



EPA420-F-94-013
November 21, 1994

**RFG/Anti-Dumping
Questions and Answers
November 21, 1994**

Fuels and Energy Division
Office of Mobile Sources
U.S. Environmental Protection Agency

RFG/ANTI-DUMPING QUESTIONS AND ANSWERS, NOVEMBER 21, 1994

The following are responses to most of the questions received by the Environmental Protection Agency (EPA) through November 7, 1994, concerning the manner in which the EPA intends to implement and assure compliance with the reformulated gasoline and anti-dumping regulations at 40 CFR Part 80. This document was prepared by EPA's Office of Air and Radiation, Office of Mobile Sources, and Office of Enforcement and Compliance Assurance, Office of Regulatory Enforcement, Air Enforcement Division.

Regulated parties may use this document to aid in achieving compliance with the reformulated gasoline (RFG) and anti-dumping regulations. However, this document does not in any way alter the requirements of these regulations. While the answers provided in this document represent the Agency's interpretation and general plans for implementation of the regulations at this time, some of the responses may change as additional information becomes available or as the Agency further considers certain issues.

This guidance document does not establish or change legal rights or obligations. It does not establish binding rules or requirements and is not fully determinative of the issues addressed. Agency decisions in any particular case will be made applying the law and regulations on the basis of specific facts and actual action.

While we have attempted to include answers to all questions received by November 7, 1994, the necessity for policy decisions and/or resource constraints may have prevented the inclusion of certain questions. Questions not answered in this document will be answered in a subsequent document. Questions that merely require a justification of the regulations, or that have previously been answered or discussed either in a previous Question and Answer document or the Preamble to the regulations have been omitted.

Topics Covered

Test Methods
RFG General Requirements
Compliance on Average
Downstream Oxygenate Blending
Product Transfer Documentation
Anti-Dumping Requirements
Transition Issues
Downstream Blending Issues

TEST METHODS

1. **Question:** Since there may be interference between benzene and ethanol or methanol when using the prescribed method for benzene, ASTM D 3606-92, how may instrument parameters be adjusted to resolve benzene from ethanol or methanol as suggested in the final regulations?

Answer: During the rulemaking process, comments directed to the Agency encouraged the use of ASTM D 3606-92. Other comments regarding that method warned against potential interference in the determination of benzene in gasolines containing ethanol or methanol. As a result of these comments, language was inserted into the regulation requiring, for ASTM D 3606-92, that "Instrument parameters must be adjusted to ensure complete resolution of the benzene, ethanol and methanol peaks..." during the operation of this test.

In light of uncertainty regarding what modifications would be considered acceptable by the Agency, the decision was made to describe in detail the best set of modifications currently known to EPA. These primarily include changes in two parameters (column and internal standard) from those described in ASTM D 3606-92.

Column Type and Length:

Original ASTM D 3606-92

Two column sections, in order:

- 1) 5' X 1/8" Methyl Silicone on chromasorb
-valve-
- 2) 15' X 1/8" 1,2,3 tris(2-cyanoethoxy)propane (TCEP) on chromasorb
-detector-

Modified ASTM D 3606-92

Three column sections, in order:

- 1) 5' X 1/8" Methyl Silicone on chromasorb (10% OV101 on Chrom PAW 80/100)
-valve-
- 2) 5' X 1/8" TCEP on chromasorb (20% TCEP on Chrom PAW 80/100)
- 3) 15' X 1/8" Carbowax 1540 (15%) on chromasorb W (eg. Wasson-ECE K16)
-detector-

In the modified setup the total column length is extended by 5'. The original 15' section of TCEP is replaced by two sections of column totaling 20' and connected in series, or one 20' column packed to simulate the two columns. This combined 20' section of column is connected in the same way as the original 15' TCEP, except that the TCEP end of the combined column is toward the valve (which places the carbowax end next to the detector).

Internal Standard:

Original ASTM D 3606-92

2-butanone (methyl ethyl ketone or MEK)

Modified ASTM D 3606-92

2-butanol (sec-butyl alcohol or SBA)

With the given column modifications, the retention time of the original internal standard, MEK, is changed relative to the benzene and is no longer separated from it. The switch to 2-butanol solves this problem, since the SBA has a slightly longer retention time, and is easily distinguished from benzene. The SBA is considered a good choice for an internal standard as it is not normally found in gasoline.

Other parameters:

GC temperature program	Isothermal at 135° C.
Column Head Pressure	65 PSI
Total Flow Rate	26.6 cc/min.

Other parameters associated with the unmodified version of ASTM D 3606-92 are unchanged.

These modifications yield improved separation of the benzene and ethanol peaks in the chromatogram to the point that a fuel containing 0.05% benzene and 10% ethanol will show near baseline resolution between the two peaks. The methanol peak in the chromatogram occurs on the other side of the ethanol peak from the benzene peak and is therefore completely separated from the benzene. Calibrations for this procedure appear linear below 0.05% benzene.

Since there may be modifications to ASTM D 3606-92 other than those described above that result in adequate separation of benzene from ethanol and methanol, EPA would appreciate information on any such modifications and will consider disseminating information on promising approaches through this bulletin board. Comments about such alternative modifications should be directed to:

J. Bruce Kolowich
Branch Chief, FCAB
U.S. EPA/NVFEL
2565 Plymouth Rd.
Ann Arbor, MI 48105

EPA will continue to consider the possibility of approving other benzene measurement methods than ASTM D 3606-92. Such actions would require rulemaking.

RFG GENERAL REQUIREMENTS

1. **Question:** In what areas outside the continental U.S. must refiners and importers comply with the RFG and anti-dumping requirements?

Answer: Under § 302(d) of the CAA, the term "State" means "a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands." Sections 211(k)(5) and (6) of the CAA impose the RFG requirements in all "covered areas" and "opt-in" areas within a State. Under § 211(k)(8) of the CAA, the anti-dumping requirements apply to gasoline "sold or introduced into commerce," which, under § 216(6), means commerce between any place in any State and any place outside thereof, and commerce wholly within the District of Columbia. As a result, refiners that operate refineries in any of the areas specified under § 302(d) of the CAA, or importers who import gasoline into any of these areas, must meet the RFG and anti-dumping requirements for this gasoline.

Section 325(a)(1) of the CAA provides that, upon petition by the Governor of Guam, American Samoa, the Virgin Islands, or the Commonwealth of the Northern Mariana Islands, the Administrator of EPA may exempt any person or source (or class of persons or sources) in such territory from these requirements if the Administrator finds that compliance with such requirements is not feasible or is unreasonable due to unique geographical, meteorological, or economic factors of such territory, or such other local factors as the Administrator deems significant. For further discussion of this exemption, see the last question ("Exemptions Under § 325(a)(1)") of the September 12, 1994 Questions and Answers document.

COMPLIANCE ON AVERAGE

1. **Question:** For purposes of RFG compliance on average, can refiners treat closely integrated facilities operating in a single covered area as a single facility, or must compliance be achieved separately for each facility? Suppose the refinery operation consists of mixing blending components to produce finished RFG using tankage in multiple terminals in close proximity, the blender is meeting all refiner requirements, and the blender is the responsible party for record keeping, reporting, and compliance. Can the refiner/blender aggregate the operations at all the facilities used for compliance on average purposes or must he meet the standards separately at each terminal?

Answer: Under § 80.67(b)(1), refiners must meet all applicable averaged standards separately for each of the refiner's refineries (i.e., for each facility at which gasoline is produced.) This would include terminals at which RFG is produced through a blending process. However,

under § 80.67(b)(3), an oxygenate blender may group "the averaged reformulated gasoline produced at facilities at which gasoline is produced for use in a single covered area." Therefore, whether the facilities producing RFG for a single covered area may be aggregated for purposes of compliance on average will depend on whether the operation is a refinery operation or an oxygenate blending operation.

2. **Question:** If average compliers have left over inventory of OPRG can they physically blend it with GTAB having a lower oxygen content in order to make RFG with the required 1.5 weight % minimum oxygen content?

Answer: Finished gasoline, including OPRG, may not be blended with GTAB.

3. **Question:** If average compliers have left over inventory of OPRG can they recertify the product (oxygenate parameter) to use during the non-OPRG season?

Answer: OPRG with >2.0 wt% oxygen may be used outside the oxy program period. No recertification is necessary.

DOWNSTREAM OXYGENATE BLENDING

1. **Question:** Please confirm that no specific registration requirements are needed to qualify for the lower sampling rates in § 80.69 if an oxygenate blender uses computer controlled sequential blending.

Answer: There is no specific registration requirement associated with computer controlled in-line blending for an oxygenate blending operation. If such blending is used, then the lower sampling rate in § 80.69(e)(2)(ii)(A) is appropriate.

PRODUCT TRANSFER DOCUMENTATION

1. **Question:** It is our understanding that the conventional gasoline message for product transfer documents "this product does not meet the requirements for reformulated gasoline.." is intended to prevent the sale or use of conventional gasoline in reformulated gasoline covered areas, and that, while other PTD information can be conveyed via product codes, this message must be explicitly present on the PTD. It is understandable that this message be present on PTD's of shipments to service stations so that carriers and service station operators are aware that the product is conventional. However, for bulk custody transfers of gasoline between sophisticated parties within the petroleum industry such as pipelines, marine vessels, railroad cars, etc., the parties involved know what product they are handling, and the product is not directly bound for a service station. Based on this, we believe the explicit conventional message

should only be required on PTD's of deliveries to service stations and that other PTD's should be allowed to convey this message implicitly via product code. Do you disagree with this rationale?

Answer: The language regarding conventional gasoline specified at § 80.106(a)(1)(vii) must be included in the product transfer documentation for all transfers of conventional gasolines, and this specific language requirement may not be satisfied through the use of product codes. However, in the case of transfers of title (as opposed to transfers of custody), where the information is being transferred electronically using electronic data interchange (EDI), and where product codes are used to meet the product transfer documentation, the specific language regarding conventional gasoline at § 80.106(a)(1)(vii), and regarding certain blendstock at § 80.106(b), may be reflected as product codes and need not be recited verbatim. See also the October 17, 1994 update to Question 2, Section VII., of the July 1, 1994 Question and Answer Document.

2. **Question:** We expect RFG geographic areas to develop in which base gasoline designated as "OPRG" with at least 2.0% oxygen but less than 2.7% oxygen will be sold. Will the product transfer documentation requirements covering such a product be met if the PTD shows the oxygen standards as 2.0% minimum and 2.7% maximum and also contains a message that although the product is designated as OPRG, it does not fulfill the requirements for resale or use in an oxygenated control area during a control period without the addition of oxygenates(s)?

Answer: The RFG regulations require the transferor to include in the PTDs the federal minimum and maximum standards with which the gasoline conforms, including oxygen content (i.e., 1.5 wt% minimum and 2.7 wt% or 3.5 wt% maximum). In the case of OPRG, the state standards may be different from the federal min/max standards for oxygen; nevertheless, the federal mix/max standards are the standards required to be on the PTDs. As a separate requirement, the RFG regulations require the PTDs to state that the product is OPRG or is not OPRG.

3. **Question:** In the October 17, 1994 EPA Q&A Product Transfer Documentation section, the EPA said that the specific language regarding conventional gasoline [80.106(a)(1)(vii)] and blendstocks [80.106(b)] may be reflected as product codes and need not be recited verbatim when the information is being transferred electronically using electronic data interchange (EDI). We are considering attaching information to both the invoice and exchange statement. These statements are generated electronically and will be sent to the transferee's of title via an automated fax system. Will the automated fax system be considered to be EDI for meeting the requirements? If the transferee does not have a fax line available could the exchange statements or invoices be mailed and still exclude the conventional and blendstock special wording if these occurrences involved only a small volume of the exchange statements or invoices delivered? The development of two systems for the same purpose would be costly.

Answer: EPA does not consider automated faxing to be a form of EDI, therefore the entire language in 80.106(a) and (b) would be required to be included verbatim.

4. **Question:** It is my understanding that under the RFG regulations the EPA mandates product transfer documentation for conventional gasoline starting January 1, 1995, not December 1, 1994. Is this correct.

Answer: Yes.

ANTI-DUMPING REQUIREMENTS

1. **Question:** Since the oxygen content of conventional gasoline is not used for the simple model compliance requirements, we believe it is not necessary to analyze for oxygen or oxygenate in conventional gasoline during 1995-1997 even though we use oxygenate in certain grades of conventional gasoline. Is this correct?

Answer: The anti-dumping regulations do not require oxygen analysis under the simple model.

TRANSITION ISSUES

NOTE: The following is an update to Question IX-A-3 of the July 1, 1994 Question and Answer document, which modifies the guidance concerning sampling and testing during the transition from VOC-controlled RFG to non-VOC-controlled RFG in advance of the high ozone season each spring:

IX-A-3. Question: How may terminals and retail outlets transition from VOC-controlled RFG to non-VOC-controlled RFG in advance of the high ozone season each spring?

Answer: Section 80.78(a)(1)(v) requires that RFG must be VOC-controlled for the proper VOC-control Region when stored or dispensed by terminals beginning May 1 of each year, and for retail outlets and wholesale purchaser-consumers beginning June 1 of each year. As a result, parties in the gasoline distribution system must transition from non-VOC-controlled RFG to VOC-controlled RFG in advance of these dates.

The RFG regulations do not prohibit combining VOC-controlled RFG with non-VOC-controlled RFG prior to these dates. As a result, VOC-controlled RFG may be added to a storage tank that contains non-VOC-controlled RFG in order to turn over the storage tank to the VOC-controlled specification, in advance of May 1 each year in the case of terminals, and in advance of June 1 each year in the case of retail outlets and wholesale purchaser-consumers.

A terminal that combines VOC-controlled and non-VOC-controlled RFG should treat the mixture as non-VOC-controlled until the party has a test result that shows the RFG meets all applicable VOC-controlled RFG standards. A terminal, therefore, should not supply product transfer documents to distributors stating the gasoline is VOC-controlled until the terminal has a test result that would support this designation. Sampling and testing is not required by retail facilities in this situation; however, it may be prudent to conduct some testing at the retail level to ensure that adequate turnover has been achieved and the product meets all applicable VOC-controlled RFG standards.

NOTE: The following is an update to Question IX-A-4 of the July 1, 1994 Question and Answer document, which modifies the guidance concerning testing in a situation involving the change of service of a gasoline storage tank:

IX-A-4. Question: The RFG regulations prohibit the mixing of various types of gasoline. For example, RFG may not be mixed with conventional gasoline. What options are available to a party to change the service of a gasoline storage tank, given the fact that often it is very difficult to drain tanks completely dry? How may terminals change the service of manifolds and storage tank connecting pipes?

Answer: Section 80.78(a) requires the segregation of several categories of gasoline. These categories are:

RFG may not be mixed with conventional gasoline and sold as RFG.

RFG blendstock for oxygenate blending (RBOB) may not be mixed with RFG or conventional gasoline, and RBOB's that have different oxygen requirements must be segregated from each other.

During the period January 1 through September 15 each year VOC-controlled RFG that is produced using ethanol must be segregated from VOC-controlled RFG that is produced using any other oxygenate, including at the retail level.

Oxygenated fuels program RFG (OPRG) must be segregated from non-OPRG designated RFG.

Upstream of the retail or wholesale purchaser-consumer level, RFG produced under the simple model may not be mixed with RFG produced under the complex model.

Before January 1, 1998 each refinery's or importer's complex model RFG must be segregated from every other refinery's or importer's complex model RFG, unless the refineries or importers have identical baselines. This segregation requirement does apply at the retail level.

These segregation requirements preclude the mixing of any amount of the gasolines that must be segregated.¹ Thus, if the type of gasoline stored in a tank is changed (a change in the tank's service), and the old gasoline type and the new gasoline type must be segregated, the new gasoline may not be added unless the tank is completely free of any amount of the old gasoline type.

EPA recognizes that when many gasoline storage tanks are pumped as low as possible, a residual volume of gasoline remains in the tank (called the tank "heel"), and in the manifolds and tank lines that serve the tank (i.e., the terminal's internal product transfer piping), and that it is very difficult (but not impossible) to eliminate these residual volumes. As a result, and in order to facilitate the orderly conduct of business by regulated parties, in the limited situation related to changing the service of a gasoline storage tank, a party may operate as follows notwithstanding the segregation requirements:

First, the party must be changing the tank service for a legitimate operational business reason, i.e., not merely to blend the product in the tank heel or manifold with the new product.

Second, the party must draw down the gasoline volume in the tank as low as is physically possible through normal pumping operations before adding the new gasoline.

Third, the volume of old product from tank manifolds and tank lines that is added to the new product must be as small as possible through normal operations.

Fourth, the party must fill the tank as full as possible with the new gasoline, taking into account the volume of gasoline that is reasonably available. For example, if the storage tank having a service change is at a terminal supplied with gasoline by a pipeline, the tank should be filled with the maximum volume of gasoline available as a result of the pipeline tender received. For another example, if the storage tank having a service change is at a retail station, the tank should be filled with the largest volume of gasoline that normally is delivered to that tank using a single delivery truck. In any case where the following step involving sampling and testing is not satisfied as a result of these reasonably available volumes, however, additional gasoline volume must be added to the tank until the sampling and testing step is satisfied.

Fifth, the party must collect a representative sample from the filled tank, and analyze this sample for all the properties that are relevant to the downstream standards for RFG using the regulatory test methods, or, in the alternative, test methods other

¹ RFG may be mixed with conventional gasoline, so long as the mixture is classified in the product transfer documents as conventional gasoline and is used only outside any RFG covered area.

than the regulatory test methods if adequate correlation to the regulatory test methods is demonstrated. This analysis must show that the gasoline meets each downstream standard that applies to the new gasoline type.

Sixth, the party must retain documents that demonstrate these steps in the tank service change process.

In another scenario, a storage tank's service may be changed in a manner that involves conventional gasoline but not RFG. For example, a storage tank's or manifold's service could be changed from blendstock (e.g., natural gasoline, raffinate, naphtha) to conventional gasoline, which would result in mixing some volume of blendstock with conventional gasoline. In this type of situation, the party would not be required to meet the standards and requirements that apply to conventional gasoline refiners if the party meets steps one through four, and step six, discussed above. The fifth step, involving sampling and testing, is not necessary for conventional gasoline because there are no downstream standards that apply to conventional gasoline.

DOWNSTREAM BLENDING ISSUES

****NOTE: The question on Downstream Blending Issues posted on November 7, 1994, regarding registration requirements as they apply to transmix blenders, had been previously asked and answered on October 3, 1994. As the October 3, 1994 document provided a more comprehensive answer to this question, the November 7 answer is retracted.**

****NOTE: The following is an update to Question 16 in the Downstream Blending Section (Section IX-B) of the July 1, 1994 Question and Answer Document, and as updated in the August 29, 1994 and October 3, 1994 Question and Answer Documents. This update adds a notation that the guidance applies to terminal transmix blending as well as pipeline transmix blending.**

IX-B-16. Question: What options are available to pipelines for dealing with interface material, i.e., mixtures of two different types of product that result when the different products are adjacent during pipeline movement?

Answer: Interface Mixtures Involving RFG or RBOB

First, the pipeline must minimize the instances of prohibited mixing, through the sequencing together of product types that may be legally mixed, to the greatest extent possible.

Second, in those instances where illegal interface mixing occurs, the entire interface must be added to the product that will most ensure no adverse environmental consequences of the mixing. For example:

- a. Interface mixtures of RFG or RBOB and conventional gasoline must be classified as conventional gasoline.
- b. Interface mixtures of VOC-controlled RFG and non-VOC-controlled RFG must be classified as non-VOC-controlled RFG.²
- c. Interface mixtures of VOC-controlled RFG for Region 1 and VOC-controlled RFG for Region 2 must be classified as VOC-controlled RFG for Region 2 or as non-VOC-controlled RFG.
- d. Interface mixtures of OPRG-designated RFG and non-OPRG-designated RFG must be classified as non-OPRG-designated RFG.
- e. Interface mixtures of VOC-controlled, OPRG RFG and non-VOC-controlled, non-OPRG RFG must be classified as non-VOC-controlled, non-OPRG RFG.
- f. Interface mixtures of RBOB and RFG must be classified as RBOB.
- g. Interface mixtures of any-oxygenate RBOB and ether-only RBOB must be classified as ether-only RBOB.
- h. Interface mixtures of generic RBOB (i.e., any-oxygenate or ether-only RBOB) and refiner-specific RBOB (under § 80.69(a)(1)) must be classified as refiner-specific RBOB.

Third, the pipeline must retain documents that reflect the nature of any illegal interface mixing and that the interface was classified in the proper manner, and must make these documents available to EPA upon request.

² The mixing of VOC-controlled RFG with non-VOC-controlled RFG is not prohibited during the transition period prior to May 1 each year (prior to June 1 each year for retail outlets), and subsequent to September 15 each year. During the VOC transition period, however, mixtures of VOC-controlled RFG and non-VOC-controlled RFG nevertheless must be classified as non-VOC-controlled unless the resulting mixture meets the applicable VOC downstream standard (as discussed in the Transition section of this document), and during the VOC-control period such mixtures also must be classified as non-VOC-controlled RFG.

Interface Mixtures Involving Conventional Gasoline and Not Involving RFG

In the case of interface mixtures that do not involve RFG or RBOB, pipelines may follow their historical practices, and will not be treated as a refiner based on such interface mixtures, so long as:

First, the interface to be blended is generated through pipeline operations, i.e., the blending does not involve blendstocks that are present for the purpose of blending.

Second, the conventional gasoline involved meets all standards and requirements that apply to conventional gasoline, including the volatility standards and the substantially similar requirements;

Third, the volumes of interface are recorded and made available for EPA inspections.

For example, in the case of interface mixtures that involve conventional gasoline and blendstocks (natural gasoline, raffinate, naphtha, etc.), if a pipeline historically has used midpoint cuts for this type of interface the pipeline could continue this practice without meeting the "refiner" requirements as a result of any blendstock that would be mixed with conventional gasoline through this process. It would not be appropriate, however, to classify all blendstock-conventional gasoline interface mixtures as conventional gasoline, i.e., to "clean cut" the interface into the conventional gasoline, because this practice would result in a net increase in conventional gasoline volume.

Interface mixtures that include neither RFG nor conventional gasoline are not impacted by the RFG/anti-dumping regulations.

Transmix

EPA understands there are certain types of interface mixtures that cannot be easily added to either of the adjoining products that produced the interface. This primarily is the case of interface mixtures of gasoline and distillate, commonly called "transmix." EPA further understands that the current pipeline industry practice is to transport transmix via pipeline or barge to a facility designed to separate the gasoline and distillate portions. The owner or operator of such a facility is called a "transmix processor," and is a refiner under the RFG and anti-dumping programs.

Transmix Processors

First, the gasoline produced must be classified as conventional gasoline, and not RFG. If the gasoline produced is classified as RFG, the transmix processor must meet all refiner standards and requirements applicable to any other refiner of RFG.

Second, no additional blendstocks may be used. If blendstocks are used, in addition to the transmix, the transmix processor must meet the anti-dumping refinery standards and requirements for this blendstock in the same manner as any other blender-refiner. A transmix processor could, of course, blend gasoline produced through the process with other finished gasoline without invoking the anti-dumping requirements, e.g., premium grade gasoline could be blended to improve octane.

Third, the transmix used must be a mixture of distillate and gasoline - either RFG or conventional gasoline. If the transmix is a mixture of distillate and blendstock, the blendstock will never have been accounted-for, and the transmix processor must meet the anti-dumping refiner standards and requirements for any gasoline produced using this transmix.

This distinction between the treatment of a transmix processor who produces RFG versus conventional gasoline is appropriate because the gasoline produced by a transmix processor is not identical to the gasoline that went into the transmix. These changes in gasoline quality through transmix processing are simply less critical for conventional gasoline than for RFG. In addition, the gasoline portion of transmix often will be mixtures of conventional gasoline and RFG, which would be appropriate for the conventional classification, but inappropriate for the RFG classification.

Transmix Blending

EPA understands that in certain limited situations where transmix cannot be transported via pipeline to a transmix processor, current pipeline industry practice is to add the transmix to gasoline in very small quantities - 0.25 percent or less of the gasoline volume - and to test the resulting gasoline to ensure it remains on-spec.³ This practice would be treated as illegal blending under the RFG and anti-dumping programs, unless the blender meets all applicable refiner standards and requirements.

In the case of transmix added to conventional gasoline:

First, the transmix must result from normal pipeline operations.

Second, the transmix must be present in a terminal from which there is no out-bound pipeline or water transportation by which the transmix could be transported to a transmix processor, or the pipeline's historical practice at the terminal (the practice

³ The transmix is added to gasoline instead of to distillate, because the consequences of any motor vehicle driveability problems resulting from distillate being mixed with gasoline are less serious than the consequences of explosions that could result from gasoline being mixed with distillate.

beginning at least before January, 1994) has been to blend transmix into conventional gasoline without further processing.

Third, the transmix is blended at a rate no greater than the historical rate the pipeline can document was used by the pipeline, and pipeline documents the current rate of transmix blending.

In the case of transmix added to RFG:

First, the transmix must result from pipeline operational necessity.

Second, the transmix must be present in a terminal from which there is no out-bound pipeline or water transportation by which the transmix could be transported to a transmix processor.

Third, conventional gasoline must not be among the slate of products that arrive at the terminal (transmix must be blended with conventional gasoline if possible).

Fourth, the blending rate of transmix to RFG must be no greater than 0.25 percent by volume.

Fifth, the transmix must be blended with RFG in a batch mode, so that a sample may be collected of the entire batch.

Sixth, the transmix-RFG blend must be sampled and tested, and the resulting blend must meet all applicable RFG downstream standards, before any of the blended gasoline leaves the terminal.

Seventh, the pipeline must retain documents that reflect the rate of transmix blending and the results of all testing on the transmix-RFG blend, and must make these documents available to EPA upon request.

As an alternative to blending the transmix in a batch mode with sampling and testing before any of the RFG blended with transmix leaves the terminal, the transmix may be blended with RFG in line provided that the pipeline carries out the following program to ensure the transmix will not cause any adverse environmental consequences.

First, the pipeline must conduct a program of laboratory testing, in which samples of transmix are mixed with RFG to determine the effects of the transmix on the RFG. In this program, the transmix samples must to the greatest extent possible represent the full range of the transmix types that are typically blended by the pipeline, and the RFG must to the greatest extent possible represent the full range of the types of RFG into which transmix will be blended by the pipeline. These different transmixes and gasolines must be blended at the maximum rate of transmix blending the pipeline intends to use, but a maximum of 0.25% transmix by volume.

Second, the RFG must be tested for each RFG parameter (RVP, oxygen, benzene, sulfur, olefins, aromatics, E200, and E300), and the RFG transmix blend must be tested for each of these parameters, using the testing methods specified at § 80.46.

Third, the results of all of the laboratory tests must show that the maximum change in properties of the RFG for any RFG-transmix blend is not more than the ranges specified at § 80.65(e)(2)(i).

Fourth, the pipeline must conduct RFG-transmix blending as described in steps 5 and 6 of the first RFG-transmix procedure, above, for a period of 30 days, and the results of the blending must show that the maximum change in properties of the RFG for any RFG-transmix blend is not more than the ranges specified at § 80.65(e)(2)(i).

Fifth, the pipeline must conduct monthly tests of the RFG-transmix blended, and the results of the blending must show that the maximum change in properties of the RFG for any RFG-transmix blend is not more than the ranges specified at § 80.65(e)(2)(i).

The procedures outlined above for transmix blending would be applicable to terminals as well as pipelines.