners and importers must meet an annual benzene average standard of 0.62 volume percent, in accordance with subpart H of this part.

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

(b) Maximum benzene average standard. Refiners and importers must ensure that the annual average benzene concentration for any refinery or import facility in any calendar year does not exceed 1.30 volume percent before the use of credits.

(c) Alternative benzene standard for importers that import gasoline by truck. In lieu of the annual benzene average standard in paragraph (a) of this section and the maximum average benzene standard in paragraph (b) of this section, importers that import gasoline by truck may comply with a 0.62 volume percent benzene per-gallon standard. Note that the alternative benzene sampling and testing requirements for importers that import gasoline by truck are contained in §1090.1805.

### **§1090.315 Gasoline volatility standards.**

Except as otherwise provided for by the exemptions in subpart G of this part, all gasoline at all locations is subject to the following Reid vapor pressure (RVP) maximum per gallon standards during the summer season:

(a) Federal 9.0 psi maximum per gallon RVP standard. Gasoline (including BOBs) is subject to a 9.0 psi RVP maximum per gallon standard unless the gasoline is subject to a lower RVP maximum per gallon standard in the following areas:

(1) Gasoline in RFG areas defined in §1090.XXX must meet the maximum per gallon RVP standard set forth in paragraph (c) of this section.

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

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

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

(b) Federal 7.8 psi standard. Gasoline in the following areas are subject to a 7.8 psi RVP maximum per gallon standard:

(1) Colorado. Denver: Adams; Arapahoe; Boulder; Broomfield, Denver; Douglas; Jefferson; Larimer (part)<sup>1</sup>; and Weld (part)<sup>2</sup> Counties.

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

(3) Louisiana. Baton Rouge: Ascension; East Baton Rouge; Iberville; Livingston; and West Baton Rouge Parishes.

(4) Nevada. Reno: Washoe County.

(5) Oregon. Portland: Clackamas (part)<sup>3</sup>; Multnomah (part)<sup>4</sup>; and Washington (part)<sup>5</sup> Counties.

(6) Oregon. Salem: Marion (part)<sup>6</sup>; and Polk Counties (part)<sup>7</sup>.

(7) Texas. Beaumont: Hardin; Jefferson; and Orange Counties.

(8) Utah. Salt Lake City: Salt Lake; and Davis Counties.

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

<sup>2</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 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.

<sup>3</sup> Air Quality Maintenance Area.

<sup>4</sup> Air Quality Maintenance Area.

<sup>5</sup> Air Quality Maintenance Area.

<sup>6</sup> Salem Area Transportation Study.

<sup>7</sup> Salem Area Transportation Study.

(c) RFG RVP maximum per gallon standard. Gasoline used in RFG areas defined in §1090.XXX is subject to an RVP maximum per gallon standard of 7.4 psi.

(d) Ethanol 1.0 psi waiver.

(1) Any gasoline subject to the federal RVP requirements and paragraphs (a) and (b) of this section that meets the requirements of paragraphs (d)(2) of this section shall not be in violation of this section if its RVP does not exceed the applicable standard in paragraphs (a) and (b) of this section by more than one pound per square inch (1.0 psi).

(2) In order to qualify for the special regulatory treatment specified in paragraph (d)(1) of this section, gasoline must contain ethanol at a concentration of at least 9 volume percent and no more than 10 volume percent. The maximum ethanol content shall not exceed any applicable waiver conditions under section 211(f) of the Clean Air Act.

(3) Gasoline must meet the standards set forth in paragraphs (a) and (b) of this section at the refinery or importer gate.

#### **§1090.320 Standards for blender-grade butane blended into PCG or BOB.**

Butane designated as blender-grade butane and blended into previously certified gasoline (PCG) to produce gasoline pursuant to the butane blending provisions of §1090.1320 must meet the following requirements:

(a) Butane content. Minimum 95 volume percent.

[NOTE TO READER: EPA is seeking input on whether this standard should be modified to allow for the presence of more propane.]

(b) Benzene content. Maximum 0.03 volume percent.

(c) Sulfur content. Maximum 10 ppm.

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

(e) Blender-grade butane shall not be blended into summer RFG.

#### **§1090.325 Standards for blender-grade pentane blended into PCG or BOB.**

Pentane designated as blender-grade pentane and blended into previously certified gasoline (PCG) to produce gasoline pursuant to the provisions of §1090.1320 must meet the following requirements:

(a) Pentane content. Minimum 95 volume percent.

(b) Benzene content. Maximum 0.03 volume percent.

- (c) Sulfur content. Maximum 10 ppm.
- (d) Be composed solely of carbon, hydrogen, oxygen, nitrogen, and sulfur.
- (e) Blender-grade pentane shall not be blended into summer RFG.

### **§1090.330 Standards for oxygenates and denatured fuel ethanol.**

(a) All oxygenates blended into gasoline, PCG, and BOB must meet the following standards:

- (1) Sulfur content. Maximum 10 ppm.
- (2) Chemical composition. The DFE or other oxygenate must be composed solely of carbon, hydrogen, nitrogen, oxygen and sulfur.

(b) Denatured fuel ethanol blended into gasoline must meet the following additional requirements:

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

### **§1090.335 Standards for ethanol denaturant.**

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

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

(1) Sulfur content. The sulfur content must not be greater than 330 ppm as determined in accordance with the test requirements of §1090.XXX. If the certified ethanol denaturant manufacturer or importer represents a batch of denaturant as having a maximum sulfur content lower than 330 ppm in the PTD (for example, no greater than 120 ppm), then the actual sulfur content must be no greater than the stated value as determined in accordance with the requirements of §1090.XXX.

(2) Denaturant type. Only gasoline blendstocks or natural gas liquids may be used to manufacture certified ethanol denaturant.

### §1090.340 Gasoline deposit control standards.

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

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

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

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

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

(A) Be additized in California.

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

(C) Be both additized and ultimately dispensed in California.

(iii) A certification under this option will continue to be valid only as long as the CARB certification remains valid. The additive manufacturer must cease selling a detergent immediately upon being notified by CARB that the CARB certification for this detergent has been invalidated, and must notify EPA pursuant to the requirements of 40 CFR 79.21.

(3) Effective until 5 years after the effective date of this rule, the detergent may comply with the requirements of 40 CFR 80.161(a)(1) provided that detergent certification materials specified in 40 CFR 80.161 were submitted to EPA by the effective date of this rule and was subsequently approved by EPA.

[NOTE TO READER: The requirements of the national generic detergent certification option are currently contained in 40 CFR 80.161(a)(1). EPA is seeking input on whether the length of this 5-year sunset date is appropriate.]

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

#### **§1090.345 Reformulated gasoline standards.**

The standards for reformulated gasoline (RFG) in this section apply to gasoline that is used in the RFG areas defined in §1090.XXX. Gasoline that meets the requirements in this section is deemed to be in compliance with the requirements of Clean Air Act Title I, Part A, Section 211(k).

- (a) RFG sulfur standards. RFG must comply with the sulfur standards in §1090.305.
- (b) RFG benzene standards. RFG must comply with the benzene standards in §1090.310.
- (c) RFG volatility standards. RFG volatility must not exceed 7.4 RVP on a per-gallon basis during the summer season.
- (d) RFG per-gallon heavy metals standard. On a per-gallon basis, RFG may contain no heavy metals, including, but not limited to, lead or manganese. The Administrator may waive this prohibition for a heavy metal (other than lead) if the Administrator determines that addition of the heavy metal to the gasoline will not increase, on an aggregate mass or cancer-risk basis, toxic air pollutant emissions from motor vehicles.

#### **§1090.350 Anti-dumping standards.**

Gasoline that meets all applicable standards of this subpart is deemed to be in compliance with the anti-dumping requirements of Clean Air Act Title I, Part A, Section 211(k)(8).

#### **§1090.355 Gasoline additive standards.**

- (a) Any gasoline additive that is added to, intended for adding to, used in, or offered for use in gasoline at any downstream location must meet the following requirements:
  - (1) The gasoline additive must be registered by a fuel additive manufacturer under 40 CFR part 79.
  - (2) The gasoline additive must contribute no more than 3 ppm on a per gallon basis to the sulfur content of gasoline when used at the maximum recommended treatment rate.
  - (3) The gasoline additive must be used at a maximum treatment rate of no more than 1.0 volume percent.

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

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

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

(c) Any person who blends any additive that does not meet the requirements of paragraphs (a) and (b) of this section is a gasoline refiner and is subject to the applicable requirements of §1090.105, including the applicable standards and requirements in this subpart for producing gasoline.

#### **§1090.360 Gasoline substantially similar provisions.**

Gasoline is subject to the substantially similar requirement Section 211(f) of the Clean Air Act.

#### **§1090.365 Requirements for E15.**

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

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

(2) A survey for the area where the E15 will be used must be approved under subpart N of this part.

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

(b) E15 dispensers must be labeled in accordance with §1090.XXX.

(c) An approved survey required by subpart N of this part must be fully implemented in a timely fashion.

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

(e)(1) Ethanol blending into BOB, gasoline, or gasoline already containing ethanol must be conducted consistent with the information on the refiner or importer blending instructions as specified on PTDs under §1090.XXX.

(2) Fuel designated as E10 by blending ethanol and gasoline must not contain less than 9.0 or more than 10.0 volume percent ethanol.

(3) Fuel designated as E15 by blending ethanol and gasoline must not contain less than 10.0 volume percent ethanol or more than 15.0 volume percent ethanol.

(f) For gasoline during the regulatory control periods, any gasoline or CBOB intended for blending with E10 that qualifies for the 1.0 psi allowance under the special regulatory treatment as provided by §1090.XXX applicable to E10 shall not be combined with any gasoline or CBOB intended for blending with E15, unless the resultant combination is designated, in its entirety, as an E10 BOB.

(g) For gasoline during the summer season, any gasoline-ethanol blend that qualifies for the 1.0 psi allowance under the special regulatory treatment as provided by §1090.XXX applicable to E10 shall not be combined with any gasoline containing less than 9 volume percent ethanol or more than 10 volume percent ethanol up to a maximum of 15 volume percent ethanol.

## **Subpart D—Diesel and ECA Marine Fuel Standards**

### **§1090.400 ULSD sulfur standards.**

(a) Except as specifically provided for 500 ppm LM diesel fuel in §1090.405 or ECA marine fuel in §1090.415, all diesel fuel is subject to a maximum 15 ppm sulfur per-gallon standard at the refinery and importer gate and is called ULSD. Note that heating oil is not diesel fuel but can become diesel fuel pursuant to the requirements in this subpart.

(b) At all locations downstream of the refinery and importer gate, ULSD is subject to a maximum 17 ppm sulfur per-gallon standard

### **§1090.405 500 ppm LM diesel fuel sulfur standards.**

500 ppm LM diesel fuel produced by transmix processing facilities and pipelines that produce diesel fuel from transmix in compliance with the requirements of §1090.505 is subject to a 500 ppm sulfur maximum per-gallon standard. Note that such 500 ppm LM diesel fuel may only be used in engines that do not require the use of ULSD. The certification requirements for locomotive and marine diesel engines are located in §XXXX.XXX.

### **§1090.410 ECA marine fuel sulfur standards.**

All ECA marine fuel is subject to a maximum 1000 ppm sulfur maximum per-gallon standard.

### **§1090.415 ULSD cetane or aromatics standards.**

All ULSD is subject to one of the following per-gallon standards for cetane index or aromatic content:

- (a) A minimum cetane index of 40.
- (b) A maximum aromatic content of 35 volume percent.

### **§1090.420 Standards for ULSD additives.**

Additives used in ULSD in a quantity less than one percent by volume of the resultant additive/ULSD mixture are subject to following requirements:

(a) Except as provided in paragraph (b) of this section, ULSD additives are subject to a 15 ppm maximum per-gallon sulfur standard at all locations.

(b) ULSD additives may exceed the 15 ppm maximum per-gallon sulfur standard in paragraph (a) of this section provided the following conditions are met: Note that parties that use ULSD additives that exceed 15 ppm are responsible for meeting the 15 ppm maximum sulfur standard for ULSD after the addition of the additive.

(1) The product transfer document complies with the informational requirements of §1090.XXX.

(2) The additive is not used or intended for use by an ultimate consumer in diesel motor vehicles or nonroad diesel engines.

**§1090.425 Provisions for heating oil, kerosene, and jet fuel.**

(a) Heating oil, kerosene, and jet fuel are generally not subject to the ULSD sulfur standard in §1090.400 or the ULSD cetane or aromatics standard in §1090.415.

(b) Heating oil, kerosene, and jet fuel that meets the ULSD standards at §1090.400 and §1090.415 may be designated and used as ULSD if the following conditions are met:

(1) The refiner that produced the heating oil, kerosene, or jet fuel is registered under §1090.XXX as a diesel refiner.

(2) The refiner that produced the heating oil, kerosene, or jet fuel has results for sulfur content and aromatics content or cetane number obtained from sampling and testing methods specified in §1090.XXX.

(3) The party that designates the heating oil, kerosene, or jet fuel as ULSD does the following:

(i) Registers as a diesel refiner under §1090.XXX.

(ii) Obtains the test results described in §1090.425(b)(2) and maintains those test results as records as required by §1090.XXX.

(iii) Complies with the PTD requirements for ULSD in §1090.XXX.

## **Subpart E—Transmix Provisions**

### **§1090.500 Scope.**

(a) This subpart provides alternative standards and provisions for gasoline and diesel fuel produced from pipeline interface or the mixtures described in paragraph (c) of this section by transmix processors or other facilities (such as pipelines) that do not produce fuel by processing crude oil. Note that pursuant to §1090.10, transmix means a mixture of finished fuels, such as pipeline interface or the mixtures described in paragraph (c) of this section that no longer meet the specifications for a fuel that can be used or sold without further processing or handling.

(b) The provisions in §1090.505 are limited to pipeline interface that meets the applicable standards without the need for further processing.

(c) The provisions of §§1090.510, 1090.515, and 1090.520 apply to transmix from pipeline interface and transmix from the following mixtures of gasoline and distillate fuel:

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

(2) Mixture 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.

(d) Blendstocks other than those specified in paragraphs (b) and (c) of this section may be used in the production of gasoline or diesel fuel under this subpart as follows:

(1) PCG may be used to produce gasoline pursuant to §1090.515(c).

(2) Gasoline blendstocks may be used to produce gasoline pursuant to §1090.515(d).

(3) ULSD may be used to produce 500 ppm LM diesel fuel pursuant to §1090.520(a)(1)(ii).

(e) Gasoline and diesel fuel produced by facilities that process crude oil may not use the alternative provisions in this subpart and are subject to the applicable requirements in §1090.105.

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

### **§1090.505 Pipeline interface.**

As an alternative to demonstrating compliance with EPA fuel quality standards through sampling and testing pursuant to the requirements of §1090.100, or designating pipeline interface as transmix, pipeline operators may designate batches of pipeline interface that meet all the applicable downstream standards, including, but not limited to, any standards and requirements

that apply downstream of the refinery in this part and the Clean Air Act as specified in this section.

(a) Gasoline interface. Gasoline interface mixtures containing the following products and no oxygenate or biodiesel may be designated by pipeline operators in the following manner:

(1) Interface mixtures of gasolines that may be used without the further addition of oxygenate that are subject to different maximum RVP standards may be designated as the gasoline with the highest RVP standard in the mixture.

(2) Interface mixtures of gasolines that may be used without the further addition of oxygenate and BOBs may be designated as a BOB subject to the highest RVP standard that applies to any component in the mixture.

(3) Interface mixtures of BOBs may be designated as the BOB subject to the highest RVP standard in the mixture.

(4) The following examples are included for illustrative purposes:

(i) Interface mixtures of RFG subject to a maximum 7.4 psi standard that may be used without the further addition of oxygenate and conventional gasoline subject to a maximum 9.0 psi RVP standard that may be used without the further addition of oxygenate may be designated as conventional gasoline subject to a maximum 9.0 psi RVP standard that may be used without the further addition of oxygenate.

(ii) Interface mixtures of winter and summer gasolines that may be used without the further addition of oxygenate may be designated as winter gasoline that may be used without the further addition of oxygenate.

(iii) Interface mixtures of RBOB and conventional gasoline subject to a maximum 9.0 psi RVP standard that may be used without the addition of oxygenate may be designated as CBOB where the finished (oxygenated) conventional gasoline is subject to a maximum 9.0 psi RVP standard.

(iv) Interface mixtures of a winter BOB and a winter gasoline that may be used without the addition of oxygenate and may be designated as winter BOB.

(b) Diesel fuel interface. Diesel fuel interface mixtures containing the following products may be designated by pipeline operators in the following manner:

(1) Interface mixtures of ULSD and heating oil may be designated as ULSD provided that the pipeline operator has documentation from the heating oil producer to demonstrate that the heating oil is compliant with ULSD standards. Note that such mixtures may be also designated as heating oil provided the applicable State requirements for heating oil are satisfied or may be designated as blendstock.

(1) Interface mixtures of ULSD or 500 ppm LM diesel fuel, and ECA marine fuel may be designated as ECA marine fuel.

(2) Interface mixtures of ULSD and 500 ppm LM diesel fuel may be designated as 500 ppm LM diesel fuel.

(3) Interface mixtures of 500 ppm LM diesel fuel and heating oil may be designated as 500 ppm LM diesel fuel provided that the pipeline operator has documentation from the heating oil refiner to demonstrate that the heating oil is compliant with ULSD fuel quality requirements. Note that such mixtures may be also designated as heating oil provided the applicable State requirements for heating oil are satisfied or may be designated as blendstock.

(c) Transmix. Pipeline interface mixtures containing the following products shall not be represented as meeting the gasoline or diesel fuel quality requirements in this part:

(1) Interface mixtures of gasoline that may be used without the addition of oxygenate, BOB, or ULSD, and blendstock or other products that are not subject to EPA standards.

(2) Interface mixtures of gasoline that may be used without the addition of oxygenate or BOB and distillate products such as diesel fuel, heating oil, jet fuel, or kerosene.

(3) Interface mixtures of ULSD, 500 ppm LM diesel fuel, or ECA marine fuel with gasoline or a BOB.

[NOTE TO READER: In addition to the provisions in §1090.510 on blending transmix into PCG in a storage tank, EPA is seeking input in what provisions are needed to allow blending of transmix into pipeline batches of both gasoline and diesel fuel.]

#### **§1090.510 Blending transmix into previously certified gasoline in a storage tank.**

As an alternative to demonstrating compliance with EPA gasoline sulfur, benzene, and RVP standards through sampling and testing pursuant to the requirements of §1090.100, transmix blenders that blend transmix into storage tank that contains PCG may comply with the requirements in this section.

(a) Transmix may be blended into any PCG, provided that the following requirements are met:

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

(2) The final transmix-blended gasoline meets that substantially similar requirements of §1090.360.

(3) The final transmix-blended gasoline meets all applicable downstream standards, including the downstream per gallon sulfur standard in §1090.305(c) and applicable summertime RVP standard in §1090.315.

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

(b) The transmix blender must maintain and follow a written quality assurance program designed to assure that the type and amount of transmix blended into PCG will not cause violations of the applicable EPA fuel quality standards. Except as specified in paragraph (b)(3) of this section, as a part of the quality assurance program, transmix blenders shall collect samples of gasoline after blending transmix, and test the samples to ensure the end-point temperature of the final transmix-blended gasoline does not exceed 437 degrees Fahrenheit, pursuant to the following requirements.

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

(2) In the case of transmix that is blended by a computer controlled in-line blending system, the transmix blender shall collect composite samples of gasoline after blending transmix at a rate of not less than 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 in paragraphs (b)(1) and (b)(2) of this section. To seek such an exemption, the transmix blender shall submit a petition to EPA that includes:

(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) If the transmix is blended by a computer controlled in-line blending system, the transmix blender shall also include all of the information required by refiners in subpart N of this part.

(iii) A letter signed by the responsible corporate officer stating that the information contained in the submission is true to the best of their belief must accompany any submission under this paragraph.

(iv) Transmix blenders that seek an exemption must comply with any request by EPA for additional information or any other requirements that EPA includes as part of the exemption. However, they may withdraw their exemption petition or approved exemption at any time, upon notice to EPA.

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

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

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

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

(iii) Inform EPA of the noncompliance.

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

(5) Any transmix blender that blends transmix into PCG and does not meet the requirements under this section shall meet all requirements and standards that apply to a refiner in §1090.100 and subpart C of this part.

### **§1090.515 Transmix gasoline product.**

The alternative provisions in this section apply to transmix gasoline product (TGP) produced by transmix processors that is designated as gasoline in lieu of the requirements that would otherwise be applicable to a refiner that produces gasoline in §1090.105.

(a) TGP that is designated as gasoline without further mixing with blendstocks, oxygenates, or previously certified gasoline. Where the TGP meets all standards and requirements that apply to gasoline downstream from the refinery, including but not limited to any standards and requirements in this part (e.g., the 95 ppm downstream sulfur cap in §1090.510 and the applicable RVP cap in §1090.315) and the Clean Air Act, and the TGP is designated and sold as gasoline without need for the further addition of oxygenate, the TGP may be excluded from calculations that pertain to the demonstration of compliance with the annual average sulfur standard in §1090.305 and the annual average benzene standard in §1090.310. The transmix processor must either include every batch or exclude every batch of this TGP from their compliance calculations for each compliance period.

[NOTE TO READER: This TGP is not subject the 80 ppm refinery gate sulfur standard. EPA is seeking stakeholder input on whether the allowance to include such TGP batches in their calculations to demonstrate compliance with annual average sulfur and benzene standards is needed or whether we should require that all such TGP batches be from these calculations.]

(b) TGP sold as a BOB. Where the TGP meets all standards and requirements that apply to a BOB downstream from the refinery, including but not limited to any standards and requirements in this part and the Clean Air Act (e.g., the 95 ppm downstream sulfur cap under §1090.510 and the applicable RVP cap under §1090.315), and the TGP becomes gasoline solely upon the addition of an oxygenate, the TGP must be included in the calculation that pertain to the demonstration of compliance with the annual average sulfur standard in §1090.305 and the annual average benzene standard in §1090.310.

(c) TGP blended with PCG to produce gasoline that may be used without the further addition of oxygenate.

(1) Where the TGP meets all the standards and requirements that apply to gasoline downstream from the refinery, including but not limited to any standards and requirements of this part and the Clean Air Act, and the transmix processor mixes the TGP with any PCG to produce gasoline, the TGP may be excluded from calculations that pertain to the demonstration of compliance with the annual average sulfur standard in §1090.305 and the annual average benzene standard in §1090.310. The transmix processor must either include every batch or exclude every batch of this TGP from compliance calculations for the transmix processing facility for each compliance period. The finished gasoline must comply with the 95 ppm downstream sulfur cap in §1090.510 and the applicable RVP cap in §1090.315.

[NOTE TO READER: EPA is seeking stakeholder input on whether the allowance to include such TGP batches in their calculations to demonstrate compliance with annual average sulfur and benzene standards is needed or whether we should require that all such TGP batches be excluded from these calculations.]

(2) Where the TGP does not meet all standards that apply to gasoline downstream from the refinery, including but not limited to any standards and requirements of this part and the Clean Air Act, and the transmix processor mixes the TGP with any PCG to produce gasoline, the TGP is treated as a blendstock and the transmix processor must fulfill all requirements and standards for a refiner under this part, for the TGP, and include the TGP in the calculations that pertain to demonstration of compliance with the annual average sulfur standard in §1090.305 and the annual average benzene standard in §1090.310.

(3) The sampling and testing required under paragraph (c)(2) of this section may be met using one of the following methods:

(i) Sample and test the TGP prior to blending with PCG to determine the volume and properties of the TGP and include each volume of TGP blended with PCG as a separate batch in compliance calculations for the transmix processing facility.

(ii) Determine the volume and properties of the PCG prior to blending with the TGP and measure the volume and properties of the gasoline subsequent to blending with the TGP. Calculate the volume and properties of the TGP by subtracting the volume and properties of the PCG from the volume and properties of the gasoline subsequent to blending, and include each volume of TGP blended with PCG as a separate batch in compliance calculations for the transmix processing facility.

(d) Other blendstock(s) added to TGP to produce gasoline. As an alternative to the sampling and testing requirements of §1090.100 to demonstrate compliance of the finished gasoline with the annual average sulfur standard in §1090.305(a), the per-gallon sulfur standard in §1090.305(b), and the annual average benzene standard in §1090.310, a transmix processor that produces gasoline by blending blendstock into TGP may comply with the provisions in paragraphs (d)(1) and (2) of this section. Note that the sampling and testing requirements of §1090.100 apply to demonstrate compliance of the finished gasoline with the annual average benzene standard of §1090.310.

(1) Sample and test the blendstock that will be added to TGP during the compliance year when received at the transmix processing facility, using the methods specified in subpart M of this part, to determine the volume, sulfur content, and benzene content, and treat each volume of blendstock that is blended into a volume of TGP as a separate batch for purposes of calculating and reporting compliance with the annual average sulfur standard in §1090.305(a), the per-gallon sulfur standard in §1090.305(b), and the annual average benzene standard in §1090.310.

(2) Sample and test the finished TGP and blendstock blend to demonstrate compliance with the 95 ppm maximum downstream sulfur standard in §1090.510 and the applicable maximum RVP standard in §1090.315.

(e) TGP sold as a blendstock. Where the TGP is sold as a blendstock, the transmix processor must exclude the TGP from calculations that pertain to the demonstration of compliance with the annual average sulfur standard in §1090.305 and the annual average benzene standard in §1090.310. Note that TGP sold as a blendstock could not be represented as meeting the gasoline or diesel fuel quality requirements in this part.

#### **§1090.520 Transmix distillate product.**

The alternative provisions in this section apply to transmix distillate product (TDP) produced by transmix processors that is designated as gasoline in lieu of the requirements that would otherwise be applicable to a refiner that produces diesel fuel under §1090.105.

(a) TDP designated as 500 ppm LM diesel fuel. 500 ppm LM diesel fuel produced by a transmix processor or a pipeline facility from transmix is subject to the sulfur standard in §1090.405. The following conditions must be satisfied to allow the production of 500 ppm LM diesel fuel under this section.

(1) The blend components used to produce 500 ppm LM diesel fuel are limited to the following:

- (i) Transmix.
- (ii) ULSD fuel that meets the standards in §1090.400.
- (iii) Diesel fuel additives that comply with the requirements in §1090.420.

(2) A facility producing 500 ppm LM diesel fuel must obtain approval from EPA for a compliance plan. The compliance plan must:

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

(A) 500 ppm LM diesel fuel may be shipped by pipeline provided that it does not come into physical contact in the pipeline with batches of other distillate fuel products that have a sulfur content greater than 15 ppm.

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

(ii) Demonstrate that the end users of 500 ppm LM diesel fuel will also have access to 15 ppm diesel fuel for use in those engines that require the use of ULSD.

(iii) Identify the entities that handle the 500 ppm LM diesel fuel through to the ultimate consumer. No more than 4 separate entities shall handle the 500 ppm LM diesel fuel between the producer and the ultimate consumer.

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

(v) Demonstrate how misfueling of 500 ppm LM diesel fuel into vehicles, engines, or equipment that require the use of 15 ppm diesel fuel will be mitigated.

(vi) Include an EPA registration number that is compliant with the requirements of §1090.XXX.

(3) Entities that handle 500 ppm LM diesel fuel must calculate the volume of 500 ppm LM diesel fuel received versus the volume delivered and used on an annual basis. An increase in the volume of 500 ppm LM diesel fuel delivered compared the volume delivered shall be due solely to:

(i) Normal pipeline interface cutting practices in compliance with the pipeline product sequencing requirements in paragraph (a)(2)(i)(A) of this section.

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

(iii) The addition of ULSD to a retail or wholesale purchaser consumer 500 ppm LM diesel fuel storage tank pursuant to the provisions in paragraph (a)(2)(i)(B) of this section.

(4) 500 ppm LM diesel fuel may be redesignated as ECA marine fuel, heating oil, or blendstock. Note that the party doing the redesignation must maintain records from the producer of the 500 ppm LM (i.e., PTDs accompanying the fuel as required by subpart K of this part) to demonstrate compliance with the 500 ppm maximum sulfur standard in §1090.XXX.

(b) TDP designated as ULSD or ECA marine fuel. Generally, TDP may not be sold as ULSD or ECA marine fuel unless the transmix processor or pipeline facility that produces ULSD or ECA marine fuel from transmix complies with all applicable requirements in §1090.100.

(c) TDP sold as heating oil. The regulation of heating oil quality is a State authority. Hence, EPA does not have specifications on heating oil quality.

(d) TDP sold as blendstock. TGP sold as blendstock shall not be represented as meeting the gasoline or diesel fuel quality requirements in this part.

**Subpart F—Reserved**

This document is a staff-level working draft, developed in preparation for EPA's Fuels Regulatory Streamlining Workshop.

## **Subpart G—Exemptions and Special Provisions**

### **§1090.600 National security and military use exemptions.**

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

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

(2) Tactical military vehicles, engines, or equipment, including locomotive and marine, that are not subject to a national security exemption from vehicle or engine emissions standards as described 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 conditions:

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

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

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

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

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

### **§1090.605 Research, development, and testing exemptions.**

(a) Written requests for a research and development exemption. Any person may receive an exemption from the provisions of this part for fuel used for research, development, or testing (“R&D”) purposes by submitting the information listed in paragraph (c) of this section to EPA at: U.S. EPA—Attn: Research and Development Exemption Request, 6406J, 1200 Pennsylvania Avenue NW., Washington, DC 20460.

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

- (1) Demonstrate a purpose that constitutes an appropriate basis for exemption.
- (2) Demonstrate that an exemption is necessary.
- (3) Design a research and development program that is reasonable in scope.
- (4) Have a degree of control consistent with the purpose of the program and EPA's monitoring requirements.

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

- (1) A concise statement of the purpose of the program demonstrating that the program has an appropriate research and development purpose.
- (2) An explanation of why the stated purpose of the program cannot be achieved in a practicable manner without performing one or more of the prohibited acts under this subpart.
- (3) A demonstration of the reasonableness of the scope of the program, including all of the following:
  - (i) An estimate of the program's duration in time (including beginning and ending dates).
  - (ii) An estimate of the maximum number of vehicles, engines, or equipment involved in the program, and the number of miles and engine hours that will be accumulated on each.
  - (iii) The manner in which the information on vehicles, engines, or equipment used in the program will be recorded and made available to the Administrator 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 research and development fuel will be segregated from fuel meeting the requirements of subparts C and/or D of this part, as applicable, and how fuel pumps will be labeled to ensure proper use of the research and development fuel.

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

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

(d) Additional requirements.

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

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

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

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

(5) At the completion of the program, any emission control systems or elements of design which are damaged or rendered inoperative shall be replaced on vehicles remaining in service, or the responsible person will be liable for a violation of the Clean Air Act section 203(a)(3) (42 U.S.C. § 7522(a)(3)) unless sufficient evidence is supplied that the emission controls or elements of design were not damaged.

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

(1) The volume of fuel subject to the approval shall not exceed the estimated amount under paragraph (c)(3)(iv) of this section, unless EPA grants a greater amount in writing.

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

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

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

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

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

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

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

#### **§1090.610 Racing and aviation fuel exemptions.**

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

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

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

(c) The fuel is not made available for use as gasoline or diesel fuel subject to the standards of subparts C and/or D of this part, or dispensed for use in motor vehicles or nonroad engines, vehicles or equipment, including locomotive and marine, except for those used only in sanctioned racing events.

**§1090.615 Special provisions for American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.**

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

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

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

(c) The fuel is accompanied by documentation that complies with the PTD requirements of subpart K of this part.

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

**§1090.620 California gasoline and diesel fuel requirements.**

(a) California gasoline and diesel fuel definitions. The terms “California gasoline” and “California diesel fuel” refer to either of the following:

(1) California gasoline means any gasoline designated by a refiner or importer for use in California.

(2) California diesel fuel means any diesel fuel physically within the State of California that satisfies all requirements of Title 13, California Code of Regulations, Sections 2281-2285, and is sold, intended for sale, or made available for sale as a motor fuel in the State of California, after May 31, 2006.

(b) California gasoline and diesel fuel exemption. California gasoline and diesel fuel that comply with all the requirements of this section are exempt from all other provisions of this part.

(c) Requirements for California gasoline and diesel fuel.

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

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

(3) Designated California gasoline and diesel fuel must ultimately be used in the State of California and not used elsewhere.

(4) For California gasoline and/or diesel fuel produced outside the State of California, the transferors and transferees must meet the PTD requirements of subpart K of this part.

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

(A) The name and address of the transferor.

(B) The name and address of the transferee.

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

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

(E) The date and time of the transfer.

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

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

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

(d) Use of California test methods and offsite sampling procedures. In the case of any gasoline and/or diesel fuel that is not California gasoline or diesel fuel and that is either produced

at a refinery located in the State of California or is imported from outside the United States into the State of California, the refiner or importer may do any of the following—

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

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

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

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

## Subpart H—Averaging, Banking, and Trading Provisions

### §1090.700 Compliance with average standards.

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

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

$$CSV_y = \sum_{i=1}^n (V \cdot S) + D_{(y-1)} + D_{S_{Oxy}} - C$$

Where:

$CSV_y$  = Compliance sulfur value for year y, in ppm-gallons. Fractional values shall be rounded pursuant to §1090.XXX.

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

$S_i$  = The sulfur content of batch i as determined by §1090.XXX, in ppm (mg/kg).

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

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

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

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

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

(2) Compliance with the gasoline sulfur annual average standard in §1090.XXX is not achieved, and a deficit is created per §1090.XXX, if for calendar year y, the compliance sulfur value is greater than 10 times the total gasoline volume produced or imported. The deficit value to be included in the following year's compliance calculation per paragraph (f) of this section is calculated as follows:

$$D_y = CSV_y - \left( \sum_{i=1}^n V \cdot 10 \right)$$

Where:

$D_y$  = Sulfur deficit created in compliance period y, in ppm-gallons.

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

$$S_a = \frac{\sum_{i=1}^n (V \cdot S)}{\sum_{i=1}^n V}$$

Where:

$S_a$  = The refinery or importer annual average sulfur level, in ppm (mg/kg).

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

$$S_{ad} = \frac{CSV_y}{\sum_{i=1}^n V}$$

Where:

$S_{adj}$  = The refinery or importer annual average sulfur level, in ppm (mg/kg).

(iii) Calculations under this paragraph are rounded and reported per §1090.XXX to two decimal places.

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

(1) Compliance benzene value calculation. A refinery or importer's compliance with the annual benzene average standard in §1090.XXX is determined as follows:

$$CBV_y = \sum_{i=1}^n \left( \frac{V \cdot B}{100} \right) + D_{(y-1)} + D_{Bz_{Oxy}} - C$$

Where:

$CBV_y$  = Compliance benzene value for year y, in benzene gallons. Fractional values shall be rounded pursuant to §1090.XXX.

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

$B_i$  = The benzene content of batch i as determined by §1090.XXX, in volume percent.

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

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

$D_{(y-1)}$  = Benzene deficit from the previous reporting period, per §1090.XXX, in benzene gallons.

$D_{Bz_{Oxy}}$  = Benzene deficit from BOB recertification, per §1090.740(a), in benzene gallons.

C = Benzene credits used by the refinery or importer, per §1090.XXX, in benzene gallons.

(2)(i) Compliance with the benzene requirement at §1090.XXX is achieved for calendar year y if:

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

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

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

(iii) The deficit value to be included in the following year's compliance calculation per paragraph (b) of this section is calculated as follows:

$$D_y = CBV_y - \left( \sum_{i=1}^n V \cdot 0.0062 \right)$$

Where:

$D_y$  = Benzene deficit created in compliance period y (gallons benzene).

(3) Compliance with the maximum average benzene standard in §1090.XXX is achieved by a refinery or importer if the value of  $B_a$  calculated in accordance with §1090.XXX is no greater than 1.30 volume percent for an applicable averaging period per §1090.XXX. The average benzene concentration of gasoline produced at a refinery or imported by an importer for an applicable averaging period is calculated according to the following equation:

$$B_a = \frac{\sum_{i=1}^n (V \cdot B)}{\sum_{i=1}^n V}$$

Where:

$B_a$  = Average benzene concentration for the applicable averaging period, in volume percent benzene.

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

$$B_{ad} = \frac{CBV_y}{\sum_{i=1}^n V}$$

Where:

$B_{adj}$  = The refinery or importer net annual average benzene level, in volume percent benzene.

(5) The annual average benzene concentration calculated in paragraphs (b)(3) and (b)(4) of this section shall be conducted to two decimal places using the rounding procedure specified in §1090.XXX.

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

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

- (1) Gasoline that was not produced at the gasoline refinery or imported by the importer.
- (2) Blendstocks transferred to others as provided in §1090.XXX.
- (3) Previously certified gasoline (PCG).
- (4) Gasoline exempted from the standards in subpart P of this part.

**§1090.705 Annual average company level compliance.**

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

(b) Gasoline refiners and importers must achieve compliance at the individual facility level for the following:

(1) Per-gallon standards described in subpart C of this part.

(2) The maximum benzene average standard at §1090.310(c).

**§1090.710 Downstream oxygenate accounting.**

The requirements of this section apply to BOB for which the gasoline refiner is accounting for the effects of the oxygenate blending that occurs downstream of the refinery in the refiner or importer's average standard compliance calculations in this subpart. This section includes requirements on parties in the distribution chain to ensure that oxygenate is added in accordance with blending instructions specified by gasoline refiners and importers.

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

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

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

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

(4) Transfer ownership of the BOB only to an oxygenate blender that is registered with EPA 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 in the PTD for the BOB described in subpart K of this part each oxygenate type(s) and amount or range of amounts that the gasoline refiner or importer tested for compliance for the handblend under §1090.1342.

(6) Participate in the national fuels survey program specified in subpart N.

(b) Requirements for oxygenate blenders. For all BOBs received by any oxygenate blender, the oxygenate blender shall add oxygenate of the type(s) and amount (or within the

range of amounts) specified in the PTDs for the BOB required by subpart K of this part, except as specified in paragraph (e)(2) of this section.

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

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

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

#### **§1090.715 Deficit carryforward.**

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

- (1) Achieves compliance with the applicable average standard in subpart C of this part.
- (2) Uses additional credits sufficient to offset the compliance deficit of the previous year.

(b) The compliance deficit value shall be calculated in accordance with §1090.XXX for sulfur and §1090.XXX for benzene.

(c) Gasoline refiners and importers must use any previously generated or obtained credits to achieve compliance with an average standard specified in subpart C of this part before creating a deficit.

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

**§1090.720 Credit use.**

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

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

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

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

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

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

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

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

**§1090.725 Credit generation.**

(a) Parties that can generate credits.

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

(i) U.S. refiners that process crude oil and/or intermediate feedstocks through refinery processing units.

(ii) Importers, except for truck importers that use the alternative sampling and testing requirements in §1090.1325.

(2) No party other than those specified in paragraph (a)(1) of this section may generate credits.

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

(c) Sulfur credit generation.

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

$$C_y = \left( \sum_{i=1}^n V \cdot 10 \right) - CSV_y$$

Where:

$C_y$  = Credits generated for the averaging period for use in complying with the annual sulfur average standard in §1090.XXX, in ppm-gallons.

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

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

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

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

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

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

(4) Sulfur credits calculated in accordance with paragraph (c)(1) of this section shall be expressed to the nearest ppm-gallon. Fractional values shall be rounded pursuant to §1090.XXX.

(d) Benzene credit generation.

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

$$C_y = \left( \sum_{i=1}^n V \cdot 0.0062 \right) - CBV_y$$

Where:

$C_y$  = Benzene credits generated for the averaging period for use in complying with the annual benzene average standard in §1090.XXX, in benzene gallons.

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

$B_i$  = The benzene content of batch  $i$  determined per §1090.XXX, in volume percent.

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

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

$CBV_y$  = Compliance benzene value for year  $y$ , in benzene gallons as determined per §1090.700(b)(1).

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

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

(4) Benzene credits calculated in accordance with paragraph (d)(1) of this section shall be expressed to the nearest benzene gallon. Fractional values shall be rounded pursuant to §1090.XXX.

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

### **§1090.730 Credit transfers.**

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

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

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

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

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

or importer that intends to use the credit. Credit transfers that occur within a company are unlimited.

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

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

(g) The transferor supplies to the transferee records pursuant to the requirements in subpart K of this part indicating the years the credits were generated, the identity of the refiner or importer that generated the credits, and the identity of the transferring party, if it is not the same party that generated the credits.

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

#### **§1090.735 Invalid credits and remedial actions.**

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

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

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

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

#### **§1090.740 Downstream oxygenate recertification.**

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

(a) Benzene deficits from downstream oxygenate recertification.

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

$$D_{Bz\_Oxy} = 0.007 \cdot V_{Base} \cdot \left[ \frac{1}{(1 - PTD_{Oxy})} - 1 \right]$$

Where:

$D_{Bz\_Oxy}$  = Benzene deficit, in benzene gallons, resulting from recertifying gasoline. Fractional values must be rounded pursuant to §1090.XXX.

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

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

(b) Sulfur deficits from downstream oxygenate recertification.

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

$$D_{S\_Oxy} = 12ppm \cdot V_{Base} \cdot \left[ \frac{1}{(1 - PTD_{Oxy})} - 1 \right] + \sum_{i=1}^n V_{Oxy\_i} \times S_{Oxy\_i}$$

Where:

$D_{S\_Oxy}$  = Sulfur deficit, in ppm-gallons, resulting from recertifying the gasoline. Fractional values shall be rounded pursuant to §1090.XXXX.

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

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

$V_{Oxy\_i}$  = The volume of an oxygenate in the batch being recertified, in gallons.

$S_{Oxy\_i}$  = The sulfur content of oxygenate i determined under §1090.XXX, in volume percent.

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

(d) Deficits incurred pursuant to this section must be fulfilled in the compliance year in which they occur and may not be carried forward pursuant to §1090.715.

## Subpart I—Registration

### §1090.800 General provisions.

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

(1) Refiners and importers, including:

(i) Refiners and importers of gasoline products including gasoline, BOB, and transmix gasoline product (TGP), as described in §1090.105(a).

(ii) Refiners and importers of diesel including ULSD, transmix diesel product (TDP), 500 ppm LM diesel fuel, and ECA marine fuel, as described in §1090.105(b).

(2) Oxygenate blenders, as described in §1090.130.

(3) Oxygenate producers and importers, as described in §1090.135.

(4) Butane producers, as described in §1090.140.

(5) Pentane producers, as described in §1090.150.

(6) Processors and importers of TGP or TDP, as described in §1090.160.

(7) Distributors, carriers, and resellers of ECA marine or 500 ppm LM diesel fuel, as described in §1090.160.

(8) Certified ethanol denaturant producers and importers, as described in §1090.170(c).

(9) Independent surveyors, as described in §1090.185.

(10) Independent auditors, as described in §1090.195.

(11) Third parties that submit reports for any entity required to report, including:

(i) Agents.

(ii) Any of the principals of a joint venture.

(iii) In order for a third party to submit reports, they must register and be associated with the entity for whom they are reporting.

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

(1) New Registrants. Except as specified in paragraph (b)(2) of this section, parties not currently registered with EPA must register with EPA not later than sixty (60) days in advance of

the first date that such person engages in any activity under this part requiring registration per paragraph (a) of this section.

(2) Existing registrants. Parties that are already registered with EPA as of the effective date of this rule are deemed to be registered for purposes of this part, except that such parties are responsible for reviewing and updating their registration information consistent with the requirements of this part and consistent with paragraph (c) of this section.

(c) Updates to registration. A registered party must submit updated registration information to EPA within thirty (30) days of any occasion when the registration information previously supplied becomes incomplete or inaccurate.

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

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

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

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

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

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

(i) The company name.

(ii) Company address.

(iii) Mailing address.

(iv) Name, title, telephone number and email address of a Responsible Corporate Officer (RCO). In the event the RCO has named a delegate, or delegates, consistent with §1090.XXX, then the name and title of each RCO delegate and their telephone number and email address must also be submitted to EPA.

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

(i) The facility name.

(ii) The physical location of the facility.

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

(iv) The type of facility.

(v) The test method(s) used to measure each parameter required to be reported per subpart J of this part.

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

(i) Whether records are kept on-site or off-site of the facility or refinery, or in the case of importers, the registered address.

(ii) If records are kept off-site, the primary off-site storage name, physical location, contact name, and telephone number.

(4) Activities. A description of the activities regulated under this part and engaged in by the company and its facilities consistent with §1090.800(a).

(b) Additional information required for pentane producers.

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

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

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

A RCO or RCO delegate may request cancellation of the registration of the company, or any of its facilities, using forms and following procedures established by EPA.

#### **§1090.815 Involuntary cancellation of company registration.**

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

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

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

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

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

(1) EPA will provide written notification to the RCO identifying the reasons or deficiencies of why EPA intends to cancel the company's registration. The company will have fourteen (14) calendar days from the date of the notification to correct the deficiencies identified or explain why there is no need for corrective action.

(2) If the basis for EPA's notice of intent to cancel registration is the absence of reporting activity, the EPA will delay canceling the registration for a period of sixty (60) days if EPA received written notification of a company's intent to submit the missing reports.

(3) If the company does not respond, does not correct identified deficiencies, or does not provide an adequate explanation regarding why such correction is not necessary within the time allotted for response, EPA will cancel the company's registration without further notice to the party.

(c) Effect of Cancellation. If cancelled:

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

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

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

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

(i) Initiate a new registration, consistent with all applicable requirements in §1090.800 and §1090.805.

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

### **§1090.820 Changes of ownership.**

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

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

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

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

- (3) The signature of the owner or RCO, or the RCO delegate, of both companies.
- (4) Any additional information requested by EPA to facility the change in registration.

## Subpart J—Reporting

### §1090.900 General provisions.

(a) Forms and procedures for reporting. All reporting must be completed using formats and according to procedures established by EPA.

(b) English language. Any reports submitted to EPA under this subpart must be submitted in English.

(c) EPA-issued company ID and facility ID. Entities must register in accordance with subpart I in order to receive an EPA-issued company and facility ID numbers for use in reporting under this subpart.

### §1090.905 Reports for refiners or importers of gasoline and gasoline products.

Any refiner or importer of gasoline products including gasoline, BOB, and transmix gasoline product (TGP) registered under §1090.800(a)(1)(i) and any producer of butane or pentane registered under §1090.800(a)(4) and (5), must submit the following reports to EPA by March 31 for the preceding compliance year, as applicable:

(a) Annual Compliance Demonstration for Benzene and Sulfur.

(1) Sulfur. Any refiner, for each of its refineries, and any importer for the gasoline it imports, shall submit a report for each calendar year averaging period that includes the following information:

(i) The compliance sulfur value calculated per §1090.XXX, expressed in ppm-gallons.

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

(iii) The gross annual average sulfur level of the gasoline produced or imported calculated per §1090.XXX, expressed in ppm.

(iv) The net annual average sulfur level after inclusion of any deficits and any credits retired for compliance calculated per §1090.XXX, expressed in ppm.

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

(A) The number of credits at the beginning of the calendar year averaging period.

(B) The number of credits generated.

(C) The number of credits retired.

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

(E) The number of credits that expired at the end of the calendar year averaging period.

(F) The number of credits that will carry over into the next calendar year averaging period.

(vi) Any carry-over deficit from the previous compliance year, expressed in ppm-gallons.

(vii) Any deficit carried-over into the next compliance year, expressed in ppm-gallons.

(viii) Any deficit incurred from downstream oxygenate recertification calculated per §1090.XXX, expressed in ppm-gallons.

(2) Benzene. Any refiner, for each of its refineries, and any importer for the gasoline it imports, shall submit a report for each calendar year averaging period that includes the following information:

(i) The compliance benzene value calculated per §1090.xxx, expressed as a volume percentage.

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

(iii) The gross annual average benzene level of the gasoline produced or imported calculated per §1090.XXX, expressed as a volume percentage.

(iv) The net annual average benzene level after inclusion of any deficits and any credits retired for compliance calculated per §1090.XXX.

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

(A) The number of credits at the beginning of the calendar year averaging period.

(B) The number of credits generated.

(C) The number of credits retired.

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

(E) The number of credits that expired at the end of the calendar year averaging period.

(F) The number of credits that will carry over into the next calendar year averaging period.

(vi) Any carry-over deficit from the previous compliance year.

(vii) Any deficit carried-over into the next compliance year.

(viii) Any deficit incurred from downstream oxygenate recertification calculated per §1090.XXX.

(3) Additional items for refiners or importers that blend butane or pentane with gasoline or BOB. Any refiner, for each of its refineries, and any importer for the gasoline it imports, that blends butane or pentane with gasoline or BOB must submit the following information:

(i) The total annual volume of butane that is blended with gasoline or BOB.

(ii) The total annual volume of gasoline produced using butane.

(iii) The total annual volume of pentane that is blended with gasoline or BOB.

(iv) The total annual volume of gasoline produced using pentane.

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

(b) Batch reporting.

(1) General. Any refiner or importer of gasoline products including gasoline, BOB, and transmix gasoline product (TGP) and any producer of butane or pentane must submit the following information to EPA on a per-batch basis by March 31 for the preceding compliance year:

(i) The batch number.

(ii) The batch volume expressed in gallons.

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

(iv) A description of the product type, such as:

(A) Reformulated gasoline meeting the standards of §1090.345.

(B) Gasoline meeting the anti-dumping standards of §1090.350.

(C) BOB and whether it is intended to be blended:

(1) With any oxygenate.

- (2) With ethers only.
  - (3) In a refiner-specific manner.
  - (D) Butane
  - (E) Pentane.
  - (F) GTAB.
  - (G) Oxygenate.
  - (H) PCG.
  - (I) Other.
  - (v) The tested sulfur content of the batch expressed in ppm.
  - (vi) The tested benzene content of the batch expressed as a volume percentage reported to two decimal places.
  - (vii) Volatility (summer gasoline only).
    - (A) The applicable Federal RVP standard, consistent with §1090.315.
    - (B) The measured RVP of the batch expressed in psi, reported to two decimal places.
  - (viii) For producers and importers of pentane, the carbon content of the batch, expressed as a volume percentage.
- (2) Additional reporting for refiners or importers that blend butane or pentane with gasoline or BOB. Refiners or importers that blend butane or pentane with gasoline or BOB must submit the following additional information:
- (i) The butane or pentane batch number.
  - (ii) The production or importation date.
  - (iii) The batch volume, expressed in gallons.
  - (iv) The amount of butane or pentane in the batch, expressed as a volume percentage.
  - (v) The sulfur content of the batch, expressed in ppm.
  - (vi) The benzene content of the batch, expressed as a volume percentage.
  - (vii) The RVP of the batch expressed in psi.

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

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

- (1) The TGP batch number.
- (2) Identification of the product as blendstock added to gasoline recovered from transmix.
- (3) The date the batch was produced or imported.
- (4) The batch volume, expressed in gallons.
- (5) The sulfur content, expressed in ppm.
- (6) The benzene content, expressed as a volume percentage.

(c) Credit transaction reporting. Any party that is subject to submit an annual compliance demonstration report pursuant to paragraph (a) of this section must submit information related to individual transactions involving benzene and sulfur credits including the generation, purchase, sale, or retirement of such credits; associated volumes of fuel; and identification of the trading partner. Credits will be transacted following forms and using procedures specified by EPA. Credit generations and retirements must be submitted to EPA by March 31 for the preceding compliance year.

[NOTE TO READER: EPA is considering whether to collect annual batch reports for ULSD and ECA marine fuel which contain batch volume and sulfur tests results at a minimum, and potentially information related to cetane/aromatics as well.]

[NOTE TO READER: EPA is considering a reported element to the performance based testing requirements in subpart M of this part to ensure that laboratories are complying with the specified statistical quality control measures.]

#### **§1090.910 Reports for oxygenate producers and importers.**

Any oxygenate producer or importer must submit the following information to EPA on a per-batch basis by March 31 for the preceding compliance year:

- (a) The batch number.
- (b) One of the following product types:
  - (1) Denatured ethanol using certified ethanol denaturant complying with §1090.XXX.
  - (2) Denatured ethanol from non-certified denaturant.
  - (3) A specified oxygenate other than ethanol.

- (c) The date the batch was produced or imported.
- (d) The batch volume, expressed in gallons.
- (e) The sulfur content, expressed in parts per million (ppm).

**§1090.915 Reports by independent surveyors.**

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

**§1090.920 Reports by independent auditors.**

Independent auditors must submit attest engagements in accordance with the requirements of subpart T by May 31, in accordance with §1090.1901(d).

## Subpart K—Product Transfer Document Requirements

### §1090.1100 General product transfer document provisions.

(a) General.

(1) On each occasion after the effective date of this rule, when any person transfers custody or title to any product covered under this subpart, the transferor shall provide to the transferee product transfer documents (PTDs) that include all of the following information:

- (A) The name and address of the transferor.
- (B) The name and address of the transferee.
- (C) The volume of the product being transferred.
- (D) The location of the product at the time of the transfer.
- (E) The date of the transfer.

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

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

(c) Products not intended for ultimate consumers or subject to various exemptions.

(1) The following statements must appear on the PTD, as applicable:

(i) If the product being transferred is not intended for ultimate consumers: “Not for sale to the ultimate consumer.”

(ii) If the product is to be used for research, development, or test purposes only: “For use in research, development, and test programs only.”

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

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

(v) For exported fuels: “This fuel is for export only.”

(vi) For fuel for racing purposes: “This fuel is for racing purposes only.”

(vii) For California gasoline: “California gasoline”.

(vii) For California diesel: “California diesel”.

(2) In statements required by paragraph (c)(1) of this section, where “fuel” is designated in a statement, the specific fuel type (for example, “diesel” or “gasoline”) may be used in place of the word “fuel”.

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

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

#### **§1090.1105 Gasoline product transfer document provisions.**

(a) BOB language requirements. For batches of BOB, in addition to the information required in §1090.1100, the following information must be included on the PTD:

(1) Oxygenate type(s) and amount(s). Statements specifying each oxygenate type(s) and amount or range of amounts that, if blended with the BOB, will result in finished gasoline meeting all applicable standards in subpart C of this part.

(2) Winter or summer designation. A statement whether the batch of BOB is designed to be “winter” or “summer” gasoline upon the addition of the specified type(s) and amount(s) of oxygenates in paragraph (a)(1) of this section.

(3) Winter BOB language requirements. For batches of winter BOB, identification of the product as “Winter RBOB”.

(4) Summer BOB language requirements.

(i) Except as specified in paragraph (a)(4)(ii) of this section, for batches of summer BOB, identification of the product with one of the following statements indicating the applicable RVP standard specified as specified in §1090.XXX:

(A) “9.0 psi CBOB. This product does not meet the requirements to produce summer reformulated gasoline.”

(B) “7.8 psi CBOB. This product does not meet the requirements to produce summer reformulated gasoline.”

(C) “Summer RBOB. This product meets the requirements to produce summer reformulated or conventional gasoline.”

(ii) For BOBs designed to produce a finished gasoline that must meet an RVP per-gallon standard required in any State Implementation Plan approved or promulgated under §§110 or 172 of the Clean Air Act, additional language to satisfy the state program may be added as necessary.

(5) Ethanol 1.0 psi waiver language requirements.

(i) For summer BOBs that are designed for the special provisions for gasoline-ethanol blends in §1090.XXX, the following statements:

(A) “Suitable for the special RVP provisions for ethanol blends that contain between 9 and 10 vol % ethanol.”

(B) “The use of this blendstock/gasoline to manufacture a gasoline-ethanol blend containing anything other than between 9 and 10 volume percent ethanol may cause a summertime RVP violation.”

(ii) For summer BOBs not covered by paragraphs (a)(5)(i) of this section, information regarding the suitable ethanol content, stated in the following format: “Suitable for blending with ethanol at a concentration of no more than 15 vol % ethanol.”

(b) Finished gasoline requirements. For finished gasoline, the following information must be included on the PTDs:

(1) Winter or summer designation. A statement whether the finished gasoline is “winter” or “summer” gasoline.

(2) Winter gasoline language requirements. For winter gasoline, identification of the product as “Winter Reformulated Gasoline”.

(3) Summer gasoline language requirements.

(i) Except as specified in paragraph (b)(3)(ii) of this section, for summer gasoline, identification of the product with one of the following statements indicating the applicable RVP standard specified as specified in §1090.XXX:

(A) For finished gasoline that meets the 9.0 psi RVP per-gallon standard in §1090.XXX: “9.0 psi Conventional Gasoline. This product does not meet the requirements for reformulated gasoline, and may not be used in any reformulated gasoline covered area.”

(B) For finished gasoline that meets the 7.8 psi RVP per-gallon standard in §1090.XXX: “7.8 psi Conventional Gasoline. This product does not meet the requirements for reformulated gasoline, and may not be used in any reformulated gasoline covered area.”

(C) For finished gasoline that meets the 7.4 psi RVP per-gallon standard in §1090.XXX: identification of the product as “Summer Reformulated Gasoline”.

(ii) For finished gasoline that meets a RVP per-gallon standard required in any State Implementation Plan approved or promulgated under §§110 or 172 of the Clean Air Act, additional language to satisfy the state RVP program may be added as necessary.

(4) Ethanol content language requirements.

(i) For finished gasoline blended with ethanol, one of the following statements that accurately describes the gasoline-ethanol blend.

(A) For finished gasoline containing no ethanol (E0), the following statement: “E0: Contains no ethanol. The RVP does not exceed [fill in appropriate value] psi.”

(B) For finished gasoline containing less than 9 volume percent ethanol, the following statement: “EX—Contains up to X% ethanol. The RVP does not exceed [fill in appropriate value] psi.” The term X refers to the maximum volume percent ethanol present in the gasoline.

(C) For finished gasoline containing between 9 and 10 volume percent ethanol (E10), the following statement: “E10: Contains between 9 and 10 vol % ethanol. The RVP does not exceed [fill in appropriate value] psi. The 1 psi RVP waiver applies to this gasoline. Do not mix with gasoline containing anything other than between 9 and 10 vol % ethanol.”

(D) For finished gasoline containing greater than 10 volume percent and not more than 15 volume percent ethanol (E15), the following statement: “E15: Contains up to 15 vol % ethanol. The RVP does not exceed [fill in appropriate value] psi.”

(E) For all other gasoline that contains ethanol, the following statement: “EXX—Contains no more than XX% ethanol,” where XX equals the maximum volume % ethanol.

(ii) The information required in paragraph (b)(4)(i) of this section regarding the ethanol content of the fuel is required year-round. The information required in paragraph (b)(4)(i) of this section regarding the RVP of the fuel is only required for summer gasoline.

(c) Oxygenate language requirements. In addition to any other PTD requirements in this subpart, on each occasion when any person transfers custody or title to any oxygenate upstream of any oxygenate blending facility, the transferor shall provide to the transferee product transfer documents which include the following information, as applicable:

(1) For DFE: “Denatured fuel ethanol, maximum 10 ppm sulfur.”

(2) For other oxygenates, the name of the specific oxygenate must be identified on the PTD, followed by “maximum 10 ppm sulfur.” For example, for isobutanol, the following statement on the PTD would be required, “Isobutanol, maximum 10 ppm sulfur.”

(d) Gasoline detergent language requirements. In addition to any other PTD requirements in this subpart, the following requirements apply:

(1) The identity of the product being transferred as detergent, detergent-additized gasoline, or non-additized detergent gasoline.

(2) The name of the registered detergent additive must be used to identify the detergent package on its PTD and the lowest additive concentration (LAC) on the PTD must be consistent with the requirements in §1090.340.

(3) If the product being transferred is gasoline that has been additized with detergent under a CARB-based certification, or under a certification option which creates an oxygenate or other use restriction, then the PTD for the additized product must identify the applicable use restriction. The PTD for commingled products containing such restrictions must indicate the applicable restriction(s) from each component.

(e) Gasoline additives language requirements. In addition to any other PTD requirements in this subpart, gasoline additive manufacturers that manufacture additives pursuant to the requirements in §1090.355(a) must include all the following information related to the maximum treatment rate on PTDs for the additive:

(1) The maximum allowed treatment rate of the additive so that the additive will contribute no more than 3 ppm to the finished gasoline.

(2) [Reserved].

(f) Certified ethanol denaturant language requirements. In addition to any other PTD requirements in this subpart, on each occasion when any person transfers custody or title to any ethanol denaturant certified under §1090.XXX, the transferor shall provide to the transferee product transfer documents which include all the following information.

(1) The following statement: “Certified Ethanol Denaturant suitable for use in the manufacture of denatured fuel ethanol meeting EPA standards.”

(2) The PTD must state that the sulfur content is 330 ppm or less, or if the certified ethanol denaturant manufacturer represents a batch of denaturant as having a maximum sulfur content lower than 330 ppm the PTD must state that lower sulfur maximum (e.g., has a sulfur content of 120 ppm or less).

(g) Pentane and butane language requirements.

(1) Pentane and butane producers and importers must initiate a PTD for each batch that it ships from its facility that contains the following information, as applicable:

(i) The pentane or butane producer or importer company name and facility registration number issued by EPA.

(ii) One of the following statements:

(A) “Blender grade pentane for use by pentane blenders”.

(B) “Blender grade butane for use by butane blenders”.

(2) PTDs that are compliant with the requirements in paragraph (g)(1) of this section must be transferred from each party transferring pentane or butane for use by pentane or butane blenders to each party that receives the blender grade pentane or butane through to the pentane or butane blender respectively.

### **§1090.1110 Distillate fuels product transfer document provisions.**

(a) General distillate fuel language requirements. For each occasion that any person transfers custody of any distillate fuel, the transferor must provide the transferee documents that include the following information:

(1) The maximum sulfur content standard that the transferor represents the fuel to meet under §1090.XXX.

(2) An accurate and clear statement of the applicable designation and/or classification of the fuel under §1090.XXX, for example, “diesel fuel” or “500 ppm LM diesel fuel.”

(b) 500 ppm LM diesel fuel language requirements. For transfers of 500 ppm LM diesel fuel, the transferor must provide the transferee documents that include the following information:

(1) All applicable information described in paragraph (a) of this section.

(2) The following statement: “500 ppm sulfur (maximum) LM diesel fuel. Not for use in highway or other nonroad vehicles and engines.”

(c) ECA marine fuel language requirements. For transfers of ECA marine fuel, the transferor must provide the transferee documents that include the following information:

(1) All applicable information described in paragraph (a) of this section.

(2) The following statement: “1,000 ppm sulfur (maximum) ECA marine fuel. For use in Category 3 marine vessels only. Not for use in engines not installed on C3 marine vessels.”

(3) Parties may use one of the following statements in lieu of the required statement in paragraph (c)(2) of this section if allowed:

(i) “High sulfur fuel. For use only in ships with an approved permit as allowed by MARPOL Annex VI, Regulation 3.”

(ii) “High sulfur fuel. For use only in ships as allowed by MARPOL Annex VI, Regulation 4.”

(iii) “High sulfur fuel. For use only in ships as allowed by MARPOL Annex VI, Regulation 3 or Regulation 4.”

(d) Heating oil language requirements. For transfers of heating oil, the transferor must provide the transferee documents that include the following information:

(1) All applicable information described in paragraph (a) of this section.

(2) The following statement: “Heating Oil. Not for use in highway vehicles or engines or nonroad, locomotive, or marine engines.”

(e) Diesel fuel additives language requirements. In addition to any other PTD requirements in this subpart, on each occasion that any person transfers custody or title to a diesel fuel additive that is subject to the provisions in §1090.XXX to a party in the additive distribution system or in the diesel fuel distribution system for use downstream of the diesel fuel refiner, the transferor must provide to the transferee documents that identify the additive as follows:

(1) For additives that comply with the 15 ppm sulfur standard specified in §1090.XXX, include the following statement: “The sulfur content of this diesel fuel additive does not exceed 15 ppm.”

(2) For additives that are permitted to have higher than 15 ppm sulfur content and comply with the requirements in §1090.XXX, the transferor must provide to the transferee documents that identify the additive as such, and do each of the following:

(i) Indicate the high sulfur potential of the additive by including the following statement: “This diesel fuel additive may exceed the federal 15 ppm sulfur standard. Improper use of this additive may result in non-complying diesel fuel.”

(ii) If the additive package contains a static dissipater additive and/or red dye having a sulfur content greater than 15 ppm, a statement must be included that accurately describes the contents of the additive package pursuant to one of the following statements:

(A) “This diesel fuel additive contains a static dissipater additive having a sulfur content greater than 15 ppm.”

(B) “This diesel fuel additive contains red dye having a sulfur content greater than 15 ppm.”

(C) “This diesel fuel additive contains a static dissipater additive and red dye having a sulfur content greater than 15 ppm.”

(iii) Include the following information:

(A) The additive package's maximum sulfur concentration.

(B) The maximum recommended concentration in volume percent for use of the additive package in diesel fuel.

(C) The contribution to the sulfur level of the fuel, in ppm, that would result if the additive package is used at the maximum recommended concentration.

(3) For those diesel fuel additives that are sold in containers for use by the ultimate consumer of diesel fuel, each transferor must have displayed on the additive container, in a legible and conspicuous manner, either of the following statements, as applicable:

(i) For those additives that comply with the 15 ppm sulfur standard, "This diesel fuel additive complies with the federal low sulfur content requirements for use in diesel motor vehicles and nonroad engines."

(ii) For those additives with a sulfur content in excess of 15 ppm, the following statement: "This diesel fuel additive does not comply with federal ultra-low sulfur content requirements for use in model year 2007 and newer diesel motor vehicles or model year 2011 and newer diesel nonroad equipment engines."

**§1090.1115 Alternative product transfer document language provisions.**

(a) Alternative PTD language to the language specified in this subpart may be used if approved by EPA in advance. Such language must contain all of the applicable informational elements specified in this subpart.

(b) Requests for alternative product transfer document language must be submitted to the attention of "Alternative Product Transfer Document Language" to the contact information in §1090.10.

## Subpart L—Recordkeeping

[NOTE TO READER: Recordkeeping requirements are typically one of the last portions of a regulation written due to it being dependent on requirements and provisions across the entire part. This subpart is neither complete nor accurate. However, EPA does not intend to modify its general approach to recordkeeping under the fuels program. Parties would need to keep similar records to those required under 40 CFR Part 80 for five years in a similar manner as today.]

### 1090.1200 General recordkeeping requirements.

(a) Length of time records shall be kept. Records required in this part must be kept for five (5) years from the date they were created, except that records relating to credit transfers must be kept by the transferor for five (5) years from the date the credits were transferred, and must be kept by the transferee for five (5) years from the date the credits were transferred, used, or terminated, whichever is later.

(b) Make records available to EPA. On request by EPA, the records specified in this section must be provided to EPA. For records that are electronically generated or maintained, the equipment and software necessary to read the records must be made available, or upon approval by EPA, electronic records shall be converted to paper documents that must be provided to EPA.

### 1090.1205 Recordkeeping requirements for all regulated parties.

Any party who sells, offers for sale, dispenses, supplies, offers for supply, stores, blends, transports, or causes the transportation of any fuel or fuel product subject to requirements under this part must maintain records containing the following information:

(a) The product transfer documents (PTDs) for all fuels and fuel products for which the party is the transferor or transferee.

(b) For any sampling and testing on fuels and fuel products required under this part, all of the following information:

(1) The location, date, time, and storage tank or truck identification for each sample collected.

(2) The identification of the person(s) who collected the sample and the person(s) who performed the testing.

(3) The results of the tests.

(4) The actions taken to stop the sale of any fuel or fuel product found not to be in compliance with applicable standards in this part, and the actions taken to identify the cause of any noncompliance and prevent future instances of noncompliance.

(c) For parties required to register pursuant to subpart I of this part, records supporting information required to complete and maintain registration for the party's company and each facility.

(d) For parties required to submit reports pursuant to subpart J of this part, copies of all reports submitted to EPA.

#### **1090.1210 Recordkeeping requirements for gasoline refiners and importers.**

Any gasoline refiner for each of its refineries, and any gasoline importer for the gasoline it imports, must keep records that include the following information:

(a) Batch records. For each batch of gasoline, all of the following information:

(1) The results of tests, including any calculations necessary to transcribe or correlate test results into reported values pursuant to subpart J of this part, performed to determine gasoline properties and characteristics in accordance with subpart M of this part.

(2) The batch volume.

(3) The batch number.

(4) The date of production or importation.

(5) The designation regarding whether the batch is summer or winter gasoline.

(6) For summer gasoline, the designation of the applicable RVP standard pursuant to §1090.XXX.

(7) The PTDs for any gasoline produced or imported.

(8) The PTDs for any gasoline received.

(9) For any gasoline blendstocks received by or transferred from a gasoline refiner or importer, documents that reflect all of the following:

(A) The identification of the product.

(B) The date the product was transferred.

(C) The volume of product.

(10) If appropriate, the designation of the batch as an exempted fuel pursuant to subpart G of this part.

(b) Downstream oxygenate accounting records. In the case of BOB certified for including in downstream oxygenate accounting pursuant to §1090.XXX, all of the following information:

(1) The results of tests for a hand blended sample prepared pursuant to §1090.XXX to ensure that, following blending, the BOB meets applicable standards.

(2) Records that demonstrate that the gasoline refiner or importer participates in the national fuels survey program described in subpart N of this part.

(3) Records that demonstrate that the gasoline refiner or importer participates in the sampling oversight program described in subpart N of this part.

(4) Compliance calculations described in §1090.XXX based on an assumed addition of oxygenate.

(c) Records for previously certified gasoline. In the case of any gasoline classified as previously certified gasoline (PCG) pursuant to §1090.XXX, all of the following information:

(1) Results of the tests to determine the properties and volume of the PCG when received at the gasoline refinery.

(2) Records that reflect the storage and movement of the PCG within the refinery to the point the PCG is used to produce gasoline or BOB.

(d) Records for refiners that blend blender-grade butane and pentane. In the case of blender-grade butane or pentane blended into gasoline or BOB pursuant to §1090.XXX or §1090.XXX, all the following information:

(1) The volume of butane added.

(2) The volume of the pentane added.

(3) The volume of gasoline or BOB both prior to and subsequent to the blender-grade butane or blender-grade pentane blending.

(4) The purity and properties of the blender-grade butane specified in §1090.XXX.

(5) The purity and properties of the blender-grade pentane specified in §1090.XXX.

(6) Compliance with the requirements of §§80.82 and 80.85.

(e) Records for the importation of gasoline treated as blendstock. In the case of any imported gasoline treated as blendstock (GTAB), documents that reflect the storage and physical movement of the GTAB from the point of importation to the point of blending to produce gasoline.

(f) Records for interface and transmix. In the case of any interface or transmix used to produce gasoline pursuant to subpart E of this part, records that reflect the results of any sampling and testing of gasoline or BOB required by subparts E and M of this part.

(1) Pipelines must keep records showing that interface was designated in the proper manner, according to the designations listed in §1090.XXX.

(2) Transmix processors and transmix blenders must keep records showing that their transmix meets the definition in §1090.XXX, or contains gasoline and distillate fuel only from the sources listed in §1090.500(c).

(3) Transmix processors must keep records showing the volumes of gasoline or BOB recovered from transmix and the type and amount of any blendstock added, if applicable.

(4) Transmix blenders must keep records showing compliance with the quality assurance program and/or sampling and testing requirements in §1090.510(b), and for each batch of gasoline or BOB with which transmix is blended, the volume of the batch, and the volume of transmix blended into the batch.

(g) Records related to ABT. Any gasoline refiner for each of its refineries, and any importer for the gasoline it imports, must keep records that include the following information, as applicable:

(1) Compliance sulfur and benzene value per §1090.XXX, and the calculations used to obtain that value.

(2) The number of valid credits in possession of the refinery or importer at the beginning of each averaging period, separately by generating facility and year of generation.

(3) The number of credits generated by the refinery or importer pursuant to subpart H of this part, separately by facility and by year of generation.

(4) If any credits were obtained from or transferred to other parties, all the following for each other party:

(i) The party's name.

(ii) The party's EPA refiner or importer registration number.

(iii) The number of credits obtained from, or transferred to, the party.

(5) The number of credits that expired at the end of each averaging period, separately by generating facility and year of generation.

(6) The number of credits that will be carried over into a subsequent averaging period, separately by generating facility and year of generation.

(7) The number of credits used, separately by generating facility and year of generation.

(8) Contracts or other commercial documents that establish each transfer of credits from the transferor to the transferee.

(h) Records related to exemptions. California gasoline pursuant to §1090.620, exempt gasoline for research and development pursuant to §1090.605, or for export outside the United States.

### **1090.1215 Recordkeeping requirements for diesel and ECA refiners and importers.**

[NOTE TO READER: The regulations at 40 CFR Part 80, Subpart I include designate and track provisions for 500 LM diesel fuel and ECA marine fuel. EPA intends to maintain these provisions despite the designate and track provisions not appearing below.]

The following recordkeeping requirements apply to all diesel and ECA marine fuel refiners:

(a) Registration and designation documents and information are records.

(1) Registration. All documents and information necessary for registration pursuant to subpart I of this part must be maintained.

(2) Designation. All documents and information created or used for the purpose of batch designation pursuant to §1090.1110 must be maintained.

(b) Batch information and documents are records.

(1) Sampling and testing. For any sampling and testing for sulfur content for a batch of diesel fuel produced or imported and subject to the 15 ppm sulfur standard, or any sampling and testing for sulfur content as part of a quality assurance testing program, and any sampling and testing for cetane index, aromatics content, solvent yellow 124, or dye solvent red 164 content of diesel fuel, the following records must be maintained:

(i) The location, date, time, and storage tank or truck identification for each sample collected.

(ii) The name and title of the person who collected the sample and the person who performed the testing.

(iii) The results of the tests for sulfur content (including, where applicable, the test results with and without application of the adjustment factor under §80.580(d)) and for cetane index or aromatics content (as applicable), and the volume of product in the storage tank or container from whence the sample was taken.

(2) Remedial actions. If a batch is not in compliance with the sulfur standards of §1090.XXX, then the refiner must maintain records of the following actions:

- (i) Stopping the sale or distribution of the noncompliant fuel.
- (ii) Identifying the cause of any noncompliance.
- (iii) Preventing noncompliance in the future.

(3) Additional batch records. Refiners producing distillate or residual fuel subject to a sulfur standard pursuant to subpart D of this part must, for each refinery, keep records that include the following information for each batch of ULSD or ECA marine fuel:

- (i) The batch volume.
  - (ii) The batch number.
  - (iii) The date of production or import.
  - (iv) A record designating the batch as one of the following:
    - (A) ULSD, LM 500 diesel fuel, or ECA marine fuel, as applicable.
    - (B) Meeting the 500 ppm sulfur standard in §1090.XXX, the 15 ppm sulfur standard in §1090.XXX, the 1,000 ppm sulfur standard in §1090.XXX, or other applicable standard.
    - (C) Dyed or undyed with visible evidence of solvent red 164.
    - (D) Marked or unmarked with solvent yellow 124.
  - (v) The calculations used to determine baselines or compliance with the volume requirements and volume percentages, as applicable, under this subpart.
  - (vi) A copy of reports submitted to EPA under §1090.XXX.
- (c) Transmix documents and information are records.
- (1) Transmix used to make 500 ppm LM diesel fuel. Producers of 500 ppm LM diesel fuel using transmix must have an EPA approved compliance plan, which must include:
- (i) A detailed description of how the facility will segregate any 500 ppm LM diesel fuel produced subject to the standards under §1090.XXX from the producer through to the ultimate consumer from fuel having other designations.
  - (ii) A demonstration showing that the end users of 500 ppm LM diesel fuel will also have access to 15 ppm diesel fuel for use in those engines that require the use of 15 ppm diesel fuel.
  - (iii) Identification of the entities that handle the 500 ppm LM diesel fuel through to the ultimate consumer. No more than 4 separate entities shall handle the 500 ppm LM diesel fuel between the producer and the ultimate consumer.

(iv) Identification of all ultimate consumers to whom the refiner supplies the 500 ppm LM diesel fuel.

(v) A detailed description of how misfueling of 500 ppm LM diesel fuel into vehicles or equipment that require the use of 15 ppm diesel fuel will be prevented.

(2) [Reserved]

(d) Diesel treated as blendstock (DTAB) documents and information are records.

(1) The importer must retain records that reflect the importation, sampling and testing, and physical movement of any DTAB.

(2) Any DTAB that ultimately is not used in the importer's refinery operation (e.g., a tank bottom of DTAB at the conclusion of the refinery operation), must be treated as newly imported diesel fuel, for which all required sampling and testing, and recordkeeping must be accomplished, and included in the importer's compliance calculations for the averaging period when this sampling and testing occurs.

(e) Heating oil designation documents and information are records.

(1) Heating oil subject to sulfur standards. Refiners producing distillate or residual fuel subject to a sulfur standard under subpart D of this part must, for each refinery, keep records that include the following information for each batch of heating oil:

(i) The batch volume.

(ii) The batch number.

(iii) The date of production or import.

(iv) A record designating the batch as heating oil:

(v) The calculations used to determine baselines or compliance with the volume requirements and volume percentages, as applicable.

(vi) A copy of reports submitted to EPA.

(2) [Reserved]

(f) Additional recordkeeping requirements apply to:

(1) Mobile facilities. Any registered mobile facility must maintain records of all the contracts between the mobile facility and any contracted component (e.g., tank truck, barge, marine tanker, rail car, etc.) at each of its registered mobile facilities.

(2) Aggregated facilities consisting of a refinery and a truck loading terminal. In addition to the applicable records required by paragraphs (a) through (e) of this section, such aggregated facilities must also keep the following records:

(i) All the following information for each batch of distillate fuel (or residual fuel with a sulfur level of 1,000 ppm or less if such fuel is intended for use in an ECA) produced by the refinery and sent over the aggregated facility's truck rack:

- (A) The batch volume.
- (B) The batch number.
- (C) The date of production.
- (D) A record designating the batch as one of the following:

(i) NRLM diesel fuel, NR diesel fuel, LM diesel fuel, ECA marine fuel, or heating oil, as applicable.

(ii) Meeting the 500 ppm sulfur standard in §1090.XXX, the 15 ppm sulfur standard in §1090.XXX, the 1,000 ppm sulfur standard in §1090.XXX, or other applicable standard.

(iii) Dyed or undyed with visible evidence of solvent red 164.

(iv) Marked or unmarked with solvent yellow 124.

(ii) Hand-off reports for all distillate fuel (or residual fuel with a sulfur level of 1,000 ppm or less if such fuel is intended for use in an ECA) from external sources (i.e., from another refiner or importer), as described in §1090.XXX.

#### **1090.1220 Recordkeeping requirements for oxygenate blenders.**

Any oxygenate blender that blends any oxygenate with any RBOB must, for each occasion such blending occurs, maintain records containing the following:

(a) The date, time, location, and identification of the blending tank or truck in which the blending occurred.

(b) The volume and oxygenate requirements of the RBOB to which oxygenate was added.

(c) The volume, type, and purity of the oxygenate which was added, and documents that show the source(s) of the oxygenate used.

**1090.1225 Recordkeeping requirements for gasoline additives**

(a) Gasoline additive producers and importers. Gasoline additive producers and importers of gasoline additives must keep the following records:

- (1) The date the batch was produced.
- (2) The volume of the batch.
- (3) The PTD for the batch.
- (4) The maximum recommended treatment rate.

(5) Records of the gasoline additive producer or importer's control practices that demonstrate that the additive will contribute no more than 3 ppm on a per gallon basis to the sulfur content of gasoline when used at the maximum recommended treatment rate.

(b) Records that parties who take custody of gasoline additives in the gasoline additive distribution system must keep. Except for gasoline additives packaged for addition to gasoline in the vehicle fuel tank, all parties that take custody of gasoline additives for bulk addition to gasoline from the producer through to the party that adds the additive to gasoline must keep all of the following records:

- (1) The PTD for each batch of gasoline additive.
- (2) As applicable, the treatment at which the additive was added to gasoline.

(3) As applicable, the volume of gasoline that was treated with the additive. A new record must be initiated in cases where a new batch of additives is mixed into a storage tank from which the additive is drawn to be injected into gasoline.

**1090.1230 Recordkeeping requirements for oxygenates producers and importers.**

(a) Records that oxygenate producers and importers must keep. Oxygenate producers and importers must keep records of all the following for each batch of oxygenate produced or imported:

- (1) The date the batch was produced.
- (2) The batch number.
- (3) The batch volume.
- (4) The PTD for the batch.
- (5) The sulfur content of the batch.

(6) The following records must be kept if the sulfur content of the batch was determined by analytical testing:

(i) The location, date, time, and storage tank or truck identification for each sample collected.

(ii) The name and title of the person who collected the sample and the person who performed the test.

(iii) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test.

(iv) Any record that contains a test result for the sample that is not identical to the result recorded in paragraph (a)(6)(iii) of this section.

(v) The test methodology used.

(7) For denatured fuel ethanol, the following records must be kept if the sulfur content of the batch was determined by the alternative means of demonstrating compliance with the sulfur requirements pursuant to §1090.XXX:

(i) The name and title of the person who calculated the sulfur content of the batch.

(ii) The date the calculation was performed.

(iii) The calculated sulfur content.

(iv) The sulfur content of the neat (un-denatured) ethanol.

(v) The date each batch of neat ethanol was produced.

(vi) The neat ethanol batch number.

(vii) The neat ethanol batch volume.

(viii) As applicable, the neat ethanol production quality control records, or the test results on the neat ethanol, including all of the following:

(A) The location, date, time, and storage tank or truck identification for each sample collected.

(B) The name and title of the person who collected the sample and the person who performed the test.

(C) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test.

(D) Any record that contains a test result for the sample that is not identical to the result recorded in paragraph (a)(7)(viii)(C) of this section.

(E) The test methodology used.

(v) The sulfur content of the denaturant(s) used, and the volume percent at which the denaturant(s) were added to neat (un-denatured) ethanol to produce denatured fuel ethanol.

(vi) The PTDs for the denaturants used.

(b) Records that parties who take custody of oxygenates in the oxygenate distribution system must keep. All parties that take custody of oxygenate—from the oxygenate producer through to the oxygenate blender—must keep a copy of the product transfer document for each batch of oxygenate.

#### **1090.1235 Recordkeeping requirements for ethanol denaturant.**

(a) Records that must be kept by certified ethanol denaturant producers and importers. Records of all the following must be kept for each batch of certified ethanol denaturant produced or imported:

(1) The date each batch was produced.

(2) The batch number.

(3) The batch volume.

(4) The PTD for the batch.

(5) The sulfur content of the batch.

(6) The location, date, time, and storage tank or truck identification for each sample collected.

(7) The name and title of the person who collected the sample and the person who performed the test.

(8) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test.

(9) Any record that contains a test result for the sample that is not identical to the result recorded in paragraph (a)(8) of this section.

(10) The test methodology used.

(b) Records that parties who take custody of ethanol denaturants designated as suitable for use in the manufacturer of DFE meeting federal quality requirements. All parties that take custody of denaturants designated as suitable for use in the manufacture of DFE pursuant to §1090.XXX must keep the following records:

(1) The PTD for the denaturant.

(2) As applicable, the volume percent at which the denaturant was added to neat ethanol.

#### **1090.1240 Recordkeeping requirements for gasoline detergent blenders.**

Gasoline detergent additive blenders must maintain the following records to demonstrate that a detergent additive has been added to gasoline before it is distributed to retail and wholesale-purchaser-consumer facilities at a concentration at least as high as represented by the lowest additive concentration for the detergent additive registered with EPA by the detergent manufacturer pursuant to §79.21(j):

(a) The PTD for the detergent additive(s) used.

(b) For each detergent additive used, the records maintained by the detergent blender must compare the volume of gasoline distributed from each detergent blending facility over the period of a calendar month or lesser time period to the volume of detergent additive blended into the subject gasoline volume.

(c) The detergent blender must provide the records specified in this section to EPA within fourteen (14) days of EPA's request.

## Subpart M—Sampling, Testing, and Retention Requirements

### §1090.1300 General provisions.

(a) This subpart is organized as follows:

(1) Sections 1090.1310 through 1090.1335 describe the scope of required testing, including special provisions that apply in several unique circumstances.

(2) Sections 1090.1340 through 1090.1345 describe handling procedures for collecting and retaining samples.

(3) Sections 1090.1350 through 1090.1365 describe the procedures for measuring the specified parameters.

(4) Section 1090.1375 describes the procedures for testing related to gasoline deposit control test procedure.

(b) Where requirements for a quality assurance program apply at some minimum frequency, your first batch of product triggers the testing requirement. The specified frequency serves as a deadline for performing the required testing, and as a starting point for the next testing period. The examples below illustrate the requirements for testing based on sampling the more frequent of every 90 days or 500,000 gallons of blender-grade butane you received from a supplier:

(1) If your testing period starts March 1 and you use less than 500,000 gallons of blender-grade butane from March 1 through May 29 (90 days), you must perform testing under a quality assurance program sometime between March 1 and May 29. Your next test period starts with the use of blender-grade butane on May 30 and again ends after 90 days or after you use 500,000 gallons of blender-grade butane, whichever comes first.

(2) If your testing period starts March 1 and you use 500,000 gallons of blender-grade butane for the testing period on April 29 (60 days), you must perform testing under a quality assurance program sometime between March 1 and April 29. Your next testing period starts with the use of blender-grade butane on April 30 and again ends after 90 days or after you use 500,000 gallons of blender-grade butane, whichever comes first.

(c) In addition to the definitions in §1090.XXX, the following definitions and additional provisions apply for this subpart:

(1) Good laboratory practice means performing sampling and measurement procedures in a way that is consistent with generally accepted scientific and engineering principles and properly accounts for all available relevant information. See 40 CFR 1068.1303.

(2) Crosscheck program is an arrangement for laboratories to perform measurements from a single reference fuel sample for evaluating precision and accuracy. This subpart relies on

monthly inter-laboratory crosscheck programs sponsored by ASTM International or another voluntary consensus standards body (see §1090.1352(c)), or on monthly crosscheck programs conducted separately by one or more companies.

(3) A voluntary consensus standards body (VCSB) is an organization that follows consistent protocols to adopt standards reflecting a wide range of input from interested parties. ASTM International and the International Organization for Standardization are examples of VCSB organizations.

#### **§1090.1305 Good laboratory practice.**

You must apply good laboratory practice for all sampling, measurement, and calculations related to testing required under this part.

### **SCOPE OF TESTING**

#### **§1090.1310 Testing to demonstrate compliance with standards.**

(a) Refiners and importers must collect a fuel sample from each batch of diesel fuel and ECA marine fuel for testing to demonstrate compliance with the standards described in subpart D of this part. Refiners and importers must obtain test results for the following parameters before the fuel leaves the refinery gate or import facility:

- (1) Gasoline sulfur, benzene, and RVP (during the summer months).
- (2) Diesel sulfur

(b) Refiners and importers must collect a representative sample from each batch of gasoline for testing to demonstrate compliance with the standards described in subpart C of this part. The following additional testing requirements apply for gasoline and gasoline-related fuel products:

(1) Oxygenate producers must collect a representative sample from each batch of oxygenate for testing to demonstrate compliance with sulfur standards, except that producers of denatured fuel ethanol may meet the alternative requirements in §1090.1335.

(2) Blender grade butane and blender grade pentane producers must collect samples for testing to demonstrate compliance with purity specifications and sulfur and benzene standards as described in §1090.1320.

(3) Ethanol denaturant producers that certify the denaturant under §1090.1335 must collect a sample from each batch for testing to demonstrate compliance with the sulfur standard.

(c) The testing described in paragraphs (a) and (b) of this section must occur before the fuel or fuel product from a given batch leaves the refinery, import facility or other production

facility, except as specified in §1090.1315. Collect and store samples as described in §§1090.1340 through 1090.1345. Perform measurements as described in §1090.1350.

(d) Refiners producing gasoline by adding blendstock to previously certified gasoline (PCG) must comply with §1090.1320.

### **§1090.1315 In-line blending.**

This section describes how refiners using in-line blending equipment may qualify for an exemption from the requirement in §1090.1310(c) to test every batch of fuel before the fuel leaves the refinery.

(a) The exemption in this section applies if you use in-line blending equipment to supply fuel directly into a pipeline, tank truck, railcar, or other type of distribution that does not involve collecting fuel in a tank or other type of storage for creating a batch of fuel.

(b) To request an exemption, send us a request signed by an authorized representative of the company with the following information:

(1) Describe the location of your in-line blending operation, how long it has been in operation, and how much of each type of fuel you have blended over the preceding three years. Describe the physical layout of the blending operation, and describe how you move the blended fuel into distribution. Also describe how your automated system monitors and controls blending proportions and the properties of the blended fuel.

(2) Describe how you collect and test fuel samples and perform composite calculations in a way that is equivalent to measuring the fuel properties of a batch of blended fuel. Your procedures need to conform to the sampling specifications in ASTM D4177 and the composite calculations in ASTM D5854 (both incorporated by reference in §1090.95).

(3) Describe any expectation or plan for you or another party to perform additional downstream testing for the same fuel parameters.

(4) Describe your quality assurance procedures. Describe any experiences from the previous three years where these quality assurance procedures led you to make corrections to your in-line blending operation.

(5) Describe any times from the previous three years that you modified fuel after it came out of your blending operation. Describe how you modified the fuel and why that was necessary.

(6) Describe how you will meet the auditing requirements in paragraph (c) of this section.

(c) You must arrange for an independent audit of your blending operation each calendar year, as follows:

(1) The third party is independent if it does not include any of your employees, and you and the third party have no shared business interest. The auditor must demonstrate work experience with the voluntary consensus standards referenced in paragraph (b)(2) of this section. An auditor suspended or debarred under 40 CFR part 32 or 48 CFR part 9, subpart 9.4, is not qualified to perform reviews under this paragraph (c).

(2) The audit must include a review of procedures and documents to determine whether measured and calculated values properly represent the aggregate fuel properties for the blended fuel.

(3) You or the auditor must send us an annual audit report by June 1 to address compliance for the previous year.

(e) If we approve your request for an exemption under this section, we may require you to update your procedures for more effective control and documentation of measured fuel parameters based on audit results, development of improved practices, or other information.

#### **§1090.1320 Testing requirements for refiners adding blendstock to previously certified gasoline.**

The following requirements apply for refiners that add blendstock to previously certified gasoline (PCG).

(a) Measure the sulfur and benzene content of each batch of blendstock used to produce a new batch of gasoline as described in §1090.1350. Determine the volume of each batch. Use these values for demonstrating compliance with the annual average standards specified in subpart C of this part. Do not include any PCG test results or volumes in these calculations.

(b) Determine the volume of each batch of fuel after adding the blendstock, and perform the following measurements with the blended fuel using the procedures specified in §1090.1350:

(1) Measure sulfur content.

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

(3) In the case of summer fuel, measure RVP.

(c) Keep records to associate batches of blended fuel with the batches of blendstock used to make the blended fuel.

(d) If you receive blender-grade butane or pentane from a registered supplier and blend it into PCG, you may meet the sampling and testing requirements of this subpart based on test results from the butane or pentane supplier, as follows:

(1) Before you blend the blender-grade butane or pentane with gasoline, you must obtain a copy of the supplier's test results that indicate the product meets the applicable standards in paragraph (f) of this section.

(2) You must account for all the butane or pentane blended under this paragraph (d) in your compliance calculations.

(3) You must enter into a contract with all parties who transport or store blender grade pentane for use by the refiner to assure that an adequate quality assurance program is implemented to ensure that blender-grade pentane will not be contaminated in transit to the refinery.

(4) You must conduct a quality assurance program for each supplier's testing based on sampling the more frequent of every 90 days or 500,000 gallons of butane or pentane you receive from each supplier.

(5) If you fail to meet the requirements of this paragraph (d), the gasoline produced with butane or pentane is deemed to be in violation of the standards in subpart C of this part.

(6) If a refiner does not fully implement the requirements of this section, it may not rely on test results from the butane or pentane producer, and may only blend butane or pentane with gasoline if it fully complies with all applicable requirements of this part, including the sampling and testing requirements applicable to refiners who produce gasoline by adding blendstocks to PCG.

(7) When pentane or butane is blended with conventional gasoline under this section during the period May 1 through September 15, the refiner shall demonstrate through sampling and testing, using the test method for Reid vapor pressure in §1090.XXX, that each batch of conventional gasoline blended with pentane meets the volatility standards specified in subpart C of this part, and in any EPA approved SIP.

(8) Pentane and butane may not be blended with RFG or RBOB under this section during the period May 1 through September 15.

(e) This paragraph (e) describes how suppliers can qualify their products as blender-grade butane or blender-grade pentane for purposes of this section. The supplier must use the procedures of §1090.1350 to demonstrate compliance with the specifications in Table 1 of this section. Testing must occur after the most recent delivery into the supplier's storage tank and before transferring the butane or pentane batch for delivery. The supplier must provide documentation of the test results for each butane or pentane batch to the refiner. Table 1 follows:

Table 1 to §1090.1320—Specifications for Blender-grade Butane and Blender-grade Pentane

<b>Parameter</b>	<b>Blender-grade butane</b>	<b>Blender-grade pentane</b>
Butane (volume %, minimum)	95	—

This document is a staff-level working draft, developed in preparation for EPA's Fuels Regulatory Streamlining Workshop.

Pentane (volume %, minimum)	—	95
Benzene (volume %, maximum)	0.03	0.03
C6 and higher hydrocarbons (volume %, maximum)	—	5.0
Sulfur (ppm, maximum)	10	10

### **§1090.1325 Testing requirements for importing gasoline or diesel fuel by truck.**

If you import gasoline or ULSD by truck, you can meet the sampling and testing requirements of this subpart based on test results from the supplier if you meet the following requirements:

(a) Your fuel supplier must perform tests on fuel parameters described in §1090.1310 using the procedures specified in §1090.1350. Testing for a given load must occur after the most recent delivery into the supplier's storage tank and before transferring product to the truck. The supplier must provide documentation of the test results for each load to you.

(b) You must conduct a quality assurance program for each supplier's testing using one of the following by collecting fuel samples for testing without notifying the supplier in advance. Collect a sample at least once for the more frequent of every 30 days or every 50 truckloads from a given supplier. Treat importation of gasoline and diesel fuel separately under this paragraph (b)(2). Test quality assurance samples as described in paragraph (a) of this section.

(c) If you fail to meet requirements under this section, you must perform your own testing as described in §1090.1310 until we agree that you have adequately addressed the cause of the failure.

### **§1090.1330 Testing requirements for blending with transmix gasoline product.**

This section is addressed to transmix processors producing gasoline by adding blendstock to transmix gasoline product (TGP).

(a) The testing requirements for volatility apply as specified in §1090.1310(a) for gasoline you produce from TGP.

(b) Measure the distillation endpoint for gasoline you produce from TGP as specified in §1090.1350.

(c) Determine the volume, sulfur content, and benzene content of each blendstock batch you receive for reporting and compliance calculations by the blendstock through sampling and testing as prescribed in this subpart. The blendstock must comply with the average and per-gallon standards in subpart C of this part.

(d) Sample and test the finished TGP and blendstock blend to demonstrate compliance with the 95 ppm maximum downstream sulfur standard of §1090.510 and the applicable maximum RVP standard of §1090.315.

#### **§1090.1335 Denatured fuel ethanol.**

This section is addressed to producers and importers of denatured fuel ethanol. You may calculate the sulfur content of a batch of denatured fuel ethanol instead of measuring every batch as follows:

(a) Determine the ppm sulfur content of ethanol before adding denaturant by measuring it as described in §1090.1310 or by estimating it based on your production quality control procedures.

(b) Use the ppm sulfur content of certified ethanol denaturant specified by a registered supplier based on the appropriate product transfer document. If the sulfur content is specified as a range, use the maximum specified value.

(c) Calculate the weighted sulfur content of the denatured fuel ethanol from the values you determined under paragraphs (a) and (b) of this section.

### **HANDLING AND TESTING FUEL SAMPLES**

#### **§1090.1340 Collecting and preparing fuel samples for testing.**

(a) Use one of the following methods to collect fuel samples:

(1) Manually collect samples for measuring any parameter except gasoline volatility using ASTM D4057 (incorporated by reference in §1090.95).

(2) Automatically collect samples for measuring any parameter except gasoline volatility using ASTM D4177 (incorporated by reference in §1090.95).

(3) Collect samples for measuring gasoline volatility using ASTM D5842 (incorporated by reference in §1090.95).

(4) Prepare composite samples using ASTM D5854 (incorporated by reference in §1090.95).

(b) Use good laboratory practice to collect samples that are representative of the batch of fuel you are testing. Always take steps to prevent sample contamination. For example, it is required practice to completely flush sampling taps and piping and to prerinse sample containers with the fuel being sampled.

(c) Use the following procedure to determine whether the batch is homogeneous and ready for parameter measurements under this subpart:

(1) Draw a sample representing at a minimum each of the upper, middle, and lower segments of the stored fuel. EPA expects the refiner, importer, or independent laboratory to use its best professional judgment in determining the procedures that are necessary in order to best represent a given batch within the guidelines of paragraph (a) of this section.

(2) To determine homogeneity of the fuel within a tank, measure API gravity from an upper, middle and bottom sample using ASTM D287, ASTM D1298, or ASTM D4052 (incorporated by reference in §1090.95). Consider the fuel batch to be homogeneous if the maximum difference in tested gravities between any two of the three samples is at or below 0.6° API, and the samples have a uniform appearance. Where it is found that tank contents are not homogeneous, further mixing should be performed before collecting a representative sample for analysis.

(3) If a question remains about whether the contents of a storage tank are fully mixed following gravity testing the party could resolve the homogeneity issue by conducting tests on the upper, middle and lower tank samples for benzene and oxygen. In this case, consider the fuel batch to be homogeneous if the maximum difference in benzene results is at or below 0.10 volume percent, and the maximum difference in oxygen results is 0.15 weight percent. You may use any appropriate method for measuring benzene and oxygen to determine whether the fuel batch is homogeneous.

(d) For sampling storage tanks EPA prefers a “running” or “all-levels” sample collected from an un-confined (no gauge tube) roof port. A “running” or “all levels” sample collected from a perforated gauge tube is the next best choice. In no case should a sample be collected from a solid gauge tube.

(1) EPA prefers to collect “running” samples as opposed to “all-levels” samples for two reasons. First, assuming both “all-levels” and “running” samples are collected with uniform lowering and retrieval rates, the “running” procedure achieves better representation of the tank contents than the “all-levels” procedure. This occurs because with the “running” procedure, one half of the sample is collected when lowering the apparatus, and the column sampled is undisturbed at that point. The second reason is that “running” samples are easier to collect than “all-levels” samples because the sample collector is not required to stopper the sample bottle.

(2) If a tank cannot be bottle sampled from the top, then tap sampling is an appropriate substitute. For best representation, collect an upper, middle and lower sample, if possible depending on how full the tank is. If homogeneity is well documented (see (2) below, the entire sample may be collected from a single tap. If a refinery or importer tank has no roof sampling port or sampling taps, then a pipeline sample is the only other sampling means that is possible.

(3) In the case of downstream quality assurance sampling from a storage tank which does not have a roof sampling port or taps for sampling, a sample collected from a truck or barge that has just loaded from that tank is marginally acceptable. The truck or barge should be completely empty before loading, and a “running” sample should be collected from the truck or barge compartment.

(e) Test the samples as follows:

(1) For summer gasoline only, measure the RVP of the sample(s).

(2) For all other fuel parameters, perform measurements with representative fuel samples.

#### **§1090.1341 Composite samples from in-line blending.**

[NOTE TO READER: EPA will reference ASTM D5854 if needed.]

#### **§1090.1342 Sample preparation for BOB testing.**

(a) If you produce or import BOB and instruct downstream blenders to add oxygenate, you may meet the sampling requirements of this subpart by blending oxygenate into a BOB sample to represent the final blended fuel. To do this, prepare each fuel sample by adding oxygenate to the BOB sample in a way that corresponds to your instructions to downstream blenders for the sampled batch of fuel. If your instructions allow for more than one type of oxygenate to be added by downstream blenders, prepare a hand blend sample for each type of oxygenate allowed. Report the highest result for sulfur, benzene and RVP (for summer gasoline) and use the highest results for determining compliance with per-gallon and average standards. Blend the fuel using the procedures described in ASTM D7717 (incorporated by reference in §1090.95). Use this blended fuel sample for all testing required under this part.

(b) If you produce or import BOB and you blend in oxygenate before selling or transporting the fuel, you must draw samples from the blended fuel for all testing required under this part.

#### **§1090.1345 Sample retention.**

The sample retention requirements of this section apply for refiners and importers. These requirements apply for all fuel and fuel products tested under this part.

(a) If you perform a test required under this subpart, keep a representative sample of the tested product for at least 30 days after testing is complete, except as set forth in paragraph (b), below.

(b) If a batch of gasoline is not produced solely from crude oil feedstock through processing steps, including distillation, that occur at the refinery where the gasoline is reduced, the refiner must keep a representative sample of the batch for 180 days.

(c) Stored samples must be at least 330 ml in volume. Keep a record of all test results and the associated test methods for the batch associated with each stored sample.

(d) If we ask for a test sample, you must promptly send it to us by a courier service (or equivalent) according to our instructions. Identify the test results and test methods along with each test sample.

(e) If a third party performs testing on your product, they may retain the sample on your behalf, but you will be liable if they fail to meet the sample retention requirements of this subpart.

## MEASUREMENT PROCEDURES

### §1090.1350 Overview of test procedures.

Refiners and importers meet the requirements of this subpart based on laboratory measurements of the specified fuel parameters. Test procedures for these measurements apply as follows:

(a) The Performance-based Analytical Test Method described in §§1090.1352 through 1090.1358 applies for the following fuels and fuel parameters:

(1) Sulfur content of diesel fuel.

(2) Aromatic content of diesel fuel.

(3) RVP, sulfur, benzene, distillation parameters identified in ASTM 4814 and oxygenate content of gasoline.

(4) Distillation for transmix gasoline.

(b) Notwithstanding paragraph (a)(3) of this paragraph, refiners do not have to test any batch of gasoline for distillation or oxygenates if the batch is produced solely from crude oil feedstock through processing steps, including distillation, that occur at the refinery where the gasoline is produced.

(c) Determine the cetane index of diesel fuel as described in ASTM D976 (incorporated by reference in §1090.95).

(d) Measure the phosphorus content of gasoline as described in ASTM D3231 (incorporated by reference in §1090.95).

(e) Measure the lead content of gasoline as described in ASTM D3237 (incorporated by reference in §1090.95).

(f) Use the following methods to measure additional gasoline fuel parameters to meet the survey requirements of subpart N of this part:

Fuel parameter	Units	Test Method <sup>1</sup>
Distillation (T50 and T90)		ASTM D86
Aromatic content	volume percent	ASTM D1319
Olefin content	volume percent	ASTM D1319

<sup>1</sup> ASTM specifications are incorporated by reference in §1090.95.

(g) Record measured values with the following precision:

- (1) Record sulfur content as follows:
  - (i) For gasoline, to the nearest 0.1 mg/kg (ppm).
  - (ii) For butane, to the nearest whole ppm for values at or above 10 ppm, and to the nearest 0.1 ppm for smaller values.
  - (iii) For ULSD and 500 ppm LM diesel fuel, to the nearest whole ppm.
  - (iv) For ECA marine fuel, to the nearest 0.001 mass percent (10 ppm).
- (2) Record gasoline benzene to the nearest 0.01 volume percent.
- (3) Record gasoline RVP to the nearest 0.01 psi or 0.1 kPa.
- (4) Record gasoline oxygenate content to the nearest 0.01 mass percent for each calibrated oxygenate; record gasoline oxygen content to the nearest 0.1 mass percent.
- (5) Record diesel aromatic content to the nearest 0.1 volume percent, or record cetane index to the nearest whole number.

**§1090.1351 Calculation adjustments and corrections.**

Adjust measured values for special circumstances as follows:

- (a) If you test with a blended fuel sample as described in §1090.1342, calculate adjusted values for demonstrating compliance with the sulfur cap standard in subpart C of this part that applies at the refinery gate using the following equation:

$$S_{BOB} = \frac{S_{HB} - V_{oxy} \cdot S_{oxy}}{1 - V_{oxy}}$$

Where:

$S_{BOB}$  = the calculated value for sulfur to represent the value that applies for gasoline before blending with oxygenate (i.e., BOB). Use this value to demonstrate compliance with the sulfur cap standard that applies at the refinery gate.

$S_{HB}$  = measured value of sulfur in the hand-blended sample, in ppm. Use this value to calculate the annual compliance level for demonstrating compliance with averaging standards.

$V_{oxy}$  = oxygenate blending fraction, based on the nominal value described for downstream blending. For example, use  $V_{oxy} = 0.10$  for fuel blends with nominally 10 percent denatured fuel ethanol.

$S_{oxy}$  = default parameter value corresponding to the oxygenate used for blending. Let  $S_{oxy}$  = 3 ppm for denatured fuel ethanol, and let  $S_{oxy}$  = 0 ppm for other oxygenates.

(b) In the case of measuring sulfur, benzene, and oxygenate in gasoline, adjust a given test result upward in certain circumstances, as follows:

(1) If your measurement method involves a published procedure with a Pooled Limit of Quantitation (PLOQ) and your measured result is below the PLOQ, treat the PLOQ as your final result.

(2) If your measurement method involves a published procedure with a Limit of Detection but no PLOQ, and your measured result is less than 3 times the Limit of Detection, treat the final result as 3 times the Limit of Detection.

(c) In the case of measuring benzene in butane and pentane, report a zero value if the test result is at or below the Pooled Limit of Quantitation or Limit of Detection that applies for the test method.

(d) Adjust measured values for total vapor pressure using the following equation:

$$\text{RVP (psi)} = 0.956 \cdot x - 0.347$$

Where:

x = Measured total vapor pressure, in psi.

#### **§1090.1352 Performance-based Analytical Test Method.**

Anyone required to perform a test to measure fuel parameters under this subpart must comply with the following requirements:

(a) The Performance-based Analytical Test Method is a measurement system that allows for testing with any procedure that meets specified performance criteria. This subpart specifies the performance criteria for measuring fuel parameters to demonstrate compliance with the standards and other specifications of this part.

(b) Requirements apply differently for absolute fuel parameters and method-defined fuel parameters.

(1) An absolute fuel parameter is one for which it is possible to evaluate measurement accuracy by comparing measured values of a test sample to a reference sample with a known value for the measured parameter. Sulfur is currently the only absolute fuel parameter. This applies for measuring sulfur in any fuel or fuel product.

(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 1090.1354 describes the initial qualifying criteria for all measurement procedures. The reference test methods identified in paragraph (e) of this section are presumed to meet these initial qualifying criteria. You may use an alternative procedure only if testing shows that you meet the initial qualifying criteria. Such testing for method-defined fuel parameters must take place at a reference installation as described in §1090.1356.

(2) Section 1090.1358 describes ongoing quality testing requirements that apply for both reference test methods and alternative procedures.

(3) Streamlined requirements for alternative procedures apply in the case of procedures adopted by a voluntary consensus standards body (VCSB). Procedures developed by individual companies or other parties are considered “non-VCSB” procedures in this subpart. Draft procedures under development by a VCSB organization are considered non-VCSB procedures until they are approved for publication. Compliance testing with non-VCSB procedures requires our advance approval.

(4) You may qualify updated versions of the reference test methods as alternative procedures under §1090.1354. This generally does not require new testing, as described in §1090.1354(a)(2). You may not use updated versions of the reference test methods without prior approval by us. You may ask us for approval to use an updated version of the reference test methods for qualifying other alternative procedures if the updated method has the same or better accuracy and precision compared to the earlier version. If the updated method has worse accuracy and precision compared to the earlier version, you must complete the required testing described in §1090.1354(a)(2).

(d) You must perform all steps necessary for testing using good laboratory practices. This applies for collecting and handling fuel samples, measuring fuel parameters, and calculating test results.

(e) Reference test methods are presumed to meet the initial qualifying criteria in this section as follows:

(1) You may use the reference test methods described in this paragraph (e)(1) to measure the specified fuel parameters and fuel types. You may use alternative procedures if you qualify them using the reference test methods as a benchmark as described in §1090.1354.

Fuel or Fuel Product	Parameter	Reference Test Method <sup>1</sup>
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Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	sulfur	ASTM D7039
Blender grade butane, and blender grade pentane	sulfur	ASTM D6370
Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	oxygen and oxygenate content	ASTM D5599
Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	volatility	ASTM D5191, except as noted in paragraph (e)(2) of this section
Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	benzene	ASTM D5769
Transmix gasoline	distillation endpoint	ASTM D86
Diesel fuel	aromatics	ASTM D1319
ULSD	sulfur	ASTM D3120
ECA marine fuel and diesel fuel additives	sulfur	ASTM D2622

<sup>1</sup> ASTM specifications are incorporated by reference in §1090.95.

(2) [Reserved]

(3) Determine the repeatability or reproducibility for a given measurement using the methods designated in paragraph (e)(1) of this section as follows:

(i) Gasoline sulfur repeatability. The repeatability for measuring sulfur in gasoline comes from the following equation, with sulfur expressed in ppm (or mg/kg):

$$r = 0.4998 \cdot S^{0.54}$$

(ii) Gasoline sulfur reproducibility. The reproducibility for measuring sulfur in gasoline comes from the following equation, with sulfur expressed in ppm:

$$R = 0.7348 \cdot S^{0.54}$$

(iii) Butane sulfur repeatability. The repeatability for measuring sulfur in butane comes from the following equation, with sulfur expressed in ppm:

$$r = 0.1152 \cdot S$$

(iv) Butane sulfur reproducibility. The reproducibility for measuring sulfur in butane comes from the following equation, with sulfur expressed in ppm:

$$R = 0.3130 \cdot S$$

(v) Gasoline oxygen. The reproducibility for measuring oxygen content in gasoline comes from the following equation, with oxygen expressed in mass %:

$$R = 0.13 \cdot O^{0.83}$$

(vi) Gasoline RVP. The reproducibility for measuring gasoline RVP is 2.75 kPa for samples drawn from a 250 ml container. The reproducibility for samples drawn from a 1000 ml container comes from the following equation:

$$R \text{ (kPa)} = 0.01014 \cdot (0.9785 \cdot VP_{\text{total}} - 3.78) + 160$$

$$R \text{ (kPa)} = 0.00579 \cdot VP_{\text{total}} + 1.584$$

(vii) Gasoline benzene. The reproducibility for measuring benzene content in gasoline (up to 1.5 volume % benzene), comes from the following equation, with benzene expressed in volume %:

$$R = 0.13 \cdot B + 0.05$$

(viii) Gasoline distillation endpoint. The reproducibility for measuring distillation endpoint is = 7.1 °C.

(ix) Diesel aromatics. The reproducibility for measuring aromatic content of diesel fuel is 3.7 volume % aromatics if the fuel includes oxygenated blendstock. For diesel fuel without oxygenated blendstock, determine reproducibility from the following table, with linear interpolation between listed values:

<b>Volume % aromatics</b>	<b>Reproducibility (volume % aromatics)</b>
5	1.5
15	2.5
25	3.0
35	3.3
45	3.5

(x) Diesel sulfur. Determine the repeatability and reproducibility for measuring sulfur in diesel fuel from the following table, with linear interpolation between listed values:

**TABLE 4 Precision Values, All Sample Types**

S, mg/kg	Repeatability r, mg/kg Eq 12 values	Reproducibility R, mg/kg Eq 14 values
3.0	0.4	1.0
5.0	0.5	1.6
10.0	0.9	2.7
25.0	1.9	5.6
50.0	3.4	9.8
100.0	5.9	17.1
500	21	62
1000	37	108
5000	135	394

**§1090.1354 Initial qualifying criteria for alternative measurement procedures.**

This section describes how to qualify alternative procedures for measuring absolute and method-defined fuel parameters under the Performance-based Analytical Test Method described in §1090.1352.

(a) The following general provisions apply for qualifying alternative procedures:

(1) Alternative procedures must have appropriate repeatability to allow for reporting to the number of decimal places specified in §1090.1350(e).

(2) Testing to qualify an alternative procedure applies for the published version of the procedure you use for making the necessary measurements. Once an alternative procedure for a method-defined fuel parameter is qualified for your laboratory, updated versions of that same procedure are qualified without further testing, as long as the procedure's specified reproducibility is unchanged from the procedure used for the original qualification testing. In the case of absolute fuel parameters, updated versions are qualified without testing if both repeatability and reproducibility remain unchanged.

(3) Except as specified in paragraph (d) of this section, testing to demonstrate compliance with the precision and accuracy specifications in this section apply only for the test facility where the testing occurred.

(b) All alternative procedures must meet precision criteria based on a calculated maximum allowable standard deviation for a given fuel parameter as described in this paragraph (b). The precision criteria apply for measuring the parameters and fuels described in paragraph (b)(5) of this section. Take the following steps to qualify the measurement procedure for measuring a given fuel parameter:

(1) Select a commercially available fuel batch for testing. Store and mix the fuel to maintain a homogenous mixture throughout the measurement period to ensure that each fuel sample drawn from the batch has the same properties.

(2) Measure the fuel parameter from a test sample at least 20 times. Record each result in sequence. Do not omit any valid results unless you determine that the omission is necessary according to good laboratory practices and you document those results and the reason for excluding them. Draw test samples over a 20-day period, with not more than one test sample in any single day. You may make up to four separate measurements from a given test sample.

(3) Test samples for measuring RVP must come from a 250 milliliter container.

(4) Test samples for measuring sulfur in diesel fuel that is subject to a 15 ppm sulfur standard must have at least 5 ppm sulfur. Test samples for measuring sulfur in ECA marine fuel must have at least 700 ppm sulfur.

(5) The maximum allowable standard deviation for measuring sulfur content in ECA marine fuel is 18.07 ppm. The maximum allowable standard deviation for measuring sulfur content diesel fuel and diesel fuel additives subject to a 15 ppm standard is 0.72 ppm. Calculate the maximum allowable standard deviation for other fuel parameters using the following equation:

$$\sigma_{max} = x_1 \cdot \frac{x_2}{x_3}$$

Where,

$x_1$  = the repeatability or reproducibility from §1090.1352(e)(4). Calculate the repeatability or reproducibility for a given fuel parameter based on the value representing the standard that applies, or a value that represents the in-use fuel if there is no standard. If averaging standards apply, and batch standards apply, use the averaging standard.

$x_2$  = the value from the following table:

<b>Fuel</b>	<b>Parameter</b>	<b>x1</b>
Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	sulfur	1.5
Blender grade butane	sulfur	1.5
Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	oxygen and oxygenate content	0.3
Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	RVP	0.3
Gasoline, gasoline blendstock, and gasoline fuel additives subject to gasoline standards	benzene	0.15
Diesel fuel	aromatics	0.3

$x_3 = 2.77$  for absolute fuel parameters. Let  $x_3 = 1$  for method-defined fuel parameters.

(6) The following examples illustrate maximum allowable standard deviation for different fuel parameters:

(i) Gasoline sulfur. For a test fuel with 10 ppm sulfur,  $\sigma_{\max} = 0.542 \cdot 1.73 \text{ ppm} = 0.94 \text{ ppm}$ .

(ii) Butane sulfur. For a test fuel with 10 ppm sulfur,  $\sigma_{\max} = 0.542 \cdot 1.15 \text{ ppm} = 0.62 \text{ ppm}$ .

(iii) Gasoline oxygen. For a test fuel with 3 mass % oxygen,  $\sigma_{\max} = 0.3 \cdot 0.32 \text{ mass \%} = 0.10 \text{ mass \%}$ .

(iv) Gasoline RVP. For a test fuel with a volatility of 6.8 psi RVP,  $\sigma_{\max} = 0.3 \cdot 0.40 \text{ psi} = 0.12 \text{ psi}$ .

(v) Gasoline benzene. For a test fuel with 1 volume % benzene,  $\sigma_{\max} = 0.15 \cdot 0.18 \text{ volume \%} = 0.027 \text{ volume \%}$ .

(vi) Diesel aromatics. For a test fuel with 35 volume % aromatics,  $\sigma_{\max} = 0.3 \cdot 3.3 \text{ volume \%} = 0.99 \text{ volume \%}$ .

(c) Alternative VCSB procedures for measuring absolute fuel parameters (sulfur) must meet accuracy criteria as described in this paragraph (c). Take the following steps to qualify the measurement procedure:

(1) Buy a commercially available gravimetric sulfur standard to serve as reference samples as described in this paragraph (c). The fuel samples must have known sulfur content within the ranges specified in paragraph (c)(3) of this section; the known sulfur content is the accepted reference value (ARV) for the fuel sample.

(2) Measure the sulfur content of the fuel sample at your laboratory at least ten times, without interruption. Use good laboratory practice to compensate for any known chemical interferences; however, you must apply that same compensation for all tests to measure sulfur content in a test fuel. Calculate the arithmetic average of all the measured values, including any compensation.

(3) The measurement procedure meets the accuracy requirement if the average of the measured values differs from the ARV by no more than the following specified values for each range of sulfur content:

<b>Fuel</b>	<b>Sulfur Content (ppm)</b>	<b>Maximum Allowable Difference Between Average Measured Value and ARV<sup>1</sup></b>
Gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline sulfur standard	1-10	0.70
	10-20	1.02
Butane subject to the butane sulfur standard	1-10	0.47
	10-20	0.94

ULSD	1-10	0.54
	10-20	0.54
ECA marine fuel	300-400	13.55
	900-1,000	13.55

<sup>1</sup> These accuracy criteria are calculated relative to the repeatability of the reference test method using the following equation:  $(0.75 \cdot 1.5 \cdot r) / 2.77$ , where r is the repeatability from §1090.1352(e)(4) for sulfur content representing the upper end of each range specified in this table. For example,  $r=1.733$  for gasoline with 10 ppm sulfur, and  $(0.75 \cdot 1.5 \cdot 1.733) / 2.77 = 0.70$ .

(d) Alternative VCSB procedures for measuring method-defined fuel parameters must meet accuracy criteria as follows:

(1) You may use the alternative procedure only if you meet the statistical criteria specified in Section 6.7 of ASTM D6708 (incorporated by reference in §1090.95) when comparing your measurements using the alternative procedure to measurements at a reference installation using the appropriate reference test method identified in §1090.1352(e)(1).

(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 described in Section 7 of ASTM D6708 (incorporated by reference in §1090.95). For all testing, apply the correlation equation to adjust measured values to be equivalent to measuring with the reference test method.

(3) If an alternative VCSB procedure states that it meets the accuracy criteria of ASTM D6708, that finding applies for all test facilities using that procedure.

(e) Alternative non-VCSB procedures for measuring absolute fuel parameters (sulfur) must meet accuracy criteria as follows:

(1) Demonstrate whether the procedure meets statistical criteria and whether it needs a correlation equation as described 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 described in paragraph (c) of this section.

(3) Send us a written request to use the alternative procedure. In your request, fully describe the procedure to show how it functions for achieving accurate measurements and include detailed information related to your assessment under paragraph (d)(1) and (2) of this section. We will approve your request if we agree that you meet the requirements of this paragraph (e).

(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 described in paragraphs (d)(1) and (2) of this section. Apply the correlation equation for all testing with the alternative procedure.

(2) Test with a range of fuels that are typical of those you will analyze at your laboratory. Use consensus named fuels or locally-named reference materials. Consensus named fuels are homogeneous fuel quantities sent around to different laboratories for analysis, which results in a “consensus name” representing the average value of the parameter for all participating laboratories. Locally named reference materials are fuel samples analyzed using the reference test method, either at your laboratory or at a reference installation, to establish an estimated value for the fuel parameter; locally named reference materials usually come from the fuel you produce.

(3) You may qualify your procedure as meeting the variability requirements of paragraph (f)(1) of this section only for a narrower, defined range of fuels. If this is the case, identify the appropriate range of fuels in your request for approval and describe how you will screen fuel samples accordingly.

(4) Qualify the precision of the alternative test method by comparing results to testing with the reference test method based on “between methods reproducibility,” Rcm, as described in ASTM D6708. The Rcm must be at or below 70 percent of the reproducibility of the reference test method from §1090.1352(e)(4).

(5) Perform testing at your laboratory as described 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 described in §1090.1352(e)(4) of this section.

(6) Fully describe the procedure to show how it functions for achieving accurate measurements. Describe the technology, test instruments, and testing method so a competent person lacking experience with the procedure and test instruments would be able to replicate the results.

(7) Engage an independent auditor to review and verify your information under this paragraph (f) as follows:

(i) The auditor is independent if it does not include any of your employees, and you and the auditor have no shared business interest.

(ii) The auditor must demonstrate work experience and a good working knowledge of the voluntary consensus standards referenced in this paragraph (f) and in §1090.1356, with training and expertise corresponding to a bachelor’s degree in chemical engineering, or combined bachelor’s degrees in chemistry and statistics. An auditor suspended or debarred under 40 CFR part 32 or 48 CFR part 9, subpart 9.4, is not qualified to perform reviews under this paragraph (f).

(iii) The auditor must send you a report describing its inspection of your facilities and its review of the information supporting your request to use the alternative procedure. The report must describe how the auditor performed the review, identify any errors or discrepancies, and state whether the information supports a conclusion that the alternative procedure should be approved.

(iv) The auditor must keep records related to the review for at least five years after sending you the report, and give us those records if we ask for them.

(8) Send us a written request to use the alternative procedure. Include the information described in this paragraph (f) and any additional information we need to evaluate your request. We will approve your request for a specific laboratory if we agree that you meet the requirements of this paragraph (f). We will make best efforts to notify you of our decision within 90 days. We will describe our reasons if we disapprove your request.

(g) We may find from testing that an alternative procedure qualifying under this section in fact does not meet performance specifications or is otherwise not consistent with good laboratory practices. If this happens, we will notify you as described in §1090.1303.

(h) Keep fuel samples from any qualification testing under this section for at least 90 days after you have taken all steps to qualify an alternative test procedure under this section. This applies for testing at your laboratory and at any reference installation you use for demonstrating the accuracy of an alternative procedure.

#### **§1090.1356 Qualifying criteria for reference installations.**

A reference installation refers to a particular test instrument used to evaluate the accuracy of alternative test methods for method-defined parameters, by comparing measured values to companion tests using one of the designated procedures in §1090.1352(c). This evaluation may result in an equation to correlate results between the two procedures. Paragraphs (a) and (b) of this section describe two alternative methods to qualify a laboratory and instruments as a reference installation for a given method-defined parameter. Once a facility qualifies as a reference installation, that qualification applies indefinitely, consistent with good laboratory practices.

(a) You may qualify a reference installation by participating in a crosscheck program that relies on Section 6.2.2.1 and Note 7 of ASTM D6299 (incorporated by reference in §1090.95) to establish the ARV of the crosscheck fuel. To qualify, you must perform testing to cover a representative range of values for each fuel parameter.

(b) You may qualify a reference installation based on the following measurement protocol:

(1) Use the precision testing procedure described in §1090.1354(b) to show that your standard deviation for tests using the reference test method is at or below 0.3 times the reproducibility for a particular fuel parameter.

(2) You must correlate your test results and the results of a monthly crosscheck program for a given fuel parameter as follows:

(i) If there are multiple fuels available from the crosscheck program, select the fuel that is closest to the standard. If there is no standard for a given fuel parameter, select the fuel with values for the fuel parameter that are most representative of typical values for fuels you test.

(ii) Measure the fuel parameter for the crosscheck fuel at your facility using the appropriate reference test method. Calculate a mean value that includes all your repeat measurements.

(iii) Determine the mean value from the crosscheck program and calculate the difference between this value and the mean value from your testing. Express this difference as a number of standard deviations relative to the data set from the crosscheck program.

(iv) The calculated monthly difference between the mean values from paragraph (b)(2)(ii) of this section for five consecutive months must fall within the central 50 percent of the distribution of data at least three times. The central 50 percent of the distribution corresponds to 0.68 standard deviations.

(v) Calculate the mean value of the differences from paragraph (b)(2)(ii) of this section for all five months. This mean value must fall within the central 50 percent of the distribution of data from the crosscheck program. For example, if the difference was 0.5 standard deviations for two months, 0.6 for one month, and 0.7 for two months, the mean value of the difference is 0.6 standards deviations, and the reference installation meets the requirements of this paragraph (b)(2)(iv).

(3) You must demonstrate that the reference installation is in statistical quality control for at least five months with the designated procedure as specified in ASTM D6299 (incorporated by reference in §1090.95). If at any point the reference installation is not in statistical quality control, you must make any necessary changes and restart testing toward meeting the requirement to achieve statistical quality control for at least five months, except as follows:

(i) Do not consider measurements you perform as part of regular maintenance or recalibration for evaluating statistical quality control.

(ii) If you find that the reference installation is not in statistical quality control during an initial five-month period and you are able to identify the problem and make the necessary changes to again achieve statistical quality control before the end of the five-month demonstration period, you may consider the reference installation to meet the requirement to be in statistical quality control for at least five months.

**§1090.1358 Quality control procedures.**

This section describes ongoing quality testing requirements that apply for both reference and alternative measurement procedures as part of the Performance-based Analytical Test Method described in §1090.1352.

(a) General provisions. You must perform testing periodically to show that your test facility meets specified precision and accuracy criteria.

(1) The testing requirement applies for the designated procedures in §1090.1352 and for alternate procedures that are qualified or approved under §1090.1354. The testing requirements apply separately for each test instrument at each test facility.

(2) If you fail to do specified testing, your test facility is not qualified for measuring fuel parameters to demonstrate compliance with the standards and other specifications of this part until you perform this testing. Similarly, if your test facility fails to meet the specified criteria, it is not qualified for measuring fuel parameters to demonstrate compliance with the standards and other specifications of this part until you make the necessary changes to your test facility and perform testing to show that the test facility again meets the specified criteria.

(3) If you do major maintenance such as replacing or overhauling an instrument's major components, you must show that you meet the precision and accuracy criteria before you start testing again.

(4) Keep records to document your testing under this section for five years.

(b) Precision demonstration. Show that you meet precision criteria as follows:

(1) Meeting the precision criteria qualifies your test facility for performing up to 20 production tests or seven days, whichever is less.

(2) Perform precision testing using the procedures of ASTM D6299 (incorporated by reference in §1090.95). Transition from one batch of quality control material to the next as described in Section 8.7 and Annex A1 of ASTM D6299. If you opt to use the Q-procedure, validate the first run on the new QC batch by either an overlap in-control result of the old batch, or by a single execution of an accompanying standard reference material. The new QC material result would be considered validated if the single result of the standard reference material is within the established site precision ( $R'$ ) of the ARV of the standard reference material, as determined by ASTM D6792.

(3) Use I charts and MR charts as described in Section 8.7 and Annex A1 of ASTM D6299 to show that the long-term standard deviation for the test facility meets the precision criteria specified in §1090.1354(b)(5).

(c) Accuracy demonstration. Show that you meet accuracy criteria as follows:

(1) Meeting the accuracy criteria qualifies your test facility for 130 days.

(2) Except as specified in paragraph (c)(3) of this section, test every instrument using a check standard as follows:

(i) Select a fuel sample with an ARV that is at or slightly below the standard that applies. If there are both average and batch standards, use the average standard. If there is no standard, select a fuel sample representing fuel that is typical for your testing.

(ii) For measuring method-defined fuel parameters, use a commercially available check standard as defined in ASTM D6299. The check standard must be an ordinary fuel with fuel parameters close to either the regulatory standard or the average level for your testing.

(iii) For method-defined VCSB procedures designated in §1090.1352(e), determine the ARV of the check standard as described in ASTM D6299 (incorporated by reference in §1090.95) based on testing with the designated procedure.

(iv) For alternative VCSB and non-VCSB procedures qualified under §1090.1354, use the ARV of the check standard established using the reference test method identified in §1090.1352(e)(1) as part of a crosscheck program according to ASTM D6299. However, if the crosscheck program does not provide an accepted reference value, calculate the average result from at least 16 repeat in-statistical-control tests on a production fuel sample using the reference test method from §1090.1352(e)(1) to establish an ARV for your check standard.

(v) Testing for method-defined VCSB procedures under this paragraph (c) are intended to align with participation in a crosscheck program such as the Proficiency Testing Programs sponsored by ASTM International (see [www.astm.org/STATQA/](http://www.astm.org/STATQA/)).

(3) This paragraph (c)(3) applies for method-defined non-VCSB alternative procedures with high sensitivity to sample-specific effects. Procedures have high sensitivity if the closeness sum of squares (CSS) statistic exceeds the 95th percentile value, as described in Section 6.7.1 of ASTM D6708 (incorporated by reference in §1090.95). Create a check standard from production fuel representing the fuel you will routinely analyze. Determine the ARV of your check standard according to the protocol in ASTM D6299 (incorporated by reference in §1090.95) at a reference installation as described in §1090.1356. You must send us a fuel sample from every 20th batch of gasoline or diesel fuel, and identify the procedures and corresponding test results from your testing. We may return one of your samples to you for further testing; if we do this, you must repeat your measurement and report your results within 180 days of receiving the fuel sample.

(4) You meet accuracy requirements under this section if your measurement of the check standard is less than the following value:

$$x = 0.75 \cdot R + \sqrt{1 + \frac{1}{L}}$$

Where,

R = the reproducibility of the reference test method as described in §1090.1352(e)(4).

L = the total number of test results used to determine the ARV of a consensus-named fuel. For testing locally named fuels, use  $L = \infty$ .

## **GASOLINE DEPOSIT CONTROL TESTING**

### **§1090.1375 Gasoline deposit control test procedures.**

This section specifies how gasoline detergent additive manufacturers demonstrate compliance with the deposit control standard specified in §1090.340.

(a) Perform testing as described in paragraph (b) of this section to identify a Lowest Additive Concentration for your detergent additive. You may alternatively perform testing as described in paragraph (c) of this section for gasoline sold in California.

(b) Perform testing to determine the Lowest Additive Concentration for your detergent additive using the procedures specified in ASTM D6201 (incorporated by reference at §1090.95), as follows:

(1) Use a base fuel that conforms to the specifications for gasoline-alcohol blends in ASTM D4814 (incorporated by reference in §1090.95). Blendstocks used to formulate the test fuel must be derived from conversion units downstream of distillation, with all processes representing normal refinery operations. Blendstocks may not come from chemical grade streams. You may add butane and pentane to adjust vapor pressure. The base fuel should include any nondetergent additives typical of commercially available fuel if they may positively or negatively affect deposit formation. In addition, the base fuel must have—

(i) 8.0–10.0 volume percent denatured fuel ethanol that meets the requirements of §80.1610 and conforms to the specifications of ASTM D4806 (incorporated by reference at §1090.95).

[NOTE TO READER: EPA is requesting input from stakeholders on whether to make this change (to 8.0-10.0 vol % to align with anticipated change to Top Tier requirements (from current 9-10 vol%) or to align this specification with EPA vehicle certification test fuel specifications in 40 CFR 1065.710 (9.6-10 vol%).]

(ii) At least 8.0 volume percent olefins.

(iii) At least 15 volume percent aromatics.

(iv) No more than 80 ppm sulfur.

(v) T90 distillation temperature at or above 143 °C (290 °F).

(vi) No detergent-active substance. You may use a base fuel with typical nondetergent additives, such as antioxidants, corrosion inhibitors, and metal deactivators.

(2) Perform testing with the base fuel to establish that the test engine accumulates at least an average of 500 mg of deposits on each intake valve during the 100-hour test. If the test engine fails to accumulate enough deposits, make any necessary adjustments and repeat the test. This demonstration is valid for any further detergent testing with the same base fuel.

(3) Repeat the test on the same engine with a specific concentration of detergent additive added to the base fuel. If the test meets the standard specified in §1090.340, the tested detergent concentration is the Lowest Additive Concentration for the detergent additive.

(c) You may use an updated version of ASTM D6201 if we approve it in advance. We will approve your request if we determine that the updated method is equivalent to or better than the earlier version for evaluating detergent performance.

(d) You may perform testing to certify your detergent additive using the procedures specified by California ARB at 13 CCR section 2257 (incorporated by reference at §1090.95). Our approval for a detergent additive tested under this paragraph (b)(1) applies only for fuel that will be sold in California as reformulated gasoline under California ARB regulations, either by adding the detergent additive in California, or by selling it to someone who will sell the fuel to ultimate consumers in California.

## **Subpart N—Survey Provisions**

### **§1090.1400 National fuels survey program participation.**

(a) Any party that manufactures, introduces into commerce, sells, or offers for sale gasoline, BOB, blendstock blended with PCG, oxygenate, gasoline fuel additives, diesel, diesel fuel additives, heating oil, ECA marine fuel, or ethanol denaturant may have an independent surveyor conduct a statistically valid program of compliance surveys pursuant to a survey program plan that has been approved by EPA, in accordance with the requirements of this subpart.

(b) Gasoline refiners and importers that elect to account for the addition of oxygenates added downstream pursuant to §1090.XXX must participate in the national fuel survey program specified in this subpart.

(c) Parties required to participate in an E15 survey as required in §1090.1435 must participate in the national fuels survey specified in this subpart or a survey approved by EPA under §1090.XXX.

(d) Other parties listed in paragraph (a) of this section may participate in the national fuel survey program as an element to establishing an affirmative defense against violations of requirements and provisions under this part as described in subpart S of this part.

### **§1090.1405 National fuels survey program requirements.**

The survey program must be:

(a) Planned and conducted by an independent surveyor that meets the requirements described in §1090.1410.

(b) Conducted at a representative sample of gasoline and diesel retail outlets in the United States as determined by the methodology described in §1090.XXX.

### **§1090.1410 Independent surveyor requirements.**

The independent surveyor conducting the survey program described in §1090.1405 shall:

(a) Submit to EPA for approval each calendar year a proposed survey program plan in accordance with the requirements of §1090.1415.

(b)(1) Obtain samples representative of the gasoline and diesel fuels offered for sale separately from all gasoline and diesel retail stations in accordance with the survey program plan approved by EPA, or immediately notify EPA of any refusal of a retail station to allow samples to be taken.

(2) Obtain a number of samples representative of the number of gasoline retail stations offering E15.

(3) Samples of gasoline produced at blender pump-refineries shall be collected using “method 1” specified in NIST Handbook 158 (incorporated by reference, see §1090.XXX). All other samples of gasoline and diesel fuels shall be collected using methods described in §1090.XXX.

(4) Samples collected shall be shipped the same day the samples are collected via ground service to an EPA-approved laboratory.

(c) Test, or arrange to be tested, as follows:

(1) All gasoline samples must be analyzed for oxygenate content, sulfur content, and benzene content. Gasoline samples collected from June 1 through September 15 must also be analyzed for RVP.

(2) A subset of gasoline samples, as determined by §1090.XXX, shall also be analyzed for aromatics content, olefins content, and distillation characteristics (i.e., T50 and T90).

(3) All diesel samples must be analyzed for sulfur content.

(4) All samples shall be tested by an EPA-approved laboratory using test methods described in subpart M of this part.

(5) All analyses shall be completed by the EPA-approved laboratory within 10 days after receipt of the sample.

(d) Verify E15 labeling requirements at gasoline retail stations that offer for sale E15.

(e) Notify EPA, the retail station, and the branded refiner (if applicable) within 24 hours after the EPA-approved laboratory has completed analysis when any of the following occur:

(1) A test result for a gasoline sample yields a sulfur content result that exceeds 95 ppm.

(2) A test result for a gasoline sample yields a RVP result that exceeds the applicable geographic and seasonal RVP standard in §1090.XXX or any SIP approved or promulgated under sections 110 or 172 of the Clean Air Act.

(3) A test result for a diesel sample yields a sulfur content result that exceeds 17 ppm.

(4) A test result for a gasoline sample labeled as “E15” contains more than 15 volume percent ethanol content.

(5) A test result for a gasoline sample contains more than 10 volume percent ethanol and up to 15 volume ethanol and was not labeled in accordance with the E15 labeling requirements as described in §1090.XXX.

(f) Provide to EPA quarterly and annual summary survey reports that include the information specified in §1090.XXX.

(g) Maintain all records relating to the surveys conducted under this section as described in §1090.XXX.

(h) Permit any representative of the EPA to monitor at any time the conducting of the survey, including sample collection, transportation, storage, and analysis.

#### **§1090.1415 Survey plan design requirements.**

The survey program plan described in §1090.1405, at a minimum, must include the following:

(a) Number of surveys. The survey program plan shall include four surveys each calendar year, which must occur during the following time periods:

- (1) One survey during the period of January 1 through March 31.
- (2) One survey during the period of April 1 through June 30.
- (3) One survey during the period of July 1 through September 30.
- (4) One survey during the period of October 1 through December 31.

[NOTE TO READER: EPA is considering whether to make this a “seasonal” survey (i.e., a survey focused on determining fuel parameters for “winter” and “summer”). There are two options that we are considering at this time. First, is to keep the compliance year. This would result in a survey period of January 1 – May 31, June 1 – September 15, and September 16 – December 31. A variation of this option is to keep four survey periods but make them unequal as follows: January 1 – March 31, April 1 – June 1, June 1 – September 15, and September 16 – December 31. The second approach is to treat the “winter” season as contiguous. For example, the survey periods would be September 16, 2020 through May 31, 2021 for winter and June 1, 2021 through September 15, 2021 for summer. This second approach would result in a significant change in the structure of the program.]

(b) Sampling areas. The national fuels survey program plan must include sampling in all sampling strata, as defined in §1090.XXX, during each survey. These sampling strata must be further divided into discrete sampling areas as defined in §1090.XXX. Each survey must include sampling in at least 40 sampling areas in each stratum that are randomly selected.

(c) No advance notice of surveys. The survey plan must include procedures to keep the identification of the sampling areas that are included in any survey plan confidential from any regulated party prior to the beginning of a survey in an area. However, this information shall not be kept confidential from EPA.

(d) Gasoline and diesel retail station selection.

(1) Gasoline and diesel retail stations to be sampled in a sampling area must be selected from among all gasoline retail stations in the United States as defined in §1090.XXX that sell gasoline with the probability of selection proportionate to the volume of gasoline sold at the retail station. The sample of retail stations must also include gasoline retail stations with different brand names as well as those gasoline retail stations that are unbranded.

(2) In the case of any gasoline or diesel retail station from which a sample of gasoline was collected during a survey was reported to EPA pursuant to §1090.1410(e), that gasoline or diesel retail station must be included in the subsequent survey.

(3) At least one sample of a product dispensed as E15 must be collected at each gasoline retail station when E15 is present, and separate samples must be taken that represent the gasoline contained in each storage tank at the gasoline retail station unless collection of separate samples is not practicable.

(4) At least one sample of a product dispensed as diesel must be collected at each diesel retail station when diesel is present. Samples of diesel may be collected at retail stations that sell gasoline.

(e) Number of samples.

(1) The number of retail stations to be sampled must be independently calculated for the total number of gasoline retail stations and the total number of diesel retail stations. The same retail station may represent both a gasoline retail station and a diesel retail station for purposes of determining the number of samples.

(2) The minimum number of samples to be included in the survey plan for each calendar year must be calculated as follows:

$$n = \left\{ \frac{(Z_{\alpha} + Z_{\beta})^2}{4 \cdot (\arcsin(\sqrt{\varphi_1}) - \arcsin(\sqrt{\varphi_0}))^2} \right\} \cdot F_a \cdot F_b \cdot Su_n \cdot St_n$$

Where:

n = Minimum number of samples in a year-long survey series. However, in no case shall n be smaller than 2,000 for the number of diesel samples or 5,000 for the number of gasoline samples.

$Z_{\alpha}$  = Upper percentile point from the normal distribution to achieve a one-tailed 95% confidence level (5%  $\alpha$ -level). Thus,  $Z_{\alpha}$  equals 1.645.

$Z_{\beta}$  = Upper percentile point to achieve 95% power. Thus,  $Z_{\beta}$  equals 1.645.

$\phi_1$  = The maximum proportion of non-compliant stations for a region to be deemed compliant. In this test, the parameter needs to be 5% or greater, i.e., 5% or more of the stations, within a stratum such that the region is considered non-compliant. For this survey,  $\phi_1$  will be 5%.

$\phi_0$  = The underlying proportion of non-compliant stations in a sample. For the first survey plan,  $\phi_0$  will be 2.3%. For subsequent survey plans,  $\phi_0$  will be the average of the proportion of stations found to be non-compliant over the previous four surveys.

$F_a$  = Adjustment factor for the number of extra samples required to compensate for collected samples that cannot be included in the survey, based on the number of additional samples required during the previous four surveys. However, in no case shall the value of  $F_a$  be smaller than 1.1.

$F_b$  = Adjustment factor for the number of samples required to resample each retail station with test results reported to the EPA pursuant to §1090.1410(e), based on the rate of resampling required during the previous four surveys. However, in no case shall the value of  $F_b$  be smaller than 1.1.

$Su_n$  = Number of surveys per year. For purposes of this survey program,  $Su_n$  equals 4.

$St_n$  = Number of sampling strata. For purposes of this survey program,  $St_n$  equals 3.

(3) The number of gasoline samples that also need to be tested for aromatics, olefins, and distillation parameters pursuant to §1090.1410(c)(2) must be calculated using the methodology specified in paragraph (e)(2) of this section without the  $F_a$ ,  $F_b$ , and  $Su_n$  parameters.

[NOTE TO READER: In general, EPA is considering a sample size equation that attempts to estimate fuel parameters nationwide. We are still in the process of determining how best to statistically determine this value. This value is also dependent on how the survey periods are defined.]

(4) The number of samples determined pursuant to paragraphs (e)(2) and (e)(3) of this section must be distributed approximately equally for the four surveys conducted during the calendar year.

(f) Laboratory designation. Any laboratory that the independent surveyor intends to use to test samples collected as part of the survey program described in this section must be approved annually as part of the survey plan. The independent surveyor must include the following information regarding any laboratory it intends to use to test samples:

(1) The name of the laboratory.

- (2) The address of the laboratory.
- (3) The test methods for each fuel parameter measured at the laboratory.
- (4) Proof that the laboratory has registered as an independent laboratory pursuant to §1090.XXX.
- (5) The EPA issued company identification and facility identification numbers for the laboratory.

**§1090.1420 Survey plan approval process.**

- (a) A survey program plan that complies with the requirements of §1090.1415 must be submitted to EPA no later than November 15 of the year preceding the calendar year in which the survey will be conducted.
- (b) The survey program plan must be signed by a responsible officer of the independent surveyor conducting the survey program.
- (c) The survey program plan must be sent to the attention of “Survey Plan to Meet Fuels Survey Requirements” to the address in §1090.10.
- (d) EPA will send a letter to the party submitting the survey program plan that indicates whether EPA approves or disapproves the survey plan.
- (e) The approving official for a survey plan under this section is the Director of the Compliance Division, Office of Transportation and Air Quality.

**§1090.1425 Independent surveyor contract.**

- (a) No later than December 15 of the year preceding the year in which the survey will be conducted, the contract with the independent surveyor must be in effect, and an amount of money necessary to carry out the entire survey plan shall be paid to the independent surveyor or placed into an escrow account with instructions to the escrow agent to pay the money to the independent surveyor during the course of the survey plan.
- (b) No later than December 31 of the year preceding the year in which the survey will be conducted, EPA must receive a copy of the contract with the independent surveyor and proof that the money necessary to carry out the survey plan has either been paid to the independent surveyor or placed into an escrow account; if placed into an escrow account, a copy of the escrow agreement must be sent to the official designated in §1090.1420(e).

**§1090.1430 Consequences of failure to fulfill survey requirements.**

- (a) No person shall fail to fulfill or cause to be fulfilled any of the requirements of this section and is a prohibited act under Clean Air Act section 211(c) and §1090.XXX.

(b) EPA may revoke its approval of a survey plan under this subpart for cause, including, but not limited to, an EPA determination that the approved survey plan has proved to be inadequate in practice.

(c) EPA may void ab initio its approval of a survey plan if EPA's approval was based on false information, misleading information, or incomplete information, or if there was a failure to fulfill, or cause to be fulfilled, any of the requirements of the survey plan.

**§1090.1435 Additional requirements for E15 misfueling mitigation surveying.**

(a) E15 misfueling mitigation survey requirement.

(1) Any gasoline refiner, gasoline importer, oxygenate blender, oxygenate producer, or oxygenate importer who manufactures, introduces into commerce, sells or offers for sale E15, gasoline, blendstock for oxygenate blending, denatured fuel ethanol, or gasoline-ethanol blended fuel that is intended for use in or as E15 must comply with either survey program Option 1 as described in paragraph (b) of this section or Option 2 as described in paragraph (c) of this section.

(2) In the case of oxygenate producers and oxygenate importers that produce or import denatured fuel ethanol, the denatured fuel ethanol that is produced or imported shall be deemed as intended for use in E15 unless an oxygenate producer or importer demonstrates that it was not intended for such use.

(b) Survey Option 1. To comply with the E15 misfueling mitigation survey requirement specified in paragraph (a) of this section, any gasoline refiner, gasoline importer, ethanol blender, ethanol producer, or ethanol importer who manufactures, introduces into commerce, sells or offers for sale E15, gasoline, blendstock for oxygenate blending, ethanol, or gasoline-ethanol blended fuel intended for use in or as E15 must properly conduct a program of compliance surveys in accordance with a survey program plan which has been approved by EPA in all areas which may be reasonably expected to be supplied with their gasoline, blendstock for oxygenate blending, ethanol, or gasoline-ethanol blended fuel if these may be used to manufacture E15 or as E15 at any time during the year. Such approval must be based upon the survey program plan meeting the following criteria:

(1) The survey program must consist of at least quarterly surveys that occur during the following time periods in every year during which the gasoline refiner, gasoline importer, ethanol blender, ethanol producer, or ethanol importer introduces E15 into commerce:

(i) One survey during the period January 1 through March 31.

(ii) One survey during the period April 1 through June 30.

(iii) One survey during the period July 1 through September 30.

(iv) One survey during the period October 1 through December 31.

(2) The survey program plan must meet all of the requirements of this subpart, except for §§1090.1400, 1090.1405(b), 1090.1410(c)(2) and (c)(3), and 1090.1415(b), (d)(1), (d)(2), (d)(4), and (e). In lieu of meeting the exempted sessions specified in this paragraph, any survey program plan submitted to EPA to meet this requirement must specify the sampling strata, clusters, and area(s) to be surveyed, and the number of samples to be included in the survey.

(c) Survey Option 2. To comply with the E15 misfueling mitigation survey requirement specified in paragraph (a) of this section, any gasoline refiner, gasoline importer, oxygenate blender, oxygenate producer, or oxygenate importer who manufactures, introduces into commerce, sells or offers for sale E15, gasoline, blendstock for oxygenate blending, denatured fuel ethanol, or gasoline-ethanol blended fuel intended for use in or as E15 must participate in the survey program described in §1090.1405.

### **§1090.1440 National sampling oversight program requirements.**

(a) National sampling oversight program participation.

(1) Any gasoline refiner or importer that elects to account for downstream oxygenate accounting pursuant to §1090.710 must participate in a national sampling oversight program in this section.

(2) Other gasoline refiners and importers may elect to participate in the national sampling oversight program under this section as part of an affirmative defense to a violation pursuant to subpart S of this part.

(3) Gasoline refiners and importers that elect to participate in the national sampling oversight program must test or arrange to be tested samples collected from their refineries and import facilities as specified in paragraph (c)(2) of this section and report results to the independent surveyor within ten (10) business days of the date the sample was collected.

(b) National sampling oversight program requirements. The national oversight sampling program must be:

(1) Planned and conducted by an independent surveyor that meets the independence requirements of §1090.XXX and the requirements of paragraph (c) of this section.

(2) Conducted at each refinery and import facility from all participating gasoline refiners and importers.

(c) Independent surveyor requirements. The independent surveyor conducting the national sampling oversight program described must:

(1) Submit to EPA for approval each calendar year a proposed national sampling oversight program plan in accordance with the requirements of §1090.XXX.

(2)(i) Obtain at least one sample representing summer gasoline and one sample representing winter gasoline for each gasoline refinery and import facility that participates in the national sampling oversight program.

(ii) Observe the refiner or importer collect at least one sample representing summer gasoline and one sample representing winter gasoline for each gasoline refinery and import facility that participates in the national sampling oversight program. The independent surveyor must also obtain a portion of the sample collected by the refiner or importer and ship the sample as described in paragraph (c)(2)(v) of this section.

(iii) The independent surveyor must immediately notify EPA of any refusal of a refiner to allow samples to be taken. Refiners or importers participating in the national sampling oversight program that refuse to allow the independent surveyor to allow samples to be taken are no longer considered by EPA to participate in the national sampling oversight program and shall not account for downstream oxygenate accounting pursuant to §1090.710.

(iv) Samples shall be collected and retained by the independent surveyor as described in §1090.XXX.

(v) Samples collected must be shipped via ground service the same day they are collected to both an EPA-approved laboratory as established in an approved plan under this section and the EPA National Vehicle and Fuel Emissions Laboratory.

(3) Test, or arrange to be tested, samples collected pursuant to paragraph (b) of this section as follows:

(i) Winter gasoline samples shall be analyzed for oxygenate content, sulfur content, benzene content, distillation characteristics, aromatics, and olefins.

(ii) Summer gasoline samples must be analyzed for oxygenate content, sulfur content, benzene content, distillation characteristics, aromatics, olefins, and RVP.

(iii) All samples must be tested by an EPA-approved laboratory using test methods described in subpart M of this part.

(iv) All analyses must be completed by the EPA-approved laboratory within ten (10) days after receipt of the sample.

(4) Notify EPA and the gasoline refiner or importer (if applicable) within 24 hours after the EPA-approved laboratory has completed analysis when any of the following occur:

(i) A test result for a gasoline sample yields a sulfur content result that exceeds 80 ppm.

(ii) A test result for a gasoline sample yields a RVP result that exceeds the applicable geographic and seasonal RVP standard in §1090.XXX or any SIP approved or promulgated under sections 110 or 172 of the Clean Air Act.

(5) Make available test results to EPA and the gasoline refiner or importer test results for all analyses described in paragraph (c)(3) of this section within five (5) business days of completion of the analysis.

(6) Compare test results of samples obtained in paragraph (c)(2) of this section and test results obtained from the gasoline refiner or importer from the same samples as described in paragraph (a)(3) of this section and inform the EPA and the gasoline refiner or importer if the test result for any parameter tested pursuant to paragraph (c)(3) of this section tested by the gasoline refiner or importer is greater than the reproducibility of the applicable method specified in subpart M of this part.

(7) Provide to EPA quarterly and annual summary sampling oversight program reports that include the information specified in subpart J of this part.

(8) Maintain all records relating to the sampling oversight program conducted pursuant to paragraph (d) of this section as described in subpart L of this part.

(9) Submit contracts to EPA pursuant to §1090.1425.

(10) Permit any representative of the EPA to monitor at any time the conducting of the national sampling oversight program, including sample collection, transportation, storage, and analysis.

(d) National sampling oversight program plan requirements. The national sampling oversight program plan described in §1090.1405 must include, at a minimum, all of the following:

(1) Advance notice of sampling. The national sampling oversight program plan must include procedures on how to keep the identification of the refineries and import facilities included in any national sampling oversight program plan confidential with minimal advanced notification from any refiner or importer prior to collecting a sample. However, this information shall not be kept confidential from EPA.

(2) Gasoline refinery and import facility selection.

(i) Each refinery and import facility of participating gasoline refiners and imports must be sampled at least once during the summer season and once during the winter season. The plan must demonstrate how these refineries and import facilities will be randomly selected within the summer and winter seasons.

(ii) In addition to the summer and winter sample collected at each refinery or import facility, additional oversight samples required to ensure sampling oversight are required per paragraph (c) of this section. The plan shall identify how these samples were randomly distributed among participating refineries and import facilities.

(3) Number of samples.

(i) The number of refineries and import facilities to be sampled must be calculated for the total number of samples to be collected for the next compliance period as part of the national sampling oversight program plan.

(ii) The minimum number of samples to be included in the national sampling oversight plan for each calendar year must be calculated as follows:

$$n = R * F_a * F_b * Su_n$$

Where:

n = Minimum number of samples in a year.

R = The number of participating gasoline refineries and import 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 sampling oversight program (i.e., due to technical or logistical considerations), based on the number of additional samples required during the previous two surveys. However, in no case shall the value of F<sub>a</sub> be smaller than 1.1.

F<sub>b</sub> = Adjustment factor for the number of samples required to ensure oversight. F<sub>b</sub> shall be 1.25.

Su<sub>n</sub> = Number of surveys per year. For purposes of this survey program, Su<sub>n</sub> equals 2 (representing summer and winter gasoline).

(4) Laboratory designation. Any laboratory that the independent surveyor intends to use to test samples collected as part of the national sampling oversight program described in this subpart must be approved annually as part of the sampling oversight program plan. The independent surveyor must include the following information regarding any laboratory it intends to use to test samples:

(i) The name of the laboratory.

(ii) The address of the laboratory.

(iii) The test methods for each fuel parameter measured at the laboratory.

(iv) Reports demonstrating the laboratory's performance in a laboratory cross-check program for the most recent six (6) months prior to submission of the plan.

(5) Sampling procedure. The plan must include a detailed description of the sampling procedures used to collect samples at participating refineries and import facilities.

(6) Submission. Plans submitted under this section are subject to the requirements of §1090.1420.

## **Subpart O—Labeling Requirements**

### **§1090.1500 General labeling provisions.**

Any retailer or wholesale purchaser-consumer required to affix a label under this subpart must affix the label to the fuel dispenser as follows:

(a) Labels must be displayed prominently and conspicuously on the vertical surface of the pump on each side with gallonage and price meters and must be on the upper two-thirds of the pump, in a location where they are clearly visible to the public.

(b) Labels must be legible, and clearly readable to the public.

(c) An alternative label design to those specified in this subpart may be used if the design is submitted to EPA for approval prior to use and meets all of the following criteria:

(1) Is similar in substance and appearance to the EPA required label.

(2) Contains the same informational elements.

(3) Is submitted in the manner described in §1090.XXX.

### **§1090.1505 E15 labeling provisions.**

Any retailer or wholesale purchaser-consumer dispensing E15 must apply a label to the fuel dispenser as follows:

(a) Position the label to clearly identify which control the consumer will use to select E15. If the dispenser is set up to dispense E15 without the consumer taking action to select the fuel, position the label on a vertical surface in a prominent place, approximately at eye level.

(b) Figure 1 of this section shows the required content and formatting. Use black letters on an orange background for the lower portion and the diagonal “Attention” field, and use orange letters on a black background for the rest of the upper portion. Font size is shown in Figure 1. Set vertical position and line spacing as appropriate for each field. Dimensions are nominal values.

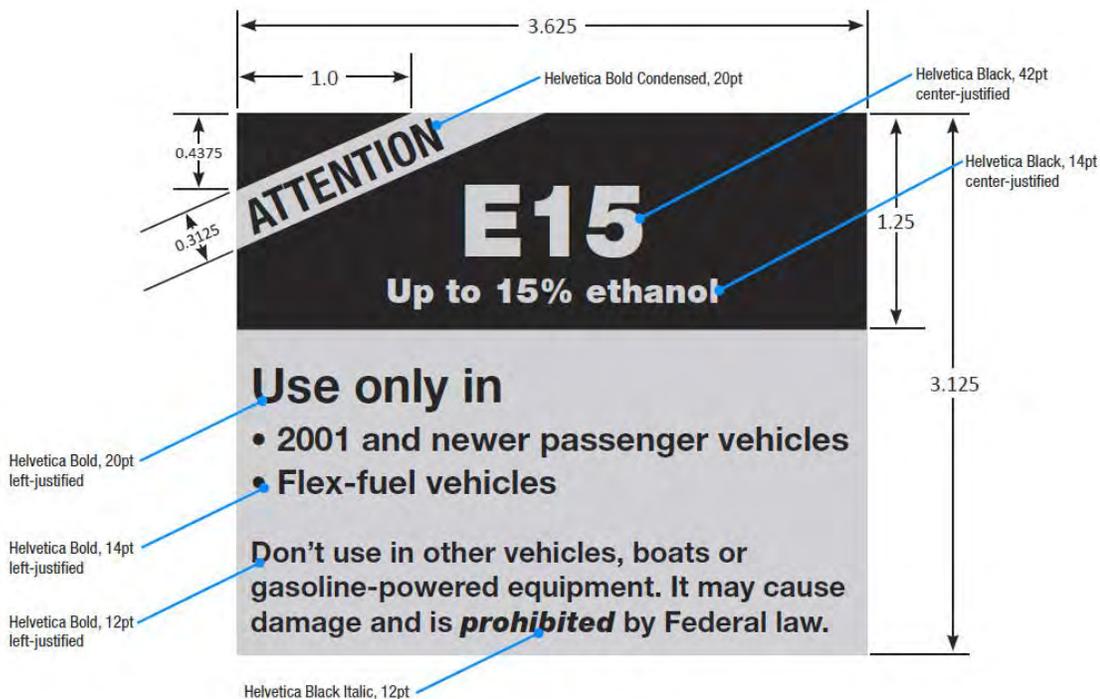


Figure 1 of §1090.1410—E15 Label

#### §1090.1510 Diesel sulfur labeling provisions.

Any retailer or wholesale purchaser-consumer dispensing diesel fuel must apply a label to the fuel dispenser as follows:

(a) The labels must be displayed on or in the immediate area of each pump stand, as applicable. The content of the label must be in block letters of no less than 24-point bold type, printed in a color contrasting with the background.

(1) Where heating oil is being dispensed along with diesel fuel for any kind of engine, vehicle, or equipment, apply the following label:

HEATING OIL

WARNING

Federal law prohibits use in highway vehicles or engines, or in nonroad, locomotive, or marine diesel engines.

Its use may damage these diesel engines.

(2) Where 500 ppm LM diesel fuel is being dispensed, apply the following label:

This document is a staff-level working draft, developed in preparation for EPA's Fuels Regulatory Streamlining Workshop.

**LOW SULFUR LOCOMOTIVE AND MARINE DIESEL FUEL (500 ppm Sulfur Maximum)****WARNING**

Federal law prohibits use in nonroad engines or in highway vehicles or engines.

(3) Where ECA marine fuel is being dispensed, apply the following label:

1,000 ppm SULFUR ECA MARINE FUEL (1,000 ppm Sulfur Maximum).

For use in Category 3 (C3) marine vessels only.

**WARNING**

Federal law prohibits use in any engine that is not installed in a C3 marine vessel; use of fuel oil with a sulfur content greater than 1,000 ppm in an ECA is prohibited except as allowed by 40 CFR part 1043.

## Subpart P—Hardship Provisions

### §1090.1600 Extreme unforeseen hardship circumstances.

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

(1) It is in the public interest to do so (e.g., distribution of the nonconforming gasoline is necessary to meet projected shortfalls that cannot otherwise be compensated for).

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

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

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

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

(b) Hardship applications under this section must be submitted in writing to EPA at §1090.XXX, and must contain a letter signed by the president or the chief operating officer or chief executive officer of the company, or their designee, stating that the information contained in the application is true to the best of their knowledge.

**Subpart Q—Reserved**

This document is a staff-level working draft, developed in preparation for EPA's Fuels Regulatory Streamlining Workshop.

## **Subpart R Importation and exportation of fuels and fuel products**

### **§1090.1700 General provisions for importers.**

(a) This subpart specifies certain provisions that apply to parties that import fuel or fuel products.

(b) As specified elsewhere throughout this part, importers are also subject to the same provisions as refiners. Those provisions are not repeated in this subpart.

(c) See 40 CFR part 80 for additional provisions that may apply for importers, especially with respect to renewable fuels.

### **§1090.1705 General provisions for exporters.**

Except as specified in this section, gasoline and diesel fuel produced, imported, distributed, or offered for sale in the United States is subject to the standards and requirements of this part.

(a) Fuels designated for export by a refiner or importer are not subject to the standards of this part, provided they are ultimately exported to a foreign country. However, such fuels must be designated at the production or importation facility.

(1) In order to exclude exported gasoline, refiners must retain records to demonstrate that the gasoline was exported. Such gasoline must be designated by the refiner, and the PTD must state that the gasoline is for “export only”; otherwise, the gasoline will be considered as intended for use in the U.S. and subject to the standards specified in subpart C. Gasoline intended for export must be segregated from all gasoline intended for use in the U.S. Distributing or dispensing such fuel for domestic use will be illegal.

(2) [Reserved].

(b) Fuels not designated for export may be exported, without restriction. However, they remain subject to the provisions of this part while in the United States. For example, fuel designated as ULSD must meet the applicable sulfur standards even if it will later be exported.

(c) See 40 CFR 80.1407 for provisions related to excluding volumes of exported fuel with respect to renewable volume obligations.

### **§1090.1720 Gasoline treated as a blendstock.**

This section addresses imported fuel that meets the definition of gasoline at the time of importation, but that will be blended with other fuels and/or fuel products to produce a new gasoline prior to title transfer from the importer to another party. Where an importer meets all requirements of this section for a given volume of gasoline, the importer may designate the fuel as “gasoline treated as blendstock” (GTAB).

(a) The GTAB must be included in all applicable designation, credit, and compliance calculations for gasoline for a refinery operated by the same party that is the importer. That party must meet all refiner standards and requirements.

(b) After importation, the title of the GTAB may not be transferred to another party until the GTAB has been blended to produce gasoline and all refiner standards and requirements have been met for the gasoline produced.

(c) The refinery 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 U.S., the import facility, or at a facility to which the GTAB is directly transported from the import facility.

(d) The GTAB must be completely segregated from any other gasoline, including any gasoline tank bottoms, prior to the point of blending and sampling and testing in the importer's refinery operation, except as follows:

(1) The GTAB may be placed into a storage tank that contains other GTAB imported by that importer.

(2) GTAB may be placed in a storage tank that contains previously certified gasoline (PCG) provided that the blending is performed in that storage tank, and one of the following criteria is met:

(i) The PCG has the same designations pursuant to §1090.XXX as the gasoline that will be produced using the GTAB, and the volume and properties of the gasoline produced using GTAB are determined in a manner that excludes the volume and properties of the PCG.

(ii) In the case of GTAB used to produce gasoline or BOB, the requirements for PCG in §1090.XXX are met.

(e)(1) The GTAB importer-refiner must complete all requirements for gasoline importers pursuant to §1090.105(a) for the GTAB at the time it is imported as if the GTAB were imported gasoline.

(2) The volume and properties of GTAB that has been combined with other GTAB may be determined by subtracting the volume and properties of the GTAB in the tank prior to receipt of the new product, from the volume and properties of the GTAB in the tank after receipt of the new product.

(3) Pursuant to paragraph (e)(1) of this section, any GTAB batch that is used in whole or in part to produce gasoline must be treated as imported gasoline for purposes of sampling and testing and reporting, except that the sampling and testing may be based on vessel composite samples without regard to whether the gasoline in individual ship compartments separately meets the gasoline downstream standards.

(4) Any reports to EPA for imported GTAB must identify the GTAB as such.

(5) Any GTAB that ultimately is not used to produce gasoline must be treated as newly imported gasoline, for which all requirements for gasoline importers in §1090.105(a) (e.g., sampling and testing, recordkeeping, and reporting) must be accomplished, and the gasoline must be included in the GTAB importer-refiner's importer compliance calculations for the averaging period pursuant to subpart H of this part that includes the date this sampling and testing occurs.

#### **§1090.1730 Diesel fuel treated as a blendstock.**

This section addresses imported fuel that meets the definition of diesel fuel at the time of importation, but that will be blended with other fuels and/or fuel products to produce a new diesel fuel prior to title transfer from the importer to another party. Where an importer meets all requirements of this section for a given volume of diesel fuel, the importer may designate the fuel as "diesel fuel treated as blendstock" (DTAB).

(a) The DTAB must meet all applicable standards of subpart D of this part and the importer-refiner must meet all applicable requirements for diesel refiners in §1090.105(b).

(b) After importation, the title of the DTAB may not be transferred to another party until the DTAB has been blended to produce diesel fuel and all refiner standards and requirements have been met for the diesel fuel produced.

(c) The refinery at which the DTAB is used to produce diesel fuel must be physically located at either the same terminal at which the DTAB first arrives in the U.S., the import facility, or at a facility to which the DTAB is directly transported from the import facility.

(d) The DTAB must be completely segregated from any other diesel fuel, including any diesel fuel tank bottoms, prior to the point of blending and sampling and testing in the importer party's refinery operation, except as follows

(1) The DTAB may be added to a diesel fuel blending tank where the diesel fuel tank bottom is not included as part of the batch volume for a prior batch.

(2) The DTAB may be placed into a storage tank that contains other DTAB imported by that importer.

(3) The DTAB may be discharged into a tank containing finished diesel fuel of the same category as the diesel fuel which will be produced using the DTAB (e.g., ULSD or ECA marine fuel) provided that the blending process is performed in that same tank.

(e) The importing party must exclude the volume of any previously designated diesel fuel when accounting for the volume of diesel fuel produced using DTAB. The diesel fuel tank bottom must be excluded for the batch of diesel fuel if the fuel in that tank bottom has been previously designated by a refiner or importer. This exclusion of previously designated diesel fuel must be accomplished using the following approach:

- (1) Determine the volume of any tank bottom that is previously designated diesel fuel before beginning to produce new diesel fuel from the DTAB.
- (2) Add the DTAB plus any blendstock to the storage tank, and completely mix the tank.
- (3) Determine the volume and sulfur content of the diesel fuel contained in the storage tank after blending is complete. Mathematically subtract the volume of the tank bottom to determine the volume of the DTAB plus blendstock added, and subsequently transferred to another facility.
- (4) As an alternative to paragraphs (e)(1) through (e)(3) of this section, where an importer has a blending tank that is used only to combine DTAB and blending components, and no previously designated diesel fuel is added to the tank, the importer party, in its capacity as a refiner, may account for the diesel fuel produced in such a blending tank by sampling and testing for the sulfur content of the batch after DTAB and blendstock are added and mixed, and reporting the volume of diesel fuel transferred from that tank to a different facility, up to the point where a new blend is produced by adding new DTAB and blendstock.
- (f) Any DTAB that ultimately is not used in the importer's refinery operation (e.g., a tank bottom of DTAB at the conclusion of the refinery operation), must be treated as newly imported diesel fuel, for which all required sampling and testing and recordkeeping must be accomplished.
- (g) The importer must retain records that reflect the importation, sampling and testing, and physical movement of any DTAB, and must make these records available to EPA on request.

## **Subpart S—Compliance and Enforcement Provisions**

### **§1090.1800 Prohibited acts.**

(a) No person shall violate any prohibited act in this part or fail to meet a requirement that applies to that person under this part.

(b) No person shall cause another person to commit an act in violation of this part.

### **§1090.1805 Evidence related to violations.**

(a) EPA may use results from any testing required by this part to determine whether a given fuel or fuel product 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 or fuel product 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. 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 or fuel product standards, and determinations of liability for any violation of this part, may be based on information from any source or location. Such information may include, but is not limited to, business records and commercial documents.

### **§1090.1810 Penalties.**

(a) Any person liable for a violation under this part is subject to civil penalties as specified in section 205 and 211 of the Clean Air Act (42 U.S.C. § 7524 and 7545) for every day of each such violation and the amount of economic benefit or savings resulting from each violation.

(b) Any person liable for the violation of an annual average standard under this part, or causing another person to violate an annual average standard under this part, is subject to a separate day of violation for each and every day in the averaging period. Any person liable under this part for a failure to fulfill any requirement for credit generation, transfer, use, banking, or deficit correction is subject to a separate day of violation for each and every day in the averaging period in which invalid credits are generated or used.

(c)(1) Any person liable under this part for a violation of a per-gallon standard, or of causing another party to violate a per-gallon standard, is subject to a separate day of violation for each and every day the non-complying fuel or fuel product remains any place in the distribution system.

(2) For the purposes of paragraph (c)(1) of this section, the length of time the fuel or fuel product that violates a per gallon standard remained in the distribution system is deemed to be

twenty-five (25) days, unless a person subject to liability or EPA demonstrates by reasonably specific showings, by direct or circumstantial evidence, that the non-complying fuel or fuel product remained in the distribution system for fewer than or more than twenty-five (25) days.

(d) Any person liable for failure to meet, or causing a failure to meet, any other provision of this part is liable for a separate day of violation for each and every day such provision remains unfulfilled.

(e) For any person that fails to meet separate parameter requirements under this part, these count as separate violations.

(g) Violation of any misfueling prohibition under this part counts as a separate violation for each day the noncompliant fuel or fuel product remains in the engine, vehicle, or equipment.

(h) The presumed values of fuel parameters in paragraphs (h)(1) through (3) of this section apply for cases in which anyone fails to perform required testing and must be reported, unless EPA, in its sole discretion, approves a different value in writing. EPA may consider any relevant information to determine whether a different value is appropriate.

(1) For gasoline: 970 ppm sulfur, 5 volume percent benzene, and 11 psi RVP.

(2) For diesel fuel: 1,000 ppm sulfur.

(3) For ECA marine fuel: 5,000 ppm sulfur.

#### **§1090.1815 Liability provisions.**

(a) Anyone who violates any requirement of this part is liable for the violation.

(b) Anyone who causes someone to commit a prohibited act under this subpart is liable for violating that prohibition.

(c) Any parent corporation is liable for any violation committed by any of its wholly-owned subsidiaries.

(d) Each partner to a joint venture, or each owner of a facility owned by two or more owners, is jointly and severally liable for any violation of this subpart that occurs at the joint venture facility or facility owned by the joint owners, or is committed by the joint venture operation or any of the joint owners of the facility.

(e) Any refiner, importer, distributor, reseller, carrier, retailer, wholesale purchaser-consumer, oxygenate producer, oxygenate importer, oxygenate blender, ethanol denaturant producer, ethanol denaturant importer, additive manufacturer, or additive blender that produced, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation or storage of fuel or fuel product that is in the storage tank containing

fuel or fuel product that is found to be in violation of a per-gallon standard is liable for the violation.

(f) In order for a carrier to be liable under paragraph (e) of this section, EPA must demonstrate, by reasonably specific showing by direct or circumstantial evidence, that the carrier caused the violation.

(g) If a refiner or importer's corporate, trade, or brand name is displayed at a facility where a violation occurs, the refiner or importer is liable for the violation. This also applies where the displayed corporate, trade, or brand name is from the refiner or importer's marketing subsidiary.

#### **§1090.1820 Affirmative defense provisions related to noncompliant fuel or fuel products.**

(a) Any person liable for a violation under §1090.1815(e) or (g) will not be deemed in violation if the person demonstrates all the following:

(1) The violation was not caused by the person or the person's employee or agent.

(2) In cases where product transfer document (PTD) requirements under this subpart apply, the PTDs account for the fuel found to be in violation and indicate that the violating product was in compliance with the applicable requirements while in that person's control.

(3) The person conducted a quality assurance sampling and testing program, as described in paragraph (d) of this section. 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. Retailers and wholesale purchaser-consumers are not required to conduct sampling and testing of fuel as part of their quality assurance programs.

(b) In the case of a violation found at a facility operating under the corporate, trade, or brand name of a refiner or importer, or a refiner's or importer's marketing subsidiary, the refiner or importer must show, in addition to the defense elements required in paragraph (a) of this section, that the violation was caused by any of the following:

(1) An act in violation of law (other than the Clean Air Act or this part), or an act of sabotage or vandalism.

(2) The action of any refiner, importer, retailer, distributor, reseller, oxygenate blender, carrier, retailer, or wholesale purchaser-consumer in violation of a contractual agreement between the branded refiner or importer and the person designed to prevent such action, and despite periodic sampling and testing by the branded refiner or importer to ensure compliance with such contractual obligation.

(3) The action of any carrier or other distributor not subject to a contract with the refiner or importer, but engaged for transportation of fuel or fuel products despite specifications or inspections of procedures and equipment that are reasonably calculated to prevent such action.

(c) Pursuant to paragraph (a) of this section, for any person to show that a violation was not caused by that person, or pursuant to paragraph (b) of this section to show that a violation was caused by any of the specified actions, the person must demonstrate by reasonably specific showings, by direct or circumstantial evidence, that the violation was caused or must have been caused by another person and that the person asserting the defense did not contribute to that other person's causation.

(d) To demonstrate an acceptable quality assurance and testing program pursuant to paragraph (a)(2) of this section, a person must present evidence of all the following:

(1) A periodic sampling and testing program adequately designed to ensure the fuel or fuel product the person sold, dispensed, supplied, stored, or transported meets the applicable per-gallon standard. A person may meet the periodic sampling and testing requirements required by this paragraph by participating in a survey program in effect at the time of the violation that meets the requirements described in subpart N of this part.

(2) On each occasion when fuel or fuel product is found to be not in compliance with the applicable per-gallon standard, the person does all of the following:

(i) Immediately ceases selling, offering for sale, dispensing, supplying, offering for supply, storing, or transporting the non-complying fuel or fuel product.

(ii) Promptly remedies the violation and the factors that caused the violation (e.g., by removing the non-complying product from the distribution system until the applicable standard is achieved and taking steps to prevent future violations of a similar nature from occurring).

(3) For any carrier that transports a fuel or fuel product in a tank truck, the quality assurance program required under paragraph (d)(1) of this section does not need to include periodic sampling and testing of gasoline in the tank truck, but in lieu of such tank truck sampling and testing, the carrier must demonstrate evidence of an oversight program for monitoring compliance with the requirements of this part relating to the transport or storage of gasoline by tank truck, such as appropriate guidance to drivers regarding compliance with the applicable per-gallon standards and PTD requirements, and the periodic review of records received in the ordinary course of business concerning gasoline quality and delivery.

## Subpart T—Attestation Engagement

### §1090.1900 General provisions.

(a) The following companies must arrange for attestation engagement by an independent auditor as specified in this subpart:

(1) Gasoline refiners and importers that produce or import gasoline subject to requirements in subpart C of this part.

(2) [Reserved].

(b) Independent auditors must:

(1) Meet the applicable requirements of §1090.2000.

(2) Not be suspended or debarred under 2 CFR part 1532 or 48 CFR part 9, subpart 9.4.

(c) Independent auditors performing an attest engagement must evaluate the specified documentation using the agreed-upon procedures described in this subpart. Unless specified otherwise, the reporting period for the engagement is the calendar year. The auditor must identify any instances where compared values do not agree, or where specified values are outside of what the regulation allows. If there is a discrepancy in a value that is needed for further calculations, the auditor must reconcile the discrepancy with the refiner or importer before continuing. The auditor must prepare a report to describe these findings and the corresponding procedures used for the engagement, and submit the report and underlying documentation electronically to us by June 1 of the year following the reporting period. The report must also include a statement from the refiner or importer acknowledging any identified discrepancies or noncompliance, and describing any appropriate corrective action. The auditor must keep the engagement reports and underlying documentation for five years after the end of the reporting period as described in subpart K of this part.

(d) Refiners and importers must send the documents and information specified in this subpart to the auditor.

(e) In addition to the definitions in §1090.50, the following definitions and additional provisions apply for this subpart:

(1) Representative sample means a selected subset of available data for the engagement, as described in §1090.1905.

(2) [Reserved].

### §1090.1905 Representative samples.

(a) If the specified procedures require evaluation of a representative sample from the overall population for a given data set, determine the number of results for evaluation using one of the following methods:

(1) Determine sample size using the following table:

Population (N)	Sample size
1-25	The smaller of N or 19
26-40	20
41-65	25
66 or more	29

(2) Determine sample size corresponding to a confidence level of 95 percent, an expected error rate of 0 percent, and a maximum tolerable error rate of 10 percent, using conventional statistical principles and methods.

(3) Determine sample size using an alternate method that is equivalent to or better than the methods specified in paragraph (a)(1) and (2) of this section with respect to strength of inference and freedom from bias. If you determine sample size under this paragraph (a)(3), describe and justify the alternate method in your final report.

(b) Select specific data points for evaluation over the course of the reporting period in a way that leads to a random sample that properly represents the overall population for the data set.

### §1090.1910 General procedures.

(a) EPA reports. Take the following steps for reviewing the reports required in subpart J of this part:

(1) If the report includes aggregated figures for multiple refineries, the refiner must send you refinery-specific volumes and the corresponding property information. Foot the refinery-specific totals and compare these totals with the aggregate values in the report. Apply the procedures in this section separately for each refinery.

(2) Identify the name of the commercial computer program used by the refiner or importer to track the data required by the regulations in this part, if any.

(b) Inventory reconciliation analysis. Review the refiner or importer's inventory reconciliation analysis by gasoline type and take the following steps:

(1) Foot the volume totals reflected in the analysis.

(2) Compare the beginning and ending inventories in the analysis to the actual inventory records. The analysis may exclude nonfinished gasoline petroleum products if the analysis shows no production of conventional gasoline.

(3) Identify the volume totals for each gasoline type.

(c) Listing of tenders and batches. For gasoline and BOB, review the refiner or importer's separate listing of tenders, showing for each tender the volume shipped and other information as needed to distinguish tenders. Also review the refiner or importer's separate listings of all batches reported to EPA. Foot to the volume totals in each listed entry for tenders and batches. Compare the total volumes in each listing to the production volume in the inventory reconciliation analysis from paragraph (b) of this section.

(d) Gasoline tenders and batches. Select representative tender and batch samples of gasoline from the listings described in paragraph (c) of this section and take the following steps for each selected tender or batch:

(1) Review product transfer documents associated with each tender and compare the volume on the tender listing to the volume on the product transfer documents. Note whether the PTDs evidencing the date and location of the tender and the compliance designations for the tender agree.

(2) Compare the volume shown on the batch listing to the corresponding batch volume reported to EPA.

(3) Review the refiner or importer's laboratory analysis and compare the listed properties to the corresponding figures from the batch report submitted to EPA.

(e) BOB tenders and batches. Select representative tender and batch samples of BOB from the listings described in paragraph (c) of this section and take the following steps for each selected tender or batch:

(1) Review product transfer documents associated with each tender and compare the volume of the specified oxygenate on the tender listing to the corresponding volume on the product transfer documents.

(2) Review batch information from the refiner or importer identifying the oxygenate compound and the oxygen volume needed for hand blending with the BOB consistent with §1090.XXX. Compare this adjusted volume to the corresponding batch volume reported to EPA.

(3) Review the refiner or importer's laboratory analysis of the hand-blended BOB. Compare the oxygenate type and oxygen amount from the laboratory analysis to the corresponding values determined in paragraph (e)(2) of this section. Also compare the properties identified in the laboratory analysis to the corresponding figures from the batch report submitted to EPA.

(f) Oxygenate blending. Review the refiner or importer's list of downstream oxygenate blenders and their blending facilities that are related to the refiner or importer's compliance calculations. You may omit the procedures in this paragraph if the refiner or importer declares in writing that its compliance demonstration does not involve any downstream oxygenate blending.

(1) Review the refiner or importer's listing of oxygenate batches added at each facility by downstream oxygenate blenders where those batches are included in its compliance calculations. Foot to the total volume of batches in the listing;

(2) The downstream oxygenate blender must give you a listing of the oxygenate volumes blended with conventional gasoline or sub-octane blendstock supplied by the refiner or importer. Foot to the total volume of oxygenate batches in the listing. Compare these volumes to the values from paragraph (f)(1) of this section.

(3) Take the following steps if the refiner or importer declares that the downstream oxygenate blender is a separate entity:

(i) Review the refiner or importer's contract with the downstream oxygenate blender and confirm that the contract was in force when the blending occurred.

(ii) Review the refiner or importer's records documenting physical inspections of blending at the blending facility to confirm that the inspections occurred.

(iii) Review the refiner or importer's records documenting an audit of the blending operation. Confirm that these records show that the audit evaluated whether oxygenate types and overall volumes the blender purchased and used were consistent with the information from the refiner or importer. Also confirm that the audit established that this oxygenate was blended with gasoline or blending stock from the refiner or importer.

(iv) Review the refiner or importer's listing of results from testing related to the downstream oxygenate blending operation. Select a representative sample from the listing. Compare the oxygenate volume from each selected test to the corresponding values from paragraph (f)(2) of this section.

#### **§1090.1915 Procedures for imported gasoline classified as blendstock.**

This section describes procedures that apply in the case of importers that import gasoline classified as blendstock (or "GTAB") under §1090.XXX.

(a) Review the importer's listing of all imported GTAB volumes. Compare the total GTAB volume from the listing to the corresponding volume in the inventory reconciliation analysis under §1090.1910(b) or to some alternative documentation if the inventory reconciliation analysis is not sufficient for making the comparison.

(b) Review the importer's listing of all GTAB batches reported to EPA. Compare the total GTAB volume from the listing to the import summary from the U.S. Customs Service, and

to the corresponding GTAB volume reported to EPA. Note that the report to EPA states that the batch is not included in the compliance calculations because the imported product is GTAB. Select a representative sample from the listing of GTAB batches and take the following steps for each selected GTAB batch:

(1) Trace the GTAB batch to the importer's tank activity records. Determine the volumes of gasoline produced from the tank activity records. Compare the volumes from the tank activity records to volumes from the batch volume reported to EPA as reformulated or conventional gasoline.

(2) Use available records, such as U.S. Customs entry records, to confirm that the refinery location identified in the tank activity records for producing gasoline from GTAB is the same as the location where the GTAB arrived in the United States, or the same as the location where GTAB was transported directly upon importation. Use product transfer records to trace volumes transported from the import facility directly to the refinery, as applicable.

(3) Review the importer's tank activity records for all received GTAB batches. Determine whether the GTAB was received into an empty tank, into a tank with blendstock, or into a tank with other GTAB imported by that importer or with finished gasoline of the same category as the gasoline that will be produced using the GTAB. Use the tank activity records to determine the volume of any tank bottom (beginning tank inventory) that is previously certified gasoline before adding GTAB to the tank. Determine the properties of the tank bottom using laboratory reports, batch reports, or product transfer documents.

(4) Determine whether the calculations of properties and volume of gasoline produced using GTAB excluded the volume and properties of any gasoline already included in any refiner or importer's compliance calculations, using one of the following procedures, noting the documented tank mixing procedures:

(i) Determine the volume and properties of the gasoline in the storage tank after blending is complete. Use a calculation methodology to subtract out the volume and properties of the previously certified gasoline to determine the volume and properties of the resulting fuel blend. Compare the volume and properties of the blended fuel to the corresponding volume and properties reported to EPA.

(ii) If GTAB and blending components were blended together without adding gasoline, you may determine volume and properties of the blended fuel using tank activity records. Compare the volumes and properties of shipments from the tank after blending and testing to the volumes and properties the refiner reported to EPA.

(5) Review the importer's laboratory analysis for each selected GTAB batch. Compare the listed properties to the corresponding figures from the batch report submitted to EPA.

**§1090.1920 Procedures for certain gasoline imported by truck.**

This section describes procedures that apply in the case of importers that import conventional gasoline into the United States by truck using the sampling and testing option in §80.101(i)(3).

(a) Review the importer's listing of all truck import volumes under §1090.XXX. Compare the total volume from this listing to the corresponding volume in the inventory reconciliation analysis under §1090.1910(b).

(b) Review the importer's listing of all §1090.XXX truck import batches reported to EPA. Agree this total volume to the import summary from the U.S. Customs Service, and to the volume of §1090.XXX truck imports reported to EPA. Select a representative sample from the listing in this paragraph (b) and take the following steps for each selected §1090.XXX truck import batch:

(1) Review the terminal test results under §1090.XXX. Determine whether the test sample was analyzed using the methods specified in subpart M of this part and compare the terminal test results to the batch properties reported to EPA.

(2) Review the importer's tank activity records for the terminal storage tank showing receipts, discharges, and sampling. Determine whether the test sample under paragraph (b)(1) of this section was collected after the most recent receipt into the storage tank.

(c) Review the importer's listings of all collected quality assurance test samples for each terminal with loading of §1090.XXX truck import gasoline. Select a representative sample from the listing and take the following steps for each quality assurance test sample:

(1) Determine whether the importer analyzed the test sample, and whether they performed the analysis using the methods specified in subpart M of this part.

(2) Review the terminal test results corresponding to the time of collecting the quality assurance test samples. Compare the terminal test results with the quality assurance test results.

(3) Determine whether the sampling frequency for quality assurance testing was within the frequency specified in §1090.XXX.

**§1090.1925 Procedures for previously certified gasoline used to produce gasoline.**

This section describes procedures that apply in the case of a refiner that uses previously certified gasoline under the provisions of §1090.XXX.

(a) Review the refiner's listing of all batches of previously certified gasoline received at the refinery under §1090.XXX. Compare the total volume of previously certified gasoline from the listing to the corresponding volume in the inventory reconciliation analysis under

§1090.1910(b) or to some alternative documentation if the inventory reconciliation analysis is not sufficient for making the comparison.

(b) Review the refiner's listing of all previously certified gasoline batches reported to EPA. Compare this total volume to the volume of previously certified gasoline reported to EPA from paragraph (a) of this section. Select a representative sample from the listing in this paragraph (b) and take the following steps for each selected batch of previously certified gasoline:

(1) Trace the batch to the refiner's tank activity records. Determine whether the refiner included the previously certified gasoline in a batch of reformulated or conventional gasoline from the refinery.

(2) Review the refiner's laboratory analysis and volume measurement for the previously certified gasoline when received at the refinery and compare these values to the corresponding properties and volume listed in the batch report submitted to EPA.

(3) Review the product transfer documents for the previously certified gasoline when received at the refinery. Determine whether the product transfer documents designate it as reformulated gasoline, RBOB, conventional gasoline or CBOB, and make note of any designations regarding RVP standards. Compare these designations to the corresponding designations in the batch report submitted to EPA.

#### **§1090.1930 Procedures for butane blenders.**

This section describes procedures that apply in the case of a refiner that blends butane under §1090.XXX.

(a) Review the refiner's listing of all butane batches received at the refinery.

(b) Review the refiner's listing of all butane batches reported to EPA. Compare this total butane volume to the total butane volume reported to EPA. Select a representative sample from the listing in this paragraph (b) and take the following steps for each selected butane batches:

(1) Trace the butane in the batch to the documents the butane supplier provided to the refiner. Determine whether these documents establish the butane as commercial grade, noncommercial grade, or neither commercial grade nor noncommercial grade as defined in §80.82.

(2) If the butane is noncommercial grade, review the refiner's sampling procedures and testing results for butane to confirm that the frequency of the sampling and testing met the requirements in §1090.XXX.

**§1090.1935 Procedures related to benzene credits.**

This section describes procedures that apply in the case of refiners and importers participating in the program for benzene credits in subpart H of this part. This applies for refiners and importers that have a positive or negative balance of credits at any time during the year, even if they do not generate, use, buy, or sell sulfur credits during the reporting year.

(a) If the refiner or importer generated or used benzene credits during the year, review the refiner or importer's Annual Gasoline Benzene Report submitted pursuant to subpart J of this part. Calculate the difference between the reported annual average benzene value and 0.62 percent by volume. Multiply the difference by the corresponding volume of gasoline identified in the report to determine the benzene credits for the year; report the total benzene credits. If the annual average benzene concentration is less than 0.62, the refiner or importer is generating positive benzene credits. If it is more than 0.62, the refiner or importer is using benzene credits or creating a credit deficit; this is a negative credit for calculation purposes. Compare the calculated benzene credit under this paragraph (a) with the value reported to EPA.

(b) If refiners or importers have an average annual benzene value greater than 0.62 percent by volume, ask them to state in writing whether they will resolve the deficit with credits, or whether they will carry forward the deficit under §1090.715. Compare the statement with the information reported to EPA.

(c) If the refiner bought or sold credits during the year, review the contracts or other documentation of all credit transactions. Calculate the credits associated with each transaction and identify the year each credit was generated. Compare these figures to the information reported to EPA.

(d) Reconcile the refiner or importer's credit balance as follows:

(1) Review the refiner or importer's Annual Gasoline Benzene Report from the previous year to determine the ending credit balance. The engine credit balance for the previous year is the starting balance for the year being reviewed.

(2) Calculate the credit balance at the end of the year being reviewed. Calculate this value by adding positive and negative credits to the starting credit balance as described in paragraph (a) of this section, and by adding purchased credits and subtracting sold credits as described in paragraph (c) of this section. Also subtract any expired credits.

(3) Compare the calculated year-end credit balance with the information reported to EPA.

(4) Identify the refiner or importer as noncompliant if they had a year-end credit deficit for both the year being reviewed and the previous year.

**§1090.1940 Procedures related to compliance with gasoline sulfur standards.**

This section describes procedures that apply in the case of refiners and importers subject to gasoline sulfur standards. The procedures related to credits in paragraphs (b) through (f) of this section apply for refiners and importers that have a positive or negative balance of credits at any time during the year, even if they do not generate, use, buy, or sell sulfur credits during the reporting year.

(a) Review the refiner or importer's annual sulfur report submitted pursuant to subpart J of this part. Compare the volume of gasoline in the annual sulfur report to the corresponding volume in the inventory reconciliation analysis under §1090.1910(b). Calculate the annual average sulfur level and compare it to the value reported to EPA. Also compare the information in the annual sulfur report to the corresponding batch reports submitted to EPA and to any available laboratory analysis.

(b) Review the refiner or importer's annual gasoline sulfur credit report submitted under §80.1652. Using the annual average sulfur level in paragraph (a) of this section, calculate the difference between this value and 10 ppm. Multiply the difference by the corresponding volume of gasoline identified in the report to determine the sulfur credits for the year. If the annual average sulfur concentration is less than 10 ppm, the refiner or importer is generating positive sulfur credits. If it is more than 10 ppm, the refiner or importer is using sulfur credits or creating a credit deficit; this is a negative credit for calculation purposes. Compare the calculated sulfur credit under this paragraph (b) with the value reported to EPA.

(c) If refiners or importers have an average annual sulfur value greater than 10 ppm, ask them to state in writing whether they will resolve the deficit with credits, or whether they will carry forward the deficit under §1090.715. Compare the statement with the information reported to EPA.

(d) If the refiner bought or sold credits during the year, review the contracts or other documentation of all credit transactions. Calculate the credits associated with each transaction and identify the year each credit was generated. Compare these figures to the information reported to EPA.

(e) Reconcile the refiner or importer's credit balance as follows:

(1) Review the refiner or importer's Annual Gasoline Benzene Report from the previous year to determine the ending credit balance. The engine credit balance for the previous year is the starting balance for the year being reviewed.

(2) Calculate the credit balance at the end of the year being reviewed. Calculate this value by adding positive and negative credits to the starting credit balance as described in paragraph (a) of this section, and by adding purchased credits and subtracting sold credits as described in paragraph (c) of this section. Also subtract any expired credits.

(3) Compare the calculated year-end credit balance with the information reported to EPA.

(4) Identify the refiner or importer as noncompliant if they had a year-end credit deficit for both the year being reviewed and the previous year.

## Subpart U—Other Requirements and Provisions

### §1090.2000 Requirements for independent parties.

(a) Independence. The independent third-party, its contractors, subcontractors and their organizations shall be independent of the regulated party. All of the criteria listed in paragraphs (a)(1) and (2) of this section must be met by every individual involved in the substantive aspects of specified activities in this part in which the independent third-party is hired to perform for a regulated party.

(1) Employment criteria. (i) No person employed by an independent third party, including contractor and subcontractor personnel, who is involved in a specified activity performed by the third party according to provisions of this part, may be employed, currently or previously, by the regulated party for any time within the three (3) years preceding the date when the regulated party hired the independent third party to provide services according to this part.

(ii) Third-party personnel may have been a contractor or subcontractor to the regulated party, if all other criteria listed in this section are met.

(2) Financial criteria. (i) The third party's primary personnel, the third party's organization, or any organization or individual that may be contracted or subcontracted by the third party must meet all of the following requirements:

(A) Have received no more than one quarter of its revenue from the regulated party during the year prior to the date of hire of the third party by the regulated party for auditing purposes. Income received from the third party to perform specified activities under this part are excepted.

(B) Have no interest in the regulated party's business.

(C) Not receive compensation for any specified activity in this part which is dependent on the outcome of the specified activity.

(ii) The regulated party shall be free from any interest in the third-party's business.

(3) For purposes of conducting annual attest engagements required by subpart T of this part, a certified internal auditor (CIA) is deemed to comply with the independent requirements of paragraphs (a)(1) and (2) of this section.

(b) Technical ability. All of the following criteria must be met by the third party in order to demonstrate its technical capability to perform specified activities under this part:

(1) An independent auditor that performs an attest engagement pursuant to subpart T of this part must be one of the following:

(i) An independent certified public accountant.

(ii) An independent firm of such accountants.

(iii) An independent internal auditor employed by the refiner, if all of the following requirements are met:

(A) That auditor is certified by the Institute of Internal Auditors.

(B) Performs the attest engagement according to the Codification of Standards for the Professional Practice of Internal Auditing, incorporated by reference in §1090.95.

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

(c) Professional Auditing Standards. Independent auditors under this section must perform the attest engagements under subpart T of this part according to the Codification of Statements on Auditing Standards, incorporated by reference in §1090.95. Except as provided in (b)(iii) of this section.

#### **§1090.2005 Requests for information.**

(a) If the Administrator, the Regional Administrator, or their delegate, has reason to believe that a violation of sections 211(c), 211(f), 211(g), 211(h), 211(i), 211(j), 211(k), 211(l), or 211(n) of the Clean Air Act or the regulations promulgated thereunder has occurred, he may require any party subject to the above sections of the Clean Air Act and the regulations promulgated thereunder to report any appropriate record.

(b) Any party shall provide such other information as the Administrator or their authorized representative may reasonably require/ to enable them to determine whether such party has acted or is acting in compliance with sections 211(c), 211(f), 211(g), 211(h), 211(i), 211(j), 211(k), 211(l), or 211(n) of the Clean Air Act and the regulations thereunder and shall, upon request of the Administrator or their authorized representative, produce and allow reproduction of any relevant records at all reasonable times.

#### **§1090.2010 Procedures for opting out of RFG and Federal 7.8 psi RVP areas.**

(a) EPA may approve a petition from a State asking for removal of any RFG opt-in area, or portion of an RFG opt-in area, from inclusion as a covered area listed in §1090.XXX or for relaxation of the Federal 7.8 psi summer ozone season RVP limit described in §1090.XXX, if it meets the requirements of paragraph (b) of this section. If EPA approves such a petition, an effective date shall be set as provided in paragraph (c) of this section. EPA shall notify the State in writing of EPA's action on the petition and the effective date of the removal when the petition is approved.

(b) An opt-out petition must be signed by the Governor of a State, or their authorized representative, and must include the following:

(1) A geographic description of each RFG opt-in area, or portion of each RFG opt-in area, or of each Federal 7.8 psi RVP area, or portion of each Federal 7.8 psi RVP area, which is covered by the petition.

(2) A description of all ways in which RFG or 7.8 psi gasoline is relied upon as a control measure in any approved State or local implementation plan or plan revision, or in any submission to EPA containing any proposed plan or plan revision (and any associated request for redesignation) that is pending before EPA when the petition is submitted.

(3) For any RFG opt-in areas or Federal 7.8 psi areas covered by the petition for which RFG or 7.8 psi gasoline is relied upon as a control measure as described in paragraph (b)(2) of this section, the petition shall include all of the following information:

(i) Identify whether the State is withdrawing any such pending plan submission.

(ii)(A) Identify whether the State intends to submit a revision to any such approved plan or pending plan submission that does not rely on RFG or 7.8 psi gasoline as a control measure, and describe the alternative air quality measures, if any, that the State plans to use to replace RFG or 7.8 psi gasoline as a control measure.

(B) A description of the current status of any proposed revision to any such approved plan or pending plan submission, as well as a projected schedule for submission of such proposed revision.

(iii) If the State is not withdrawing any such pending plan submission and does not intend to submit a revision to any such approved plan or pending plan submission, describe why no revision is necessary.

(4) The Governor of a State, or their authorized representative, shall submit additional information upon request of the Administrator.

(c)(1) Except as provided in paragraph (c)(2) of this section, the Administrator shall set an effective date for removal of an area as requested by the Governor, but no less than ninety (90) days from EPA's written notification to the state approving the opt-out petition for either RFG or 7.8 psi gasoline.

(2) Where RFG or 7.8 psi gasoline is contained as an element of any plan or plan revision that has been approved by EPA, other than as a contingency measure consisting of a future opt-in to RFG, then the effective date for removal of an area under paragraph (a) of this section shall be the date requested by the Governor, but no less than ninety (90) days from the effective date of EPA approval of a revision to the plan that removes RFG or 7.8 psi gasoline as a control measure.

(3) Notwithstanding the provisions of paragraphs (c)(1) and (2) of this section, for an area that opted in to RFG pursuant to Clean Air Act section 211(k)(6)(B), the Administrator shall not set the effective date for removal of the area earlier than four (4) years after the commencement date of opt-in.

(d) The Administrator shall publish a notice in the Federal Register announcing the approval of any petition pursuant to paragraph (a) of this section, and the effective date for removal.

**§1090.2015 Reformulated gasoline covered areas.**

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

(a) The Los Angeles-Anaheim-Riverside, California, area, comprised of:

(1) Los Angeles County;

(2) Orange County;

(3) Ventura County;

(4) That portion of San Bernadino County that lies south of latitude 35 degrees, 10 minutes north and west of longitude 115 degrees, 45 minutes west; and

(5) That portion of Riverside County, which lies to the west of a line described as follows:

(i) Beginning at the northeast corner of Section 4, Township 2 South, Range 5 East, a point on the boundary line common to Riverside and San Bernadino Counties;

(ii) Then southerly along section lines to the centerline of the Colorado River Aqueduct;

(iii) Then southeasterly along the centerline of said Colorado River Aqueduct to the southerly line of Section 36, Township 3 South, Range 7 East;

(iv) Then easterly along the township line to the northeast corner of Section 6, Township 4 South, Range 9 East;

(v) Then southerly along the easterly line of Section 6 to the southeast corner thereof;

(vi) Then easterly along section lines to the northeast corner of Section 10, Township 4 South, Range 9 East;

(vii) Then southerly along section lines to the southeast corner of Section 15, Township 4 South, Range 9 East;

(viii) Then easterly along the section lines to the northeast corner of Section 21, Township 4 South, Range 10 East;

(ix) Then southerly along the easterly line of Section 21 to the southeast corner thereof;

(x) Then easterly along the northerly line of Section 27 to the northeast corner thereof;

(xi) Then southerly along section lines to the southeast corner of Section 34, Township 4 South, Range 10 East;

(xii) Then easterly along the township line to the northeast corner of Section 2, Township 5 South, Range 10 East;

(xiii) Then southerly along the easterly line of Section 2, to the southeast corner thereof;

(xiv) Then easterly along the northerly line of Section 12 to the northeast corner thereof;

(xv) Then southerly along the range line to the southwest corner of Section 18, Township 5 South, Range 11 East;

(xvi) Then easterly along section lines to the northeast corner of Section 24, Township 5 South, Range 11 East; and

(xvii) 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) San Diego County, California.

(c) The Greater Connecticut area, comprised of:

(1) The following Connecticut counties:

(i) Hartford;

(ii) Middlesex;

(iii) New Haven;

(iv) New London;

(v) Tolland;

(vi) Windham; and

(2) Portions of certain Connecticut counties, described as follows:

- (i) In Fairfield County, the City of Shelton; and
  - (ii) In Litchfield County, all cities and townships except the towns of Bridgewater and New Milford.
- (d) The New York-Northern New Jersey-Long Island-Connecticut area, comprised of:
- (1) Portions of certain Connecticut counties, described as follows:
    - (i) In Fairfield County, all cities and townships except Shelton City;
    - (ii) In Litchfield County, the towns of Bridgewater and New Milford;
  - (2) The following New Jersey counties:
    - (i) Bergen;
    - (ii) Essex;
    - (iii) Hudson;
    - (iv) Hunterdon;
    - (v) Middlesex;
    - (vi) Monmouth;
    - (vii) Morris;
    - (viii) Ocean;
    - (ix) Passaic;
    - (x) Somerset;
    - (xi) Sussex;
    - (xii) Union; and
  - (3) The following New York counties:
    - (i) Bronx;
    - (ii) Kings;
    - (iii) Nassau;

- (iv) New York (Manhattan);
  - (v) Queens;
  - (vi) Richmond;
  - (vii) Rockland;
  - (viii) Suffolk;
  - (ix) Westchester;
  - (x) Orange; and
  - (xi) Putnam.
- (e) The Philadelphia-Wilmington-Trenton area, comprised of:
- (1) The following Delaware counties:
    - (i) New Castle; and
    - (ii) Kent;
  - (2) Cecil County, Maryland;
  - (3) The following New Jersey counties:
    - (i) Burlington;
    - (ii) Camden;
    - (iii) Cumberland;
    - (iv) Gloucester;
    - (v) Mercer;
    - (vi) Salem; and
  - (4) The following Pennsylvania counties:
    - (i) Bucks;
    - (ii) Chester;
    - (iii) Delaware;

- (iv) Montgomery; and
- (v) Philadelphia.
- (f) The Chicago-Gary-Lake County, Illinois-Indiana-Wisconsin area, comprised of:
  - (1) The following Illinois counties:
    - (i) Cook;
    - (ii) Du Page;
    - (iii) Kane;
    - (iv) Lake;
    - (v) McHenry;
    - (vi) Will;
  - (2) Portions of certain Illinois counties, described as follows:
    - (i) In Grundy County, the townships of Aux Sable and Goose Lake; and
    - (ii) In Kendall County, Oswego township; and
  - (3) The following Indiana counties:
    - (i) Lake; and
    - (ii) Porter.
- (g) The Baltimore, Maryland area, comprised of:
  - (1) The following Maryland counties:
    - (i) Anne Arundel;
    - (ii) Baltimore;
    - (iii) Carroll;
    - (iv) Harford;
    - (v) Howard; and
  - (2) The City of Baltimore.

(h) The Houston-Galveston-Brazoria, Texas area, comprised of the following Texas counties:

- (1) Brazoria;
- (2) Fort Bend;
- (3) Galveston;
- (4) Harris;
- (5) Liberty;
- (6) Montgomery;
- (7) Waller; and
- (8) Chambers.

(i) The Milwaukee-Racine, Wisconsin area, comprised of the following Wisconsin counties:

- (1) Kenosha;
- (2) Milwaukee;
- (3) Ozaukee;
- (4) Racine;
- (5) Washington; and
- (6) Waukesha.

(j) Any other area classified under 40 CFR part 81, subpart C, as a marginal, moderate, serious, or severe ozone nonattainment area may be included as a covered area on petition of the Governor of the State in which the area is located. The ozone nonattainment areas listed in paragraphs (j)(1) through (13) opted into the RFG program prior to the start of the RFG program. These areas are covered areas for purposes of this part. The geographic extent of each covered area listed in paragraphs (j)(1) through (13) shall be the nonattainment area boundaries as specified in 40 CFR part 81, subpart C.

- (1) Sussex County, Delaware;
- (2) District of Columbia portion of the Washington ozone nonattainment area;
- (3) The following Kentucky counties:

- (i) Boone;
  - (ii) Campbell;
  - (iii) Jefferson; and
  - (iv) Kenton;
- (4) Portions of the following Kentucky counties:
- (i) Portion of Bullitt County described as follows:

(A) 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;

(B) Proceeding south on county road 567 to the junction with Ky 1116 (also known as Zoneton Road);

(C) Proceeding to the south on KY 1116 to the junction with Hebron Lane;

(D) Proceeding to the south on Hebron Lane to Cedar Creek;

(E) Proceeding south on Cedar Creek to the confluence of Floyds Fork turning southeast along a creek that meets Ky 44 at Stallings Cemetery;

(F) Proceeding west along Ky 44 to the eastern most point in the Shepherdsville city limits;

(G) Proceeding south along the Shepherdsville city limits to the Salt River and west to a point across the river from Mooney Lane;

(H) Proceeding south along Mooney Lane to the junction of Ky 480;

(I) Proceeding west on Ky 480 to the junction with Ky 2237;

(J) Proceeding south on Ky 2237 to the junction with Ky 61 and proceeding north on Ky 61 to the junction with Ky 1494;

(K) Proceeding south on Ky 1494 to the junction with the perimeter of the Fort Knox Military Reservation;

(L) Proceeding north along the military reservation perimeter to Castleman Branch Road;

(M) Proceeding north on Castleman Branch Road to Ky 44;

(N) Proceeding a very short distance west on Ky 44 to a junction with Ky 1020; and

(O) Proceeding north on Ky 1020 to the beginning.

(ii) Portion of Oldham County described as follows:

(A) Beginning at the intersection of the Oldham-Jefferson County Line with the southbound lane of Interstate 71;

(B) Proceeding to the northeast along the southbound lane of Interstate 71 to the intersection of Ky 329 and the southbound lane of Interstate 71;

(C) Proceeding to the northwest on Ky 329 to the intersection of Zaring Road on Ky 329;

(D) Proceeding to the east-northeast on Zaring Road to the junction of Cedar Point Road and Zaring Road;

(E) Proceeding to the north-northeast on Cedar Point Road to the junction of Ky 393 and Cedar Point Road;

(F) 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);

(G) 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;

(H) 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;

(I) Proceeding on to the east-southeast along the power line then south across Fort Pickens Road to a power substation on Ky 146;

(J) Proceeding along the power line south across Ky 146 and the Seaboard System Railroad track to adjoin the incorporated city limits of La Grange;

(K) Then proceeding east then south along the La Grange city limits to a point abutting the north side of Ky 712;

(L) Proceeding east-southeast on Ky 712 to the junction of Massie School Road and Ky 712;

(M) Proceeding to the south-southwest and then north-northwest on Massie School Road to the junction of Ky 53 and Massie School Road;

(N) Proceeding on Ky 53 to the north-northwest to the junction of Moody Lane and Ky 53;

(O) Proceeding on Moody Lane to the south-southwest until meeting the city limits of La Grange;

(P) 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;

(Q) Proceeding southwest on the northbound lane of Interstate 71 until intersecting with the North Fork of Currys Fork;

(R) 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

(S) Proceeding northwest along the Oldham-Jefferson County Line to the beginning.

(5) [Reserved]

(6) The following Maryland counties:

(i) Calvert;

(ii) Charles;

(iii) Frederick;

(iv) Montgomery;

(v) Prince Georges;

(vi) Queen Anne's; and

(vii) Kent;

(7) The entire State of Massachusetts;

(8) The following New Hampshire counties:

(i) Strafford;

(ii) Merrimack;

(iii) Hillsborough; and

(iv) Rockingham;

(9) The following New Jersey counties:

(i) Atlantic;

(ii) Cape May; and

(iii) Warren;

(10) The following New York counties:

(i) Dutchess;

(ii) The portion of Essex County that consists of the portion of Whiteface Mountain above 4,500 feet in elevation.

(11) The entire State of Rhode Island;

(12) The following Texas counties: and

(i) Collin;

(ii) Dallas;

(iii) Denton; and

(iv) Tarrant;

(13) The following Virginia areas:

(i) Alexandria;

(ii) Arlington County;

(iii) Fairfax;

(iv) Fairfax County;

(v) Falls Church;

(vi) Loudoun County;

(vii) Manassas;

(viii) Manassas Park;

(ix) Prince William County;

(x) Stafford County;

- (xi) Charles City County;
- (xii) Chesterfield County;
- (xiii) Colonial Heights;
- (xiv) Hanover County;
- (xv) Henrico County;
- (xvi) Hopewell;
- (xvii) Richmond;
- (xviii) Chesapeake;
- (xix) Hampton;
- (xx) James City County;
- (xxi) Newport News;
- (xxii) Norfolk;
- (xxiii) Poquoson;
- (xxiv) Portsmouth;
- (xxv) Suffolk;
- (xxvi) Virginia Beach;
- (xxvii) Williamsburg; and
- (xxviii) York County.

(k) The following ozone nonattainment areas have opted into the RFG program since the beginning of the program, and are RFG covered areas for purposes of this part:

(1) The Missouri portion of the St. Louis, Missouri-Illinois, ozone nonattainment area is a covered area beginning June 1, 1999. The prohibitions of section 211(k)(5) of the Clean Air Act apply to all persons in the St. Louis, Missouri, covered area, other than retailers and wholesale purchaser-consumers, beginning May 1, 1999. The prohibitions of section 211(k)(5) of the Clean Air Act apply to retailers and wholesale purchase-consumers in the Missouri portion of the St. Louis, Missouri-Illinois, area beginning June 1, 1999. The covered area is defined as: Franklin County, Jefferson County, St. Charles County, St. Louis County, and St. Louis City.

(2) The Illinois portion of the St. Louis, Illinois-Missouri ozone nonattainment area is a covered area beginning on July 1, 2007. The prohibitions of section 211(k)(5) of the Clean Air Act apply to all persons other than retailers and wholesale purchaser-consumers in the Illinois portion of the St. Louis, Illinois-Missouri ozone nonattainment area beginning on June 1, 2007. The prohibitions of section 211(k)(5) of the Clean Air Act apply to retailers and wholesale purchaser-consumers in the Illinois portion of the St. Louis, Illinois-Missouri ozone nonattainment area beginning July 1, 2007. The covered area is defined as: Jersey County, Madison County, Monroe County, and St. Clair County.

(l) Upon the effective date for removal of any opt-in area or portion of an opt-in area included in a petition approved pursuant to §1090.XXX, the geographic area covered by such approval shall no longer be considered a covered area for purposes of this part.

(m) Effective one year after an area has been reclassified as a Severe ozone nonattainment area under section 181(b) of the Clean Air Act, such Severe area shall also be a covered area under the RFG program. The ozone nonattainment areas identified pursuant to this paragraph (m) were reclassified as Severe ozone nonattainment areas, and are covered areas for purposes of this part. The geographic extent of each covered area identified pursuant to this paragraph (m) shall be the nonattainment area boundaries as specified in 40 CFR part 81, subpart C for the ozone NAAQS which was the subject of the reclassification.

(1) An area identified as a covered area pursuant to this paragraph (m), whose classification as a Severe nonattainment area under the 1-hour ozone NAAQS is removed as a result of removal of the 1-hour ozone NAAQS, remains a covered area as follows:

(i) Prior to redesignation as attainment for the 8-hour ozone NAAQS the area remains a covered area;

(ii) After redesignation as attainment for the 8-hour ozone NAAQS.

(2) An area identified as a covered area pursuant to this paragraph (m), based on its classification as a Severe nonattainment area under the 1-hour ozone NAAQS, but which is redesignated to attainment for the 1-hour ozone NAAQS, may be removed as a covered area at the request of a State providing that the State does not rely on RFG in any State Implementation Plan.

(n) The following areas are located within the ozone transport region established under Clean Air Act section 184(a), are not classified as a Marginal, Moderate, Serious, or Severe ozone nonattainment area, have opted into the RFG program, and are covered areas for the purposes of subparts D, E, and F of this part:

(1) The southern Maine counties of York, Cumberland, Sagadahoc, Androscoggin, Kennebec, Knox, and Lincoln are a covered area beginning June 1, 2015. The prohibitions of Clean Air Act section 211(k)(5) apply to all persons other than retailers and wholesale purchaser-consumers in these counties beginning May 1, 2015. The prohibitions of section 211(k)(5) of the

Clean Air Act apply to retailers and wholesale purchaser-consumers in these counties beginning on June 1, 2015.

(2) [Reserved]

## **REFUELING HARDWARE REQUIREMENTS FOR DISPENSING FACILITIES AND MOTOR VEHICLES**

### **§1090.2020 Requirements for gasoline dispensing nozzles.**

(a) Every retailer and wholesale purchaser-consumer must limit each nozzle from which gasoline is introduced into motor vehicles to a maximum fuel flow rate not to exceed 10 gallons per minute (37.9 liters per minute). The flow rate may be controlled through any means in the pump/dispenser system, as long as the nozzle flow rate does not exceed the maximum specified flow rate. Any dispensing pump that is dedicated exclusively to heavy-duty vehicles, boats, or airplanes is exempt from this requirement.

(b) Every retailer and wholesale purchaser-consumer must equip all gasoline pumps from which gasoline is dispensed into motor vehicles with a nozzle spout that meets the following specifications:

(1) The outside diameter of the terminal end must not be greater than 0.840 inches (2.134 centimeters).

(2) The terminal end must have a straight section of at least 2.5 inches (6.34 centimeters).

(3) The retaining spring must terminate at least 3.0 inches (7.6 centimeters) from the terminal end.

(c) The specifications in paragraphs (c)(1) through (4) of this section apply for any new nozzle installations used primarily for dispensing gasoline into marine vessels beginning January 1, 2009. Note that nozzles meeting the specifications of this paragraph (c) also meet the specifications of paragraph (b) of this section. Every retailer and wholesale purchaser-consumer must use nozzles meeting these specifications for any new construction or for nozzle replacements. This does not require replacement of existing nozzles for refueling marine vessels before they would be replaced for other reasons. The following specifications apply to spouts on new or replacement nozzles intended for dispensing gasoline into marine vessels:

(1) The outside diameter of the terminal end must have a diameter of  $0.824 \pm 0.017$  inches ( $2.093 \pm 0.043$  centimeters).

(2) The spout must include an aspirator hole for automatic shutoff positioned with a center that is  $0.67 \pm 0.05$  inches ( $1.70 \pm 0.13$  centimeters) from the terminal end of the spout.

(3) The terminal end must have a straight section of at least 2.5 inches (6.34 centimeters) with no holes or grooves other than the aspirator hole.

(4) The retaining spring (if applicable) must terminate at least 3.0 inches (7.6 centimeters) from the terminal end.

**§1090.2025 Refueling-related requirements for gasoline-fueled motor vehicles.**

(a) Gasoline-fueled motor vehicles must be manufactured such that every gasoline tank filler inlet allows insertion of the refueling nozzle specified in §1090.2020(b), and does not allow insertion of a nozzle whose spout has an outside diameter of 0.930 inches (2.363 cm) or greater.

(b) Highway motorcycles subject to standards under 40 CFR part 86, subpart E, are exempt from the requirements of paragraph (a) of this section.

**§1090.2030 Requirements related to dispensing natural gas and liquefied petroleum gas.**

(a) Natural gas. Every retailer and wholesale purchaser-consumer must equip each pump from which natural gas is introduced into motor vehicles with a nozzle and hose configuration that vents no more than 1.2 grams of natural gas during a complete refueling event for a vehicle meeting the requirements of 40 CFR 86.1813-17(f)(1). Compliance with this requirement must be demonstrated using calculations based on the geometric shape of the nozzle and hose.

(b) Liquefied petroleum gas. Every retailer and wholesale purchaser-consumer must equip each pump from which liquefied petroleum gas is introduced into motor vehicles with a nozzle that has no greater than 2.0 cm<sup>3</sup> dead space from which liquefied petroleum gas will be released when the nozzle disconnects from the vehicle. The volume of the nozzle cavity must be determined using calculations based on the geometric shape of the nozzle, with an assumed flat surface where the nozzle face seals against the vehicle.

(c) Exemptions. Any dispensing pump dedicated to heavy-duty vehicles is exempt from the requirements of paragraphs (a) and (b) of this section.

**§1090.2035 Petroleum Administration for Defense Districts (PADDs).**

For the purposes of this part, the following definitions of PADDs apply:

(a) The following States are included in PADD I:

Connecticut	New Jersey
Delaware	New York
District of Columbia	North Carolina
Florida	Pennsylvania
Georgia	Rhode Island
Maine	South Carolina
Maryland	Vermont
Massachusetts	Virginia
New Hampshire	West Virginia

(b) The following States are included in PADD II:

Illinois	Nebraska
Indiana	North Dakota
Iowa	Ohio
Kansas	Oklahoma
Kentucky	South Dakota
Michigan	Tennessee
Minnesota	Wisconsin
Missouri	

(c) The following States are included in PADD III:

Alabama	Mississippi
Arkansas	New Mexico
Louisiana	Texas

(d) The following States are included in PADD IV:

Colorado	Utah
Idaho	Wyoming
Montana	

(e) The following States are included in PADD V:

Alaska	Nevada
Arizona	Oregon
California	Washington
Hawaii	

(f) The following States are included in PADD VI:

U.S. Virgin Islands	Commonwealth of Puerto Rico
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