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Consolidated List of Reformulated Gasoline and Anti-Dumping Questions and Answers: July 1, 1994 through November 10, 1997

Transportation and Regional Programs Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

This document includes the following Question and Answer Postings:

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I. Introduction[1]

This document is a compilation of *Reformulated Gasoline and Anti-Dumping Questions and Answers* guidance documents which respond to questions we have received concerning the manner in which the U.S. Environmental Protection Agency (EPA) intends to implement and ensure compliance with the reformulated gasoline (RFG) and anti-dumping regulations at 40 CFR part 80. The original questions and answers guidance documents were prepared by EPA's Office of Air and Radiation, Office of Mobile Sources (now Office of Transportation and Air Quality (OTAQ)), and EPA's Office of Enforcement and Compliance Assurance, Office of Regulatory Enforcement, Air Enforcement Division. This document does not supercede the original guidance documents or alter the guidance contained in the original documents in any way. It is merely a consolidation of the original documents into one indexed document to facilitate access to the guidance contained in the original documents. The date of the original document in which a question and answer appeared is given at the end of each answer. The questions and answers, with a few exceptions, appear under the same subject headings as in the original documents.

This document does not include questions and answers relating to guidance that subsequently has been codified by regulation, or ones that are no longer relevant due to regulatory changes. However, all of the original questions and answers guidance documents, identified by the date issued, are on the OTAQ web site referenced below. In some cases, the answers provided in the original documents include a contact, telephone number or address that is no longer appropriate. Parties may contact OTAQ's Transportation and Regional Programs Division at (202) 564-8991 for the current information. This document is posted on the OTAQ web site both in its entirety and in sections to facilitate downloading.

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

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[1] The direct final rule for reformulated gasoline and anti-dumping that was implemented during the week of June 27, 1994 sometimes is referred to in this document as the "technical amendments."

The EPA Office of Transportation and Air Quality posts RFG regulations, regulatory supporting documents, Question and Answer documents, and other RFG related documents on the following EPA Internet Web site:

www.epa.gov/otaq/fuels/rfg.htm
(Look in What's New or under the specific rulemaking topic for recently published regulations)

Official Federal Register notices are made available on the date of publication on the following Internet site:
www.epa.gov/EPA-AIR
(either select desired date or use Search feature)

II. Standards[2]

1. **Question:** What are the standards for RFG?

Answer: The standards applicable to RFG under each model may be found in § 80.41 of the regulations.(7/1/94)

2. **Question:** What is the maximum oxygen content a refiner, importer or blender may certify, including blending allowances? Does this maximum oxygen content vary according to oxygenate type?

Answer: In general, refiners, importers, and oxygenate blenders may not certify fuel at an oxygen level above the maximum cap of 2.7% by weight for VOC controlled RFG, or 3.5% by weight for non-VOC controlled RFG. The maximum oxygen content for RFG does not vary according to oxygenate type, nor will blending allowances be permitted. This may be modified by state petition under § 80.41(g). Also, oxygen content must otherwise be federally permissible. More specifically, under the substantially similar interpretive rule (56 FR 5352, February 11, 1991), oxygen content is limited to 2.7% by weight unless waived under section 211(f) of the Clean Air Act.(7/1/94)

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[2] This document draws a distinction between the standards that apply to refiners for gasoline produced and importers for gasoline imported, to the standards that apply only downstream of the refinery or import facility. These RFG "downstream" standards are the per-gallon maximums or minimums associated with the following average standards: under the simple model, oxygen and benzene, and RVP in the case of VOC-controlled RFG; under the complex model, oxygen, benzene, and NOx emissions performance, and VOC emissions performance in the case of VOC-controlled RFG.

3. **Question**: Can a refiner ship gasoline with an oxygen content higher than 2.9 weight % using ethers? The purpose is to quickly increase the oxygen content in the distribution system.

Answer: In general, the maximum oxygen content for RFG that is not designated as VOC-controlled is 3.5 weight% oxygen. However, under the terms of the § 211(f) "Sun" waiver, MTBE blends are restricted to 15 volume% (or approximately 2.7 weight% oxygen). Refiners may ship RFG designated as VOC-controlled only if the RFG has an oxygen content of 1.5 to 2.7 weight%.

For those areas with state oxygenated gasoline programs under § 211(m) of the Act, EPA has granted a "blending tolerance" which allows upstream parties to introduce ethers of up to 2.9 weight% oxygen. The reason for this tolerance was to address the slight dilution of oxygen content in the distribution system and to ensure downstream compliance with the 2.7 weight % oxygen content for oxygenated gasoline program areas under § 211(m). This "blending tolerance" only applies in oxygenated gasoline program areas. For those oxygenated gasoline areas that are also RFG areas, the blending tolerance would only apply during the oxygenated gasoline control season (i.e. there is no "blending tolerance" in these areas during the VOC-controlled season or for VOC-controlled RFG).(7/1/94)

4. **Question:** What is the definition of oxygenated fuels program control area and oxygenated fuels program control period?

Answer: As per section 80.2 of the regulations, an oxygenated fuels program control area means a geographic area in which only oxygenated gasoline may be sold or dispensed during the control period. An oxygenated fuels program control period means the period during which oxygenated gasoline must be sold or dispensed in any oxygenated gasoline control area, pursuant to section 211(m)(2) of the Act, and as specified in EPA guidance. Control seasons vary from 4-7 months in length depending on the state implemented program. A list of geographic areas required to implement oxygenated fuels programs and the length of their specific control periods is attached at the end of this document as Attachment I.(7/1/94)

5. **Question:** Will carbon monoxide non-attainment areas have to market 2.0% oxygen during one season and 2.7% oxygen during another season?

Answer: If an RFG area is also an oxygenated fuels program control area, then the RFG distributed to that area during the designated carbon monoxide control season will, pursuant to section 211(m) of the Act, require an average of 2.7% oxygen by weight with a minimum oxygen content of 2.0% by weight. If a state oxygenated fuels program does not provide for averaging, the minimum oxygen content is 2.7% by weight. During the remainder of the year, RFG distributed to that area must contain either 2.0% oxygen by weight or, if averaging, must contain 2.1% oxygen on average with a minimum allowable oxygen content of 1.5% by weight. (Note:

California has applied for a waiver from the 2.7% oxygen standard for the oxygenated fuels program, and currently has a 1.8% to 2.2% oxygen program enforced in the oxygenated fuels program control areas. Therefore, the specific waiver allowances for California would apply during the oxygenated fuel control season).(7/1/94)

6. **Question:** Will areas that opted into RFG have to meet the 2.0% oxygen requirement all year?

Answer: Areas that have opted into the RFG program will have to meet the same oxygen content standards as other RFG areas (i.e., 2.0% per gallon or 2.1% oxygen if averaging). However, if an RFG area is also an oxygenated fuels program control area, RFG distributed to that area during the control season must meet the oxygen content standards of the state implemented oxygenated fuels program as discussed in the answer to question #4 above.(7/1/94)

7. **Question:** Given EPA's stated intent in the preamble to the direct final rule of July 20, 1994, it is our interpretation of the RFG regulations that refiners may certify and release a non-VOC controlled RBOB designated for blending with 10 vol% ethanol ("gasohol waiver"), provided the refinery's certification sample does not exceed 4.0 wt% oxygen. Is our interpretation correct?

Answer: In the direct final rule EPA changed the maximum oxygen range for both the simple and complex model from 3.5 wt% to 4.0 wt% in order to accommodate 10 vol% ethanol blends within a range of specific gravities. As noted in the preamble to the direct final rule, density variations in gasoline blendstocks may result in variation in the oxygen content of an oxygenated fuel on a weight percent basis despite the fact that the volume percent remains fixed. See 59 FR 36947. The preamble goes on to state that, as an example, the oxygen content of a 10 volume % ethanol blend may be as low as 3.4 wt% and as high as 4.0 wt%.

Although the range in the models was changed, § 80.41(g) provides that the maximum oxygen content for simple model RFG is 3.5 wt% in the case of VOC-controlled RFG and 2.7 wt% in the case of non-VOC-controlled RFG. The direct final rule did not change these provisions and they remain in effect. However, EPA believes that the maximum oxygen content provisions for RFG should accommodate blended oxygenates that meet the applicable Clean Air Act section 211(f) "substantially similar" and waiver provisions. In consequence, EPA believes the oxygen maximums specified in § 80.41(g) should be adjusted to reflect the expected maximum oxygen content when RBOB is blended with 10 vol% ethanol in the case of non-VOC-controlled RFG and 7.7 vol% ethanol in the case of VOC-controlled RFG. These adjusted oxygen maximums are 4.0 wt% in the case of non-VOC-controlled RFG and 3.2 wt% in the case of VOC-controlled RFG. EPA intends to change the oxygen maximums specified in § 80.41(g) to reflect these adjustments in a future rulemaking. In the meantime, EPA will allow parties to use these adjusted oxygen maximums. (4/18/95)

8. **Question:** Can total oxygen content, which may include small amounts of oxygenates such as DIPE that are not required to be reported, be used in demonstrating compliance with the oxygen standard? If so, in filling out the batch reports, the percent weight oxygen shown in Item 8.1 will not necessarily add up to the oxygen content that can be calculated from the sum of individual oxygenates shown in Items 8.7 thru 8.12.

Answer: Total oxygen content may be used for demonstrating compliance with the oxygen standard. If total oxygen content is used, the total oxygen weight percent in Item 8.1 of the batch report may not necessarily be identical to the oxygen weight percent that can be calculated from the sum of the individual oxygenates reported in Items 8.7 thru 8.12. (5/23/95)

9. **Question:** Section 80.41(h)(1) specifies that RFG may contain no heavy metals. What specifically does that mean, and is a refiner required to test for the presence of heavy metals?

Answer: The prohibition of heavy metals in RFG means that heavy metals may not be added, nor may it contain more than trace levels that may be picked up from the transportation/distribution system. In fact, no substantially similar unleaded gasoline may contain any elements purposely added outside of carbon, hydrogen, oxygen, nitrogen, and sulfur. Refiners are not required to test for heavy metals; however, quality control measures should be in place to ensure that heavy metals are not being added.(7/1/94)

10. **Question:** The emissions standard for simple model RFG is 100% of the baseline. Is this the refiner's baseline or the statutory baseline?

Answer: For reformulated gasoline under the Simple Model, refiners must not allow the level of sulfur, olefins, and/or T90 to rise above the levels of these parameters in their individual baseline fuels. The only exception is if a refiner meets the requirements for using the statutory baseline in lieu of an individual 1990 baseline.(7/1/94)

11. **Question:** For simple model RFG, will the RVP be 8.1 psi max. all year around or will the 13.5 psi be allowed during the winter months in VOC-Control Region 2?

Answer: The 8.1 psi maximum for per gallon RFG applies to any RFG designated as VOC controlled for use in VOC-Control Region 2. VOC controlled RFG is required only during the summer months (the period May 1 through September 15 for all facilities except retail stations, and June 1 through September 15 for retail stations). As well, VOC-Control Region 1 has a simple model per gallon maximum standard of 7.2 psi during the summer. There are no maximum RVP requirements for gasoline designated as non-VOC controlled during the winter months for either VOC-Control Regions 1 or 2.(7/1/94)

[Note: The RFG Simple Model oxygen maximum standards were changed to match the substantially similar limits, with certain exceptions. *See* 61 FR 12030, March 25, 1996.]

12. **Question:** Must the complex model be used to certify RFG with an oxygen level greater than 2.7%?

Answer: From the period January 1, 1995, through December 31, 1997, the simple model may be used for VOC-controlled RFG in a state which has elected to use the 3.5% by weight maximum oxygen content pursuant to 80.41(g). (Currently, no state has made such an election). In addition, the simple model may be used for RFG not designated as VOC-controlled which has a maximum oxygen content of 3.5% by weight.(7/1/94)

13. **Question:** Section 80.41(h)(2)(iii) and EPA's draft reporting forms imply that the sulfur, T-90 and olefin restrictions associated with the simple model do not apply on a refinery basis for a refiner with more than one refinery, but instead apply to the refiner's aggregation of his refineries as chosen under the antidumping program. Is that correct?

Answer: If a refiner that operates more than one refinery elects to aggregate some or all of its refineries under section 80.101(h)(1), the aggregation of refineries must meet the standards for sulfur, T-90, and olefins for RFG that is produced at the aggregated refineries, on an annual average basis. If a refiner that operates more than one refinery chooses not to aggregate its refineries, each refinery must comply with the sulfur, T-90, and olefin standards for the RFG produced at each refinery on an individual refinery basis.(7/1/94)

14. **Question**: Does the refiner baseline, either an individual baseline or statutory baseline, have any relevance when calculating the toxic emissions reduction requirements for RFG, assuming the simple model technique is used? Does each refiner have a different starting point and therefore a different ending point when achieving the 15% reduction in toxic emissions?

Answer: Under the simple model, individual baselines are not used to determine compliance with the toxics standard for RFG. The toxics standard is set at a specified percentage reduction in emissions, determined using a model specified in the regulations. Neither the toxics standard nor the toxics emissions model are based on a refiner's or importer's individual baseline values. Each refiner has the same "endpoint" in that they have the same emissions performance standard, measured using the same emissions model. Each refiner has its own "starting point" in that the actual characteristics of that producer's fuel is used in the emissions model. However, the individual baseline is not used to determine compliance with the toxics standard. (10/3/94)

15. **Question**: In determining the standards under the early use Complex Model, does a refiner need to comply with a 15% reduction (or, in the case of an averaging scenario, a 16.5% reduction) from the emission standards determined under §80.41(j) for VOC and toxics?

Answer: No. The emission standards (when expressed in terms of percent reduction from the statutory baseline) determined under §80.41(j) for VOC, toxics, and NOx are the emission performance levels below which reformulated gasoline cannot be certified. The early use Complex Model emission standards calculated per §80.41(j) automatically include the VOC and toxics reductions required under the RFG program. No additional reductions beyond the standards established under §80.41(j) are required. (3/7/96)

16. **Question**: Under the early use Complex Model, emission standards for VOC, toxics, and NOx are determined according to §80.41(j). If per-gallon standards are being determined, the values from the table in §80.41(a) are used to calculate the emission standards with which a refiner must comply. If averaging standards are being determined, the values from the table in §80.41(b) are used instead. However, since the table in §80.41(b) includes per-gallon limitations under the averaging program, how should the per-gallon fuel property limits be translated into per-gallon emission limits under the early use Complex Model?

Answer: To determine per-gallon emission limits under the early use Complex Model for an averaging scenario, first determine the standards for VOC, toxics, and NOx according to §80.41(j). These standards should be represented as percent reduction from the statutory baseline despite the fact that the calculations should be performed using g/mi values (see question #3 below for details). Then subtract 4.00% from each of the averaging standards to obtain the per-gallon limits. Per-gallon emission limits should only be calculated for VOC and NOx. (3/7/96)

17. **Question**: When determining the emission standards under the early use Complex Model, what oxygenate should be used?

Answer: For the purposes of setting the standards for RFG under §80.41(j), the oxygenate should be assumed to be MTBE to be consistent with the assumptions made during EPA's standards-setting process for the mandatory use of the Complex Model in 1998. (3/7/96)

18. **Question**: Are the per-gallon limits for fuel benzene and oxygen still applicable under the early-use Complex Model?

Answer: Yes. However, the Simple Model standards for RVP are <u>not</u> applicable under the early use Complex Model, <u>unless</u> compliance is being determined per the alternative Simple Model approach described in a 1/22/96 Q&A. (3/7/96)

19. **Question**: Please explain how to determine the proper aromatics value to use in calculating early complex model standards.

Answer: Section 80.41(j)(2) states that early complex model standards should be calculated using "the aromatics value which, together with the [applicable simple model] values for benzene, RVP, and oxygen meets the simple model toxics requirement." Thus, when calculating early complex model standards that are being met on a per-gallon basis, the simple model per-gallon standards under § 80.41(a) for oxygen (2.0 wt%) and benzene (1.00 vol%), and the applicable standard for RVP (7.2 psi for Region 1, 8.1 psi for Region 2, and 8.7 psi for winter) are used to determine the aromatics value that results in a 15 % toxics reduction calculated under the simple model. These aromatics values are the following:

Category of Gasoline	Aromatics Value
VOC Controlled for Region 1	37.1
VOC Controlled for Region 2	33.1
Not VOC Controlled	23.8

A refiner then can calculate the per-gallon standards for VOC, toxics and NOx that apply at a particular refinery. Consider, for example, a refiner who operates Refinery X. Assume that the relevant individual baseline values for Refinery X are: sulfur, 310 ppm; E300, 81 %; and olefins,

12.9 vol%. Using the complex model, the following early complex model per-gallon standards are calculated:

Gasoline Category	Per Gallon Standards (% change)		
	VOC	Toxics	NOx
VOC Controlled for Region 1[3]	-33.31	-18.72	0.68
VOC Controlled for Region 2	-14.03	-18.23	1.00
Not VOC Controlled	n/a	-15.45	-0.77

The average standards for VOC, toxics and NOx, however, address gasoline in three categories (VOC controlled for Region 1, VOC controlled for Region 2, and not VOC controlled), so that calculating the proper annual aromatics value requires weighting the proportions of gasoline in these categories, such that the overall toxics reduction under the simple model is 16.5 %.

The regulations establish a precedent for the weighting of summer gasoline (Region 1 plus Region 2 gasoline) and winter gasoline of 39.6 %, and 60.4 %, respectively, representing a national average gasoline volume split between the two seasons. The annual average baseline fuel parameters and emissions given in § 80.91(c)(5) were calculated on the basis of this 39.6 to 60.4 summer to winter ratio. In addition, this same ratio was used in generating the complying simple model reformulated gasolines given in Section IV.H of the preamble to the Final Rule, subsequently evaluated under the complex model to determine the Phase I standards under §§ 80.41(c) and (d). As a result, these weightings also should be used when calculating the applicable standards under the early-use complex model. Thus, in every instance a refiner should use a summer weighting of 39.6 % and a winter weighting is 60.4 %, regardless of the actual portions of a refinery's gasoline that are classified as VOC controlled or non-VOC controlled.

The regulations do not contain any precedent for establishing the ratio of summer gasoline that is in the Region 1 versus Region 2 category, however. As a result, under the early complex model a refiner should use the actual volumes of gasoline produced in these summer categories

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[3] For example, the following values are used with the complex model to calculate the per-gallon standards for VOC, Toxics and NOx emissions performance for gasoline classified as VOC Controlled for Region 1:

MTBE	2 wt% (§ 80.41(a) standard)
sulfur	310 ppm (refinery baseline value)
RVP	7.2 psi (§ 80.41(a) standard)
E200	41 % (seasonal value from § 80.45(b)(2))
E300	81 % (refinery baseline value)
aromatics	37.1 vol% (calculated as discussed above)
olefins	12.9 vol% (refinery baseline value)
benzene	1 vol% (§ 80.41(a) standard)

to establish the weighting of summer gasoline in the Region 1 versus Region 2 category. Thus, for example, if the classification of the gasoline produced at Refinery X is 25 % VOC controlled for Region 1, and 75 % VOC controlled for Region 2, the refiner would calculate the weighting of gasoline in the two summer gasoline categories as 9.9 % Region 1 (0.25 X 39.6 = 9.9 %), and 29.7 % Region 2 (0.75 X 39.6 % = 29.7 %). The winter category is given a weighting of 60.4 % in every instance, regardless of the portion of a refinery's gasoline that is classified as winter.

The simple model then is used to determine a single aromatics value that, when applied in all three gasoline categories, results in an overall toxics reduction of 16.5 %. In the case of the Refinery X example, this aromatics value is 26.6 vol%, determined as follows:

Category of Gasoline	Category Weighting (%)	Toxics Reduction @ 26.6 vol% aromatics	Category Weighting X Toxics Reduction
VOC, Region 1	9.9	- 25.1	- 2.5
VOC, Region 2	29.7	- 21.9	- 6.5
Not VOC Controlled	60.4	- 12.4	- 7.5
Total	100		- 16.5

In order to calculate the average standards for VOC, toxics and NOx emissions performance, the emissions are calculated using the complex model for each of the three gasoline categories on

the basis of an aromatics value of 26.6 vol%. The average VOC emissions performance standards for Refinery X are the percent changes shown by the complex model runs, as follows:

Category of Gasoline	Average VOC Standards (% change)
VOC Controlled for Region 1[4]	
Annual Average Standard[5]	-36.79
Per-Gallon Minimum[6]	-32.79
VOC Controlled for Region 2	
Annual Average Standard	-17.19
Per-Gallon Minimum	-13.19

[4] Under § 80.67(c)(1) the VOC emissions control standards, when met on average, must be met separately for the reformulated gasoline that is VOC controlled for Region 1 and the reformulated gasoline that is VOC controlled for Region 2. These two averaging categories may not be combined in a single compliance calculation.

[5] For example, the following values are used with the complex model to calculate the average standard for VOC, toxics and NOx emissions performance for the VOC controlled for Region 1 category:

MTBE	2.1 wt% (§ 80.41(b) standard)
sulfur	310 ppm (refinery baseline value)
RVP	7..1 psi (default wintertime RVP value)
E200	41 % (seasonal value from § 80.45(b)(2))
E300	81 % (refinery baseline value)
aromatics	26.6 vol% (calculated as discussed above)
olefins	12.9 vol% (refinery baseline value)
benzene	0.95 vol% (§ 80.41(b) standard)

[6] The per-gallon minimums associated with average emissions performance standards are calculated by adding 4.0 % to the average standard.

In the case of the annual average standards for toxics and NOx, the emission results must be combined using the same seasonal weightings that were used to calculate the annual aromatics value. For Refinery X this calculation is shown as follows:

Standard	Category of Gasoline	Category Weighting (%)	Emissions Reduction (% change)	Category Weighting X Emissions Reduction (% change)
Toxics	VOC, Region 1	9.9	-27.76	-2.75
	VOC, Region 2	29.7	-24.22	-7.19
	Winter[7]	60.4	-13.92	-8.40
			Annual Average Toxics Standard	-18.35
NOx	VOC, Region 1	9.9	-0.44	-0.04
	VOC, Region 2	29.7	0.00	0.0
	Winter	60.4	-0.07	-0.04
			Annual Average NOx Standard[8]	-0.08
			Per-Gallon NOx Maximum	3.92

(5/2/96)

20. **Question**: What is the significance of winter VOC emissions, §80.45(c)(6)(ii)? Do not VOC emissions limits, by definition, apply only during VOC regulatory time periods?

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[7] For example, the following values are used with the complex model to calculate the average standard for VOC, toxics and NOx emissions performance for the winter category:

MTBE	2.1 wt% (§ 80.41(b) standard)
sulfur	310 ppm (refinery baseline value)
RVP	8.7 psi (default wintertime RVP value)
E200	50 % (seasonal value from § 80.45(b)(2))
E300	81 % (refinery baseline value)
aromatics	26.6 vol% (calculated as discussed above)
olefins	12.9 vol% (refinery baseline value)
benzene	0.95 vol% (§ 80.41(b) standard)

[8] Under § 80.67(e)(2) the annual average NOx standard must be separately met for reformulated gasoline that is VOC controlled and that is not VOC controlled.

Answer: The VOC performance standard applicable under § 80.41 is indeed a summer-only standard. Under the Complex Model, VOC emissions are calculated for winter blends to determine the emissions of Polycyclic Organic Material (POM). Emissions of POM are calculated as a fraction of VOC emissions. POM emissions are, in turn, used to determine compliance with the emissions performance standard for toxic pollutants for both RFG and conventional gasoline. The only significance of winter VOC emissions is based on their use in the determination of compliance with these toxic performance standards. (11/10/97)

21. **Question**: Today, and with the Phase I complex model, there is effectively a 1 RVP difference between the Region 1 and 2 standards. In Phase II, this difference basically drops to 0 RVP. Was this intended, and why?

Answer: The Phase 2 Volatility Standards (55 FR 23658 (June 11, 1990)) provided the basis for the different RVP standards, depending on VOC Control Region, for reformulated gasoline under the Simple Model. The standards for VOC emissions performance for Phase I RFG under the Complex Model were based on the Simple Model standards, which were translated into equivalent VOC emission performance standards under the Complex Model. The Phase II RFG standards for VOC emissions performance, however, were derived using the Complex Model, which takes into account RVP and several other factors in determining VOC emissions performance. Since the Complex Model already evaluates the effect of RVP on VOC emissions performance, there was no need to make any additional RVP distinction between the two regions. (11/10/97)

22. **Question**: For downstream compliance, has EPA addressed the issue that two complying batches mixed downstream may not comply when tested downstream?

Answer: In the development of the Complex Model, EPA investigated the possibility that two complying batches, when mixed, may not comply with the RFG standards. This "fungibility" issue arises out of the model's nonlinear character. Based on a Monte Carlo simulation, EPA concluded that fungibility problems would not occur. The downstream standards adopted by EPA apply to each gallon of gasoline, including fungibly mixed gasoline.(11/10/97)

III. Models

1. **Question:** Does a refiner have to use the same model at all of its refineries?

Answer: If a refiner elects to aggregate its refineries under section 80.101(h), the same model (simple or complex) must be used at all refineries aggregated.(7/1/94)

2. **Question:** If a given refinery produces both reformulated and conventional gasoline, must that refinery use the same model for both?

Answer: Yes.(7/1/94)

3. **Question:** Will the EPA "Spreadsheet" be revised to be considered acceptable for fuel certifications?

Answer: No. The spreadsheet was designed to provide assistance in understanding and implementing the Complex Model equations as provided in the regulations. The EPA has no authority to endorse the spreadsheet as a legal instrument of certification. Only the Federal Register has legal authority.(7/1/94)

4. **Question:** When will EPA publish a corrected version of the Complex Model? The NOx equation corrections published in the DFRM were not correct, and the published evaporative VOC equations do not yield the published baseline emissions for baseline fuel.

Answer: Errors in the final rule for the reformulated gasoline program and the DFRM are being corrected in an upcoming technical amendment.

The spreadsheet version of the Complex Model does not contain the errors that appeared in the Federal Register description of the Complex Model. However, the equation coefficients in the spreadsheet have been rounded in comparison to the coefficient values given in the Federal Register. This difference results in a disparity of less than 0.005% between the published baseline emission values and the values calculated from the evaporative equations in the spreadsheet, a disparity which is unlikely to affect any results. Nevertheless, EPA will update the spreadsheet version of the Complex Model as soon as time permits.(10/31/94)

5. **Question:** Is there a "recommended" calculation tool for performing Complex Model calculations?

Related question: In view of inconsistencies between the current regulations and the Complex Model spreadsheet posted by EPA, which should industry follow? If the answer is the regulation, can EPA confirm that the regulation is consistent with the actual Complex Model developed by EPA? Will EPA use the spreadsheet to determine if fuels are in compliance?

Answer: The version of the Complex Model that is legally binding is that contained in the Federal Register[9]. The printed version of the Complex Model in the Federal Register does

[9] *See* 59 Fed. Reg. 7716 (Feb. 16, 1994); 59 Fed. Reg 36944 (July 20, 1994; *see also* 40 CFR §80.45.

contain several minor errors which are under correction through a proposed rulemaking (62 FR 37337 (July 11, 1997). With these minor corrections, the Complex Model contained in the Federal Register will be consistent with the spreadsheet version.

The Lotus spreadsheet which EPA made available through the internet is being used by both the Office of Mobile Sources and the Office of Enforcement and Compliance Assurance in verifying refiners' compliance with the performance standards. The Agency has no plans to use a version of the Complex Model other than this Lotus spreadsheet. Although a refiner choosing to use the spreadsheet version of the Complex Model bears responsibility for any errors it may contain, to date no errors have been found in the spreadsheet. (11/10/97)

6. **Question:** Section 80.42 states that the summer Simple Model is to be used from May 1 through September 15. However, reformulated gasoline certified to be VOC-controlled can be made from January 1 through September 15. Should batches of VOC-controlled gasoline blended during January 1 through May 1 be certified by the summer or winter model?

Answer: The summer Simple Model should be used to evaluate all batches of VOC-controlled gasoline produced between January 1 and September 15. Non-VOC-controlled gasolines should be evaluated with the winter model.(7/1/94)

7. **Question:** If a California refiner chooses to certify a CARB Phase 2 gasoline formulation under the predictive model, does this alter his ability to select the Simple or the Complex Model for conventional gasoline?

Answer: The use of the Simple or Complex Models during the 1995 through 1997 time frame is generally governed by the provisions in § 80.41(i). A refiner cannot change from use of the Simple Model to the Complex Model when California Phase 2 RFG begins on March 1, 1996 because only one compliance model can be used within any calendar year. Other than this restriction, all refiners retain the option of complying under the Simple Model or the Complex Model during the 1995-1997 time frame for RFG sold in non-California states.(7/1/94)

8. **Question**: What are the differences between the summer and winter models and what is their justification?

Answer: The equations, extrapolations, and normal-to-high emitter ratios remain the same when one switches from the summer version of the Complex Model to the winter version. However, four changes do take place. First, the baseline fuel is changed from the statutory summer values to the winter values. Second, the baseline emissions are changed from summer to winter values. The baseline emissions were derived from the MOBILE model with scenarios representing typical summer and winter conditions, and using the RVPs associated with the summer and

winter baseline fuels. Third, the difference in non-exhaust emissions between the baseline fuel and the candidate fuel is given a value of zero under the winter complex model. As explained in Section IV.E of the Regulatory Impact Analysis for the RFG program, EPA determined that vapor generation rates under summer conditions are substantially higher than under winter conditions, and that the mechanisms involved in non-exhaust emission production are highly temperature dependent. Since the data on which the Complex Model was based was collected entirely under summer conditions, it was deemed unfit to represent non-exhaust winter emissions. Last, under the winter complex model the RVP for both the baseline fuel and target (candidate) fuels must be set to 8.7 psi when calculating emission performances with the Complex Model. *(See* § 80.45(c)(2), for example.) This last condition is designed to remove the effect of RVP on exhaust emissions, again since RVP effects are highly temperature dependent, and all the data on which the Complex Model was based was collected under summer conditions. *See* 59 FR 7716, 7731 (February 16, 1994) (11/10/97)

9. **Question**: What are specific calculation steps for conventional gasoline exhaust toxics and NOx emission performance? Is the annual statutory baseline used? If not, how are batches to be assigned to the summer/winter statutory baselines?

Answer: The regulations currently state that batches of gasoline are to be designated as summer or winter for purposes of compliance calculations under the Complex Model based on the RVP of the gasoline (§ 80.101(g)(1)(ii)). However, EPA issued guidance in the RFG/Anti-dumping Questions and Answers document (8/29/94), which clarifies that batches are to be designated as summer or winter for use with the Complex Model based on RVP and the intended season of use. This clarification has been proposed in the July 11, 1997 NPRM at § 80.101(g)(3)(ii).

The Complex Model calculates emissions in mg/mi for each batch. Proposed § 80.101(g)(2)(i) of the July 11, 1997 NPRM clarifies that the exhaust toxics and NOx emissions in mg/mi are volume-weighted by batch to arrive at annual average values which must be less than or equal to the refiner's compliance baseline. (11/10/97)

10. **Question:** The valid range limits for the Simple and Complex Models given in § 80.42(c)(1) and § 80.45(f)(1), respectively, give the ranges outside of which fuels cannot be evaluated with the compliance models. What are you supposed to use if the fuels to be evaluated are outside of the specified valid range limits?

Answer: If a target fuel contains one or more fuel parameters which are outside the valid range limits, the compliance models generally cannot be used to evaluate that fuel. To use the compliance models, a refiner may reformulate the fuel such that it falls within the valid range limits. A refiner may also augment the Complex Model through vehicle testing to widen the valid range limits. Finally, if the refiner's individual 1990 baseline fuel contains any parameters which fall outside the specified valid range limits, he may qualify for extension of the valid range

per § 80.91(f)(2)(ii). This paragraph on valid range extension has been clarified in the Direct Final Rulemaking signed on June 27, 1994.(7/1/94)

11. **Question:** Limits of the RFG Simple Model for RVP at § 80.42(c) is 9.0 psi. However, this Simple Model is used for compliance determinations of winter toxics. Will EPA revise the RVP range for non-VOC-controlled RFG to allow properly volatilized gasoline to be delivered in the winter season?

Answer: RVP does not show up in the calculation of toxics during the winter because non-exhaust emissions are assumed to be zero. Thus the valid range limits for RVP are superfluous under the winter Simple Model.(7/1/94)

12. **Question:** For anti-dumping, is there any provision to use the complex model outside of the limits shown in § 80.45(f)(1)(ii)?

Answer: Yes, the provision is given in § 80.91(f)(2)(ii), and allows for the extension of the valid range when a refiner's individual baseline fuel lies outside of the specified valid range. The provision given in this paragraph was clarified in the Direct Final Rulemaking signed on June 27, 1994.(7/1/94)

13. **Question:** Clarify that the valid range for RVP specified in the regulations has no effect on winter calculations with the Complex Model since the RVP is fixed at 8.7 psi in the winter regardless of the actual RVP of the fuel.

Answer: That is correct. Since the winter Complex Model requires the use of an RVP of 8.7 psi for both baseline and target fuels regardless of the actual RVPs, the valid range limits for RVP do not apply to the winter Complex Model calculation.(7/1/94)

14. **Question:** The Complex Model upper limit for RVP of conventional gasoline is 11.0 psi. Will winter gasoline meeting ASTM Class C and D specifications of 11.5 psi and 13.5 psi vapor pressures be allowed?

Answer: As described in §80.45(c)(2), (d)(2), and (e)(2)(i), use of the winter version of the Complex Model requires that the RVP be set to 8.7 psi for both the baseline and target fuels. Thus the valid range limits associated with RVP are irrelevant for winter gasoline. (11/10/97)

15. **Question:** Under the early-use Complex Model, conventional gasoline compliance is determined only on the basis of exhaust benzene per §80.101(b)(2). The valid range limits given in §80.45(f)(2)(ii) indicate that any conventional gasoline having an olefins content higher than

30 vol% cannot be evaluated with the Complex Model. However, the olefins content of any conventional gasoline evaluated under the early-use Complex Model will have no effect on exhaust benzene because there is no olefins term in the equations for exhaust benzene. Are refiners still required to comply with the valid range limits for olefins for conventional gasoline complying under the early-use Complex Model?

Answer: The olefin level of any conventional gasoline complying under the early-use Complex Model play no role in compliance. As a result, the valid range limits for olefins do not apply to conventional gasoline produced under the early-use Complex Model. Note that this answer does not apply to the alternative Simple Model because the alternative Simple Model approach does not apply to conventional gasoline. (5/2/96)

16. **Question**: Can refiners ship RFG with an RVP result of less than 6.4 psi, but use 6.4 psi in the emission parameter calculations?

Answer: The valid range limits associated with the Complex Model are given in §80.45(f). These standards apply to every batch of RFG. Since the lower end of the valid range limit for RVP is 6.4 psi, no valid batches of RFG may be produced with an RVP of less than 6.4 psi. The Agency proposed to clarify this in the July 11, 1997 NPRM.

If a given batch of RFG contains one or more fuel parameters falling outside of the valid range limits, the refiner must re-blend the batch before it leaves the refinery to comply with the valid range limit standards. (11/10/97)

17. **Question**: Will EPA consider widening the limits on distillation?

Answer: The range of data on which the Complex Model was based limits the range within which the model will exhibit appropriate accuracy. The E200 range in the database was 33 to 66 vol%; extrapolation widened this range to 30 to 70 vol% for the Complex Model. Likewise the E300 database range of 72 to 94 vol% was widened through extrapolation to 70 to 100 vol% in the Complex Model. The Agency believes that these extrapolations maximize the utility of the Complex Model without unduly compromising its accuracy. Further widening of the limits on distillation would dramatically increase the likelihood that Complex Model emission estimates would be fictitious. In addition, the regulations contain provisions for widening the valid range limits on any fuel parameter through vehicle testing. *See* §80.48. (11/10/97)

18. **Question**: It is technically possible for a particular batch of RFG to meet all current ASTM and EPA volatility specifications and yet have an E200 value less than the 30% minimum specified in 40 CFR 80.45(f)(1)(ii). Does EPA consider it unlawful to produce and sell a particular batch of RFG with an E200 less than 30% even though the volume-averaged

parameters of the total RFG produced during the compliance period, including the E200 value, are well within the valid range of the Complex Model?

Answer: The valid range limits associated with the Complex Model are, in effect, per-gallon RFG standards. Thus it would be unlawful to produce RFG with an E200 value less than 30 vol%. The July 11, 1997 NPRM has proposed regulatory text to clarify this. (11/10/97)

19. **Question:** Clarify that "B" as defined in § 80.48(f)(3)(ii)(B) is equivalent to an edge target fuel as defined in § 80.45(c) and (d). The reference to paragraph § 80.48(f)(3)(i) is correct.

Answer: Yes, "B" defines the percent change in emissions for an edge target fuel wherein the fuel parameter being testing is fixed at the valid range limit for that parameter as specified in § 80.45(f)(1).(7/1/94)

20. **Question:** Clarify that interactive effects must be investigated when augmenting the Complex Model for a new fuel parameter despite the fact that the specified test fuel matrix does not include the full set of orthogonal matrices which is statistically necessary.

Answer: The test fuel matrix provided in the regulations delineates the minimum test program that would be acceptable to the Agency for Complex Model augmentation. A more comprehensive test program, which would provide the full set of orthogonal matrices which is statistically necessary, is allowed and is encouraged. The Agency expects that primary interactive effects can be adequately identified with the required minimum test fuel matrix.(7/1/94)

21. **Question:** Clarify that the proper version of the Complex Model that is to be used with an augmentation is the version that was in effect at the time the augmentation was approved. The preamble and regulations are inconsistent on this issue, and confusion arises in the term "the fuels," which is meant to apply to fuels that are produced before the augmentation is approved.

Answer: The proper version of the Complex Model that is to be used with an augmentation is the version that was in effect at the time the augmentation was approved.(7/1/94)

22. **Question:** Will the Complex Model for NOx emissions take additive effects into account?

Answer: No. However, the Complex Model can be augmented through the vehicle testing procedure outlined in the final rule to include the emission effects of an additive.(7/1/94)

23. **Question**: When performing simple and complex model calculations, what number of decimal
places need to be entered for each of the gasoline properties?

Answer: Fuel parameters should be rounded to the following decimal places:

RVP	2 decimal places	Olefins	1 decimal place
Benzene	2 decimal places	E200	1 decimal place
Sulfur	0 decimal places	E300	1 decimal place
Aromatics	1 decimal place		

(7/1/94)

24. **Question**: Will you be looking at switching to MOBILE6, and if so, when?

Answer: Version 4.1 of the MOBILE model was used to generate the statutory baseline emission values for the Phase I Complex Model, and version 5 of the MOBILE model was used to generate the baseline values for the Phase II Complex Model. To use MOBILE6 to generate baseline values for either the Phase I or Phase II Complex Models would require substantial changes to the RFG regulations, resulting in a major disruption to the RFG program. Therefore, the Agency has no current plans to modify the regulations to incorporate MOBILE6 into the Complex Model. However, the Agency may evaluate using the MOBILE6 model in the RFG program in the future. (11/10/97)

IV. Baselines

A. Baseline Auditors

1. **Question:** Can you identify absolute minimum data requirements and margin for auditor judgements to minimize petitions for deficient data?

Answer: No. The amount of data that is sufficient to develop a baseline will depend on the individual case. The baseline auditor does have some flexibility in using their judgement to determine what is appropriate, but the rationale and detailed discussion of the situation must be provided in a petition to EPA.(7/1/94)

2. **Question:** It would seem that one objective of the auditor is to assure that the most representative 1990 baseline (with allowable adjustments) is submitted. What leeway, if any, do auditors have to achieve the most representative baseline?

Answer: Within the limits of the regulations, the auditor has a significant amount of leeway in determining the most representative baseline. The amount of flexibility is also dependent on the individual situation. However, the baseline auditor's role includes using technical judgement to determine the best approach, or the most appropriate of several options, when developing or auditing a baseline.(7/1/94)

3. **Question:** How does an auditor verify computer data if no hard copies exist?

Answer: The only option is to make do with the data available. If it seems clear to the auditor that data is in error or otherwise false but this cannot be verified, that data should be excluded from the calculations, with an explanation.(7/1/94)

4. **Question:** What are the requirements for baseline auditors?

Answer: The requirements for baseline auditors are clearly outlined in section 80.92 of the reformulated gasoline regulations.(7/1/94)

B. Petitions

1. **Question:** Will EPA provide written responses to petitions?

Answer: If the EPA responds to a petition prior to the deadline for baseline submissions, it will respond in writing. If the petition is not evaluated until review of the baseline submission (i.e after the deadline for baseline submissions), the petition will be addressed in the context of the baseline approval.(7/1/94)

2. **Question:** Why can't general petitions be submitted?

Answer: Section 80.91(b) requires a separate baseline submission for each refinery. Each baseline represents a distinct, individual situation and must be addressed as such. While similar situations may apply to several facilities, the impacts may vary significantly.(7/1/94)

3. **Question:** Why are petitions needed for relatively simple things?

Answer: Petitions are required for every situation where a refiner or other party wants or needs to deviate from the baseline determination requirements stipulated in the RFG regulations. Even apparently simple issues must be evaluated before the petition can be granted.(7/1/94)

4. **Question:** Rather than petitioning to use less than the minimum data for baseline determination, can refiners rely on the engineering judgement of the outside auditor, if it is at least half of these minimum requirements?

Answer: No. Baseline determination submissions must follow the criteria specified in the regulations regarding minimum data.(7/1/94)

5. **Question:** Rather than petitioning EPA for approval to exclude any data due to improper labeling, improper testing, etc., can refiners petition for excluding data which is not within the normal statistical data range of two standard deviations from the average? (The best statistical approach would exclude data outside of the normal statistical range and should not require any special permission.)

Answer: A petition must be approved for the exclusion of any baseline data, regardless of statistical deviation. Statistical variability, by itself, is not an acceptable basis for excluding data.(7/1/94)

6. **Question:** Will EPA eliminate the petition and approval requirement for using E200 and E300 equations to determine values from T50 and T90 data (i.e., just mandate the use of the conversion equations if temperature data is unavailable)?

Answer: No. This section of the regulation is subject to interpretation, and EPA needs to ensure that the equations are used only in situations that truly warrant their use. Often, interpolation of actual temperature data is more appropriate than using the equations.(7/1/94)

7. **Question:** When should a refiner file a petition to use calculated E200 and E300 values via the formula provided?

Answer: When they feel adequate temperature data is not available to create a distillation curve from actual data.(7/1/94)

8. **Question:** Will a petition be granted to use the E300 and E200 equations if data from the actual distillation is available in the form of temperature values?

Answer: No. The equations should be used only when the only available measurements are for T50 and T90. Given a table of temperature values, a distillation curve should be plotted from those numbers, and E (percent evaporated) values determined from the curve.(7/1/94)

Question: How do we determine our baseline if we don't know the outcome of a petition?

Answer: The refiner must decide how to proceed with its baseline determination. One method would be to assume that the petition will be allowed. Another method would be to calculate the baseline with and without approval of the petition.(7/1/94)

9. **Question:** What if we can't meet a WIP or extenuating circumstance criteria--can we petition anyway?

Answer: EPA cannot prevent any petition submissions. In this case, however, it is unlikely that the petition would be granted. Nevertheless, it may be a useful mechanism to gain EPA guidance on how the situation can best be addressed.(7/1/94)

10. **Question:** Can work-in-progress be applied to an aggregate baseline?

Answer: Work-in-progress applies only in the calculation of an individual refinery baseline.(7/1/94)

11. **Question:** What is the difference in the WIP caps for compliance under the simple and complex models?

Answer: Currently, the WIP caps for simple model and complex model compliance are defined differently, as stipulated in the regulations. However, this has been changed in the technical amendments.(7/1/94)

12. **Question:** If a refinery has more than one WIP which came on-line at different times (e.g., early 1991, late 1992) is it limited to one WIP adjustment, or are the adjustments cumulative?

Answer: If both projects meet the WIP requirements, the baseline should be adjusted for both. In other words, the baseline should reflect operation after both projects came on-line.(7/1/94)

13. **Question:** For WIP, would a good indicator of progress be to require that a certain amount of funds be expended toward the project in 1990? The language might read "In order to be considered as WIP, the refiner must have committed at least X percent of the total cost of the project externally in 1990." Use of the "committed" rather than the "expended" is suggested because equipment procurement normally includes a payment schedule rather than cash up front. For example, the first payment might be 30 percent, timed to coincide with the refiner's accounting periods so that it appears on the books in a certain fiscal year. "Externally" means

committed to others rather than the re-deployment of the refiner's in-house staff which could be more subjective.(7/1/94)

Answer: EPA will not be changing the regulation language regarding this issue. EPA will be evaluate each WIP petition on a case-by-case basis.(7/1/94)

14. **Question:** Several refiners embarked on capital programs in 1990 aimed at meeting new environmental requirements. In some cases, permanent changes have been implemented stage-wise and in such a way as to provide improved refining returns as well as meeting the environmental regulations. Can a refiner claim as his baseline volume the impact of all these related permanent changes initiated by the need to produce low sulfur diesel?

Answer: If, and only if, the projects were begun or committed to in 1990, in response to environmental regulations, may they all be considered in making the WIP adjustment.(7/1/94)

15. **Question:** For a Work-in-Progress, are Method 1 and 2 type data limited to 1990 data only, with Method 3 being the only option for post-1990 data? OR are the Methods re-defined in a WIP situation?

Answer: The data types are not re-defined by the WIP. The WIP is a post-1990 adjustment made to the original baseline, regardless of the data type (method 1, 2 or 3) originally used.(7/1/94)

16. **Question:** For extenuating circumstances, does the shutdown include the shoulders of the shutdown?

Answer: No. The limit of 30 days or more downtime given in the regulation was not meant to include the shoulders of the shutdown. Extenuating circumstances, however, may be evaluated on a case by case basis.(7/1/94)

17. **Question:** For an extenuating circumstance adjustment, must the 30 days of downtime be consecutive?

Answer: Generally, the downtime is expected to be continuous. In some situations, such as a unit being shutdown for an extended period and then only in operation a few days before shutting down again, continuous downtime is not necessary. This is subject to EPA evaluation and approval.(7/1/94)

18. **Question:** Do all of the refineries of a refiner have to meet the JP-4 requirements to get an adjustment?

Answer: The criteria for a JP-4 baseline adjustment must be met for each refinery of a refiner: 1) the refinery will not produce reformulated gasoline; and 2) refiners must meet the specified 1990 JP-4 production to gasoline ratio (the ratio has changed from .5 to .2 via the DFRM, barring adverse comments). However, for those refiners with multiple refineries, it is no longer required that each of a refiner's refineries had to have produced JP-4 in 1990.(7/1/94)

19. **Question:** If a refiner meets the JP-4 provisions, but later switches to reform production, what baseline would be used?

Answer: A refiner may begin producing reformulated gasoline instead of, or in addition to, conventional gasoline any time during the calendar year. If this happens at any refinery within a refinery aggregate which has received an adjustment for JP-4 production, then the compliance baseline for that aggregate shall revert to its unadjusted baseline values for that entire averaging period. This is true even for those refiners that meet the JP-4 criteria, have petitioned to receive the adjustment, and were subsequently approved to adjust their baselines by the Agency.(7/1/94)

20. **Question:** Explain JP-4 provisions -- On a refinery basis or refiner basis?

Answer: The 1990 JP-4 to gasoline production ratio should be calculated on a refiner basis as opposed to a refinery basis. In other words, the total 1990 JP-4 production for each of a refiner's refineries should be divided by the total 1990 gasoline production for each of a refiner's refineries to determine the ratio.(7/1/94)

21. **Question:** To avoid burdensome additional testing in 1994, can a refiner use data from any industry-accepted test method in determination of fuel parameter values?

Answer: In most cases, yes. However, in order to use such alternative test methods, the refiner must submit a petition and obtain EPA approval.(7/1/94)

22. **Question:** How do we handle a WIP that was built before 1990 but was not used in 1990?

Answer: To qualify for a WIP adjustment, the project must meet the requirements given in the regulation. It may be possible to consider a pre-1990 WIP if some unforeseen, extenuating circumstance prevented it from operating in 1990. This is highly unlikely, however, and is dependent on the specifics of the situation.(7/1/94)

23. **Question:** What is the effect of the WIP caps on volume? For instance, if exhaust benzene cannot exceed 6.77, does the refiner get the full effect of the volume increase?

Answer: Volume will also be adjusted based on the WIP. The new WIP-adjusted fuel parameters, whatever they may be, will apply to the entire WIP-adjusted volume. The WIP-adjusted volume would then be the baseline volume for the refinery.(7/1/94)

24. **Question:** Must refiners of dual train refineries include the entire1990 operation in their baselines or only the portion of the operation which they intend to operate?

Answer: The baseline submittal must represent 1990 refinery operation. It can only be adjusted based on allowable petitions, not subsequent changes in refinery operation.(7/1/94)

C. Submission/Approvals

1. **Question:** Clarify due dates for baseline submission and late submission if still collecting data.

Answer: Baselines were due to EPA June 1, 1994. If data collection continued beyond December 15, 1993, the resulting baseline is due September 1, 1994. It is not necessary to notify EPA that a baseline will be submitted September 1, 1994, if data collection continued into 1994.(7/1/94)

2. **Question:** Must a petition be submitted for an extension of the baseline submittal deadline? What is the likelihood of it being granted?

Answer: EPA does not have the authority to grant extensions to the deadlines for baseline submissions given in the final regulations.(7/1/94)

3. **Question:** Do California refiners need to submit baselines?

Answer: Yes. Every facility producing, importing or blending gasoline is required to have a 1990 baseline.(7/1/94)

4. **Question:** For a refinery still collecting data on one or two parameters but has baseline values for the other parameters, should only completed data be submitted, with a note about the missing parameters (and then submit those as available) or should refiners wait and submit all data when complete?

Answer: EPA would prefer to receive the completed baseline, once all data has been collected and all parameter values determined. If an incomplete baseline is submitted, EPA will wait until it is complete before beginning the review of that baseline. If an incomplete baseline is submitted after the deadline, the EPA will notify the submitter of the missing information and will wait for a resubmittal before begin review of the baseline.(7/1/94)

5. **Question:** In methods 1, 2, and 3, can seasonal data be submitted, rather than monthly data (seasonal data is sufficient and significant data are from scattered weekly samples, not monthly)?

Answer: The regulation requires monthly data - minimum data requirements are defined by month. However, EPA has modified the final rule (via the technical amendments) to allow use of method 1 per batch data to create the seasonal database. For minimum data requirements a month would then be defined as 4 weeks. This change would only apply to method 1.(7/1/94)

6. **Question:** Why is seasonal data needed in the baseline submission?

Answer: Because there are two compliance models, one for summer and a second for winter.(7/1/94)

7. **Question:** When will the baseline guidance document be finished? Are alternate formats okay? How thick is the expected submission?

Answer: A draft baseline guidance document is available. Given the time constraints of this regulation, it is unlikely that this document will be finalized. This document presents a suggested format; alternate formats are acceptable. The thickness of the submission will depend entirely upon the amount of data available for the facility.(7/1/94)

8. **Question:** Specifically, what operating data is required for each refinery unit?

Answer: The specific operating data required in the baseline submission is given in section 80.93(c)(10). This information should be provided for both the summer and winter operating periods.(7/1/94)

9. **Question:** Is the refinery information needed if using Method 1 or Method 2? Or is it just needed if using Method 3?

Answer: Per the final regulations, the refinery information must be provided with every baseline submission, regardless of the type of data used.(7/1/94)

10. **Question:** How will baselines be approved? Who should we call concerning the status of our baseline?

Answer: You will receive notification from EPA when the baseline has been approved. Please refrain from contacting EPA regarding the status of your individual baseline. EPA will be contacting each submitter throughout the review process.(7/1/94)

11. **Question:** When presenting the gasoline pool data (EPA Table 6), is it ok to present just summer, winter, and annual average data, rather than monthly data?

Answer: Yes, it is acceptable to present seasonal gasoline pool data. The format of this table will depend on the data available.(7/1/94)

12. **Question:** What are the consequences of a facility not having an approved baseline by 1/1/95? If a refiner has submitted its baseline application, but EPA has not issued a final baseline determination, may a refiner produce RFG? If so, what baseline should the refiner use to be in compliance?

Answer: A facility whose baseline has not been approved by the time it begins producing RFG is responsible for meeting the baseline as ultimately approved by EPA. There is no bar on producing RFG before the baseline is approved, but if the RFG produced violates the parameters of the baseline as ultimately approved, the facility would be in violation and would be subject to civil penalties. EPA believes that any facility seeking to establish its baseline should have sufficient knowledge to determine its likely baseline, and to plan accordingly. EPA also believes that it will be able to issue approved baselines in all cases where complete and properly prepared baseline applications are submitted by facilities in a timely manner.(7/1/94)

13. **Question**: When will the approvals for an individual refiner's baseline be completed by EPA? It is anticipated that in early October 1994, RFG will be produced and shipped to initiate transition prior to the December 1, 1994 compliance date. Timing of EPA's response to this issue is critical as it is our understanding according to the Q&A document that any product produced not in compliance with the approved baseline will be in violation.

Answer: As stated in answer to question IV-C-12 of the July 1, 1994 Question and Answer Document, a party whose baseline has not been approved by EPA by the time it begins producing RFG is responsible for meeting the baseline as ultimately approved by EPA. EPA cannot state with certainty when approvals for individual refiners' baselines will be complete. In the interim, EPA believes that refiner's that have complied with the regulations by submitting their baselines in a timely manner should have a good grasp of what their actual baseline will be. Accordingly, these refiners may commence production assuming that the baseline submitted for approval will

be their individual baseline. In the event that there is any discrepancy between the refiner's submitted baseline certification and the actual baseline approved by EPA, the refiner should have the opportunity to achieve compliance on average during the whole of the 1994 through 1995 averaging period.(8/29/94)

14. **Question:** What information in the baseline submittal will be considered Confidential Business Information?

Answer: Based on section 80.93(b)(6), the information listed in section 80.93(b)(5) cannot be considered CBI. Any other information in the baseline submission which the refiner wishes to be considered CBI must be clearly identified. Any such claims will be evaluated subject to 40 CFR part 2, subpart B. Upon baseline approval, EPA will publish the individual baseline standards for each refinery, blender and importer in the Federal Register, including annual average baseline emissions and 125% of the individual baseline values for sulfur, olefins and T90.(7/1/94)

D. Baseline Development - General

1. **Question:** Does a baseline change between the simple and complex models?

Answer: The set of baseline fuel parameters (after allowed adjustments) is basically fixed. The only time the baseline fuel parameters would change is when some circumstance specified in the regulations allowed it to change (such as the production of RFG after a JP-4 adjustment). There are different baseline emissions calculated using these parameters, depending on the model used (Simple or Complex) and the timeframe (Phase I vs. Phase II).(7/1/94)

2. **Question:** Do we get credit for the elimination of lead in the reduction of toxics?

Answer: No. The Clean Air Act did not allow the consideration of fuel lead reductions in establishing a 1990 baseline nor in developing the anti-dumping regulations.(7/1/94)

3. **Question:** Is anti-dumping compliance the only restriction on conventional gasoline? Are there any future emissions reductions for conventional gasoline?

Answer: All gasoline requirements currently in place, except for those applicable to reformulated gasoline, apply to conventional gasoline (e.g., volatility requirements, lead requirements, state oxygenated fuel requirements, etc.). The anti-dumping requirements are in addition to these. It is possible that other fuel controls could be promulgated through separate actions in the future. (7/1/94)

4. **Question:** Is the blendstock-to-gasoline ratio to be reported as part of the baseline one number, i.e., the sum of the eight identified blendstocks divided by the gasoline produced? Are eight individual ratios required?

Answer: The numerator in the blendstock-to-gasoline ratio specified in § 80.102 of the final rule is, in general, the sum of the volumes of the applicable blendstocks. An individual ratio is not required to be determined for each blendstock.(7/1/94)

5. **Question:** With respect to benzene exhaust emissions for conventional gasoline under the simple model, there is reference to both benzene exhaust emissions calculated by the simple model and benzene exhaust emissions calculated by the formula presented in Section 80.90. Which formula should be used?

Answer: For conventional gasoline compliance, the equation specified in § 80.90 of the final regulations should be used to determine baseline exhaust benzene "emissions" under the simple model.(7/1/94)

6. **Question:** If a refinery will only be producing reformulated gasoline (no conventional gasoline) does it have to develop baseline values for other than sulfur, olefins and T90? If not, are audit requirements reduced?

Answer: Baseline values must be developed for each of the fuel parameters specified in § 80.91(a)(2), and all individual baselines must be verified by a baseline auditor. The full set of baseline fuel parameter values will become necessary if the refinery ever elects to produce conventional gasoline. Also, the full set of baseline values will be used to determine regional and national average baselines.(7/1/94)

7. **Question:** Using method 2 or 3 blendstock data, is there any way to exclude minimal blendstock quantities? (e.g. of the 1990 blendstocks, some contained only very small quantities for special cases, i.e. the volumes were negligible).

Answer: There are no lower end, minimum provisions in the regulation. All blendstocks should be included in the baseline, regardless of their volume.(7/1/94)

8. **Question:** When calculating the Winter Baseline Emissions for Anti-dumping in section 80.91, should a refinery use its winter baseline RVP or 8.7 psi?

Answer: 8.7 psi.(7/1/94)

9. **Question:** Why is the baseline winter RVP 8.7 psi?

Answer: When using the winter complex models, an RVP of 8.7 psi is used because the EPA was not able to adequately quantify the effects of RVP on wintertime emissions, and thus they are not represented in the Complex Model. Thus, independent of the actual RVP of such fuel (or the baseline value) for both baseline and compliance determination, 8.7 psi should be used.(7/1/94)

10. **Question:** How are baselines apportioned for facilities that are joint ventures?

Answer: Each facility must have a complete baseline. The joint venture is considered the owner of the facility and is responsible for the baseline. Individual baselines cannot be apportioned or divided in any way. Further, the facilities owned by the joint venture are considered separate from the facilities that may be owned by the individual parties of the joint venture. Therefore, the jointly owned facility can not be aggregated with facilities owned by any of the individual parties.(7/1/94)

11. **Question:** Is in-line blending data acceptable for Method 2? For Method 1?

Answer: The regulations allow the use of alternative sampling and/or test methods if it can be shown that these methods are equivalent to the methods required in the regulation. Generally, it is better to use the available data rather than attempting to model qualities, as long as the procedures used are not significantly biased. Petition for the use of in-line blending data and EPA will consider its use.(7/1/94)

12. **Question**: The July 1, 1994 Q&A document indicates that purchased finished gasoline should not be included in a refiner's individual 1990 baseline in cases where the purchaser adds blendstocks or finished gasoline to the purchased gasoline, or does nothing to the purchased gasoline (see questions F.4 and J.3). However, in EPA's baseline review and approval process, some refiners have been told that purchased finished gasoline should be included if it has been changed in any way. Please clarify.

Answer: Section 80.91(c)(1)(iii) of the regulations indicates that purchased finished gasoline should not be accounted for in a refiner's baseline if it leaves the refinery "unchanged" from its arrival state. This provision is designed to ensure that a refiner's baseline reflects, to as great an extent as possible, its activities in producing gasoline in 1990. This provision also avoids double-counting (defined in more detail below), and is designed to ensure that a refiner's baseline does not reflect actions attributable to other refiners. A similar approach is taken in the compliance provisions (see 40 CFR 80.101(e)) where a refiner is required to exclude gasoline from its compliance calculations which was not produced at its own refinery.

The guidance issued by the Agency on July 1, 1994 for baseline development is consistent with the approach taken for compliance calculations. It notes that where a refiner purchased finished gasoline that has been included in the seller's baseline and then added components produced at its own refinery, only those added components are to be included in the refiner's baseline calculations; the purchased finished gasoline is not included. The one exception to this guidance is stated in Section 80.91(c)(1)(iii): if a refiner "changed" the purchased finished gasoline, it must be included in that refiner's baseline.

Purchased finished gasoline is considered unchanged (per §80.91(c)(1)(iii)) if it was simply blended with finished gasoline produced at the purchaser's refinery. When purchased finished gasoline is manipulated in this way, the resulting blend is no different than if fungible mixing had occurred downstream of the refinery. The finished gasoline produced at the purchaser's own refinery is a distinct product that can be clearly attributed to that refiner, and its properties are an accurate reflection of the product made by that refiner in producing gasoline in 1990. The addition of finished gasoline to the purchased finished gasoline can be treated as a separate event from the production of either of the precursory batches. Including the properties of the blend into the purchaser's baseline would result in the properties of the seller's finished gasoline being accounted for in both the seller's baseline and the purchaser's baseline (double-counting).

Likewise if the purchased finished gasoline was blended with blendstocks such as butane or alkylate, the purchased gasoline would be considered unchanged. The blendstocks are a distinct product, clearly attributable to the refiner, and the properties of the blendstock are an accurate reflection of the product made by that refiner in producing gasoline in 1990. The addition or mixing of the blendstock and the purchased finished gasoline can be treated as a separate event from the production of either the blendstocks or the purchased gasoline, and including the properties of the final blend in the purchaser's baseline would tend to double-count the properties of the seller's finished gasoline.

In both forms of blending, the purchased finished gasoline is introduced into commerce in the same form as it arrived at the buyer's refinery, except with some additional, readily identifiable components; the fuel components involved all eventually end up being combusted in a vehicle engine. Since very few interactive effects between fuel parameters are recognized in the RFG compliance models, the final emission effects of a batch of gasoline are largely independent of whether the components are in a single batch or two different batches. Thus mixtures of gasolines or gasoline blendstocks are reasonably considered unchanged for the purposes of baseline determination.

If blending was regarded as an event that changes purchased finished gasoline, some refinery baselines could be severely and detrimentally affected. The volumes of purchased finished gasoline are very small for many refiners, but can be quite substantial for some. For such refiners, significant differences between the properties of the purchased gasoline and that produced at their own refinery can result in a baseline which profoundly misrepresents the impact of that refinery's production on vehicle emissions. In addition, many refiners have data on the finished gasoline they purchased in 1990, and so can accurately exclude such gasoline from their baseline.

Unlike blending, reprocessing of purchased finished gasoline would necessarily result in changes to the components that make up the gasoline batch. These changes would significantly alter the emission characteristics of the final finished gasoline. Although blending of purchased finished gasoline with components from the purchaser's own refinery also alters the emission characteristics of the final blend, there is a critical difference between blending and reprocessing in terms of the emission effects. For blending, the combustion emissions produced from the final blend will be nominally equal to the sum of the emissions from the purchased gasoline and those from the added components, had the blending not occurred. In other words, the same emissions (amount and type) can be expected regardless of whether blending occurs, because all the gasoline components in question (i.e. both the purchased finished gasoline and the added components) will end up being combusted in vehicles anyway; blending simply means that the components are combusted all at once instead of separately. As a result it may be said that the emission effects of purchased gasoline can be expected to manifest downstream of the buyer's refinery regardless of whether or not blending occurs.

However, when a batch of purchased finished gasoline is reprocessed in some way, all of the original gasoline components will not be combusted in a vehicle. Reprocessing would include any fuel manipulation that involves a blendstock producing unit, and which results in either a separation of fuel components or a chemical change to the molecules. Examples would include using the purchased finished gasoline as a supplemental feedstock to a unit, removing butane from the purchased gasoline, or redistilling it into separate components. Thus some components may be removed and sold in a non-fuels market, while other components may be chemically changed. As a result, the emissions attributable to the original purchased finished gasoline can never be expected to manifest downstream of the purchaser's refinery. Thus EPA makes a distinction between blending and reprocessing of purchased finished gasoline for the purposes of baseline determination.

Therefore, per §80.91(c)(1)(iii), any purchased finished gasoline which has been reprocessed in any way (not simply blended) must be included in the purchaser's baseline determination. All other purchased finished gasoline shall be excluded from a refiner's baseline determination if the purchased finished gasoline has been included in another refiner's baseline.

EPA is aware that in a limited number of cases it has not implemented Section 80.91 (c)(1)(iii) consistent with the above guidance. For example, certain baselines have been approved that included purchased finished gasoline that had been blended with either finished gasoline or blendstocks. In such cases a baseline will need to be resubmitted to the EPA, regardless of whether a baseline has been approved or is pending approval by EPA. However, EPA will consider a petition by a refiner to <u>not</u> make such a resubmission if one or more of the following conditions are met:

1) The refiner is unable to accurately determine or estimate the volumes and properties of any components added to gasoline purchased in 1990, and so cannot accurately exclude the purchased finished gasoline from the baseline calculations.

2) Any change in refinery baseline properties or volume resulting from the resubmission will be de minimis.

3) Any change in refinery baseline properties or volume resulting from the resubmission would constitute a more lenient baseline.

In addition, if a refiner's baseline has already been approved by EPA and is revised to be more stringent for any parameter or volume due to the exclusion of purchased finished gasoline, then the revised baseline will not apply to any gasoline produced prior to January 1, 1996. (9/19/95)

E. Baseline Development - Oxygen/RVP

1. **Question:** When calculating the winter baseline emissions for anti-dumping purposes, should a refinery use its winter baseline RVP or 8.7 psi?

Answer: When using the winter Complex Model, an RVP of 8.7 psi should be used for both the baseline and target fuels. This applies to all winter Complex Model calculations, including an individual refiner's baseline emissions.(7/1/94)

2. **Question:** If for the winter model an RVP of 8.7 has to be used when calculating emissions, what is the purpose of the RVP limits being 6.4 to 11 psi for conventional gasoline?

Answer: Some valid range limits must apply to conventional gasoline because even in summer months the RVP varies widely. The Complex Model contains statistically derived regression equations whose accuracy decreases dramatically when they are used outside of the valid range limits.(7/1/94)

3. **Question:** How is the RVP and distillation non-linearity handled?

Answer: The RVP of hydrocarbons and oxygenates should actually blend very linearly, with the exception of the lighter alcohols, methanol and ethanol. Methanol is not expected to be used as an oxygenate due to its high RVP, and there are accepted rules of thumb for approximating the RVP boost from ethanol. Regarding distillation, EPA's complex model uses the percent evaporated at a given temperature as opposed to the temperature at which a given percentage of fuel evaporates. This was done in part to avoid this problem, since percent evaporated, like RVP, blends very linearly.(7/1/94)

4. **Question:** How are small amounts of alcohols and ethers in MTBE accounted for?

Answer: In baseline determination, such negligible quantities are insignificant. An attempt should be made to account for them, but there should not be much concern over these byproducts.(7/1/94)

5. **Question:** How should refiners use blending records for oxygenate parameters when distillation is nonlinear?

Answer: In this situation, it may be necessary to do further testing with the same oxygenates and similar hydrocarbon blendstocks to determine the blending effects.(7/1/94)

6. **Question:** For percent oxygen parameter determination, most refiners did not test for percent oxygen if they used an oxygenate. Should percent oxygen be estimated by dividing the volume of oxygenate blended by the volume of gasoline in 1990?

Answer: Yes, the percent oxygen can be estimated, using an appropriate formula.(7/1/94)

7. **Question:** What does EPA mean by "blending RVP of oxygenate" (equation in § 80.91(e)(4)(i)(B))?

Answer: This means the effect that an oxygenate has on RVP when it is assumed to have a constant RVP effect per volume added. This is analogous to the blending RVP for any other hydrocarbon, except that blending RVPs for hydrocarbons are generally independent of other factors while those for oxygenates may depend on the hydrocarbon composition and the amount of oxygenate added.(7/1/94)

F. Baseline Development - Special Situations

1. **Question:** What if a refinery shipped a lot of blendstock in 1990 instead of gasoline (thus its 1990 gasoline volume is low)--can it adjust for this?

Answer: The baseline can be adjusted only if this unusual operation were the result of a work-in-progress, extenuating circumstance, or other allowable adjustment specified in the regulations. EPA recognizes that there may be anomalies in 1990 operation, however the Clean Air Act Amendments require that baselines must reflect 1990 operations.(7/1/94)

2. **Question:** Can refiners aggregate if one of the refineries is partially owned? If so, how? (e.g. co-owned by oil company and some other, unrelated company)

Answer: No. Two refineries can only be aggregated if they are wholly owned by the same refiner. If a refinery is owned by more than one party, it may not be aggregated with any other refineries.(7/1/94)

3. **Question:** If a terminal was in operation for all of 1990, but did no blending of ethanol for gasoline and wishes to register it for potentially blending conventional gasoline from raffinate and ethanol, is it appropriate to use the statutory baseline? Would an outside audit be necessary?

Answer: If full method 1 fuel parameter data is available for the terminal's 1990 operation, an individual 1990 baseline is required, regardless of future operation plans. If this complete data is not available, the statutory baseline must be used. If the statutory baseline is used, verification by a baseline auditor is not needed.(7/1/94)

4. **Question:** If a refiner purchased finished gasoline in 1990, then blended in it's own components, is the baseline based on parameters for the final product (which would result in double counting of that gasoline), or only on the blending components it added? If parameters are required for the final product, the parameter information for the purchased gasoline is not available and will require a great deal of "guess work" to estimate.

Answer: If the purchased product is finished gasoline which would be reported in another party's baseline calculation, only the produced blendstocks need to be included in the baseline. This is similar to the compliance provision in § 80.101(e)(1) which states that gasoline produced at another refinery must be excluded from compliance calculations.(7/1/94)

5. **Question:** A refiner owns a refinery where typical blend components are produced and blended to finished gasoline. One component is produced in excess, and shipped to a distant terminal also owned by that refiner. How should a baseline be developed?

1) Could the terminal be included as an extension of the refinery, and thus construct a single baseline for both (the terminal is a refinery by definition)? These facilities do not meet the geographical proximity and other requirements.

2) Should the refiner construct two baselines, one for each facility (one refiner, one blender)? The problem is that the blend component provided by the refinery is not purchased, as described in the regulations. Should the term "purchased" be interpreted as "purchased or otherwise acquired"? For the terminal, if Method 1 data is not complete, would it then default to the CAA baseline?

Answer: Under § 80.91(e)(1)(ii), if the terminal received at least 75 percent of its 1990 blendstock volume from a single refinery, or from one or more refineries which are part of an

aggregate baseline, the terminal could be included as an extension of the refinery, resulting in a single baseline for both. If not, the terminal would need to develop it's own 1990 baseline as a blender. It is correct that if complete method 1 data is not available for the terminal, it would then default to the statutory baseline.(7/1/94)

6. **Question:** When no oxygenate was used in 1990, how are oxygenated values calculated from non-oxygenated? What oxygenate is used, at what volume?

Answer: Oxygenate values are not required in the baseline calculations if no oxygenate was used in 1990.(7/1/94)

7. **Question:** If a refinery makes major post-1990 operating changes (like shutting down an FCC unit to go into the lube business), can this be accounted for in the baseline development?

Answer: No, unless it meets the criteria for a work-in-progress adjustment or other adjustment (i.e., was contracted for prior to or in 1990, etc. See section 80.91(e)(5)). The anti-dumping baseline is based on 1990 operations.(7/1/94)

8. **Question:** If loss of refinery throughput due to poor operation (not extenuating circumstances) was greater than 12% of normal, can that be equivalent to, say, 1-1/2 months of shutdown or otherwise accounted for using auditor judgement?

Answer: No. Adjustments can be made to the 1990 baseline only when meeting the stipulated criteria for work-in-progress, extenuating circumstances, etc. However, you can petition for consideration of a special situation if you cannot meet the baseline determination requirements of the regulation.(7/1/94)

9. **Question:** In an area where conventional gasoline is consumed and no longer supplied by the same company as in 1990, can the new supplier substitute or add the prior company's volume and/or baseline quality to its own?

Answer: No. Each producer and supplier of gasoline must have it's own baseline parameter values, volumes and emission values - whether they are individual or statutory. Any excess volume must comply with the statutory baseline.(7/1/94)

10. **Question:** A blender was producing gasoline in leased tankage in 1990. The blender subsequently purchases the tanks and moves them to a different physical location. Do the

baseline properties and volumes associated with the leased tanks "move" to the new blending location?

Answer: To the extent that blending operations remain the same, yes, the baseline associated with that operation should be used at the new location.(7/1/94)

11. **Question:** If a refinery produces more conventional gasoline in a compliance period than Veq (equivalent 1990 baseline volume), it must use the statutory gasoline as the performance standard for the additional production. This results in several questions: Does the refinery meet 125% of the statutory baseline sulfur, olefin and T90 for the added volume? What sulfur, olefin and T90 does the refinery use for the statutory/regulatory baseline -- summer, winter or annual?

Answer: The regulations have been amended in a manner that eliminates the calculation for Veq. The refinery must meet a maximum of 125% of it's compliance baseline which is calculated in accordance with section 80.101(f)(). The statutory baseline values used in this calculation are contained in section 80.91(c)(5)(iv), which are seasonally weighted summer/winter baseline fuel properties.(7/1/94)

G. Baseline Development - Calculations

1. **Question**: Should Method 2 calculation include produced, transferred and purchased blendstock (i.e., all blendstocks used in the refinery's 1990 gasoline.)?

Answer: Yes, all blendstocks should be included. The phrase "produced in the refinery" has been removed from both method 2 and method 3 definitions via the technical amendments.(7/1/94)

2. **Question:** Can refiners reduce the number of significant figures required for emissions values from 4 to 3 (the fourth significant figure is not meaningful in these calculations)?

Answer: No. Section 80.90(g) states that emission values shall be determined to four (4) significant figures.(7/1/94)

3. **Question:** Should seasonal emissions for each refinery be calculated and weighted to produce an aggregated baseline or should the seasonal parameters be weighted and the emissions calculated with these seasonal averages?

Answer: Refinery baseline emissions are calculated from the Complex Model, which is seasonal. Thus baseline emissions must be calculated separately for summer and winter, and then combined into a year-round baseline. You cannot determine baseline emissions based on annually

aggregated fuel parameter values. However, the seasonal, individual refinery baseline values for sulfur, olefins and T90 should also be aggregated into year-round values.(7/1/94)

4. **Question:** The baseline volume for a blender as described at § 80.91(f)(1)(v) does not include the opportunity for inclusion of oxygenate volume. Is this intended?

Answer: Section 80.91(f)(1)(v) does not exclude oxygenate from the baseline volume. It only excludes blendstocks produced and sold as blendstocks, and exported gasoline.(7/1/94)

5. **Question:** Can a refiner include a terminal with a refinery in developing a common baseline if the terminal is under long-term lease to (as opposed to owned by) the refinery (80.91)?

Answer: Yes, if it meets the definition and requirements of section 80.91(e)(1)(i).(7/1/94)

6. **Question:** If the importer becomes the supplier to a marketer who imported gasoline in 1990, can the importer add the marketer's 1990 volume to the importer's 1990 volume? (isn't this analogous to buying a refinery and adding it to your baseline?) Would the parameter values for the marketer's volume be the CAAA default values?

Answer: No, the importer cannot add the marketer's 1990 volume to it's own to create a new 1990 volume. As described in section 80.91, the requirements for an importer are not analogous to those for a refiner. Any imported volume exceeding the 1990 baseline volume (e.g. the marketer's volume) would have the statutory baseline values.(7/1/94)

7. **Question:** Generally, small, simple refiners wish to establish their baseline using gasoline shipments, using Method 1 and Method 3 data (these refiners are generally operated nearly steady-state, on an essentially constant crude diet and there is no internal accounting for blendstocks, and there is no intermediate storage for these components). Will EPA allow the auditor to confirm an assessment, by means other than actual component data, as to whether the refiner has met the 10% component criteria?

Answer: No. For method 3 data calculation, the only way to confirm that post-1990 fuel meets the 10% component criteria is to evaluate actual component data.(7/1/94)

8. **Question:** Must refiners defer to regulatory references to blendstock produced on a batch basis, as all blendstocks made by refiners are produced from continuous processes (even purchased blendstocks are received at regular intervals and are typically blended on a fairly uniform basis)?

Answer: Yes. Even continuous streams are only measured periodically and it would be best to apply the measurements to the volume produced most closely to the time of the measurement. In other words, break up the continuous stream into discrete batches for calculation purposes.(7/1/94)

H. Baseline Development - Late Data Collection

1. **Question:** What happens if refiners need to go beyond 9/15/94 to collect winter data?

Answer: Refiners collecting data after December 15, 1993 must submit a baseline by September 1, 1994. If there has not been enough time to collect sufficient winter data due to the seasonal nature of winter fuel production, EPA can consider a petition for less than minimum data.(7/1/94)

2. **Question:** If a refiner was forced to shut down prior to and during 1990 as a result of bankruptcy, what alternatives are available (other than assuming the default statutory baseline in the event the refinery is subsequently started)?

Answer: Section 80.91(b)(1)(ii) of the regulations clearly state that a refinery not in operation for at least 6 months in 1990 gets the statutory baseline.(7/1/94)

3. **Question:** A refinery was in operation for >6 months in 1990, shutdown after 1990 and insufficient data was collected to develop an individual baseline. Does this refinery develop a baseline or does it get the statutory baseline if:

a) it re-opens after 12/31/94 -- can it collect CY 1995 or later data?

Answer: Section 80.91(b)(1)(ii) of the regulations state that a refiner in this situation shall have the statutory baseline.(7/1/94)

b) it re-opens after 6/15/94 and can collect sufficient summer/winter data in CY 1994?

Answer: If sufficient 1990 and post-1990 data is collected prior to January 1, 1995, the refinery must develop an individual baseline.(7/1/94)

c) it re-opens after 6/15/94 but cannot collect sufficient summer/winter data in CY 1994?

Answer: If insufficient 1990 and post-1990 data is collected prior to January 1, 1995, the refinery shall have the statutory baseline.(7/1/94)

d) it re-opens before 6/15/94 and can collect sufficient summer/winter data in CY 1994?

Answer: The refiner must develop an individual baseline.(7/1/94)

e) it re-opens before 6/15/94 but cannot collect sufficient summer/winter data in CY 1994?

Answer: The refiner must develop an individual baseline. If insufficient data was collected, EPA would consider a less than minimum data petition.(7/1/94)

I. Minimum Data Requirements

1. **Question:** How is data excluded, i.e., are there statistically abnormal requirements, like 3 standard deviation?

Answer: There are no specific provisions in the regulation for excluding data. If a submitter feels data should be excluded, they must petition for EPA approval.(7/1/94)

2. **Question:** Define weighting of data for combined EPA methods based on a) assuming all gasoline pool data points are equivalent, or b) assuming Method 1 or Method 3a finished gasoline pool data points on finished batches are superior to Method 2 or Method 3b component data points on weekly grab samples and should be weighted by a factor of at least 2 to 1.

Answer: The weighting of data when combining method data is dependent on the individual situation. Weighting should be determined based on the technical judgement of the refiner and the baseline auditor, to be evaluated and approved by EPA.(7/1/94)

3. **Question:** What if there are only 1 or 2 1990 data points? Should they be used? Must they be used? Can the auditor use judgement (i.e., would the points fall on a representative 1990 curve)?

Answer: Any 1990 data must be used in the baseline determination, unless the refiner petitions to exclude the data, subject to EPA approval.(7/1/94)

4. **Question:** For Method 3, do post-1990 volume and volume sampled need to be supplied?

Answer: Yes. Post-1990 volume must be supplied to determine the accuracy of post-1990 volumetric fraction. Sample volume is required in the method 3 blendstock calculation.(7/1/94)

5. **Question:** When combining M1, M2 and M3, when is the data sufficiency requirement met?

Answer: The data sufficiency requirements are met when the minimum data requirements for the final supplemental method have been fulfilled. As stated in the regulation, if method 1 data is supplemented with method 2 data, the data sufficiency requirements for method 2 must be met.(7/1/94)

6. **Question:** If 4 batches/week of gasoline were produced in 1990, and 1 batch/week was tested, will this be acceptable in lieu of the minimum data? It is equivalent to blendstock testing for 6 months and better than using post-1990 data and backcasting.

Answer: The regulations require that at least half of the batches must have been sampled to satisfy the minimum data requirements. However, EPA will consider a petition for less than minimum data if it can be clearly shown that the available data is sufficient in quality and quantity to develop a baseline. EPA cannot state whether one half of the required data is sufficient or not without evaluating the specific situation.(7/1/94)

7. **Question**: How do we handle results from two different labs (refinery and outside) which differ?

Answer: Technical and engineering judgement must be used to develop an explanation for and/or solution to the discrepancy. This explanation/solution must be supported by the baseline auditor, and is subject to EPA review and approval.(7/1/94)

8. **Question:** Can we exclude 1990 data on a given parameter if post-1990 data via a better test method was later collected?

Answer: Data can only be excluded if it can be shown, to EPA's satisfaction, that the data is not within the normal range of values expected for the gasoline or blendstock sample. This data could only be excluded if the testing or labelling could be shown to be improper, or the data is in some other way unacceptable as verified by an auditor.(7/1/94)

9. **Question:** Are we to use the best data (whether it's 1990 or post-1990) or meet the requirements of the regs (i.e., hierarchical manner, including everything)?

Answer: A baseline determination must meet the requirements of the regulation. The goal is to develop the most representative 1990 baseline, as defined by the requirements and criteria in the regulation.(7/1/94)

10. **Question:** What is determined first: WIP/extenuating circumstance; M1; M2; M3; oxy/non-oxy basis?

Answer: First, an unadjusted baseline must be developed based on the available data. Then any adjustments are made to develop the adjusted baseline. Oxygenated and non-oxygenated fuel parameter values shall be determined for both the adjusted and unadjusted baselines.(7/1/94)

11. **Question:** If good 1990 data on 3 of 5 streams is available, and 1993 data on all 5 streams, should refiners use that part of the 1993 data missing for the 2 streams, or use all of the 1993 data? Isn't the goal to minimize backcasting and use the best data?

Answer: The regulations state that if there is insufficient Method 1 and Method 2 data for a baseline parameter value determination, it must supplement that data with all available Method 3 data (the 1993 data), until the Method 3 sampling requirements have been met.(7/1/94)

12. **Question:** Should refiners use all available Method 2 and Method 3 data to supplement Method 1 data or just until there's enough?

Answer: As the regulation states, a refiner is only required to use sufficient Method 2 or Method 3 data until the minimum data requirements of that method have been met. Thus a refiner must use the first data collected which is sufficient to meet the minimum requirements. Should additional data be available, the refiner is encouraged to use it since presumably its use would result in a more accurate baseline. However, the refiner is not required to do this.(7/1/94)

13. **Question:** Are sampling requirements based on 50% of volume or on one-half of the number of batches?

Answer: Sampling requirements are based on the number of batches, not the volume, over a minimum of six months.(7/1/94)

J. Included Gasolines

1. **Question:** Aviation gasoline has a low RVP, high octane, 10% aromatics and could be used as gasoline. Can it be included in the baseline determination? Is aviation gasoline considered finished gasoline?

Answer: If a fuel is exempted from the gasoline RVP and/or lead requirements, exclude that volume from the baseline determination.(7/1/94)

2. **Question:** Are specialty batches of gasoline (e.g. test fuels for the Auto-Oil research program) included in the baseline? Or are they considered "not introduced into commerce"?

Answer: Specialty batches of gasoline in very limited volumes may be interpreted to be "not introduced into commerce," subject to EPA approval.(7/1/94)

3. **Question:** For refiners who purchase blendstocks, how do other refineries' gasoline fit into the baseline?

Answer: Purchased blendstocks are included in a refinery's baseline. Purchased gasoline is not included in a refinery's baseline calculation. The only exception would be when the producing refinery is able to demonstrate that such gasoline was sold as a blendstock, and is not included in that refiner's baseline. In this case, the purchaser is responsible for including the blendstock in a baseline.(7/1/94)

4. **Question:** For purposes of baseline development, does the operation of the refinery have to be arms length from the import activities? If the refinery ships blendstocks to the leased storage facilities, are these considered to be blendstocks transferred to others?

Answer: No, the refinery operation does not need to be separate from the import activities in any way. Such a refiner would file two baselines, one for each type of operation. If blendstocks are shipped to leased storage, this is not considered transferred to others, since the fuel is still under that refiner's control/operation.(7/1/94)

K. Method 3 Data

1. **Question:** If winter sulfur data was collected in 1991, but the results were in error, should refiners resample, or can they backcast using reasonable estimates and technical judgement?

Answer: This would depend on the individual situation. If the error could be corrected in a simple, straightforward manner, it may be possible to use the data, subject to auditor verification and EPA approval.(7/1/94)

2. **Question:** How does backcasting work? Are the numbers used in the Method 3 calculation the original post-1990 numbers or the backcasted numbers?

Answer: The Method 3 equations use the post-1990 parameter values to calculate the adjusted baseline parameter value. Subsequent calculations are based on this adjusted baseline parameter.(7/1/94)

3. **Question:** The RIA/preamble language indicates that Method 3-blendstock data is superior to Method 3-finished gasoline data. Is there a hierarchy in their use, i.e., must Method 3-blendstock data be used first? This would be opposite to the way Methods 1 and 2 are set up.

Answer: The regulations specify no hierarchy between the two types of Method 3 data.(7/1/94)

4. **Question:** Butane is exempted from the Method 3-finished gasoline requirements - are oxygenates? Since 1992 gasoline was subject to the oxy\fuel requirements, can oxygenates be exempted unless the change significantly affected fuel parameter values (by X%)?

Answer: No. Paragraph 80.91(e)(4) requires both oxygenated and non-oxygenated baselines to be determined, so oxygenate is not exempted. Butane is exempted because of the change in the RVP standard between 1990 and later years.(7/1/94)

5. **Question:** Since Method 3-finished gasoline data cannot be used unless it meets certain requirements, does it have to be backcasted?

Answer: Yes. Gasolines must be similar to start with to be able to have confidence in the backcasting adjustment (projecting changes between the future year gasoline and 1990 gasoline). Despite such similarities, however, backcasting is still required.(7/1/94)

L. Test Methods

1. **Question:** What fuel parameters are acceptable via which test methods? Will all tests be considered industry standard methods?

Answer: API has prepared a list of alternate test methods that could be considered industry standard methods for each of the baseline fuel parameters. EPA is currently evaluating this list, but will use it along with other available information to evaluate petitions for the use of alternate test methods.(7/1/94)

2. **Question:** Are adjustments made to parameters for future vs. current test methods?

Answer: If a known bias can be shown, parameters should be adjusted based on the test method used. This will only be considered as part of an alternate test method petition.(7/1/94)

3. **Question:** Please clarify what is meant by industry standard.

Answer: API has assisted EPA in determining industry standard by preparing a list of alternate test methods in use in 1990. Other test methods may also be considered, but there must be concurrence from the auditor that such test methods were acceptable in 1990 and used correctly.(7/1/94)

4. **Question:** The RIA method for aromatics and olefins doesn't result in agreement with finished gasoline, i.e., the sum of the blendstock parameters doesn't equal the finished gasoline value (>6% delta). Are alternative methods okay?

Answer: Alternative test methods may be considered, based on the individual situation as explained in an alternate test method petition.(7/1/94)

5. **Question:** Can a bias/correlation be used to adjust baselines from alternate lab methods to EPA-specified methods to enhance accuracy? That is, since EPA will be comparing new data to old data, old data should be adjusted to be comparable to new data (reg. test method).

Answer: If a known bias can be shown, parameters may be adjusted based on the test method used. This will only be considered as part of an alternate test method petition.(7/1/94)

6. **Question:** For purposes of developing baselines, EPA has established limits for negligible levels of aromatics, olefins, benzene, sulfur and oxygen in gasoline blending components. If the levels of any of these properties are below these "negligible limits" (which are similar to very low level test reproducibility limits), they may have been considered to be zero in the refinery baseline development. As a result, a refinery may have a baseline parameter value that is below the test tolerance. At these low concentrations, they could be in technical violation of the regulations simply because of testing accuracy. How can this be handled?

Answer: Section 80.91(d)(3) was written to promote simplification of baseline determination and to excuse testing in certain limited circumstances. If a refiner can "show" that a fuel component exists only in negligible quantities in a blendstock stream, testing that stream for the component in question is not required, and a value of zero is assigned to that component. The fuel components to which this provision applies are aromatics, olefins, benzene, sulfur, and oxygen content. Negligible quantities are defined as levels which fall below the minimum levels given in §80.91(d)(3). Note that this provision is not a requirement, but rather an option.

The negligible quantities provision applies only to Method 3 data collection for two reasons. First, the provision applies only to blendstocks, not finished gasoline. Since only Method 2 and 3 data are blendstock data, the provision cannot apply to Method 1 data. Second, the primary action of the negligible quantities provision is to excuse testing in certain cases. The only time when a

refiner must choose whether or not to do additional testing is when considering the sufficiency of its Method 3 data.

The negligible quantities provision reduces the burden placed on refiners collecting Method 3 data to satisfy the minimum data requirements. If a refiner can "show" that a fuel component exists only in negligible quantities, testing for the blendstock stream in question is not required. Instead, a refiner can assume that the level of a component is zero. Clearly, the "showing" indicates engineering judgement or past experience. A "showing" cannot refer to actual test data for the blendstock stream in question, because the very purpose of the negligible quantities provision is to excuse testing. Thus if a refiner has data on the stream in question, that data must be used in the determination of the baseline per §80.91(d)(1)(i)(B).

Although the provision was designed to simplify baseline determinations, some refiners questioned the use of zero values for components which existed in negligible quantities. Instead, they proposed the use of the minimum values given in the provision. Doing so would negate the original intention of the provision to simplify baseline determinations, but would also recognize that the minimum values represent values below which the components cannot be measured accurately. Although the use of the minimum values would result in slightly dirtier (more lenient) baselines, the EPA has decided to allow the use of the minimum values in lieu of zero values at the refiner's discretion.

A refiner could too easily generate a fictitiously more lenient baseline if EPA allowed test data to be used as a showing of negligible quantities. Such a refiner could test a given blendstock stream for components that are known to be essentially absent, and then lay claim to the minimum values given in the negligible quantities provision. The EPA has chosen to interpret the negligible quantities provision in a manner that is consistent with the original intent, provides additional flexibility, and yet maintains the primary goal of developing baselines which accurately represent a refiner's actual 1990 production.

One caveat on the use of actual data in the baseline determination should be clarified. If a refiner measures a blendstock stream and discovers that the measured component level of that stream is below the applicable range for the test method used, the low end of the applicable range may be substituted for the actual measured value in the baseline determination. For example, if a sulfur test method has an applicable range of 20 - 200 ppm and a blendstock stream is discovered to have a sulfur content of 11 ppm with that test method, the stream can be assumed to contain 20 ppm for the purposes of determining the baseline.(1/30/95)

M. Summer/Winter Clarification

1. **Question:** Must the 3 months of summer or winter data be consecutive?

Answer: No.(7/1/94)

2. **Question**: In determining summer/winter data, does the actual data go to a given season on a batch basis?

Answer: Per the Direct Final Rulemaking, for Method 1, actual per batch data is used define the season of that batch.(7/1/94)

3. **Question:** Is Puerto Rico considered a domestic producer? There are no federal RVP standards there--do they use summer fuels in the winter complex model?

Answer: Puerto Rico refineries are considered federal gasoline producers. If their fuel remains seasonally the same throughout the year, they meet the criteria of a refiner marketing in an area with no seasonal changes, and they are only required to provide three months of data. In such a case, all fuels would be evaluated by the seasonal Complex Model which matches their year-round season. If the fuel does change seasonally, then they are required to provide data on both the "summer" fuel and "winter" fuel.(7/1/94)

4. **Question:** Revise the minimum required data from 3 months of summer and 3 months of winter to 12 weeks each.

Answer: Per the technical amendments, when using Method 1 actual per batch data, a month is defined as 4 weeks, and therefore the 3 month season is equivalent to 12 weeks.(7/1/94)

5. **Question:** For baseline purposes, how is summer fuel made early in the year (e.g., February) handled?

Answer: This situation is clarified by the new season definition given in the technical amendments. For Method 1, actual per batch data, any summer RVP fuel produced in February is considered summer volume and is included in the summer calculations. Otherwise, the determination for the month of February is made based on the volumes of winter RVP and summer RVP fuel produced in that month. If more than 50 percent of the fuel is summer fuel, February is a summer month.(7/1/94)

6. **Question:** Does summer quality gasoline go with the summer calculation?

Answer: The technical amendments clarify handling of summer and winter data. For method 1 data, all summer quality gasoline is included in the summer calculation. For method 2 and 3 data, all data from a given month is considered summer or winter, based on the volumes of summer and

winter fuel produced. If more than 50 percent of the fuel is summer fuel, that month is considered a summer month.(7/1/94)

7. **Question:** If there is little difference between summer and winter component composition, can refiners use less than the minimum required data?

Answer: Based on the baseline data, a petition for less than minimum data would be considered in this situation.(7/1/94)

8. **Question:** Producers in California may not have 3 months of winter data. What do they do?

Answer: If three months of winter data are not available, a petition for less than minimum data would be considered.(7/1/94)

9. **Question:** One refiner made 7# RVP gasoline beginning in March in order to begin blending down the vapor pressure in the market, but did not make 9# gasoline until late April. Does the 7# product count as summer gasoline in the baseline calculation (it meets the Federal standard for summer)?

Answer: If the fuel meets summer volatility standards, it should be considered summer fuel. This is true in a case where the low RVP gasoline was produced to blend down RVP in preparation for the summer season.(7/1/94)

10. **Question:** Does EPA preclude refiners with batch per batch summer and winter data from using that data? By defining monthly data, more specific data seems to be unacceptable.

Answer: The technical amendments allow the use of specific method 1, per batch data in the seasonal calculations. If such data is not available, then the data is defined on a monthly basis.(7/1/94)

N. Low Parameter Values

1. **Question:** If baseline sulfur or olefins are very low, how is 125% of these numbers determined for compliance?

Answer: EPA expects to apply a lower threshold value, based on the lower limits of the test methods used to measure the fuel parameters. For example, if a baseline sulfur parameter value of 3 ppm is given based on a test method with a valid range of 1000 to 5 ppm, the parameter value would be 5 ppm, 125% of that being 6.25 ppm.(7/1/94)

2. **Question:** Many refiners have reported certain 1990 parameter values at a "less than" value. For a refiner who can demonstrate that his parameter values are less than the quantity deemed negligible (i.e. 30 ppm sulfur), may she/he assume the negligible values adopted by EPA?

Answer: Yes.(7/1/94)

O. Blenders/Importers[10]

1. **Question:** How is imported gasoline, which is then blended, accounted for (i.e., as an import or as a blend)? What if it can be demonstrated that it was used as a blendstock?

Answer: Imported gasoline requires a separate baseline. If it can be shown that this fuel was never sold as is, then it can be treated as a domestic blendstock.(7/1/94)

2. **Question:** If a blender or importer has finished gasoline data for all but one parameter, can it develop a baseline value for that parameter or use the statutory value for that parameter?

Answer: A blender or importer must have complete method 1 data. If not, that blender's or importer's baseline is the statutory baseline. The statutory baseline cannot be used partially. However, it may be possible to petition for approval of less than minimum data.(7/1/94)

3. **Question:** If a blender or importer has finished gasoline data on 29 of 30 shipments, will EPA allow it to develop its own baseline?

Answer: The regulations state that a blender or importer must have method 1 data on every 1990 batch. However, it may be possible to petition for approval of less than minimum data.(7/1/94)

4. **Question:** Who accounts for imported finished gasoline blended with blendstock?

Answer: If the blendstock added to the imported finished gasoline is oxygenate, then the blending activity is ignored and the finished gasoline is reported by the importer. If some other blendstock is blended to the imported finished gasoline, e.g., to create a different grade of fuel, then the imported finished gasoline is treated as a blendstock and is reported in the blender's baseline.(7/1/94)

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[10] This section assumes that the importer is not also a domestic refiner.(7/1/94)

5. **Question:** In 1990, a refinery sent unfinished gasoline to a terminal. Is the baseline of the terminal, or of an entity (the blender) which happens to use the terminal's facilities? If the refinery wants to become a blender, does it get the terminal's baseline?

Answer: If the refinery and terminal are owned by the same entity or have a long term agreement, then they are treated as one operation, developing one baseline which includes both. If not, the refinery produced no gasoline in 1990 and thus does not have a baseline, and would have to use the statutory baseline. The baseline applies to the owner of the gasoline, whether that is the terminal operator or an entity using the terminal's facilities.(7/1/94)

6. **Question:** If a terminal uses Method 1 data to establish a baseline, and it received gasoline from a refinery, isn't the gasoline going to be double counted?

Answer: If the gasoline received from the refinery leaves the terminal unchanged, it is not included in the terminal baseline. If the fuel is blended with anything other than oxygenate, the fuel must be included in the terminal baseline.(7/1/94)

7. **Question:** Can blenders substitute statutory baseline values for those parameters for which they have no Method 1 data?

Answer: No. The statutory baseline values must be used together. If a blender does not have complete method 1 data, they must use the complete statutory baseline.(7/1/94)

8. **Question:** Will EPA allow an importer to use known Method 1 type data for previously tested volume but not for untested volume?

Answer: If an importer has complete method 1 data, it must be used. However, complete method 1 data is required on every batch. If such data is not available, the importer defaults to the statutory baseline.(7/1/94)

9. **Question:** Even if an importer had sufficient imports in 1990 to establish an RFG baseline, it is likely that all of the RFG parameters were not identified. In this case, would the importer default to the statutory baseline?

Answer: Under § 80.91(b)(4), if an importer is unable to meet the requirements for baseline-setting under Method 1 for all parameters, the importer must use the statutory baseline. However, if an importer is also a foreign refiner, under § 80.91(b)(4)(ii) that importer must determine its individual baseline if 75% of the gasoline produced at its foreign refinery in 1990 was imported into the U.S. This baseline must be set using the three Methods available to domestic refiners. In

addition, if the importer is also a domestic refiner, under § 80.101(f)(3) the importer would use the volume-weighted average of the refiner's refinery baselines.(7/1/94)

10. **Question:** If a blender has data on 1 or 2 parameters, should they come up with the rest, or use the statutory baseline?

Answer: If a blender has complete method 1 data, it must be used. If not, the blender must comply with the statutory baseline.(7/1/94)

11. **Question:** For blenders that purchased gasoline, raffinate, and ethanol and splash blended them into a truck in 1990 and now wishes to register for blending of conventional gasoline, must he:

Use method 1 or use the statutory baseline?
Have an outside audit of his baseline?

Answer: If complete method 1 data is available, it must be used to develop an individual baseline. Individual baselines must be audited. If complete method 1 data is not available, the blender must comply with the statutory baseline. Using the statutory baseline does not require an outside audit.(7/1/94)

P. E300/T90, E200/T50

1. **Question:** Can refiners linearize the distillation curve between points or must refiners curve fit data on every sample? Is linear interpolation using a table of values considered calculating E200 and E300 "direct from the data"?

Answer: Refiners should use the most accurate means available to determine values for E200 and E300. If these parameters can be measured directly, such direct measured values should be used. If E200 and E300 must be converted from distillation data, nonlinear curve-fitting would be considered more accurate than linear interpolation since distillation curves are generally non-linear, and therefore should be used.(7/1/94)

2. **Question:** Can refiners use the E300 and E200 conversion equations in lieu of re-graphing the distillation data?

Answer: Refiners should use the most accurate means available to determine values for E200 and E300. If these parameters cannot be measured directly, they must be converted from distillation data via curve-fitting. Only if no distillation data exists can the conversion equations be used.(7/1/94)

3. **Question:** For those with graphical data on E200/E300, will EPA allow use of either the equation or graphical for both baseline and compliance?

Answer: Graphical approaches to calculating E200 and E300 for all fuels (i.e. both baseline and compliance fuels) can be used when curve-fitting or linear interpolation are not feasible. The conversion equations provided in the regulations can only be used if the only data available to a refiner is T50 and T90 measurements (i.e. no other distillation data is available).(7/1/94)

4. **Question:** In determining E200 and E300, will EPA allow D-86 distillation point averaging of gasoline grade data which is ± 20°F before graphing?

Answer: E200 and E300 values should be calculated separately for each batch of gasoline. If error bars are associated with distillation data for repeat tests on a given batch, the results may be averaged for the purposes of graphing and/or curve-fitting.(7/1/94)

5. **Question:** Does EPA have curves showing the effects of different oxygenate levels on the resulting T50/T90?

Answer: The Agency has developed no such curves. However, since the Complex Model requires the use of E200 and E300 instead of T50 and T90, the effects of different oxygenate levels on E200 and E300 can be back-calculated from the resulting dilution of the base gasoline.(7/1/94)

Q. Closely Integrated Facilities

1. **Question:** A refiner establishes a single 1990 baseline representing several facilities according to the **closely integrated facilities** provision in §80.91(e)(1). In 1996, one of the facilities in question shuts down. Is the refiner allowed to change its 1990 baseline to exclude the influence of the shut-down refinery on its baseline?

Answer: In general, no. Under the **closely integrated facilities provision**, two or more facilities are assumed to operate as a single refinery. If one of the facilities shuts down, the situation is analogous to the shut-down of one or more blendstock producing units in single-facility refinery. In both cases, since the 1990 situation remains unchanged, so also should the 1990 baseline.

The regulations provide few means for recalculation of a refinery baseline due to changes that occurred after 1990. One of these involves **aggregation** [see §80.101(h)]. Aggregation allows a multi-refinery refiner to group its individual baselines, representing separate refineries, together for a single set of compliance calculations. Aggregation thus occurs after the baselines for the individual facilities have been calculated and approved. In addition, there are no criteria that must

be met before use of an aggregate baseline will be approved. Aggregated baselines may be recalculated according to §80.91(f)(4) in the event that one refinery is shut down or changes owners.

The closely integrated facilities provision [§80.91(e)(1)] is distinct and separate from the aggregation provision. In order to take advantage of the closely integrated facilities provision, a refiner must show that 1) the facilities in question were proximate to one another in 1990, and 2) their 1990 operations were significantly interconnected. A single baseline is developed which represents all the facilities in question. There is no regulatory provision for recalculating such a baseline if one facility is shut down or changes owners.

The EPA may consider making a change to a refiner's baseline if **one of the facilities included in a closely integrated facilities baseline is sold to another refiner rather than simply being shut down**. Under these conditions, the 1990 production may be double-counted as the sold refinery uses its own baseline representing gasoline it produced in 1990. Such situations will be evaluated on a case-by-case basis. (7/15/96)

V. Sampling and Testing

A. Sampling and Testing Procedures

1. **Question:** How should storage tanks be sampled for RFG?

Answer: Section 80.65(e)(1) of the regulations states that "[e]ach refiner or importer shall determine the value of each of the [reformulated gasoline] properties for each batch of reformulated gasoline it produces or imports prior to the gasoline leaving the refinery or import facility, by collecting and analyzing a representative sample of gasoline taken from the batch." "Batch of reformulated gasoline" is defined at § 80.2(gg) as "a quantity of reformulated gasoline which is homogeneous with regard to those properties which are specified for reformulated gasoline certification."

Samples that accurately represent batch properties are necessary in order to determine if RFG standards are being met. Therefore, the first concern of batch sampling is to determine whether or not the tank contents are homogeneous.

Gravity analyses of upper, middle, and lower samples is an appropriate means of establishing tank homogeneity. EPA would consider a tank to be homogeneous where the maximum difference in tested gravities between any two samples from different tank strata is no greater than 0.6 °API, unless there is reason to believe the tank contents are not mixed in spite of such gravity test results. For example, if samples from a storage tank have noticeably different colors, the gasoline in the tank should not be considered homogeneous even if the samples have gravity tests that are within the 0.6 °API range. 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. (Tank homogeneity could be established using benzene and oxygen tests on upper, middle and lower tank samples without the need for gravity testing.) EPA would consider a tank to be homogeneous if the maximum difference in benzene tests is 0.10 vol% and the maximum difference in oxygen tests is 0.15 wt%. The benzene and oxygen testing to establish homogeneity (as opposed to certification testing) could use a non-regulatory method such as mid-infrared analysis.

Where it is found that tank contents are not homogeneous, further mixing should be performed before collecting a representative sample for reformulated gasoline analysis.

Product stratification should also be avoided downstream of refiner or importer facilities, because samples must meet the downstream "per gallon" standards, and stratification could result in a portion of the gasoline in a tank being out of compliance with "per gallon" standards. For further discussion of homogeneity, see the Independent Sampling and Testing Section, Question 20 of the July 1, 1994 Question and Answer Document).

Storage tanks should be sampled according to 40 CFR part 80, Appendix D, using the method that will best represent the contents of the tank or batch. 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 Appendix D.

EPA preference for sampling storage tanks is 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.

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.

If a tank cannot be bottle sampled from the top, then tap sampling is an appropriate substitute. For best representation, a single composite should be collected by proportionally filling the sample container from all available taps. If homogeneity is well documented, 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. Pipeline sampling is discussed in Question 2 of this section.

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.

Appendix D contains general instructions and precautions that must be followed when choosing sampling equipment and containers, and when collecting samples. RVP is the most sensitive reformulated gasoline property, relative to sampling, and therefore precautions to prevent loss of "light ends" must be followed carefully. Also, sampling containers must be clean and rinsed well with the gasoline to be sampled in order that the sample is not contaminated, for example, with trace amounts of heavy metals. When collecting tap samples, the tap and connecting piping must be completely flushed, and the sample container must be bottom filled strictly according to the procedure outlined in Appendix D. Always label the container as soon as possible, and note the location of the sampling point and method of collection.(1/23/95)

2. **Question:** Must sampling be performed only from tank storage, or will pipeline sampling qualify?

Answer: For a refiner, pipeline sampling is appropriate when performed according to the procedures outlined in 40 CFR part 80, Appendix D. Appendix D, section 11.4 describes how to collect a continuous or intermittent flow proportional sample, using automatic sampling apparatus, of an entire batch. Under § 80.65(e), however, refiners must have test results in hand before shipping RFG. Therefore the only way a refiner could conduct pipeline sampling of an RFG batch, would be to collect the entire batch in tankage subsequent to the pipeline sampling and prior to shipping the batch out of the refinery, and to hold the batch in that tank until the requisite test results are complete.

In the case of downstream quality assurance sampling, pipeline sampling as outlined in Appendix D is appropriate, and tank collection is not an issue.

In the case of an independent laboratory collecting a pipeline sample at a refinery or import facility in fulfillment of the independent sampling and testing requirement, the automatic sampling equipment must be calibrated and operated by the independent laboratory during the entire period of time the pipeline sample is collected. See the Independent Sampling and Testing Section, Question 18, for further discussion of pipeline sampling and in-line blending.(7/1/94)

3. **Question:** Appendix D of the fuels regulations specifies that only taps extending at least 3 feet inside a tank are suitable for sampling. Is this requirement applicable for gasoline sampling? Is it necessary to secure EPA's acceptance before collecting samples from taps without such "stingers?"

Answer: Section 11.3 of Appendix D to 40 CFR Part 80, titled "Tap Sampling," states that where tap sampling is conducted, "[t]he tank should be equipped with at least three sampling taps... extending at least three feet inside the tank shell." The tap extension into the storage tank is commonly called a "stinger." Section 11.1 of Appendix D provides for the use of alternative procedures (such as sampling from taps without "stingers"), however, "if a mutually satisfactory agreement has been reached by the party involved and EPA and such agreement has been put in writing and signed by authorized officials."

EPA has learned that where storage tanks with floating roofs have tap samples, the taps do not have tap "stingers" because they would interfere with the floating roof. EPA also understands that most gasoline storage tanks have floating roofs. Moreover, EPA believes that tap "stingers" do not significantly improve the quality of samples collected, because most gasoline stratification manifests as horizontal strata in the gasoline being stored. As a result, EPA will not require parties to obtain agreement in advance to use sampling taps without "stingers," provided that the storage tank has a floating roof that would interfere with the tap "stingers," and the tank does not allow other types of sampling (e.g., a gauge tube). In addition, any party that certifies RFG or conventional gasoline using samples collected from a tap sampler must be able to demonstrate the gasoline in the storage tank was homogeneous. Several methods of establishing tank

homogeneity have been described in other guidance. See, Sampling and Testing question 1 from the January 23, 1995 Question and Answer document. (10/31/95)

4. **Question**: Under what environmental conditions must RFG samples be shipped and stored?

Answer: The sample container specifications outlined in 40 CFR part 80, Appendix D, limit the materials and closure systems for sample containers, such that RFG properties will be maintained under normal conditions encountered during shipping (by air or ground), and long term storage at room temperature and pressure. Refrigerated storage is appropriate if desired. Refrigeration is not necessary, however, as long as temperature extremes (less than 0 degrees F, and greater than 120 degrees F) are avoided during storage.(7/1/94)

5. **Question:** Should separate samples be collected for RVP analysis?

Answer: One sample may be used for all of the RFG parameters that need to be determined, including RVP. However, because sample handling in the laboratory may affect various reformulated gasoline properties, such as RVP, analyses must be performed in order of sensitivity. As long as RVP is the first laboratory analysis performed on each sample, there is no need to collect a separate sample just for the RVP measurement.(7/1/94)

6. **Question:** Are there any temperature requirements for the shipping of samples?

Answer: No.(7/1/94)

7. **Question:** When handling samples to be analyzed for oxygen and oxygenate content, section 80.46(g), what are conditions for bringing the samples to room temperature?

Answer: There are no conditions other than to have the sample at room temperature before beginning any volumetric measurement for the analysis.(7/1/94)

8. **Question:** When preparing samples for oxygen analysis according to section 80.46(g), isn't there a risk of losing volatile components when allowing samples to come to room temperature?

Answer: The fractional loss during "limited" sample handling is not measurable for these properties.(7/1/94)

9. **Question:** Are the samples in section 80.46(g) oxygen analysis brought to room temperature in an autosampler or similar device?

Answer: No.(7/1/94)

10. **Question:** Do the sample handling requirements for oxygen and oxygenate content apply to the analysis of other fuel parameters.

Answer: The sample handling procedures must comply with the requirements of their individual testing methods. Aromatics, oxygen and oxygenate, benzene, olefins, and sulfur samples should be at room temperature, although aromatics samples for GC-MS analysis are measured gravimetrically and are not very temperature sensitive. Distillation samples require 55 °F - 65 °F. Vapor pressure requires 32 °F - 40 °F.(7/1/94)

11. **Question:** Are samples collected at a retail outlet dispenser acceptable for quality assurance testing requirements?

Answer: Yes, when sampling from retail outlets, nozzle samples should be collected according to the procedure specified in 40 CFR part 80, Appendix D, section 11.5.(7/1/94)

12. **Question:** Please comment on how laboratories can discard erroneous test results. Also, please comment on the example of a test result which is clearly an outlier, but without a discernible cause.

Answer: Suspect test results should not be discarded, but should be treated according to the laboratory's quality assurance plan covering the test method. At a minimum, the plan should include steps to document that a result is suspect, the reason the result is considered suspect, the results for the sample that are not considered suspect, the steps that were taken to obtain the non-suspect result, and the steps that were taken to assure quality of future analyses. Reporting requirements (to EPA) only include submission of the final result. However, documentation of erroneous results should be kept for auditing purposes.

An outlier which can be clearly identified through statistical means, may be discarded when allowed by the laboratory's quality assurance plan. These steps must be clearly documented as explained above. EPA will not accept retesting on a regular basis as a means to achieve favorable test results through test to test variation. Also, it is not considered appropriate to only retest unusually high (or unfavorable in the case of properties like oxygen content) test results. An outlier in the favorable direction should also be investigated.(7/1/94)

13. **Question**: Will EPA waive the requirement for completing all testing prior to shipping for complex model conventional gasoline?

Answer: Section 80.101(i)(1)(i)(A) requires refiners and importers of conventional gasoline to determine the value of each of the properties required for determining compliance with applicable standards by collecting and analyzing a representative sample of each batch of gasoline using the regulatory test methods. Refiners and importers, therefore, must sample each batch of conventional gasoline before the gasoline is shipped from the refinery. The regulations, however, do not require that the testing for conventional gasoline properties be completed before the gasoline is shipped. (11/10/97)

14. **Question:** Section 80.101(i) provides a composite sampling and testing option to determine conventional gasoline properties. One provision to this option is that composite samples will need to be prepared as described in § 80.91(d)(4)(iii). Part B of this procedure requires that "properties of the retained samples shall be adjusted for loss of butane by comparing the RVP measured right after blending with the RVP determined at the time that the supplemental properties are measured." No further details are given. Please detail how this process would work.

Answer: The best process would be to avoid the butane adjustment by blending the fuels in such a way that butane loss is avoided. Practically, this means having all fuel samples at or below 32 degrees Fahrenheit before their containers are opened for blending. In practice, however, some loss may occur. Three assumptions are made in the adjustment procedure.

The first of these is that RVP blends linearly with volume. This is not true if ethanol fuels are included, so ethanol blended fuels must be treated separately. If ethanol blended fuels are to be composited, a separate composite must be maintained for them. If different ethanol blended fuels are to be produced, such as 2.0% oxygen and 3.7% oxygen fuels, these must be composited separately. In operation, the maintenance of several composites may be necessary, one containing all hydrocarbon fuels, one with 2.0% oxygen from ethanol, and one with 3.7% oxygen from ethanol. In general, any single ethanol fuel composite may span a range of up to 0.5% oxygen. In other words, samples containing from 3.3% to 3.8% oxygen may be composited. If other samples are produced, they will require a separate composite. Since fuels containing MTBE and similar ethers do not affect RVP as dramatically, they may be combined with the hydrocarbon fuels.

The second assumption is that all the loss in RVP observed is due to evaporation of n-butane. In reality, this is not true, as virtually all of the isobutane and some of the pentanes will be lost. However, considering the difficulty of ascertaining the exact species lost, this is a reasonable approximation.

The final assumption is that the RVP of n-butane is 51.6 psi. This value was taken from a Phillips Petroleum Reference Data circular (bull.no.521).

The technique for producing a composite sample would require that additions to any composite be of consistent volume, 100 ml for example. Using this method, the final expected RVP of the composite would be the simple arithmetic average of the included samples. If the

measured RVP of the composite is different than this calculated value, any measured property should be adjusted for the volume loss due to butane. This is done by calculating the quantity of n-butane required to bring the composite to its original RVP. As an example, the following calculation would result from a composite of 80 samples at 100 ml each. The calculated average RVP should be 7.20 psi, and the measured RVP of the composite is 6.60 psi.

6.6(8000 - z) + 51.6(z)	=	7.2(8000)	(I)
52,800 - 6.6(z) + 51.6(z)	=	57,600	(II)
45.0(z)	=	4,800	(III)
z	=	106.7	(IV)
106.7/(8000) - 106.7)	=	1.35%	(V)

This means that 1.35 volume percent butane must be added to bring the composite sample to its original RVP. This is the volume correction that must be applied to all other measured properties. For intrinsic properties, such as the concentration of benzene, this correction is applied as a ratio, so that a measured concentration of benzene in the composite would be reduced by 1.35%. As an example of this, where the measured benzene concentration is 0.925%

0.925(8000 - 106.7)	=	(b)8000	(VI)
b	=	0.913	(VII)

The corrected benzene concentration 0.913% by volume. This type of correction would also be applied to oxygenate, sulfur, aromatic, and olefin measurements.

This is a simplified version of the correction calculation, and assumes a consistent product batch size. In cases where the batch size varies, the sample removed for composite must be proportional to the size of the batch. For example, if batches totaling 50,000, 30,000, and 80,000 bbls. are produced, one might remove 100, 60, and 160 ml from the respective batches. This amounts to volume weighting the composite for batch sizes. The calculated average RVP value is a weighted average of the original values:

RVP1(Vol1) + RVP2(Vol2) + RVP3(Vol3)....= RVP(avg)(Vol(total))

The volume compensation is calculated exactly as in the simplified case.

Distillation measurements require a different type of correction, since any evaporative loss due to butane would affect the initial portion of the distillation curve. In fact, during the test, there is loss, and this loss is assumed to be due to the inability of the still to recover butane. The most appropriate way to apply the correction here would be to begin the distillation with only 98.6 ml

of fuel. The result will be a larger loss. This measured loss will be the correction for butane loss, and will yield corrected values for the distillation. If E200 and E300 values are needed, they are taken from the corrected curve.(1/9/95)

15. **Question:** Conventional gasoline refineries meeting simple model average standards must monitor their T90, olefins, sulfur and exhaust benzene (function of benzene and aromatics) results. Since RVP is not required for anti-dumping compliance in the simple model case will the butane adjustment step be required for composite samples at simple model refineries?

Answer: No. The adjustment may be done but is not required.(7/1/94)

B. Test Methods

1. **Question:** Please confirm that the regulations require that the test methods listed in § 80.46 must be used for certifying both conventional and reformulated gasoline by the refiner or importer and no other methods are acceptable.

Answer: Confirmed. However, the regulations provide for the use of optional alternative methods for oxygen and aromatics until January 1, 1997. See §§ 80.46(f)(3) and (g)(9). The other exception to the regulatory test method requirements pertains to California gasoline. § 80.81(h) states that, for purposes of the batch sampling and analysis requirements of § 80.65(e), a refiner of California gasoline may use a sampling and/or analysis methodology prescribed in the Title 13, California Code of Regulations, sections 2260 et seq., in lieu of the regulatory methods for sampling and testing California gasoline.(7/1/94)

2. **Question:** For conventional gasolines, can a refiner use the same methods that were accepted for baseline determination for compliance testing if they are correlated to the regulatory methods?

Answer: No. The methods specified in § 80.46 must be used for conventional gasoline. See § 80.101(i)(1)(i)(A).(7/1/94)

3. **Question:** The regulations dictate specific equipment and methodologies for reformulated gasoline analysis. We recommend that the EPA only specify the precision or level of accuracy it requires and let the chemist or laboratory decide which method and type of equipment they will employ for the required analysis.

Answer: Although this may be possible at some time in the future, at the present time, tolerance issues dictate that we specify equipment and method.(7/1/94)

4. **Question:** The preamble states: "As with all parameters, there will be only one regulatory distillation test method. However, other suitable methods may be used for defense purposes (but not to meet mandatory testing requirements) as long as they are properly correlated with the regulatory test method." Does this mean that for testing downstream of the refinery or import facility for quality assurances purposes, other methods may be used by a refiner for defense assuming they are correlated to the regulatory method?

Answer: Yes.(7/1/94)

5. **Question:** Since other ASTM methods are being developed that would allow the use of one analyzer to obtain benzene, aromatics, and olefins, will EPA allow any of these new methods to be used for gasoline certification and/or a refiners's defense?

Answer: They are not allowed for the determination of properties of reformulated, or conventional gasoline at the refinery, but, as indicated above, they may be used downstream for quality assurance. In the future, EPA may consider amending the regulations to allow for new methods as it did for RVP.(7/1/94)

6. **Question:** Since RVP and low-sulfur diesel regulations allow the use of alternative methods (if they are correlated to EPA-approved methods), will EPA allow these alternate methods to be used in reformulated gasoline certification and/or a refiner's defense?

Answer: EPA will not allow these alternative methods to be used in reformulated gasoline certification, although, as discussed in the preceding question, correlated alternative test methods may be used for quality assurance purposes.(7/1/94)

7. **Question:** We interpret the following with respect to sampling and testing at the terminal level:

a. That oxygenate blenders are required to use the same methodology for oxygen testing as prescribed for refiners under § 80.46.

b. That for quality assurance purposes, a terminal may use alternate methods if such methods are correlated with those prescribed under § 80.46.

Answer: Oxygenate blenders are required to use the methodology for oxygen testing prescribed under § 80.46. This is true both for the oxygenate blenders who blend in terminal tanks, under § 80.69(c), and for those who splash blend in trucks, under § 80.69(e). In the case of truck blending, any quality assurance testing <u>beyond</u> that specified under § 80.69(e) could use alternative test methods, however.(7/1/94)

8. **Question:** Will a portable midrange infrared analyzer be acceptable if correlated to the mandatory test method at an independent laboratory for monitoring the oxygenates, benzene, and aromatics for terminals and retailers in their quality assurance programs?

Answer: Testing for downstream quality assurance programs may be done with test methods other than the regulatory methods if adequate correlation to the regulatory test methods is demonstrated. However, testing for downstream oxygenate blending must be done using the regulatory test methods.(10/3/94)

9. **Question:** Can a refiner certify finished gasoline using method D-4294 or D-5354-94 (Antek Oxidation-UV Fluorescence Method) instead of D-2622 for sulfur? Will EPA accept other methods for measuring total aromatics content such as using mid-IR instruments?

Answer: No. Again, alternate methods are not allowed for certification of the gasoline by the refiner or importer, with the exception of alternatives for oxygen/oxygenates and aromatics until January 1, 1997, but they can be used for downstream quality assurance testing if correlated with the regulatory method.(7/1/94)

10. **Question:** Will foreign refiners be allowed to use a sulfur test other than D-2622 in order to verify specification?

Answer: Foreign refiners are not regulated parties under the reformulated gasoline regulations, issued on 12/15/93. Importers of foreign gasoline are required to test the gasoline using the regulatory methods, including the regulatory test method for sulfur.(7/1/94)

11. **Question:** What is the definition of sulfur in gasoline?

Answer: The sulfur portion of all sulfur forms and compounds.(7/1/94)

12. **Question**: If a refiner used ASTM D-3120 to determine sulfur levels in 1990, its baseline sulfur value could be as low as 3 ppm, since this is the low end of the valid range for this test method. However, this refiner must use the EPA-specified test method for sulfur, ASTM D-2622, for compliance purposes beginning in 1995. Since D-2622 is only valid down to 10 ppm, this refiner could never meet the Simple Model caps for sulfur. What options does this refiner have?

Answer: Section 80.91(d)(5) specifies that in certain situations data from test methods other than those specified in § 80.46 may be used to establish refinery baselines. Regardless of the method used, however, for test results that are below the lower valid range limit for the analysis method

used the lower valid range limit for the method may be used for establishing a baseline under § 80.91.

For purposes of compliance calculations, a refiner who measures a parameter at below the lower valid range limit for the analysis method also would use the lower valid range limit in its baseline determinations. One exception to this general rule applies in the case of a refiner who used a parameter test method for baseline development that is different from the regulatory test methods specified under § 80.46 for that parameter, and where the baseline test method had a lower valid range limit that is more stringent than the lower valid range limit for the regulatory test method. In this limited exception, during each compliance period a refiner who measures a parameter value at below the valid range for the regulatory test method may use a value of zero in compliance calculations.

This limited exception is illustrated with the following example. A refiner collected sulfur content data for purposes established a refinery baseline using ASTM method D-3120, which has a lower valid range limit of 3 ppm. This refiner could use a sulfur value of 3 ppm for any test result that is less than 3 ppm in the baseline calculations. For purposes of determining compliance with the RFG and anti-dumping standards, however, this same refiner is required under § 80.46(a) to measure the sulfur content of gasoline using ASTM method D-2622, which has a lower valid range limit of 10 ppm. Because the lower valid range limit for the baseline sulfur test method used by this refiner (3 ppm) is more stringent than the lower valid range limit for the regulatory sulfur test method (10 ppm), the refiner could use a sulfur value of zero for any compliance test result that is less than 10 ppm. (10/31/95)

13. **Question:** A procedure has been outlined by the EPA for the certification of oxygen content by meter for the oxyfuel program. Can this method be used for certification of oxygen content in reformulated gasoline? Is an exemption for in-line blending required?

Answer: No. The regulatory method for oxygen testing, or the approved temporary method discussed in question 39, must be used for certification of reformulated gasoline produced at the refinery and also for blending oxygenate with RBOB. For further discussion of the exemption see the In-line Blending Section.(7/1/94)

14. **Question:** Regarding oxygen and oxygenate content analysis by the OFID method, § 80.46(g)(1)(ii) states "It is applicable to individual organic oxygenated compounds ... in gasoline having a final boiling point not greater than 220 C (428 F). Samples above this range should be diluted to fall within the specified range." ASTM allows a final boiling point of 437 F.

A procedure should be available that allows handling this boiling range. Failing that, what procedures are acceptable for diluting that will not distort other parameters?

Answer: Dilution refers to oxygen concentration, not to boiling point. The final boiling point referred to in § 80.46(g)(1)(ii) was mistakenly specified as 220 °C, rather than the correct value of

225 °C that should be used. Nevertheless, we believe that essentially all finished fuels will have end points below 220 °C, especially in reformulated fuels controlled for E300.(7/1/94)

15. **Question:** With the industry average level for sulfur, has the EPA seen any problems with their OFID instrumentation? The understanding is that small levels of sulfur kills the catalyst used in this application resulting in much downtime and a calibration drift over time.

Answer: We have not experienced this problem. We believe the latest catalysts are very sturdy.(7/1/94)

16. **Question:** Concerning the OFID test method for oxygenates:

a) The method has a program run of 20 minutes, but over half the eluting peaks on the table in the method come off after 20 minutes. For example, the last oxygenate present on the table elutes off at 38 minutes. Can one use other chromatographic conditions such as those conditions set in the ASTM draft method for OFID analysis to achieve shorter retention times and better analytical techniques?

Answer: Yes.(10/31/94)

b) The method states that the chromatographic parameters for hydrogen (H2) and air (O2) for the FID should be 370 ml/min for O2 and 15 ml/min for H2. According to the manufacturer, these conditions cannot be met with the instrument we have. The manufacturer recommendation is air at 300 ml/min and H2 at 30 ml/min. Will EPA accept requirements or recommendations from the instrument manufacturers which are different than what is stated in the method for the best chromatographic way of running their OFID system for oxygenate determination?

Answer: Yes.(10/31/94)

c) Can one use the same vendor for purchasing calibration standards along with the independent secondary Q.A. standard needed in the quality control part of this method? Please outline all differences that there must be between the standards.

Answer: It would generally be inappropriate to purchase prepared Calibration and Independent Standards from the same purveyor; however, if one is purchasing pristine pure compounds for the purported purpose of preparing precise standards, one vendor may be acceptable.

The main concept is that an inaccuracy caused by an impure standard material would be identified by the use of a different compound, assuming that the second compound is not impure

by an identical amount. Similar logic is applied in that a different chemist should prepare the second standard to avoid replicating an inadvertent mispreparation.(10/31/94)

d) Please clarify the quality control section by outline what is required to be run with each batch of RFG.

Answer: Quality control for OFID (FR V59, No32, pp7828-7833)

QC Provision	Required		Recommended	
CalCheck Standards 1 per 10 samples or once per analysis batch.	±10% ±13%	EtOH MeOH MTBE t-BuOH	±6% ±10%	EtOH MeOH MTBE t-BuOH
Independent Check Stds 1 per 100 samples or once per analysis batch.	±10% ±13%	EtOH MeOH MTBE t-BuOH	±6% ±10%	EtOH MeOH MTBE t-BuOH
Spikes Required only if matrix effects are suspected. One per analysis batch or one per ten samples recommended.	±13% ±16%	EtOH MeOH MTBE t-BuOH	±10% ±13%	EtOH MeOH MTBE t-BuOH
Duplicates (Duplicates are not required, but it is recommended that one sample in tenor one per analysis batch be duplicated)(10/31/94)	Limit to Range MeOH 0.043C + 0.010 (0.27-1.07%) MeOH 0.053C (1.07-12.73%w/w) EtOH 0.053C MTBE 0.029C + 0.069 DIPE 0.048C ETBE 0.074C TAME 0.060C			

17. **Question:** The EPA allows ASTM D-4815-93 to be used for determination of oxygenates prior to 1/1/97 if it is correlated to the GC-OFID method identified in § 80.46(g)(1). Does the EPA know of any such correlations that have been developed for use by the industry?

Answer: Because D-4815 is such an operator dependent method, each correlation must be developed individually. A universal correlation equation is not acceptable. Correlation of a laboratory's D-4815 instrument can be shown through participation in a "round-robin" program that includes a GC-OFID or by correlation to any other laboratory's GC-OFID.(7/1/94)

18. **Question:** What is the frequency of correlation samples for laboratories to remain qualified for reform testing?

Answer: There is no definition of "qualified" laboratories under the regulations. The principle requirement for correlation relates to the use of one of the alternate methods allowed until 1/1/97.

When one elects to use ASTM D1319 for measuring aromatic content in gasoline, or ASTM D4815 for the measurement of oxygenates in gasoline, correlation to the regulatory methods must be established. The principle reason for this requirement is the operator dependent nature of D1319 and D4815. This operator dependence is echoed by the relatively large reproducibility of these methods. Because of the operator dependence, each facility (or in some cases, each operator) must establish its own correlation to the appropriate regulatory methods. This correlation need not be established via an internal route, participation in an outside program or ongoing exchange group may be sufficient. The actual number of tests performed will depend on the quality of the correlation. In general, some initial group of tests will be necessary, perhaps from 15 to 30, to establish the nature of one's correlation. If both methods report identical numbers, this may be enough, and all that would be required in addition would be a few samples a month to verify that no shift has occurred.

If this initial effort describes a bias, considerably more effort may be necessary. The object would be either to describe the bias via a correlation equation, or eliminate the bias via improvement (or alteration) in the technique of the operator. The effort required will be determined by the difficulty in eliminating the bias or producing the equation. Following this, some number of samples should be run on an ongoing basis, to confirm that no shifts have occurred. Again, this number will be determined by the individual's confidence in his established correlation.

In practice, this means that each laboratory must establish this correlation if it intends to measure aromatics by ASTM D1319, or oxygenates by ASTM D4815. This correlation testing is done to define a bias, or show that none exists. It is not appropriate to include reproducibility in this discussion, since the intention is to correlate the mean of one method with the mean of a second method. In all cases, the fuel must meet its intended aromatics level as measured by GC/MS, and its intended oxygenates level as measured by OFID.(1/9/95)

19. **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.(11/21/94)

20. **Question:** Confirm that ASTM method D-1319, Fluorescent Indicator Adsorption (FIA) can be used to determine aromatic and olefin levels until January 1, 1997.

Answer: Yes, the current version, ASTM method D-1319-93, is the regulatory method for olefins and may be used as an alternate for aromatics until January 1, 1997. For aromatics, it must

also be correlated to the GC-MS method. Correlation to another laboratory's GC-MS is acceptable. Each D-1319 analysis system must show correlation since the method is operator dependent.(7/1/94)

21. **Question:** Will EPA cooperate in round robin efforts to provide correlation tests for users of method ASTM D-1319-93 for total aromatics?

Answer: EPA will participate as we are able. Since we are unable to make open commitments of this type, labs should make arrangements with local labs for routine correlation testing.(7/1/94)

22. **Question:** The final RFG rule specifies the use of EPA's GC-MS method for measuring aromatics, but allows the use of ASTM method D 1319-93 for aromatics until January 1, 1997 for the purpose of meeting the industry requirements under section 80.65(e), provided that it is correlated with EPA's GC-MS method. According to the preamble of the final rule,

> This two year transition period should provide sufficient time for industry to purchase equipment and become familiar with the new method. In addition, during this time period, it is anticipated that EPA and industry can discuss any problems that might arise as a result of the new method being promulgated.

Will EPA provide further guidance as to how a correlation with the GC-MS method can be developed at this time? Since EPA's GC-MS method is not fully defined, refiners cannot reasonably develop a correlation with D 1319. Without this correlation, refiners will have no choice but to purchase new equipment, install it, and ensure that it is operating properly. It is highly unlikely that all this can be accomplished by September when some refiners will have to begin RFG production. Given these difficulties, can refiners use the ASTM D 1319 method without correlation?

Answer: Prior to 1993, ASTM 1319 specifically excluded analysis of aromatics in the presence of oxygenates which, of course, is needed for RFG analysis. ASTM 1319 was edited in 1993 to accommodate gasoline with oxygenates; however, EPA still believes this method is inferior for long term use because of the very high reproducibility associated with it and because the procedure is highly operator-dependent. Nevertheless, given the time constraints, EPA has decided to allow this method IF correlated with the EPA method discussed below.

EPA prescribed a method in the RFG regulations referred to as the GC-MS method (gas chromatography/mass spectrometry). This method has much better repeatability and is much more accurate. The method, as described in the regulations is not defined as a step-by-step procedure but, instead, allows flexibility so that companies can tailor the procedures to their lab. In the regulations, specified quality control procedures are detailed so as to assure adequacy of these tailored methods. Correlation with this method by those using ASTM D 1319 will produce results far less operator-dependent.

EPA believes that the regulatory method is sufficiently defined. Furthermore, there is no requirement that correlation with the EPA method be shown internally within a lab and, therefore, correlation can be accomplished with other labs utilizing the EPA method. In fact, EPA's lab has already correlated the EPA method internally with ASTM D 1319. Thus, purchase of new equipment by September is not required. Additionally, EPA believes most labs already have the needed equipment (even if not previously used for this purpose). EPA's lab and other labs with this equipment should supply sufficient correlation opportunities.(7/1/94)

23. **Question:** Since a gas chromatograph-mass spectrometer (GC-MS) must be used in the measurement of total aromatic content, including benzene, why is there a separate GC method, ASTM method D-3606-92, for benzene?

Answer: D-3606-92 is specified as the single test method for benzene because many testers do not plan to use GC-MS instruments immediately. The FIA method, an alternative to using a GC-MS, can be used to measure total aromatics until January 1, 1997.(7/1/94)

24. **Question:** When a GC-MS is used for analyzing total aromatics, a benzene number will be produced that is different from that produced by method D-3606-92. Which result should be used?

Answer: The result from method D-3606-92 must be used.(7/1/94)

25. **Question:** When measuring total aromatics using a GC-MS, can either method A or method B be used, or must both be used?

Answer: Either method A or method B may be used.(7/1/94)

26. **Question:** In the GC-MS test for aromatics, why must the calibration curves be forced through the origin? All mass spectrometers will show some noise at a zero concentration level.

Answer: Calibration curves are not required to be forced through the origins. The reference in the regulation is a suggested method.(7/1/94)

27. **Question:** Rather than bracketing all components of a sample during the GC-MS analysis in section 80.46(f), can a laboratory use linearity curves for the components?

Answer: Yes. We only require that the calibration standards bracket the concentration range of samples. You may use the linearity curves when analyzing the unknowns.(7/1/94)

28. **Question:** Currently, the EPA's GC/MS method for aromatics does not work (poor repeatability precision on successive sample injections.) Should refiners spend $100,000 each for GC/MS instruments before the EPA method development work is complete? What is the likelihood of the EPA later rejecting the GC/MS method altogether?

Answer: When EPA developed the GC/MS method for the determination of aromatics in gasoline, samples that were run side by side after the method was completed showed that the precision of GC/MS was considerably better than D-1319. This study was undertaken several years ago, and involved some thirty or so samples, all analyzed without any change to the calibration.

Currently, ASTM is in the round robin phase of development of their version of the GC/MS method. The details of this method have been coordinated with EPA, and we believe they are consistent with the regulatory requirements. Evaluations of the need for the use of secondary and tertiary ions for compound identification during this round robin will provide EPA with some hard evidence for evaluating whether this technique will be permitted. Should secondary and tertiary ion use prove unnecessary, it is possible that instruments costing about $35K will be suitable.

In any case, as discussed above, the regulations provide an optional alternate method until 1/1/97. After that time, the GC/MS analysis for aromatics will be the only allowed method for this property. Should the ASTM GC-MS method prove satisfactory, EPA will accept its use.(7/1/94)

29. **Question:** When method A is used to quantify the total aromatic hydrocarbons, should the measurement include only the analytes listed in the method?

Answer: No. All aromatics must be measured. The list is a sample calibration. Uncalibrated peaks are estimated from the nearest calibrated peak with the same mass.(7/1/94)

30. **Question:** The chromatographic conditions listed in the total aromatic method are loosely defined. Does this mean that the laboratory is free to use any type of column and chromatographic conditions as long as adequate separation and the appropriate QA/QC parameters are met?

Answer: Yes.(7/1/94)

31. **Question:** Who is the EPA contact person for questions about the procedure for measuring total aromatics with a GC-MS?

Answer: Contact Carl Scarbro (313) 668-4209 or Bruce Kolowich (313) 668-4582.(7/1/94)

32. **Question:** Does EPA know where the industry can purchase a standard with the list of aromatic analytes shown in method A?

Answer: No.(7/1/94)

33. **Question:** There are two typing errors in the analyte list in method A. 1-ethyl-2-methylbenzene and 2-ethyl-1,3-dimethylbenzene each appear twice in the list, each with a different retention time. What analytes have been mislabeled?

Answer: Corrections have been made to the table in section 80.46 and published in the technical amendments. The number of compounds has been increased from 32 to 34 and several of the specifications have been changed.(7/1/94)

34. **Question:** Concerning the EPA method for total aromatics:

a) Does EPA know of a source where all the components on the table in the method can be purchased? We have not been able to find one component, 1,3 diethyl benzene. Please state the manufacturer and the availability of each aromatic component in the method table.

Answer: EPA is using the five level calibration mixture recommended in the ASTM draft method for aromatics in gasoline. Pre-made standards for that method can be purchased from at least two vendors. The list of compounds used in the ASTM calibration are generally available from at least one vendor. For further information, contact Carl Scarboro at (313) 668-4209.(10/31/94)

b) If all the aromatic components listed in the method table cannot be found to calibrate the GC-MS, how can someone get an accurate result?

Answer: Precise results are possible by using a multi-level calibration using the compounds listed in either the ASTM procedure and by using: the response factor for Indan for all uncalibrated aromatics with a molecular mass of 117, the response factor for 1,2,3,5-tetramethylbenzene for all uncalibrated aromatics with a molecular mass of 134, and the response factor for pentylbenzene for all uncalibrated aromatics with a molecular mass of 148. There are undoubtedly some errors in the quantification but they are probably less than 1.0 of the total aromatic number. Leaving out the uncalibrated aromatics would underestimate the total aromatic number. We have no evidence that using a response factor of one is as good as using a response factor of a calibrated compound of a similar mass and structure.(10/31/94)

c) A previous Q&A document stated that one had to determine all aromatic components in a sample by comparing them to the closest calibrated component. How can this be done? Since

response factors are so widely different between the different aromatics, how can one get an accurate total aromatic result?

Answer: Using the above calibration standards and a reconstructed chromatogram at the masses 117, 134, and 148 of a gasoline like RFA or other high aromatic gasoline, one can identify uncalibrated aromatics with the above molecular weights, assign a single point through zero calibration curve using the curves generated for one of the above three calibrated compounds and produce an adequate calibration table for this procedure.(10/31/94)

d) 25 vol% is the lowest concentration for the internal standard recommended by EPA. We believe this is not good analytical practice when the largest component is around 5 vol% and almost all other aromatic components are below 2 vol%. Can a refiner pick a level for the internal standard that fits the level of the aromatic components in their fuel sample? If one cannot pick a level for the internal standard, please indicate why and how to get accurate results.

Answer: The 25 vol% only refers to the volume of a single internal standard in the total internal standard mixture; i.e., a compound is specified as 25 vol% of the internal standards. That translates to a much lower number when it is mixed into a sample or standard. Presently, EPA is using 6.0 wgt% ethylbenzene-d10, 2.5 wgt% benzene-d6, and 2.0 naphthalene-d8. This seems to work well, but methylbenzene may be better quantitated with the addition of methylbenzene-d8. We believe other compounds should work as well.(10/31/94)

e) The quality control section of the aromatic method states that the samples must be within 2 vol% of the RFG sample at a 95% confidence level. Does this mean that you must run each sample 10 times to get a statistical average and compare it with 10 runs of a previous statistical average so that one can compare it to a 95% confidence level. Please explain the quality control section in more detail. We assume this to mean that any 2 runs of a sample cannot deviate by more than 2 vol% in a fuel sample.

Answer: The 2 vol% is the allowable difference for lab duplicates of a sample. That is, duplicate analyses should not differ by more than 2 vol%. In addition, the analysis of the quality control standard or reference material should also not differ from its nominal concentration by 2 vol%. These are fairly wide targets. EPA is currently seeing a precision of 5.0% of point at the 95% confidence interval. That figure translates in a standard or sample containing 25 vol% aromatics as 1.25 vol% for a 95% confidence interval and less than 1.9 vol% at a 99% confidence interval.(10/31/94)

f) The issue of handling aromatics that are found in the sample but are not part of the calibration list must also be resolved. In a previous question and answer session, EPA indicated that other aromatics found in the sample but not part of the system calibration should be approximated by comparing the peak area of the non-calibrated compound to the closest calibrated analyte. This type of calculation is difficult for instrument manufacturers to program and, therefore, places a large burden of manual calculations on the chemist. These

approximations can also corrupt the quantitation data. Why build calibration curves for 30 to 40 analytes and follow the QA/QC protocol for verification of these curves only to corrupt the final result by adding in a number of estimated aromatic levels. In other EPA methods such as 524, 525, 8260, and 8270, unknown peaks that are not part of the calibration are tentatively identified by a library search against a commercial library and their approximate concentration calculated by assuming a response factor of 1 for the unknown peak. These compounds are reported as potentially being present in the sample but are not involved in any of the calculations involving calibrated analytes. Software for this sort of a calculation is available from any GC-MS vendor.

If it is necessary to add the unknown aromatics into the total aromatic content, we suggest using the same type of calculation used in the other EPA methods (assume a response factor of 1). This would allow for easy modification of existing software to handle the calculations.

Answer: We believe that by following the steps outlined in paragraphs b and c above, and the ASTM procedure one can produce satisfactory results. The use of a response factor of one may or may not produce similar results. We have no data at this time to make an evaluation.(10/31/94)

35. **Question**: The rules provide that the ASTM method D-1319-93 may be used for Aromatics until January 1, 1997, and that if used, the method must be correlated with the GC-MS test method. Is the correlation factor between the D-1319 test method for Aromatics and the GC-MS test method for Aromatics intended to be used for purposes of determining compliance?

Answer: Section 80.46(f)(3) states as follows:

(3) Alternative test method. (I) Prior to January 1, 1997, any refiner or importer may determine aromatics content using ASTM standard method D-1319-93, entitled "Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption," for purposes of meeting any testing requirement involving aromatics content; provided that

(ii) The refiner or importer test result is correlated with the method specified in paragraph (f)(1) of this section.

Thus, when ASTM method D-1319-93 is used to determine aromatics content, the result obtained must be correlated with the gas chromatography method specified in § 80.46(f)(1) in order to reflect the result which would have been obtained had the analysis been conducted using the gas chromatography method, and this adjusted result must be used for purposes of reporting and determining compliance with regulatory requirements. (8/29/95)

36. **Question:** Why is the Digital Herzog excluded as a compliance test acceptable for RVP measurement under section 80.46?

Answer: Method 3 was selected for RVP measurement because it has been shown to have much greater precision than the Digital Herzog.(7/1/94)

37. **Question:** If the Method 3 RVP analyzer fails, can a gauge RVP reading be used to make a shipment and an RVP determined by an outside laboratory later?

Answer: No.(7/1/94)

38. **Question:** Regarding distillation testing, in the preamble and in § 8046(d)(2), it is noted that the repeatability and reproducibility figures in Table 9 of ASTM D-86-90 are incorrect and cannot be used. According to ASTM, Table 9 in ASTM D-86-93 contains the correct figures. Please confirm that it is acceptable to use ASTM D-86-93 as the regulatory method or to use ASTM D-86-90 and substitute Table 9 from ASTM D- 86-93.

Answer: Refiners and importers must use D-86-90, except that Table 9 from the 1990 version of that method may not be used. Parties may use Table 9, the reproducibility values, from the 1993 version of this method, ASTM D-86-93.(7/1/94)

39. **Question:** In general, how are the properties determined for blendstocks that fall outside the scope of the regulatory methods?

Answer: Some gasoline blendstocks have properties that cause them to fall outside the scope of the regulatory methods. If properties need to be obtained for these blendstocks, they must be determined by a different route, that being an interpolation based on the measured properties of the gasoline before and after the blendstock is added. For example, to determine the RVP of a blendstock, an appropriate equation would be:

7.60(100,000) + r(5,000)	=	7.30(105,000)	(I)
760,000 + r(5,000)	=	766,500	(II)
r(5,000)	=	6,500	(III)
r	=	1.30	(IV)

In this example, where the initial fuel sample was 100,000 barrels with an RVP of 7.60, the blendstock volume was 5,000 barrels, and the RVP of the final blend was 7.30, the calculated RVP of the blendstock would be 1.30.(7/1/94)

VI. Requirements

A. RFG General Requirements

1. **Question:** Must reformulated gasoline be sold only in those areas designated as reformulated gasoline areas by the EPA? Can a refiner produce and designate certified reformulated gasoline for distribution and sale even though there may be no immediate reformulated gasoline market for that product except as a replacement for conventional gasoline? Are the volume and fuel parameters of the gasoline to be incorporated into the anti-dumping compliance calculations?

Answer: Reformulated gasoline may be sold in areas not designated as RFG areas. However, if the reformulated gasoline is mixed with conventional gasoline, it may not be sold as reformulated gasoline. Certified reformulated gasoline used in a non-RFG area should not be incorporated into the anti-dumping compliance calculations and should be used in the RFG compliance calculations.(7/1/94)

2. **Question:** To blend gasoline from various components, must we be registered as a refiner?

Answer: Yes. Registration is required for any refiner, importer, and oxygenate blender that produces any reformulated gasoline, and any refiner and importer of conventional gasoline. (§§ 80.76(a) and 80.103.) Section 80.65(d)(3) requires each batch of reformulated or conventional gasoline or RBOB produced or imported at each refinery or import facility, or each batch of blendstock produced and sold or transferred if blendstock accounting is required under § 80.101(d)(1)(ii), to be assigned a "batch number" which includes (among other information) the refiner, importer, or oxygenate blender registration number and the EPA assigned facility registration number.(7/1/94)

3. **Question:** Averaged reformulated gasoline produced in 1994 is to be included in 1995 compliance determinations. However, recordkeeping and reporting for conventional gasoline does not begin until January 1, 1995. Please confirm this understanding.

Answer: Your understanding is correct.(7/1/94)

4. **Question:** Most pipeline companies conduct an internal pipe corrosion control program pursuant to DOT regulations. These programs generally involve the injection of corrosion inhibitor additives into the petroleum products (gasoline, distillate, etc.) being transported by the pipeline company. Does this injection of corrosion inhibitors result in the pipeline company coming under the reformulated gasoline regulations' definition of a (blender) refiner?

Answer: No. EPA does not view the blending of de minimis amounts of additives, such as detergents or corrosion prevention additives, into finished RFG to be the "production" of gasoline, and does not believe such blending will cause resulting gasoline to fail to meet RFG standards.(7/1/94)

5. **Question:** Terminal blending of mid-grade gasoline (using a premium and regular mix) is common practice in the industry. We interpret that terminals engaging in this practice are not considered refiners under the regulations based on the comment "that the EPA believes that multi-grade mixing of RFG will result in gasoline that meets all reformulated standards." (Response to comments, fungibility section). We request clarification.

Answer: Parties who only mix different grades of certified reformulated gasoline will not be considered refiners or blenders under the reformulated gasoline regulations. Similarly, parties who mix different grades of conventional gasoline which were produced in compliance with the anti-dumping regulations will not be considered refiners under the regulations.(7/1/94)

6. **Question:** Can a producer manufacturing only conventional gasoline purchase RFG, blend it with the conventional gasoline at the refinery, and use the combined blend volume and properties as part of the refinery's compliance calculations starting January 1, 1995?

Answer: Combining finished RFG and finished conventional gasoline is not an act of "producing or importing" under the RFG/anti-dumping regulations. Consequently, the resulting product would not be included in the refinery's compliance calculations. Under § 80.78(a)(10), however, such product may not be sold as RFG. Under § 80.78(a)(5), finished RFG may not be combined with a non-oxygenate blendstock unless the blendstock meets all RFG standards without regard to the properties of the RFG to which the blendstock is added. However, a downstream party may downgrade RFG to conventional gasoline and combine it with blendstocks. In this case, the blendstocks would be included in the refinery's anti-dumping compliance calculations without regard to the volume and properties of the downgraded RFG. (4/18/95)

7. **Question:** If a refiner produces RBOB and sends it down a proprietary line to his own terminal where it is blended with ethanol, is the refiner required to register as an oxygenate blender for this terminal oxygenate blending operation?

Answer: Yes.(7/1/94)

8. **Question:** Who is the oxygenate blender in a situation where a petroleum marketer who holds title to the gasoline engages a common carrier tank truck company to transport the gasoline, and, upon the completion of loading the truck, but before leaving the marketer's facility, oxygenate

owned by the marketer is added to the gasoline per instructions by the marketer? Who is the oxygenate blender in a similar situation, except that the blending operation is performed by the carrier at a site removed from the marketer's facility and/or operational control?
Answer: In both scenarios, since the marketer owns the gasoline and the carrier owns the oxygenate blending facility (i.e., the truck in which blending takes place) and executes the blending operation, both parties fit the definition of an oxygenate blender, as found in § 80.2 of the regulations. Both parties, therefore, are independently responsible for the completion of all oxy blending requirements, such as meeting standards, sampling and testing, recordkeeping and reporting. However, these oxy blending requirements must be met only once for any oxy blending operation. As a result, if the requirements are properly accomplished by one oxy blender for a particular blending operation, EPA will consider the requirement to have been accomplished by each person who meets the definition of oxy blender for that operation. Normally, the party that holds title to the fuel would be responsible for reporting the batch to EPA. (7/1/94)

9. **Question:** Who accounts for blending operations that take place in leased storage facilities?

Answer: Under the regulations, a refiner is any person who owns, leases, operates, controls, or supervises a refinery. As indicated above, an oxygenate blender is any person who owns, leases, operates, controls, or supervises an oxygenate blending facility, or who owns or controls the blendstock or gasoline used or the gasoline produced at an oxygenate blending facility. Therefore, there are situations where more than one person meets the definition of refiner or oxygenate blender (e.g., the person who owns the facility, the person who directs the blending operation, and the person who owns the gasoline). In a situation where a refiner leases storage facilities to another, both parties would be considered refiners under the regulations and would be accountable for blending operations. The parties may decide among themselves who registers and reports, however, all are liable in the event there is a violation. While all parties must meet all of the elements of their defense, if a violation is discovered, the regulated parties may decide who performs quality assurance tasks.(7/1/94)

10. **Question:** Public terminals that "refine" and "blend" RFG, RBOB or conventional gasoline as defined in the RFG rules at 40 CFR Part 80, and obtain agreements from their customers to comply with the refiner/blender requirements of the rule, will not separately need to register with EPA. It is my understanding that terminals in such situations must not register. Is my understanding correct?

Answer: No. In a situation in which more than one party fits the definition of a refiner or oxygenate blender under the regulations, each such party is subject to the requirements under the regulations, including registration requirements. Where, for a particular operation, more than one party fits the definition of refiner or oxygenate blender, the parties may agree that one party will register. There is no prohibition against the terminal registering in this situation.(8/29/94)

11. **Question:** Can a party downstream of the refiner certify a batch of conventional gasoline as RFG if the required RFG standards are met after testing? If not, can this batch of conventional gasoline which meets RFG standards be sold to a refiner as a GTAB?

Answer: No. Only refiners and importers may designate gasoline as RFG. A downstream party also may not sell conventional gasoline as gasoline-treated-as-blendstock (GTAB) even if it meets RFG standards. The concept of GTAB applies only in the limited situation where the product is imported, is used by the company that imported it for blending gasoline in a refinery operated by the company, and is included in the company's refinery compliance calculations. Previously accounted for RFG or conventional gasoline may not be treated in this manner. For further discussion of GTAB, see the February 6, 1995 Question and Answer document. (4/18/95)

12. **Question:** In the case of a refinery which is sold during the course of an annual averaging period (i.e., other than at midnight on December 31), how does EPA view the responsibilities of the seller refiner and the buyer refiner with regard to meeting the RFG and anti-dumping standards for the gasoline produced at that refinery?

Answer: Under § 80.65(c), each refiner of RFG is responsible for meeting the RFG standards for each batch of RFG produced by that refiner, and under § 80.67(b) in the case of RFG the refiner designates for compliance on average the refiner must meet the applicable RFG standards separately for the RFG produced by that refiner at each refinery over each calendar year averaging period. Under § 80.101 each refiner of conventional gasoline is responsible for meeting the anti-dumping standards for all conventional gasoline produced by that refiner at each refinery over each calendar year averaging period. In addition, each refiner is responsible for meeting all other refiner requirements for the gasoline produced at each refinery (sampling and testing, record keeping, reporting, etc.) and under § 80.65(h) each refiner is responsible for the completion of a compliance audit for the gasoline produced at each refinery during each calendar year.

In the case of a refinery that is sold during an averaging period, therefore, both the seller refiner and the buyer refiner would independently be responsible for meeting the applicable RFG and anti-dumping standards for the RFG and conventional gasoline produced at that refinery during the period that party owns the refinery, and for meeting all other refiner requirements for the gasoline produced. For example, if a refinery is sold on April 1, 1996, the seller refiner would be responsible for meeting the RFG and anti-dumping standards for the RFG and conventional gasoline produced at the refinery during the period January 1, 1996 through March 31, 1996, and the buyer refiner would be responsible for meeting the RFG and anti-dumping standards for the RFG and conventional gasoline produced at the refinery during the period April 1, 1996 through December 31, 1996. Each refiner also would be responsible for meeting all other refiner requirements for their periods of ownership, including sampling and testing, independent sampling and testing, record keeping, reporting, and attest engagements. This responsibility to meet RFG standards would apply regardless of whether the RFG produced by one refiner or the other is designated for meeting standards on average or on a per-gallon basis. Moreover, each refiner could designate the RFG produced during the period that party owns the refinery as

meeting the RFG standards on average or on a per-gallon basis, and the buyer refiner could make an aggregation election for the refinery under § 80.101(h).

For those standards and requirements that rely on the refinery's 1990 baseline volume, such as the compliance baseline for conventional gasoline under § 80.101(f)(4), the refinery's baseline volume would be allocated to the relative periods of time the seller refiner and the buyer refiner own the refinery. For example, if a refinery with a baseline volume of 500 million gallons is sold on April 1, the seller refiner would receive a baseline volume of 123.29 million gallons ({90/365}*500 million), and the buyer refiner of 376.71 million gallons ({275/365}*500 million).

EPA recognizes there are seasonal differences in some RFG and anti-dumping standards calculations (e.g., the different toxics equations for summer versus winter) which, depending upon when a refinery is sold, could have an impact on either the seller or buyer refiner meeting these standards when met on average. As a result, in a case where a refinery is sold during an averaging period, and where either the seller or buyer refiner fails to meet an RFG or conventional gasoline standard which is met on average, EPA will evaluate the gasoline produced at the refinery by both the seller and the buyer refiner together. If this evaluation shows that the applicable RFG and conventional gasoline average standards have been met for all the gasoline produced at the refinery during the averaging period, EPA will treat both refiners as having met these standards, regardless of the separate compliance calculations of these parties. This collective evaluation would not be appropriate and would not be conducted, however, in a case where the standard in question is one that may be met by aggregating refineries (i.e., all anti-dumping standards, and in the case of RFG under the simple model, sulfur, T-90 and olefins) and where the refiner who failed to meet the standard has elected to aggregate the refinery in question with other refineries.

EPA believes that the considerations discussed in this answer should be taken into account when a refiner enters into a transaction to sell or buy a refinery, particularly to the extent a refiner would intend to rely on the collective evaluation approach. For example, a refiner who sells a refinery in April and who is counting on summer gasoline to meet RFG or conventional gasoline toxics standards should ensure that the buyer refiner will produce gasoline of sufficient quality that the toxics standards are met for the refinery overall for the calendar year averaging period. (8/29/95)

13. **Question:** What constitutes a batch of reformulated gasoline? What method should be used by refiners, importers and oxygenate blenders for determining the volume of a batch of reformulated gasoline? What method should be used by independent laboratories? If a refiner is to report the tank volume at the time that a sample is collected, this may result in double-counting because the tank would not be emptied before blendstocks are added to produce the next batch. For example, suppose the volume in a tank is 100,000 barrels for batch 1, which is sampled and tested. Subsequently, there are two shipments from this tank, a 50,000 barrel shipment and a 20,000 barrel shipment, leaving 30,000 barrels in the tank. The tank is then blended up to 90,000 barrels for batch 2, which is sampled and tested, with subsequent shipments of 28,000 barrels and

44,000 barrels. Should the reported volume for batch 1 be 100,000 barrels or 70,000 barrels? Should the reported volume for batch 2 be 90,000 barrels or 72,000 barrels?

Answer: Section 80.2(gg) defines a "batch of reformulated gasoline" as "a quantity of reformulated gasoline which is homogeneous with regard to those properties which are specified for reformulated gasoline certification." The reported volume for the batch should be the volume of reformulated gasoline shipped out of the refinery or import facility after the gasoline has been blended and sampled. In the example above, the volume for batch 1 would be 70,000 (50,000 + 20,000) barrels and the volume for batch 2 would be 72,000 (28,000 + 44,000) barrels. For a discussion of the method for determining batch size by independent laboratories, see Independent Sampling/Testing Section, Question 19.(7/1/94)

14. **Question:** A refinery has two product tanks in series; a 10,000 gallon tank in which blendstocks are combined to produce gasoline (a blend tank), followed by a 50,000 gallon tank which feeds directly to the rack. Customers pull product from the rack. There are no blend streams going into the 50,000 gallon tank. Can we just certify the 10,000 gallon tank for all the properties for a specific volume (batch), without actually sampling any product from the larger tank?

Answer: The refiner should certify the properties of each batch produced in the 10,000 gallon blend tank based on a sample of gasoline collected after all the blending components have been added and mixed. The volume of each batch would be the volume of gasoline that is transferred from the blend tank up to the point when additional blendstocks are added to the blend tank to begin the subsequent batch. No certification sampling and testing would be required of gasoline from the 50,000 gallon tank.(8/29/94)

15. **Question:** What does EPA consider "shipment volume" for the volume reported to the EPA? Would shipment be considered the point at which the product leaves the blend tank where it is certified and is fungibly mixed in sales tanks; could it be the point where the product is placed on a pipeline, barge or sold over the rack; could it be the point of tender as defined in the audit requirements; or at the point where a transfer of custody or ownership took place?

Answer: For purposes of reporting, under § 80.75(a)(2)(iii), the "volume of the batch" is the volume that leaves the blend tank where it is certified and is subsequently fungibly mixed somewhere else.(9/26/94)

16. **Question:** During tank transfers and other operations necessary to accommodate pipeline schedules, barrels of untested, uncertified reformulated gasoline may be mixed with barrels of previously certified product that have been included in the refiner's averaging calculations. If the total volume of mixed product is tested, certified, and booked, then double-accounting of the

previously certified barrels will result. Can a procedure for un-booking of the quality and quantity of the previously certified product be used to avoid this double accounting problem?

Answer: If, as discussed above, batch volumes are reported based on shipments out of the refinery or import facility (and averaging calculations are based on these volumes), a volume of previously tested reformulated gasoline remaining in a tank, which is then mixed with untested gasoline, would be included in the volume reported (i.e., the next shipment out of the refinery from that tank) and double counting will not occur.(7/1/94)

17. **Question:** Our practice is for each tank to be a batch and we test that tank once even though it may be used to supply several distribution systems. If several tanks are required to make up a pipeline tender, each tank is tested separately and the separate certificates of analysis provided to the pipeline. Will this practice still be acceptable?

Answer: Yes. Moreover, EPA believes that each separate tank of produced gasoline must be a separate batch, and that gasoline produced and contained in more than one tank may not be treated as a single batch.(7/1/94)

18. **Question:** A blender/importer unloads 200,000 barrels of imported blendstock into a tank at a registered terminal and blends the imported blendstock into reformulated gasoline. After the finished gasoline is certified as RFG, 150,000 barrels of the product is shipped out, and the next shipment of imported blendstock arrives. Can the imported blendstock be unloaded onto the remaining 50,000 barrels of certified RFG and reblended? (This seems to be defined as a prohibited activity if the subsequent blend is "dirtier," even though it meets RFG specifications.)

Answer: The shipped batch of RFG should be reported as 150,000 barrels of RFG. The 50,000 barrels which are left are not considered to be part of the RFG batch for reporting purposes, because only the shipped volume is reported. Therefore, imported blendstocks can be unloaded onto these 50,000 barrels and reblended to produce another batch of RFG.(7/1/94)

19. **Question:** Must the refiner track the barrels and qualities of each batch of gasoline beyond the tank in which it was certified?

Answer: No, but the batch volume is not determined by tank volume; rather, it is determined based on shipment volume.(7/1/94)

20. **Question:** If, due to piping constraints, a refiner must put a purchased or inter-refinery transferred batch of finished gasoline through the refinery blendstock system, but does so without the batch losing integrity, must the refiner include the batch in his compliance calculations?

Answer: No. As per § 80.65(i) of the regulations, any refiner, importer, or oxygenate blender shall exclude from all compliance calculations, the volume and properties of any RFG that is produced at another refinery or oxygenate blending facility, or imported by another refiner in order to avoid double-counting.(7/1/94)

21. **Question:** Section 80.65(e) lists properties that product must be tested for before shipment. Some of these do not have standards in the simple model. Is it necessary to test, and ultimately report, those parameters not required for the simple model? Is reporting of all tests required or just those required for the simple model?

Answer: Refiners and importers must test for each parameter listed in § 80.65(e) for RFG certified under the simple model with the exception of T-50 and, in the case of non-VOC controlled RFG, RVP. However, in the case of simple model RFG, refiners must only have received test results prior to shipment for oxygen and benzene, and RVP in the case of VOC-controlled RFG.(7/1/94)

22. **Question:** When certifying a batch of gasoline, which property data should be used (analyzer, lab, calculated, etc.)?

Answer: When certifying a batch of gasoline, a sample that is representative of the entire batch must be taken and tested according to the regulatory test methods specified in § 80.46 of the regulations. For information on independent sampling and testing, please see Independent Sampling and Testing Section. In addition, for information on what property data to use when certifying RFG when using a computer-controlled in-line blending operation that has been exempted from the independent sampling and testing requirements, see In-Line Blending Section.(7/1/94)

23. **Question:** What are the sampling and testing requirements for terminal blenders (barges, trucks and pipelines)?

Answer: If the facility's activities fit the definition of a refiner, it would have to sample and test each batch of gasoline as required under § 80.65(e). If its activities fit the definition of an oxygenate blender, it would have to fulfill the appropriate testing requirements under § 80.69.(7/1/94)

24. **Question:** If operations necessitate a transfer between two tanks which are both certified reformulated gasoline, does the receiving tank have to be retested and certified?

Answer: Assuming that the receiving tank contains certified RFG, such a transfer would be permissible without retesting and recertification.(7/1/94)

25. **Question:** Should the first sentence of § 80.65(e)(2)(ii)(B), which makes reference only to refiners, also make reference to importers?

Answer: The first sentence of § 80.65(e)(2)(ii)(B) should read as follows: "The refiner or importer shall have the gasoline analyzed for the property at one additional independent laboratory." Importer language inadvertently was omitted from this sentence when promulgated as evidenced by the use of "refiner or importer" language in the second sentence, and will be corrected in a future rulemaking.(4/18/95)

26. **Question:** Please clarify how the facility aggregation option would work. Would the facility aggregation apply only to simple model RFG sulfur, T-90 and olefins compliance?

Answer: A refiner may aggregate its refineries for anti-dumping compliance purposes under § 80.101(h). This aggregation option must be exercised for the 1995 averaging period, and may not thereafter be changed. In addition, under § 80.41(i) the refiner must use the same model (simple or complex) for the RFG and conventional gasoline produced at any refinery, and the same model must be used at all aggregated refineries. Moreover, under § 80.41(i) the RFG standards for sulfur, T-90, and olefins, but no other RFG standards, are met in relation to refinery baselines. Therefore, in the case of a refiner who elects to aggregate refineries, who produces RFG, and who uses the simple model, the RFG standards for sulfur, T-90, and olefins must be met for all RFG produced at the refiner's aggregated refineries, and all other RFG standards must be met separately for each refinery, regardless of aggregation.(7/1/94)

27. **Question:** We are concerned that our terminal which will contain RFG beginning December 1 will suffer a loss of business during that month, because distributors will obtain less expensive conventional gasoline for delivery to retail outlets located in the RFG covered area which is our normal market. Would this approach by distributors be appropriate? If a terminal stocks conventional gasoline for use outside RFG covered areas after December 1, 1994, would the terminal be liable if distributors deliver this gasoline to retail outlets in an RFG covered area during December, 1994?

Answer: Section 80.65(a) requires in part that beginning December 1, 1994 all gasoline transported, stored, or sold at any location other than at the retail level must meet the RFG requirements. Section 80.65(b) requires that gasoline sold or dispensed in a covered area must be certified as reformulated. These requirements thus apply to <u>any</u> terminal or distributor that supplies gasoline to an RFG covered area beginning December 1, 1994. Any distributor who delivers conventional gasoline to a retail outlet located in an RFG covered area beginning

December 1, 1994 will be in violation of the §§ 80.65(a) and (b) requirements. A terminal operator dispensing conventional gasoline to such a distributor also will be in violation of these sections if the operator knows or reasonably should know the distributor will deliver the gasoline to a retail outlet located in an RFG covered area beginning December 1, 1994. Question VII-B-10 from the July 1, 1994 Question and Answer document discusses this type of scenario and the steps the terminal should take.

EPA intends to enforce these requirements through audits of the delivery records of terminals and distributors, and through inspections of gasoline quality at retail stations in RFG covered areas beginning January 1, 1995.

As a result, a terminal that meets the RFG requirements beginning on December 1, 1994, as required by §§ 80.65(a) and (b), will not be at risk that any other terminal may legally supply conventional gasoline to that terminal's customers for delivery into an RFG covered area during or after December, 1994.(9/26/94)

28. **Question:** Can bulk terminals located in covered areas receive conventional gasoline that is intended to be distributed to non-RFG areas?

Answer: Distributors, including bulk plants, located in covered areas may receive and distribute conventional gasoline to non-RFG areas, assuming all of the requirements of the regulations are met, including segregation of conventional gasoline from RFG, and the product transfer documentation statement at § 80.106(a)(1)(vii) which identifies the product as not meeting the requirements for RFG.(12/5/94)

29. **Question:** What are the compliance requirements for pipelines?

Answer: Pipelines, unless they engage in blending gasoline, generally fit the definition of carrier under the regulations. As such, pipelines must ensure that the quality of the gasoline is not changed and provide product transfer documents. In order to establish a defense to a presumptive violation, pipelines should also conduct quality control programs. For further information on pipeline compliance requirements, see Question 29 of this section.(7/1/94)

30. **Question:** Are there any circumstances where a pipeline could be considered an oxygenate blender?

Answer: If a pipeline otherwise meets the definition of oxygenate blender (i.e., any person who owns, leases, operates, controls, or supervises an oxygenate blending facility, or who owns or controls the blendstock or gasoline used or the gasoline produced at an oxygenate blending

facility), then it will be considered an oxygenate blender. This can occur if the pipeline operates a terminal where oxy blending is occurring.(7/1/94)

31. **Question:** If a pipeline must be classified as a refiner, how would that be handled administratively by EPA? Since pipelines don't own the product, would pipeline have to become buyers and sellers for regulatory purposes?

Answer: Refiners must be registered with EPA. The pipeline need not be an owner of the gasoline to be a refiner.(7/1/94)

32. **Question:** What are the requirements for retailers in the covered areas?

Answer: Retailers are subject to certain controls and prohibitions on reformulated gasoline as provided in § 80.78 of the regulations, such as meeting downstream standards, not selling conventional gasoline in RFG areas, selling VOC-controlled gasoline for the proper VOC Control Region from June 1 through September 15, not adding any oxygenate to reformulated gasoline unless it is designated at OPRG, not combining any VOC-controlled reformulated gasoline that is produced using ethanol with any VOC-controlled reformulated gasoline that is produced using any other oxygenate from January 1 through September 15, or combining reformulated gasoline with conventional gasoline and selling the resulting mixture as reformulated gasoline. Retailers may be held liable for violations in accordance with the provisions of § 80.79.(7/1/94)

33. **Question**: If RFG is sold outside of an RFG area, are there any labeling changes, physically on the pump, that will be required?

Answer: There are no pump labeling requirements under the RFG program, either inside or outside RFG covered areas. However, a mixture of conventional gasoline and RFG may not be sold as reformulated gasoline. Parties, therefore, should only sell gasoline as RFG if it has been segregated from conventional gasoline.(10/3/94)

34. **Question:** Can conventional gasoline be used for off-road applications in an RFG area?

Answer: No. Only reformulated gasoline may be sold or supplied in a covered area.(7/1/94)

35. **Question:** Are any categories of gasoline users in the RFG covered areas exempt from the requirement to use RFG instead of conventional gasoline?

Answer: Section 211(k)(5) of the Clean Air Act describes the scope of the requirement to use RFG in the RFG covered areas:

(5) PROHIBITION. -- Effective beginning January 1, 1995, each of the following shall be a violation of this section:

(A) The sale or dispensing by any person of conventional gasoline to ultimate consumers in any covered area.

....

This statutory prohibition on the sale or dispensing of conventional gasoline in RFG covered areas is not restricted to gasoline used to fuel motor vehicles, but rather applies to all gasoline sold or dispensed within an RFG covered area to any consumer, regardless of the use. The prohibition, therefore, would include gasoline sold or dispensed for use in motor vehicles, boats, construction equipment, recreational vehicles, lawn and garden equipment, etc.

As a matter of enforcement discretion, however, EPA will not enforce the requirement to sell or dispense RFG in the case of two categories of gasoline: aviation gasoline sold or dispensed for use in aircraft, including gasoline that has properties identical to motor vehicle gasoline that is sold or dispensed solely for use in aircraft; and racing gasoline sold or dispensed for use in racing vehicles during a sanctioned racing event. These exceptions would not apply if the aviation gasoline or racing gasoline is used other than in an aircraft, or in a racing vehicle in conjunction with a sanctioned racing event.

In the case of both aviation gasoline and racing gasoline, the gasoline must be clearly designated as such, and any person selling or dispensing these categories of gasoline must take appropriate steps to ensure the gasoline is used only in the limited circumstances described. In addition, EPA has strict guidelines as to what constitutes a racing vehicle, and the exception for racing gasoline applies only for gasoline used in such a vehicle. For further information on what constitutes a racing vehicle, contact EPA's Manufacturers Operations Division at (202) 233-9250.

The rationale for the exception for aviation gasoline used to fuel aircraft is based on safety considerations. Aviation gasoline must satisfy performance criteria that are relevant to the safe operation of aircraft, and this safety consideration outweighs the limited adverse environmental effect of conventional gasoline used in this manner. In addition, aircraft emissions normally would not be confined to the covered area where the aircraft is fueled, and could occur in significant part outside any RFG covered area. The rationale for the exception for racing gasoline is based on the special performance requirements for true race vehicles and the limited volumes of gasoline involved.(1/17/95)

36. **Question:** Is it possible to get an exemption to use conventional gasoline in an RFG covered area for testing purposes?

Answer: The RFG regulations do not provide an exemption from the RFG requirements for testing purposes. However, EPA would consider allowing the use of conventional gasoline in an RFG covered area for purposes of a testing program if sufficient information is provided to EPA to verify the necessity of using non-RFG. Parties interested in pursuing such an allowance should contact Marilyn Bennett at (202) 233-9006.(1/30/95)

37. **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.(11/21/94)

38. **Question:** Is a company considered an importer under the RFG regulations if it has a refinery located in the Virgin Islands or Guam and transports gasoline produced at this refinery to a State?

Answer: Section 80.2(r) defines "importer" as "a person who imports gasoline or gasoline blending stocks or components from a foreign country into the United States...." Under § 302(d), Puerto Rico, Guam, American Samoa, the Virgin Islands and the Northern Mariana Islands are included in the definition of "State" for purposes of compliance with the RFG and anti-dumping regulations. A company that produces gasoline at a refinery located in Puerto Rico, Guam, American Samoa, the Virgin Islands or the Northern Mariana Islands, therefore, is a refiner, rather than an importer, of that gasoline. In addition, gasoline transported into Puerto Rico, Guam, American Samoa, the Virgin Islands or the Northern Mariana Islands from outside any "State" would be imported gasoline that must be included in the importer's RFG or anti-dumping compliance calculations.(1/9/95)

39. **Question:** Can a company ship, sell, or offer for sale conventional gasoline to a retailer or wholesaler operating on an Indian Reservation in an ozone nonattainment area which has been opted-in by the state? Can a company sell conventional gasoline to a wholesaler who supplies a retailer or wholesaler who is operating on an Indian Reservation in an ozone nonattainment area which has been opted-in by the state?

Answer: The Clean Air Act (CAA) specifies the areas that must be subject to the reformulated gasoline (RFG) program. These "covered areas" are: (1) the nine major metropolitan areas with the worst (highest) ozone levels; and (2) any area reclassified as a severe ozone nonattainment area (effective one year after reclassification). See CAA section 211(k)(10)(D). This statutorily-prescribed component of the RFG program applies with equal force to all covered areas, including all affected State and Tribal areas.

The CAA also allows the "Governor of a State" to voluntarily "opt-in" and subject any marginal, moderate, serious or severe ozone nonattainment area in the State to the RFG program. See CAA section 211(k)(6). As explained in the discussion below, a Governor's application to opt-in to the RFG program includes all affected ozone nonattainment areas within the State's jurisdiction but does not include any lands within the jurisdiction of a Federally recognized Indian tribe.

The term "State" is specifically defined in section 302(d) of the CAA and does not include Indian Tribes. Rather, the term "Indian tribe" is independently defined in section 302(r) to include any Federally recognized "tribe, band nation, or other organized group or community, including any Alaska Native village."[11] Compare also CAA § 302(b)(1)-(4) with CAA § 302(b)(5).

Several other provisions of the CAA evince congressional intent not to treat Federally recognized Indian Tribes as subdivisions of States under the CAA. For example, section 164(c) provides that "[l]ands within the exterior boundaries of reservations of federally recognized Indian tribes may be redesignated" for purposes of the Prevention of Significant Deterioration of Air Quality program "only by the appropriate Indian governing body." See also CAA § 164(e). Section 301(d)(2) of the CAA authorizes EPA to issue regulations specifying those provisions of the CAA for which it is appropriate "to treat Indian Tribes as States."[12] Hence, section 301(d) of

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[11] The Department of the Interior periodically publishes a list of Federally recognized Tribes. See 58 FR 54364 (Oct. 21, 1993).

[12] Further, section 301(d)(2)(B) addresses the potential jurisdictional scope of the resulting Tribal CAA program submittals, authorizing EPA to treat Tribes in the same manner as States for "the management and protection of air resources within the exterior boundaries of the reservation or other areas within the tribe's jurisdiction." EPA has proposed to interpret section 301(d) and other provisions of the CAA as granting Tribes--approved by EPA to administer CAA programs in the same manner as States--authority over all air resources within the exterior boundaries of a reservation for such programs. EPA has explained that "[t]his grant of authority by Congress would enable such Tribes to address conduct on all lands, including non-Indian owned fee lands, within the exterior boundaries of a reservation." EPA also proposed to interpret the language in section 301(d)(2)(B) providing for Tribal management and protection of air resources in "other areas within the Tribe's jurisdiction" to authorize

the CAA provides for treating Tribes in the same manner as States, not as governmental subdivisions of States. EPA has issued proposed rules that would treat Tribes in the same manner as States for virtually all CAA programs. See 59 FR 43956 (Aug. 25, 1994).

In addition, Federal Indian law and policy direct EPA to treat Tribes as sovereign governments not as subdivisions of States. Settled principles of Indian law provide that "States are generally precluded from exercising jurisdiction over Indians in Indian country unless Congress has clearly expressed an intention to permit it." Washington Department of Ecology, 752 F.2d at 1469-1479 (citations omitted); see also United States v. Mazurie, 419 U.S. 544, 556 (1975) (the inherent sovereign authority of Indian Tribes extends "over both their members and their territory"); Montana v. United States, 450 U.S. 544, 556-557 (1981) (Tribes generally have extensive authority to regulate activities on lands that are held by the United States in trust for the Tribe); Montana, 450 U.S. at 566 (a Tribe "may...retain inherent power to exercise civil authority over the conduct of non-Indians on fee lands within its reservation when that conduct threatens or has some direct effect on the...health or welfare of the tribe").

Federal and Agency Tribal policy also direct EPA to treat Tribes as sovereign governments. On January 24, 1983, the President issued a Federal Indian Policy stressing two related themes: (1) that the Federal government will pursue the principle of Indian "self-government" and (2) that it will work directly with Tribal governments on a "government-to-government" basis. An April 29, 1994 Presidential Memorandum reiterated that the rights of sovereign Tribal governments must be fully respected. 59 FR 22,951 (May 4, 1994).

EPA's Tribal policies commit to certain principles, including the following:

> EPA recognizes Tribal Governments as sovereign entities with primary authority and responsibility for the reservation populace. Accordingly, EPA will work directly with Tribal Governments as the independent authority for reservation affairs, and not as the political subdivisions of States or other governmental units.
>
> * * * * *
>
> In keeping with the principal of Indian self-government, the Agency will view Tribal Governments as the appropriate non-Federal parties for making decisions and carrying out program responsibilities affecting Indian reservations, their environments, and the health and welfare of the reservation populace. Just as EPA's deliberations and activities have traditionally involved interests and/or participation of State Governments, EPA will look directly to Tribal Governments to play this lead role for matters affecting reservation environments.

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potential Tribal jurisdiction under the CAA over areas that lie outside the exterior boundaries of a reservation, upon a fact-based showing of a Tribe's inherent authority over sources located on such lands. See 59 FR 43956, 43958-43960 (Aug. 25, 1994).

November 8, 1984 "EPA Policy for the Administration of Environmental Programs on Indian Reservations"; Policy Reaffirmed by Administrator Carol M. Browner in a Memorandum issued on March 14, 1994.

Accordingly, a Governor's request to opt-in to the RFG program does not bind areas within the jurisdiction of Federally recognized Indian Tribes. The "opt-in" portion of the RFG program is voluntary and based on an application by the Governor of a State. Treating a request by a Governor of a State to voluntarily opt-in to the RFG program as binding on areas within the jurisdiction of Federally recognized Indian Tribes would fundamentally be at odds with the voluntary premise of the opt-in program, in light of other provisions of the CAA, and Federal Indian law and policy that do not treat Tribes as subdivisions of States.

Federally mandated and implemented fuels programs apply to areas within the jurisdiction of Federally recognized Indian Tribes. See 59 FR 43960-61. Thus, areas within Tribal jurisdiction that are located within the nine statutorily prescribed covered areas are subject to the RFG regulations, and other areas within Tribal jurisdiction are subject to the anti-dumping regulations. However, where an area within Tribal jurisdiction is not located within one of the nine statutorily-prescribed covered areas: (1) the sale of conventional gasoline to a retailer or distributor operating within the jurisdiction of a Federally recognized Indian tribe is not prohibited, even if surrounded by a State opt-in area; and (2) the sale of conventional gasoline intended for sale in areas within Tribal jurisdiction to a distributor located within a State opt-in area but outside the Tribal area is also not prohibited. All conventional gasoline is required to be accompanied by product transfer documents that identify it as conventional gasoline not to be used in a RFG covered area. See 40 CFR § 80.106(a)(1)(vii).

Finally, any Tribes interested in opting in to the RFG program for areas within their jurisdiction should contact Joanne Jackson Stephens at (303) 668-4276. As noted, EPA has authority to treat Federally recognized Tribes in the same manner as States for CAA programs and has already proposed to do so for virtually all CAA programs including RFG.(1/9/95)

B. Independent Sampling & Testing

1. **Question:** What procedures should independent labs use to identify the samples for analysis under the 10% independent analysis option? What samples will EPA want to receive from independent labs?

Answer: Please see the following Protocol.(10/3/94)

REFORMULATED GASOLINE PROGRAM

INDEPENDENT SAMPLING AND TESTING REQUIREMENTS

PROTOCOL

FOR USE BY INDEPENDENT LABS IN SELECTING SAMPLES FOR ANALYSIS UNDER THE 10% INDEPENDENT ANALYSIS OPTION, AND FOR IDENTIFYING SAMPLES TO SHIP TO EPA.

1.0 General Instructions.

1.1 This protocol constitutes EPA identification under § 80.65(f)(1)(ii)(B) of samples that must be analyzed for refiners and importers using the 10% independent analysis option of § 80.65(f)(1)(ii), and must be followed separately for each refinery or importer for which the independent lab is being used to fulfill the 10% independent analysis option. This protocol also constitutes EPA identification under § 80.65(f)(3)(iv) of samples that independent labs must ship to EPA .

1.2 In the case of the 10% independent analysis option, this protocol must be used to select the samples for analysis for each two week period. Each two-week period begins on Sunday night at midnight, and lasts for the subsequent two weeks. The first two-week period begins at midnight on August 7, 1994, the second two-week period begins at midnight on August 21, 1994, etc.

1.3 This protocol may be replaced at any time by EPA with different instructions for selecting samples for analysis under the 10% independent analysis option, or for shipping samples to EPA.

1.4 EPA may issue special instructions for selecting samples for analysis or shipping to EPA for any specific refiner, refinery, importer, or independent lab that differ in whole or in part from the instructions contained in this protocol, and if such special instructions are issued they must be followed instead of the instructions contained in this protocol.

1.5 Definitions:

RFG - reformulated gasoline
RBOB - reformulated gasoline blendstock for oxygenate blending

2.0 Identify Samples for the Current Analysis Cycle.

2.1 Identify each sample of RFG or RBOB collected during the preceding two-week period, and the refiner or importer assigned batch identification number for each sample.

2.2 Add any samples carried over from a prior analysis cycle, from 3.2 and 3.4.1.

2.3 Order the samples from the preceding two-week period, plus any carry over samples, in chronological order using the batch identification number for each sample.

3.0 Determine the Number of Samples to be Analyzed.

3.1 The number of samples that must be analyzed for the current analysis cycle is the number of samples identified under step 2.0 that is evenly divisible by ten.

3.2 Any remainder from this division is the number of samples that must be carried over to the subsequent analysis cycle. Any carry over samples must be those with the largest batch identification numbers.

For example, if the number of samples identified under step 2.0 is thirty seven, with batch numbers 4321-54321-95-002534 through 4321-54321-95-002570, the number of samples that must be analyzed in the current analysis cycle is three, and seven samples must be carried over to the subsequent analysis cycle. The specific samples that must be carried over are those seven with the largest batch identification numbers, or samples 4321-54321-95-002564 through 4321-54321-95-002570.

3.3 To the extent any sample carry over would result in a sample being retained by the independent lab for more than 30 days, this protocol constitutes EPA's request under § 80.65(f)(3)(ii) to retain the sample for more than 30 days. This additional sample retention request is for the length of time until the sample is not carried over to a subsequent analysis cycle, but for a maximum of 180 days.

3.4 Case Where Number of Samples is Less than Ten

3.4.1 If the number of samples identified under step 2.0 is less than ten, then all samples should be carried over to the subsequent analysis cycle.

3.4.2 If, however, the number of samples identified under step 2.0 is less than ten, and any sample carry over would result in a sample being retained for more than 180 days, then one sample must be analyzed from the number, and none of the samples would be carried over to the subsequent analysis cycle.

4.0 Identify Which Samples to Analyze

4.1Identify the beginning point for using the Random Number Table at 4.2 for the current analysis cycle.

4.1.1 Identify the last two digits from the closing point for the Dow Jones Industrial Average as reported in the Wall Street Journal for the first day the New York Stock Exchange is open following the close of the preceding two-week period.

For example, for the two-week period ending at midnight on Sunday, August 20, the relevant two digits would be the last two digits for the close for the Dow Jones Industrial Average for Monday, August 21, as reported in the Wall Street Journal for Tuesday, August 22. If this Dow Jones Industrial Average close is 3,741.06, the relevant two digits would be 06.

4.1.2 The beginning point for the Random Number Table at 4.2 for the current analysis cycle is the row number (from Column A of Table 4.2) that corresponds to the number identified under 4.1.1.

Using the example from 4.1.1, the applicable row number would be 06, and the first random number would be 27.

4.2 Random Number Table

Column		Column		Column	
A	B	A	B	A	B
00	60	39	91	78	65
01	77	40	95	79	29
02	38	41	01	80	64
03	16	42	02	81	57
04	45	43	76	82	59
05	39	44	79	83	83
06	27	45	19	84	10
07	93	46	11	85	52
08	97	47	88	86	53
09	37	48	73	87	30
10	06	49	43	88	48
11	18	50	74	89	69
12	98	51	12	90	24
13	05	52	31	91	62
14	92	53	85	92	99
15	72	54	94	93	51
16	71	55	35	94	56
17	87	56	40	95	36
18	20	57	55	96	08
19	41	58	86	97	14
20	00	59	34	98	07
21	78	60	22	99	44
22	33	61	46		
23	61	62	89		
24	75	63	70		
25	25	64	50		
26	54	65	03		
27	80	66	09		
28	32	67	67		
29	17	68	42		
30	15	69	82		
31	63	70	84		
32	04	71	96		
33	21	72	28		
34	90	73	66		
35	68	74	49		
36	58	75	23		
37	13	76	26		
38	47	77	81		

4.3 For each sample for the current analysis cycle under 2.0, excluding any samples carried over to the subsequent analysis cycle under 3.2 or 3.4.1, identify the last two digits of the batch identification number.

This process is illustrated in the following table:

If the batch number is:	The last two digits are:
4321-54321-95-002533	33
4321-54321-95-002593	93

4.4 Compare the two digit number from Column B of the Random Number Table at the beginning point identified under 4.1.2 (the first random number) with each of the two digit sample numbers Identified under 4.3.

4.5 If the first random number matches any sample number, this sample is identified as a sample for analysis. If the random number matches more than one sample number, only the sample with the lowest batch identification number is identified as a sample for analysis.

4.6 If the first random number does not match any sample number, then move to the next number in the Random Number Table, and repeat the process described under 4.5.

In the example under 4.3, there is no match for the first random number (27), but there is a match for the second random number (93), and sample number 4321-54321-95-002593 would be identified for analysis.

4.7 Continue this process until the number of samples identified for analysis equals the number under 3.1 or 3.4.2.

5.0 Analysis of Identified Samples

5.1 Proceed to analyze each sample identified under 4.0 as specified under § 80.65(f)(1)(ii)(C).

5.2 If a sample to be analyzed is of RBOB, the sample first must be blended with the applicable amount and type of oxygenate. The following chart specifies this oxygenate blending with RBOB:

RBOB Type	Oxygenate Type	Oxygen Volume
Any-Oxygenate	Ethanol	2.0 wt%
Ether-Only	MTBE	2.0 wt%
Any-Renewable-Oxygenate	Ethanol	2.0 wt%
Renewable-Ether-Only	ETBE	2.0 wt%
Non-VOC-Controlled-Renewable-Ether-Only	ETBE	2.0 wt%
Refiner-Specified	[13]	[14]

This requirement to blend RBOB with oxygenate applies to refiners and importers who are using both the 10% independent analysis option under § 80.65(f)(1)(ii) and the 100% independent analysis option under § 80.65(f)(1)(i).

6.0 Shipment of Samples to EPA

6.1 Quality Assurance Samples

For purposes of quality assurance oversight, a portion of certain samples must be sent to EPA, under § 80.65(f)(3)(iv), at the frequencies specified in this item 6.1. This requirement applies to refiners and importers who are using both the 10% independent analysis option under § 80.65(f)(1)(ii) and the 100% independent analysis option under § 80.65(f)(1)(i). EPA may specify a different frequency for sending quality assurance samples to EPA for any refiner, refinery, importer, or independent lab, and if such different frequency is specified it must be followed.

6.1.1 Refiners and Importers Using the 10% Independent Analysis Option

6.1.1.1 In the case of samples identified for analysis under 4.0, for each thirty-third sample that is analyzed for each refinery or importer a portion of the sample must be sent to EPA.

6.1.1.2 In the case of samples that are not identified for analysis under 4.0, each thirty-third sample that is collected for each refinery or importer but that is not analyzed by the independent lab must be sent to EPA.

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[13] The oxygenate specified in the refiner's instructions, or if more than one oxygenate is allowed, from the following list of oxygenates the first that is allowed by the refiner's instructions: ethanol, MTBE, ETBE, any other specified oxygenate.

[14] The volume specified in the refiner's instructions, or if a range is specified, the minimum vol% oxygenate allowed.

6.1.2 Refiners and Importers Using the 100% Independent Analysis Option

For every thirty-third sample that is analyzed for each refinery or importer, a portion of the sample must be sent to EPA.

6.2 Samples That Violate Applicable Standards

6.2.1 In the case of refiners or importers who are using the 100% independent analysis option, a portion of each sample that violates an applicable per-gallon standard must be sent to EPA.

6.2.2 The applicable standards are those specified under § 80.41. In the case of parameters being met on a per-gallon basis, the per-gallon standards are the applicable standards. In the case of parameters being met on an average basis, the per-gallon minimums and maximums are the applicable standards.

6.3 Shipping of Samples

6.3.1 Each sample sent to EPA must be sealed in containers and transported in accordance with the procedures specified in Appendix D to 40 CFR Part 80, and identified with the independent lab's name and registration number and the sample information specified in § 80.65(f)(3)(i).

6.3.2 The quantity of sample that must be sent is: in the case of samples that have been analyzed by the independent lab, the entire volume remaining following the laboratory analysis which should be a minimum of one pint; and in the case of samples that have not been analyzed by the independent lab, the entire volume that is collected by the independent lab, or a minimum of one quart.

6.3.3 Samples identified for shipping to EPA under 6.1 or 6.2 must be sent to EPA via an overnight package service to:

United States Environmental Protection Agency
Motor Vehicle and Fuels Emissions Laboratory
Fuels and Chemicals Analysis Branch
2565 Plymouth Road
Ann Arbor, Michigan 48105
(313) 668-4200

2. **Question:** When does the independent sampling and testing requirement begin?

Answer: The independent sampling and testing requirements apply to each batch of RFG that is produced or imported, unless an in-line blending waiver has been obtained. As a result, the independent sampling and testing requirements begin for any refiner or importer when the first batch of RFG is produced or imported during the Fall of 1994, in preparation for bringing terminals up to the RFG standards by December 1, 1994.(7/1/94)

3. **Question:** Is a lab independent if any refiner has an interest in the lab?

Answer: Section 80.65(f)(2)(iii) specifies the criteria for independence for labs, and states that the laboratory must not be operated by any refiner or importer, the laboratory must be free from any interest in any refiner or importer, and the refiner or importer must be free from any interest in the laboratory. These independence criteria mean a lab would not be considered independent if any refiner or importer operates the lab, but that another refiner may have an interest in the lab.(7/1/94)

4. **Question:** May an independent lab use the refiner's testing equipment? May the independent lab set up its lab on property that is owned by the refiner? May the independent lab use the refiner's facilities for storing gasoline samples?

Answer: In order to ensure independence, the independent lab must operate in a manner that is completely separate from the refiner. This means that, in fulfillment of the independent sampling and testing requirements, the independent lab may not use the refiner's testing equipment, may not operate its own testing equipment if set up on the refiner's premises, and may not store gasoline samples on the refiner's premises.(7/1/94)

5. **Question:** Is a laboratory considered to be "independent" under the independent sampling and testing requirements and the gasoline quality survey provisions, if the company that operates the laboratory also is a refiner who produces conventional gasoline only?

Answer: The independent sampling and testing requirements of § 80.65(f)(2)(iii) and the gasoline quality survey provisions of § 80.68(c)(13)(i) each require that the sampling and testing must be carried out by a laboratory that is independent of any refiner or importer. Section 80.65(f)(2)(iii)(A) specifies that in order to be independent the laboratory "shall not be operated by any refiner...," and § 80.68(c)(13)(i)(A) specifies that in order to be independent "[t]he surveyor shall not be an employee of any refiner or importer."

Both of these regulatory provisions relate to RFG only, however, and have no application to refiners or importers who produce or import conventional gasoline only, or to areas that are outside any RFG covered area where conventional gasoline may be sold. As a result, EPA interprets the cited regulatory provisions as referring only to refiners or importers who produce or import RFG. As a result, a refiner or importer who produces or imports conventional gasoline only, and who produces or imports no RFG or RBOB, could be considered independent for purposes of the independent sampling and testing, and gasoline quality survey, requirements.

This interpretation of "independence" would not apply in the case of a corporation if any RFG is produced or imported anywhere within a common corporate structure. Thus, if a parent

corporation has a subsidiary corporation that is refiner or importer that produces or imports RFG, no other subsidiary corporation of that parent could be considered "independent."(8/29/94)

6. **Question:** For the purposes of the RFG sampling and testing requirements under § 80.65(e) and (f), may a refiner use the option under which the independent lab samples and tests 100% of the batches for some parameters, and use the option under which the refiner tests 100% of the batches and the independent lab samples 100% of the batches and tests 10% of the batches for other parameters?

Answer: Refiners and importers may not use the 100% independent lab analysis option for certain parameters and the 10% independent lab analysis option for other parameters, but must use the same option for all RFG parameters.

However, a refiner or importer using the 10% independent analysis option may use another lab, including the refiner's or importer's designated independent lab, to perform analyses that are the responsibility of the refiner or importer provided the substitute lab properly performs the testing. In any case where a refiner or importer uses a substitute lab, the refiner or importer remains responsible for the proper conduct of the analyses, and for meeting all requirements for reporting test results to EPA.(7/1/94)

7. **Question:** In the case of a refiner or importer using the 100% independent analysis option, must the refiner or importer conduct any sampling or testing of RFG in addition to that performed by the independent lab?

Answer: A refiner or importer using the 100% independent analysis option must use the test results from the designated independent lab as the basis for all RFG reports to EPA. The RFG regulations do not prohibit a refiner or importer using the 100% independent analysis option from also performing other sampling and testing, nor from having other sampling and testing performed by another lab.[15] Such other test results may not be used by the refiner or importer to show compliance with the RFG standards, however.(7/1/94)

8. **Question:** If an independent lab temporarily cannot run a required test, may the independent lab use a substitute lab for the test until the independent lab regains its testing capacity? May a refiner use one independent lab to collect samples at a refinery, and another independent lab to analyze those samples? If a second lab is used, must the primary independent lab notify EPA of the role of the second lab?

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[15] The testing requirement at § 80.65(e)(2), that includes provisions for reconciling testing "conducted by the refiner or importer and by an independent laboratory..." refers to refiner or importer testing conducted under the 10% independent analysis option, and not to the 100% independent analysis option.

Answer: An independent lab may use a second lab to collect samples or perform required tests, provided that: (1) the second lab is independent as defined in § 80.65(f)(2)(iii); (2) the primary independent lab is responsible for the quality of work performed by the second independent lab; and (3) the primary independent lab remains responsible for receiving all communications from EPA and submitting all reports to EPA. If a second independent lab is used, there is no requirement to report this fact to EPA, but the primary independent lab should retain documents to support the manner in which the sample collection and analyses were performed. Such documents then would be available, at the time of the independent attest engagement or EPA audit, to document the proper completion of the independent sampling and testing requirements.(7/1/94)

9. **Question:** Must a refiner identify a single independent lab for each refinery?

Answer: Yes. Although an independent lab may use a substitute lab for certain tasks, a refiner is required to name a single independent lab for each refinery. It is this independent lab with which EPA will communicate regarding the independent sampling and testing program, and who must submit all reports to EPA. A refiner that operates more than one refinery may, however, use the same independent lab for each refinery.(7/1/94)

10. **Question:** Must the independent lab use the same brand and model of equipment as the refinery lab?

Answer: Both the refiner's and the independent lab must use the RFG analyses methods specified in § 80.46, but this section does not specify particular brands or models for the testing equipment.

Note that in the case of oxygen and aromatics, alternative test methods may be used until January 1, 1996. Nevertheless, EPA believes there is a strong incentive for a refiner to select an independent lab that is able to closely correlate with the refiner's lab, and that this correlation concern probably would result in a refiner selecting an independent lab that uses the same oxygen and aromatics test methods as the refiner's lab.(7/1/94)

11. **Question:** In the case of refiners or importers using the 10% independent analysis option, will EPA evenly distribute the analyses that must be performed over the year, or is it possible EPA will concentrate the entire 10% during a short time period?

Answer: EPA intends to evenly space through the year the 10% of the samples identified for analysis under the 10% independent analysis option, although the specific batches selected for independent analysis each week (or every other week) will be selected randomly. There could be cases, however, where EPA would direct an independent lab to analyze more than 10% of the samples from a particular refinery or importer, to be offset later by requests for analysis of less

than 10% of the samples from that refinery or importer. Over the course of each year, though, the total number of analyses identified for each refinery or importer will not exceed 10%.(7/1/94)

12. **Question:** In the case of refiners or importers using the 10% independent analysis option, if the independent lab analyses a particular sample before receiving notification from EPA that this sample should be analyzed, will the prior analysis meet the independent analysis requirement?

Answer: Yes.(7/1/94)

13. **Question:** Are independent labs required to report to EPA, the refiner, or both? What are the reporting requirements for independent labs in the case an independent lab's analysis shows gasoline does not meet relevant RFG standards?

Answer: Under § 80.65(f)(3)(iii) refiners and importers are required to have their independent labs report directly to EPA on a quarterly basis. There is no requirement that independent labs must report to the refiner or importer for whom they are conducting sampling and testing. Nevertheless, EPA expects that independent labs normally will report the results of their analyses to the refiner or importer, so these parties will know if their analyses results are corroborated, and if not corroborated, so these parties may arrange for secondary independent lab analyses and take corrective actions if necessary.

A refiner or importer may not release RFG from the refinery or import facility until the refiner or importer has test results which demonstrate the RFG meets all applicable standards.[16] As a result, in the case of a refiner or importer using the 100% independent lab analysis option - where the refiner or importer relies only on the independent lab's analyses - the refiner or importer would have to receive the independent lab's test results before the RFG in question could be released from the refinery or import facility. A refiner or importer using the 100% independent lab analysis option also would need the independent lab's test results so the refiner or importer could file its quarterly reports to EPA, and averaging reports to EPA in the case of standards that are being met on average.

In the case of an analysis by an independent lab that shows an RFG batch does not meet applicable RFG standards, under either the 10% or the 100% independent analysis options, EPA believes the independent lab should immediately notify the refiner or importer so that party may take corrective actions. Such a situation would exist, for example, if a sample is found by the independent lab to contain in excess of 1.300 volume percent benzene (or a lesser benzene content if there has been a benzene ratchet); or if a sample is found to contain in excess of 1.000 volume percent benzene if the refiner or importer is meeting the benzene standard on a per-gallon basis.

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[16] Under the simple model, refiners and importers may release RFG after having test results only for oxygen and benzene, and RVP in the case of VOC-controlled RFG.

The independent lab's non-compliant analysis result would be reported to EPA as part of the normal quarterly report to EPA, and there currently is no requirement that independent labs must report such instances to EPA prior to the quarterly report. Nevertheless, EPA intends to monitor this aspect of the independent sampling and testing program, and may modify the reporting requirements in this regard in the future if it appears necessary in order to ensure appropriate correction of violations.(7/1/94)

14. **Question:** What are the requirements for reporting to EPA in the case of an independent lab that conducts sampling and testing that is unrelated to the independent sampling and testing requirements that apply for refiners or importers, such as quality assurance sampling and testing for a downstream pipeline or terminal?

Answer: There is no requirement that the results of downstream quality assurance sampling and testing must be reported to EPA. This is true both in the case of quality assurance sampling and testing by downstream parties such as pipelines or terminals, and in the case of quality assurance sampling and testing carried out by branded refiners or importers over their downstream branded operations. The conduct of quality assurance sampling and testing programs, and the actions that are appropriate when violations are found through such a program, are discussed in the Remedies and Liability/Defenses Sections of this document.(7/1/94)

15. **Question:** Section § 80.65(e)(2) contains a mechanism for identifying the test result a refiner or importer must use if the independent lab's test result does not corroborate the refiner's or importer's test result. Does this mechanism apply in a case where the independent lab's test result fails to corroborate the refiner's or importer's test result for a particular parameter, but where both test results are within the applicable maximum level for that parameter?

Answer: The mechanisms specified in § 80.65(e)(2)(ii), for instances where a refiner's or importer's RFG test result is not corroborated by the independent lab's test result, apply whenever there is such a non-corroboration. There is no exception in a case where both the refiner's or importer's test result and the independent lab's test result are within the applicable maximum level for that parameter. If the standard at issue is being met on average, the mechanism in § 80.65(e)(2)(ii) will identify the value for the parameter the refiner or importer must use in its compliance calculations. If the standard at issue is being met on a per-gallon basis, the question is whether the parameter meets the per-gallon standard, and the cited mechanism will resolve that question. (7/1/94)

16. **Question:** Can EPA provide a range for total oxygen content for use under § 80.65(e)(2)(i)?
Answer: Section 80.65(e)(2)(i) provides a table with ranges for fuel properties to be used in comparing the refiner's or importer's test results to the test results obtained from the independent laboratory. Although a range for total oxygen content is not included in this table, a range of 0.1

wt% may be applied for total oxygen under § 80.65(e)(2)(i). This range for weight % oxygen would be in addition to, and not instead of, the ranges listed in § 80.65(e)(2)(i). For example, if an oxygen volume % was outside the range, the provisions of§ 80.65(e)(2)(ii) would apply, even if the weight % was within the 0.1% range. EPA will address this in an appropriate rulemaking.(8/15/95)

17. **Question:** May a refiner use the same independent lab to satisfy the RFG independent sampling and testing requirements and to conduct sampling and testing needs that are unrelated to the RFG requirements (e.g., internal quality assurance or custody transfer sampling and testing)?

Answer: Yes.(7/1/94)

18. **Question:** Is independent sampling and testing required of oxygenate blenders?

Answer: A party who meets the definition of oxygenate blender is not required to have the gasoline it produces sampled or tested by an independent lab. However, an oxygenate blender is required to sample and test the gasoline it produces: every-batch sampling and testing in the case of terminal storage tank oxygenate blending, and periodic sampling and testing at specified frequencies in the case of truck splash blended oxygenate. This oxygenate blender sampling and testing requirement could be met if performed by an independent lab, but an independent lab is not required. The sampling and testing requirements for oxygenate blenders are discussed in the Downstream Oxygen Blending Requirements Section of this document.(7/1/94)

19. **Question:** Is independent sampling and testing required of terminals that supply RFG?

Answer: The only parties who are required to meet the independent sampling and testing requirements are refiners and importers. A party that meets the definition of distributor or reseller, such as a terminal, therefore, is not required to meet the independent sampling and testing requirements. In order to establish a defense to violations of the RFG standards for which it may be presumptively liable, however, a distributor must conduct a quality assurance program of sampling and testing. This quality assurance sampling and testing program could be conducted by an independent lab, but an independent lab is not required. The quality assurance sampling and testing defense provisions are discussed in the Liability/Defenses Section of this document.(7/1/94)

20. **Question:** Is independent sampling and testing required of a refiner who has an in-line blending program?

Answer: Refiners who produce RFG using computer controlled in-line blending, and who have received an exemption from EPA from independent sampling and testing, are not required to conduct independent sampling and testing of RFG produced with this blending operation. The

issues associated with in-line blending waivers from independent sampling and testing are discussed in the In-Line Blending Waivers Section of this document.

A refiner who produces RFG using in-line blending, but who does not have an exemption from independent sampling and testing from EPA, must meet the independent sampling and testing requirements. In such a case, however, EPA believes it is unlikely the refiner could meet all the requirements that apply to the production of RFG unless all the gasoline produced using the in-line blender is available for sampling and testing in storage tanks at the refinery before being shipped from the refinery. This tank collection gasoline is necessary so the refiner is able to meet the requirement that it have test results for a batch of RFG before releasing the RFG from the refinery. Tank collection also is necessary so the independent lab is able to collect a representative sample for the entire batch.

A sample collected by the refiner or by an independent lab at any single point in the blending process would not necessarily be representative of portions of that batch that were produced prior to, or subsequent to, the moment the independent sample was collected. As a result, a pipeline spot sample collected during an in-line blending operation would not satisfy the requirement that the refiner must have test results in advance of release of RFG unless the entire batch is held at the refinery until the refiner has in hand a test of the entire in-line blended batch. This entire batch sample could be a composite over the entire in-line blend, but more likely would be a sample from the storage tank, or storage tanks, where the in-line blended RFG is collected.

With regard to the independent sampling and testing requirement, conceivably the independent lab could collect a composite sample of the entire blend, but this would require the independent sampler to use its own compositor equipment, to be present during the entire blending operation in order to ensure the compositor functions properly, and to collect and analyze additional spot samples to verify the composite sample. In addition, the independent lab would have to independently establish the volume of the in-line blended batch. EPA is unaware of any valid way an independent lab can establish RFG batch volume, except through measurement in a storage tank.

As a result, EPA believes the only option available for a refiner using in-line blending to produce RFG who does not have an exemption from EPA from independent sampling and testing, is to collect the RFG produced using the in-line blender in a storage tank (or storage tanks) located on the refinery premises. The refiner then could certify the RFG in each storage tank as a batch, and have the independent lab collect a sample from each storage tank in the same manner as tank-blended RFG.(7/1/94)

21. **Question:** Explain the volume determination requirement for independent labs.

Answer: Section 80.65(f)(3)(i)(B) requires the independent lab to determine the volume of each RFG batch that is sampled. EPA expects the independent lab will determine the volume of a RFG batch in the same manner gasoline volumes currently are determined for commercial transactions, using standard industry methods such as ASTM standard D 1085, "Method of Gaging Petroleum

and Petroleum Products." (This same method also is referenced by API as standard 2545, and by ANSI as standard 211.196.)

The independent lab's volume determination, of the volume of gasoline contained in the storage tank, would be the total production volume of the RFG batch. The refiner's report to EPA for RFG batch volume, however, is of the volume of RFG produced and shipped. The refiner reports the volume shipped in order to avoid double counting the RFG remaining in the storage tank when blending begins for the subsequent batch (i.e., the tank heel). This difference between the reported RFG batch volume for the independent lab (production volume) and the refiner (shipped volume) means the two volume reports normally will not match.

While it would be preferable for the independent lab's and the refiner's or importer's volume reports to match, such correlation currently is not anticipated. In order for the independent lab to be able to report the shipped volume for an RFG batch, which would match the refiner's batch volume, the independent lab would have to reinspect the tank subsequent to all gasoline movements from the tank in question. EPA believes the costs associated with such additional independent inspections are not warranted. The independent lab's report of production volume for an RFG batch serves an appropriate oversight function, because it constitutes an outside bound on the volume the refiner could report for the batch. Nevertheless, EPA intends to monitor the effectiveness of this portion of the independent sampling and testing program, and may modify this provision if greater correlation in volume measurements by refiners and independent labs is necessary.(7/1/94)

22. **Question:** What is the responsibility of the independent lab in determining whether a tank of RFG meets the definition of "batch," i.e., is homogeneous with regard to the RFG properties?

Answer: The independent sampling and testing provisions require the independent lab to collect a separate sample from each batch of RFG. "Batch of reformulated gasoline" is defined at § 80.2(gg) as "a quantity of reformulated gasoline which is homogeneous with regard to those properties which are specified for reformulated gasoline certification." As a result, when an independent lab identifies a sample it collects as being representative of the gasoline contained in a batch of RFG, that lab is independently representing that the gasoline being sampled is homogeneous with regard to the RFG properties - that the tank is fully mixed and is not stratified. EPA expects the independent lab to use its best professional judgment in determining the procedures that are necessary in order to classify the gasoline in a storage tank as being fully mixed. For example, if the independent lab's normal practice is to analyze the gravity of top/middle/lower samples to determine tank mixing, EPA believes the independent lab should follow that practice with regard to the RFG independent sampling and testing requirements.(7/1/94)

23. **Question:** In a case where an independent lab collects more than one sample from a batch (e.g., top/middle/lower samples), how many samples must be retained by the independent lab?

Answer: For EPA's purposes, an independent lab must collect a single representative sample for each batch of RFG, and it is this single sample that should be analyzed and retained for transfer to EPA if necessary. If more than one laboratory will be analyzing the properties of a batch, then the independent lab should collect two separate samples rather than splitting one sample after collection. Split samples are vulnerable to loss of light ends unless transfer is carefully performed according to the procedure outlined in Appendix E, section 8.1 and figure 1.1.

When collecting duplicate samples take care to assure consistency. For example, unless a storage tank is fully mixed, multiple running samples collected from that tank can vary according to retrieval rates, dwell at the bottom point, and consistency of the measurement of the bottom point. See the Sampling/Testing - Sampling Section, Question 1, for a discussion of the sampling methods that are appropriate for RFG.

In the case of additional samples collected by the independent lab, for example, to establish that a storage tank is fully mixed and is not stratified, there is no requirement that such samples must be retained. The independent lab should keep documents that reflect any sampling and testing that was performed to establish the effectiveness of tank mixing, however, in case questions arise about the quality of gasoline from a particular batch or to support the quality of the independent lab's work in the case of an EPA audit.(7/1/94)

24. **Question:** What volume of gasoline should a sample collected by an independent lab contain?

Answer: EPA believes that a one quart sample is adequate.(7/1/94)

25. **Question:** If EPA requests that an independent lab supply a portion of a sample to the EPA lab, what volume of gasoline should be sent to EPA?

Answer: When EPA requests a sample from an independent lab, the independent lab should send EPA the entire one quart sample if the lab has not analyzed the sample. If the sample is one the independent lab has analyzed, the independent lab should send EPA the entire remaining volume.(7/1/94)

26. **Question:** When the independent lab samples a batch of RFG, they are to "determine" blending times, batch volumes, tank numbers, and grade. Which of these determinations must be independently made by the independent lab, and which can be obtained from the refiner or importer?

Answer: The independent lab may rely on the refiner's or importer's representations with regard to the date and time the batch became finished RFG, and the grade of gasoline, if this reliance is warranted in the exercise of the independent lab's best professional judgment. This reliance

would, of course, not be warranted where the independent lab has reason to believe the information supplied is incorrect. The independent lab is required to independently establish the identification number of the storage tank, and the batch volume as discussed in Question 19 of this Section.(7/1/94)

27. **Question:** Section 80.74(a)(2)(ii) requires "the identification of the person who collected the sample and the person who performed the testing." In the case where samples are taken and analysis performed by an independent testing company, would it be sufficient to identify the independent testing company in place of the sampler and tester?

Answer: Yes. (4/18/95)

28. **Question**: Are independent labs required to submit quality parameter data or the % reduction performance results to EPA?

Answer: The regulations require parameter comparisons and not emissions performance reduction comparisons. *See* § 80.65(f)(3)(iii)(B)(1). (11/10/97)

29. **Question:** Are there any plans for laboratory certifications?

Answer: No. It is the responsibility of each refiner to ensure the quality of the independent laboratory it is using.(7/1/94)

C. In-Line Blending

1. **Question**: Is EPA making any allowances for refiners that utilize a computer-controlled in-line blending operation?

Answer: EPA is allowing an alternative to the independent sampling and analysis requirement for certain refiners that produce RFG using computer-controlled in-line blending equipment. This option would be appropriate only in the case of relatively sophisticated in-line blending operations, where sufficient gasoline quality checks and cross-checks occur to ensure that fuel produced in-line meets the specifications for RFG. Under this alternative the refiner would have an independent audit conducted of the documents generated during the course of such in-line blending as confirmation of the refiner's reported batch properties and volume.

In order to use this option, a refiner is required to petition EPA to allow its use for a particular in-line blending operation. EPA will evaluate the petition on the basis of the particular equipment

and procedures in place at the petitioner-refiner's refinery. The types of factors which are relevant to EPA's review of the petition are specified in the regulations at § 80.65(f)(4).

EPA believes this alternative for certain in-line blending operations is appropriate because of the difficulty of obtaining a representative sample of gasoline that has been produced through in-line blending, and because there can be sufficient confidence in the results from a paper audit of such an operation. EPA expects that a sophisticated in-line blending operation would have to have multiple safeguards to monitor and record the properties of the blend on an on-going basis to qualify for the exemption.(7/1/94)

2. **Question:** Is there a deadline for the submittal of a petition requesting an exemption from the independent sampling and testing requirements?[17]

Answer: There are no time frames for or limitations in the regulations or the statute for submitting or reviewing in-line blending petitions. However, since EPA will need adequate time to review and resolve any outstanding issues before acting on a petition for exemption, we suggest that refiners that wish to apply for the exemption, submit their petitions as soon as possible if they plan to be exempt from the independent sampling and testing requirements at the beginning of production of RFG in the Fall of 1994. Until a petition is approved, all RFG and RBOB produced by a refiner is subject to the independent sampling and testing requirements under § 80.65(f). (7/1/94)

3. **Question:** The petition process referred to in § 80.65(f)(4) references RFG. Will in-line blenders of RBOB also be allowed to become exempt from the independent sampling/testing requirements through EPA approval of a petition?

Answer: Yes, refiners who blend RBOB using a computer-controlled in-line blending process are allowed to petition for exemption from the independent sampling and testing requirements.(7/1/94)

4. **Question:** What is the definition of "computer-controlled in-line blending"?

Answer: The regulations do not define computer-controlled in-line blending. Generally, EPA will consider an in-line blending operation to be adequate if it has sophisticated computer monitoring and recording of all relevant data generated during the batch. These systems would also include computer control and adjustment of the blend properties during production depending on other parameters. In-line blending systems vary with regard to degree of automation. As a

[17]With regard to in-line blending petitions, answers provided in this section pertain only to simple model RFG and not complex model RFG.

result, the sufficiency of any particular system will have to be evaluated on a case-by-case basis.(7/1/94)

5. **Question:** Does in-line blending of conventional gasoline require an exemption?

Answer: Conventional gasoline does not require independent sampling and testing and, therefore, there is no need to obtain an exemption. However, the properties of both reformulated and conventional gasoline are required to be determined by the methods specified in § 80.46. Please refer to the Sampling and Testing Section of this document.(7/1/94)

6. **Question:** What defines a batch for refineries utilizing in-line blending?

Answer: Section 80.2 of the regulations defines a "batch" as "a quantity of reformulated gasoline which is homogeneous with regard to those properties which are specified for reformulated gasoline certification." For refiners who are exempt from the independent sampling and testing requirements, the batch identification number should be assigned at the point the refiner begins producing a stream of gasoline with a given set of parameters, which are representative of the composite sample. In some cases, where a large volume of gasoline is produced to the same specification, the refiner may wish to sample, test and report batches based on smaller quantities of gasoline as it is being shipped out.

However, refiners who in-line blend, and who have not been exempted from the independent sampling and testing requirements, must blend to a storage tank and meet the independent sampling and testing requirements for certifying RFG as specified in § 80.65(f).(7/1/94)

7. **Question:** How does a refinery that in-line blends RFG generate a certificate of analysis (key RFG parameters) prior to shipment as required by the regulations?

Answer: For the simple model, refiners who petitioned for an exemption from the independent sampling and testing requirements are required to specify their reasonable basis for knowing that the fuel meets the standards for benzene and oxygen, and RVP in the case of VOC-controlled RFG, before the gasoline leaves the refinery. The on-line analyzers, coupled with the continuous measurement of component blend ratios and volumes, in approved in-line blending operations, are expected to provide an accurate characterization of the fuel during, and at the end of the blend. When the batch is complete, the composite sample will be tested to provide a report of the blend's certified properties. EPA has amended the final rule to allow exempted in-line blenders to release RFG in advance of receiving final test results.

However, refiners who in-line blend, and who have not been exempted from the independent sampling and testing requirements, must blend to a tank and meet the independent sampling and testing requirements for certifying RFG as specified in§ 80.65(f).(7/1/94)

8. **Question:** Does EPA intend to grant approval for in-line blending systems that do not have the opportunity for sampling and analysis prior to fungible mixing?

Answer: As discussed in the answer to question #7 above, samples taken for determining the certified properties of the fuel, and some analysis of the gasoline properties, must occur before the gasoline is fungibly mixed with other gasoline.(7/1/94)

9. **Question:** For refiners that in-line blend and are exempt from the independent sampling and testing requirements, which test measurements are to be used for the certified fuel properties, the integrated readings from on-line analyzers and flow meters, spot samples, composite samples, or samples taken from storage tanks downstream of the blending process?

Answer: Generally, the results from the composite sample, tested using the methods specified in § 80.46 of the regulations, should be used. If more than one composite sample is taken during the blend and tested to determine compliance, or if the composite is tested more than once, an average of the test results must be used. The number of composite samples taken and the number of tests conducted on each sample should be the same for each batch (i.e., a refiner should specify in his petition how many analyses will be performed on a composite sample and must conduct the same number of tests on all batches produced). Data and test results from component tanks, on-line samples and spot samples would be used to control the blend properties and to corroborate composite sample results.

EPA will evaluate, on a case-by-case basis, proposals for using results from on-line analyzers or storage tank samples for certification of fuel properties, based on the particular equipment being used on-line and other relevant aspects of the particular in-line operation. Spot sample results cannot be used for certification, but are appropriate quality control/quality assurance measures to check and correlate the on-line analyses and/or composite results.(7/1/94)

10. **Question:** Assuming that EPA approves the use of analyzers to certify in-line blended RFG, if an analyzer has maintenance problems during a blend such that it did not give results for 50% of the blend, can the refinery use spot samples to track the property? Is there a specific percent up-time that the EPA requires should analyzers be used to certify blends?

Answer: Proposals for using results from on-line analyzers for purposes of certifying a batch will be evaluated on a case-by-case basis. EPA has not established the amount of up-time required in order to qualify the on-line analyzer results for use in certification. However, in considering a

proposal to use on-line analyzer results for certification, EPA expects that the proposal will include a back-up system and plan as part of the QC/QA program for dealing with outliers and analyzer failures.(7/1/94)

11. **Question:** If a spot sample indicates the analyzers were off, can a sample from the transporting ship or truck in which the fuel is being shipped be used to certify the batch? Can this sample be taken when off-loading the fuel?

Answer: In the case of an approved in-line blending system, spot sample results should be used to correlate with the results from on-line analyzers. If a spot sample shows that the on-line analyzers are not properly monitoring the fuel parameters, then the refiner should act accordingly to bring the fuel back on spec. If a portion of a batch is shipped prior to the composite sample being tested, it is the refiner's responsibility to ensure that the fuel shipped out meets all requirements for RFG.(7/1/94)

12. **Question:** When a portion of a batch is shipped to a customer while the batch is still being blended, assuming an approved in-line blending system, does the batch ID number for the shipping documents pertain to the portion shipped or to the whole batch?

Answer: The batch identification number is assigned to the total batch volume as is represented by the composite sample. Section 80.77 does not require refiners to include the batch identification number or total batch volume on the product transfer documents. The volume that is required in the product transfer document is the volume of gasoline being shipped out of the refinery. For more information, see the Product Transfer Document Section of this document.(7/1/94)

13. **Question:** What is the relationship between a portion of a batch that is shipped during in-line blending and the remainder of that batch?

Answer: Both portions of the batch, i.e. the volume shipped and the remaining portion or portions of the total batch volume, are identified with the same fuel properties and the same batch identification number. The properties are determined from the analysis of the fuel in the compositor, a proportional sample of the total batch.(7/1/94)

14. **Question:** At an in-line blending facility, a portion of batch A is captured in an empty storage tank and not immediately shipped. Then a portion of batch C is added to that tank and the combined mixture is shipped. How do the records show compliance with reformulated gasoline regulations?

Answer: Batches A and C will be certified separately based on the results from the composite sample analyses for each of these batches (unless EPA has approved another method of sampling for a particular refiner). Since product transfer documents do not require that a batch number be assigned to each shipment, multiple batches of certified RFG can be commingled without regard for batch numbers (i.e, the resulting mixture will not be assigned a new batch number). As discussed in the answer to question #11 above, when the combined mixture is shipped, the product transfer document will identify the volume of the shipment, not the batch, and any other designations specified in § 80.77.(7/1/94)

15. **Question:** In the case where RFG is in-line blended through a holding tank, should the compositor be located before or after the holding tank?

Answer: The regulations do not specify where the compositor should be located; however, the location of the compositor will determine what qualifies as the certified batch. The refiner should include the location of compositors in their petition for a waiver as stated in § 80.65(i)(7).(7/1/94)

16. **Question:** Do all properties have to be analyzed on-line to get an exemption from the independent laboratory sampling and testing requirement?

Answer: No. However, EPA would prefer that in-line blending operations at least be capable of analyzing benzene, oxygen, and RVP on line. If the operation does not have the capability to analyze all properties on-line, the refiner must indicate in his petition how he intends to determine the fuel properties for those parameters not analyzed on-line, and provide sufficient cross-checks of the results from a composite sample to warrant an exemption from the independent sampling and testing requirements. In-line blending petitions will be evaluated on a case-by-case basis with regard to the operation's capability to analyze all properties on-line.(7/1/94)

17. **Question:** Our computerized control system collects, calculates, and historizes data for blends and product movements. The data can include volumes, analyzer results, manually entered lab results, etc. Data is historized by writing a file to the equivalent of a personal computer hard disk. The data collected in the files will be used for reformulated fuels documentation. The file is protected such that only a person with a physical engineering key can unprotect the file. Is this acceptable data control to the EPA?

Answer: Data control and recording systems should be proposed in the exemption request as part of an overall quality control, record keeping and review plan. All data that is generated for the batch that is intended to form a basis for the RFG certification, must be recorded and retained in a secure manner so that the auditor will be able to review accurate data for the yearly in-line blending audits. We believe the refiner should provide reasonable security for all the data that is generated so as to retain uncompromised files and to restrict unnecessary and unauthorized access

to those files. Limiting the number of persons who have access to the files is as important as who has access.(7/1/94)

18. **Question:** In a computer-controlled in-line blending operation, adjustments to blending volumes and other blending parameters are made on an ongoing basis to keep the gasoline being blended on-spec. Normally, these adjustments are made automatically by a computer. However, some aspects of the blending operation must be placed in a manual mode when instrument problems arise. The operator is able to enter values (transfer volumes, blend volumes) in the case of such a manual mode operation. The computer records when manually-entered adjustments are made. Is this acceptable data control to the EPA?

Answer: It would seem to be appropriate for the software to indicate when data are manually entered, who entered the data and when it was entered. This information should be recorded with the file for the batch and available for an audit. There should also be a procedure or method by which the data that were entered could be verified by some other documents available for an auditor.(7/1/94)

19. **Question:** For a refinery with an in-line gasoline blending exemption, can the annual in-line blending audit be conducted by the same attestation auditor as outlined under Subpart F of the RFG and Anti-dumping regulations? Must the auditor for an in-line blending operation meet the requirements for Attest Engagements at § 80.125?

Answer: An in-line blending exemption exempts a refiner from the independent sampling and testing requirements of § 80.65(f). As one of the conditions of the exemption, the refiner must carry out an independent audit program of its in-line blending operation.

Attestation engagements are different than, and do not take the place of, the in-line blending audits. Attestation engagements cover a broad range of records required under the reformulated gasoline and anti-dumping programs, as specified in Subpart F. They deal with production volumes, fuel properties reported for those volumes, and shipment documentation. The independent audits required for in-line blending operations, on the other hand, are narrowly focused on individual in-line blending systems that are unique for each location. Basically, the in-line blending audit must verify that for each batch, the reported batch properties are supported by secondary sources of test data; that in-line blending control and recordkeeping systems are being carried out as represented to the Agency in the petition for the exemption; and that the testing, cross checks and quality control being exercised over the operation allow the refiners to accurately predict the property values and volumes being reported for each batch.

Auditors who conduct in-line blending audits must meet the criteria specified in § 80.125(a) and/or (d), which require the auditor to be an independent certified public accountant, or, alternatively, an employee of the refiner, provided that such employee is an internal auditor certified by the Institute of Internal Auditors, Inc. ("CIA") and completes the internal audits in

accordance with the Codification of Standards for the Professional Practice of Internal Auditing. However, because of the complexity of on-line measurements and estimates, many auditors who qualify for the attestation engagements may not have the technical qualifications to conduct in-line blending audits. The audit program for an in-line blending operation will require the refiner to use an auditor who both fulfills the requirements under § 80.125(a) and/or (d), and has expertise with in-line blending operations. (8/15/95)

D. Compliance on Average

1. **Question:** In calculating the 1995 annual average for toxics, do we include December 1994 along with the twelve 1995 months?

Answer: You should include all gasoline that was produced in 1994 and 1995 and that was designated as RFG.(7/1/94)

2. **Question:** Based on EPA's comments in the July 1, 1994 Question and Answer Document, we are to include all 1994 batches designated as RFG in the calculation of our first year average toxics calculation. We interpret this to mean that RFG-designated batches shipped before December 1, 1994 will also be included for the purpose of generating benzene and oxygen credits. Please confirm that our interpretation is correct.

Answer: Your interpretation is correct.(11/28/94)

3. **Question:** Can a refiner complying on a per gallon basis take domestic delivery of a product from a refiner or an importer that meets per gallon or minimum/maximum standards for averaged gasoline but does not meet per gallon standards?

Answer: Yes.(7/1/94)

4. **Question:** With no set procedure for declaring per gallon/averaging, it appears a refinery has until the first quarterly report to make a decision. As long as per-gallon standards were met up to the point the first quarterly report is filed, and the refiner meets the gasoline quality survey requirements, the option would remain open to go averaging for the year. Is this acceptable?

Answer: It is true that EPA did not include in the RFG rule a process for regulated parties to notify EPA in advance of per-gallon versus averaging. As a result, the strategy described in the question would be appropriate.(7/1/94)

5. **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.(11/21/94)

6. **Question:** Section 80.67(g) of the regulations describes the calculations that must be done in order to determine compliance with the averaged standards for reformulated gasoline and, in some instances, conventional gasoline. In calculating the Actual Total and Compliance Total a party multiplies volumes by either parameter values or the appropriate standards. In cases that involve parameters and standards that are expressed in terms of weight percent and parts per million (i.e. oxygen content and sulfur content) should a party also include the specific gravity in the calculation in order to adjust for differences in the densities of different batches of gasoline?

Answer: No. The calculations as written in section 80.67(g) of the regulations do not allow for an adjustment for density. While it is appropriate to use the specific gravity to adjust for density in calculating the content and average content of a parameter (as in sections 80.66 and 80.101(g)), it is not relevant for calculating the Actual Total and Compliance Total. The Actual Total and Compliance Total values are intended to allow the comparison, in the aggregate, of batch parameters with their respective standards. The Agency has chosen to weight by volume for all such compliance calculations and then compare the results.

EPA plans on reviewing section 80.67(g)'s method of determining compliance for parameters that are measured on a mass basis. If warranted, EPA will make appropriate changes in a future rulemaking. (3/19/96)

7. **Question:** Can a refiner with more than one refinery transfer oxygen and benzene credits from one of its refineries to another of its refineries?

Answer: If a refiner generates credits at one refinery, these credits could be used to offset a shortfall at another refinery through a transfer of credits meeting all conditions of § 80.67(h).(7/1/94)

8. **Question:** The regulations and reporting requirements imply that credit trading for oxygen and benzene is allowed across nonattainment areas [and] not just within an area. Is that correct? Is there any geographic restriction with regard to benzene and oxygen trading?

Answer: Oxygen and benzene credits may be traded across RFG areas. However, all conditions specified in 80.67(h) must be met.(7/1/94)

9. **Question:** Can a company which is both a refiner and importer transfer oxygen and benzene credits from its import operations to its refineries?

Answer: Yes, through a transfer of credits meeting all conditions of § 80.67(h).(7/1/94)

10. **Question:** Can exports of high olefins, high benzene, and/or nil oxygen gasolines from the U.S. generate credits for the exporter?

Answer: No. Section 80.67(g)(6) provides that oxygen and benzene credits are generated if the actual total for the oxygen standard is greater than the compliance total, or if the actual total for the benzene standard is less than the compliance totals. Exported gasoline is not included in compliance calculations, and, as a result, has no impact on credit creation.(8/29/94)

11. **Question:** Why must oxygen and benzene credits pass only from creator to user? Why can't a blender or importer buy credits in advance as a safety measure, and then sell or resell them if/when (within the averaging period) it is established that it has performed better than expected?

Answer: The regulations do not provide for the reselling of credits. However, there may be ways for businesses to provide some flexibility, such options to buy credits which extend to the end of the averaging period.(8/29/94)

12. **Question:** Can oxygen and benzene credits be transferred from the RFG area where they are created to another RFG area?

Answer: Benzene and renewable oxygenate credits may be transferred from the refiner or importer who creates the credits to any other refiner or importer who would use the credits. Oxygen credits may be transferred from the refiner, importer, or oxygenate blender who creates the oxygen credits to any other refiner, importer, or oxygenate blender who would use the credits. Credits are not associated with any RFG covered area either when they are created or when they

are used, so there is no restriction on credit transfers based on the specific RFG covered areas where the transferor or transferee refiner, importer, or oxygenate blender are located.(10/3/94)

13. **Question:** What are the units for RFG credit trading?

Answer: The units for oxygen and benzene credit trading are the units required for calculating batch properties under §§ 80.66(d) and (e), i.e., wt%-gallons for oxygen, vol%-gallons for benzene. (4/18/95)

14. **Question:** Will a foreign refiner or blender, or an importer of RFG produced overseas, be given some kind of credit for plant emissions outside the United States?

Answer: No. The RFG regulations do not extend to foreign refineries.(8/29/94)

E. Surveys

1. **Question:** If a refinery supplies averaged gasoline to an area which fails a survey, can the refinery during the following year opt to meet per gallon standards and thus avoid the ratcheted standards which would have been applicable to its averaged gasoline?

Answer: Yes. If a refinery opts to meet per gallon standards instead of averaging, ratcheted standards do not apply to that refinery even if the refinery had supplied averaged gasoline to the ratcheted area the previous year. Ratcheted standards apply only to averaged gasoline.(7/1/94)

2. **Question:** Refiner A buys averaged RFG from refiner B and then sells it in NYC during a certain year. If NYC fails the survey for that year, which refiner must ratchet down the following year?

Answer: The refinery which has produced the gasoline and accounted for the gasoline in its averaging program is responsible for the gasoline. Therefore, if the gasoline is ultimately used in NYC and NYC is ratcheted, all of the averaged gasoline produced at refinery B, with one exception, must meet the ratcheted standards the following year. The exception is VOC-controlled gasoline produced at the same refinery for a different VOC-control area. In the case of ratcheted VOC standards for a covered area located in VOC Control Region 1, the adjusted VOC standards apply only to the averaged RFG for use in Region 1, and ratcheted standards for Region 2 apply only for gasoline for use in Region 2. (See section 80.41(q)(4).) (Of course, if Refinery A actually produces gasoline during the following year which is sold in NYC, then Refinery A must also meet the ratcheted standards for all of its averaged RFG.)

Refiner B, however, is responsible for quality control of its gasoline which must carry with it transfer documentation indicating that it will meet the minimum and maximum standards associated with the ratcheted area.(7/1/94)

3. **Question:** A refinery produces averaged RFG which is mixed with other gasoline in a fungible system such as a pipeline or distribution terminal. A survey failure occurs in only one of many RFG areas served by the system. How does the refinery ascertain whether it must meet ratcheted standards for its averaged gasoline the following year?

Answer: In the case of a refinery which supplies averaged RFG to a fungible distribution system which, in turn, supplies RFG to a failed survey area, that refinery must meet ratcheted standards for all of its averaged gasoline the following year. Specifically, if any RFG area supplied by the system fails the survey, such failure would trigger ratcheted standards the following year for all averaged gasoline supplied to the system from any refinery. (Of course, in the case of VOC standards, ratcheting is on a Region-specific basis. See Survey Question 2 above.) The only exception to this would be a situation where a refinery can demonstrate that the gasoline it had supplied to a system was, in fact, distributed to a smaller number of areas. Typically, this would require that the gasoline be completely segregated and the ultimate destination(s) could be demonstrated. Of course, such a product would not actually be considered to be a "fungible" shipment.

In some cases, one fungible system is connected to a second system such as a separate second pipeline system which distributes, at least in some situations, material from the first system. If a refinery has supplied RFG to the first system, the refinery is not automatically responsible to meet ratcheted standards applied to areas serviced by delivery points of the second system. However, if it is a typical day-to-day business practice to distribute fungible gasoline directly from the first system into the second, then the refiner must assume responsibility for ratchets on the second system. Likewise, if it is known that RFG produced by a specific refinery has, in fact, been supplied to the second system, then that refinery would have to meet ratcheted standards resulting from a failed survey of a delivery area on the second system. If distribution to the second system is unusual or not a typical day-to-day procedure, then the refiner does not have to automatically assume responsibility for survey failures along the second system. If EPA has specific knowledge that fuel is distributed to the second system, then, to avoid a ratchet of an area on the second system, it would be the responsibility of a fuel producer to demonstrate that its fuel did not, in fact, move to the second system.(7/1/94)

4. **Question:** Is there a bottom end to consecutive year "ratchets" in the RFG program should the annual compliance surveys continue to deem that a ratchet is necessary?

Answer: Generally, for those properties for which there is a maximum or minimum, there is an effective practical bottom (or top in the case of minimums) in the ratcheting process. This is true because, at some point, a maximum or minimum reaches the per gallon standard and the concept of averaging loses its utility. There would presumably be no good reason to average if the

maximum (or minimum) of an averaged gallon of RFG was the same as the per gallon standard. Hence, the regulated parties would presumably switch to a per gallon requirement and the ratcheted standards would become irrelevant. For example, after three consecutive benzene ratchets, the maximum allowable benzene content for averaged RFG would decrease from 1.3 volume percent to 1.0 volume percent (0.1 percent per ratchet). The 1.0 volume percent level is equal to the per gallon standard.

Although not an exception to this view, section 80.41(o)(1) specifically states that "in no case shall the minimum oxygen content standard be greater than 2.0%."

In the case of toxics reduction requirements, there is no minimum or maximum. Thus, the average toxics reduction requirement increases by 1.0 percent for each ratchet and there is no formal "top" to this increase. Of course, there is likely a point where every averaging party would reach a practical "top" in that the standard would be so severe as to essentially require meeting the per gallon toxics reduction even for the averaged gallonage at the lowest toxics reduction level. However, from a practical standpoint, the ratcheted standard at which this occurs likely will vary for different regulated parties.(7/1/94)

5. **Question:** It may be the case that a refiner begins producing averaged RFG for January as early as the previous September. In this case, the refiner would not know if ratcheted standards (other than VOC or RVP) would apply to this "early" production, since ratcheted standards may not be known to apply or be announced by EPA until the first quarter of the following year. Thus a refiner would have to make a decision regarding per gallon vs. averaging 3-5 months prior to knowing what the average standard was going to be. Since severe economic penalties could result for lack of having an approved EPA target at the time of production, is this reasonable? Is the gasoline produced prior to announcement of a ratchet subject to the standard in place before the newly announced ratchet?

Answer: Much of this question assumes that gasoline produced during one year and used the following year must be accounted for when averaging for the following year. This is an incorrect assumption. The refiner must meet the standards in place when the RFG is produced and certified. The ratcheted <u>average</u> standards (and not maximums and minimums) would not apply to gasoline produced during the year of the survey failure that precipitated the ratchet, but only to that gasoline produced and certified as RFG during the year when the ratcheted standards are in place.

Ratcheted maximum and minimum standards do not apply until 90 days after announcement of a failure. Thus, leadtime issues should not be a problem in regards to maximums and minimums. Furthermore, the Agency will attempt to expedite the analysis and announcement of results of surveys and the Agency intends to make preliminary summary survey data available as it is produced throughout the year. This data should help to give an early picture of the possible chances of survey failures for non-summer parameters.(7/1/94)

6. **Question:** Several covered areas which receive RFG from the same fungible system experience survey failures during a given year. (Or, alternatively, approved survey plans were not carried out in several cities receiving RFG from the same fungible system during a given year.) Would a refinery supplying averaged RFG to this fungible system be subject to one ratchet or multiple ratchets?

Answer: As is mentioned in Survey Question 3 above, special considerations exist for fungible systems. In the case of a fungible system supplying RFG to a ratcheted area, the ratchet applies to all refineries supplying fungible RFG entering that system, since this RFG may have gone to any city receiving gasoline from the system. If two (or more) areas receiving gasoline from the system are ratcheted, all refiners supplying fungible averaged RFG are subject to each ratchet. However, these ratchets are not "additive". If the standard is the same for each ratcheted city, averaged RFG meeting one area's ratcheted standards would likewise meet the other area's standards. On the other hand, if two (or more) areas receiving gasoline on a fungible system have been ratcheted to different standards (e.g., one area is subject to two consecutive yearly ratchets, but the other areas are not), then all refineries providing fungible averaged RFG to the fungible system are subject to the most severe of the ratcheted standards. Likewise, for a single refinery supplying averaged RFG to several different fungible distribution systems, all averaged RFG produced by that refinery is subject to the most stringent of the ratchets of any area on any of the distribution systems.

Failure to conduct an approved survey is tantamount to a survey failure and, therefore, the above answer applies in such situations.(7/1/94)

7. **Question:** Some refineries supply product to more than one distribution system. It is understood that ratcheted standards apply on a given fungible system. Is a ratchet to which a refinery is subject due to survey failures on one distribution system applied to averaged RFG produced by that refinery for another distribution system? If so, why would this RFG produced for the other distribution system also be subject to the same ratchet since the material for the second system (for example, a local truck loading rack) may be completely segregated at the refinery.

Answer: If any of a refinery's averaged RFG is subject to a ratchet, then all of that refinery's averaged RFG is subject to the same ratchet. (See section 80.41(q).) As was explained in previous RFG rulemaking notices, if the refinery was supplying averaged RFG to an area that failed a survey, that refinery's RFG potentially contributed to that survey failure. Therefore, all of that refinery's averaged RFG is subject to any ratchet resulting from a survey failure to which it has potentially contributed. The survey and ratchet provisions of the regulations were adopted to ensure that "refinery gate" averaging would lead to compliance for each covered area separately.

This answer is applicable even in situations where fungibility is not a concern. For example, if a refinery supplies segregated (not fungible) shipments of averaged RFG to two covered areas and one of those areas are subject to a ratchet, all averaged RFG produced at that refinery must meet the ratcheted standards.(7/1/94)

8. **Question:** If an area's standards have been ratcheted, some suppliers of that area will likely opt for a per gallon standard the following year and thus are not required to meet the ratcheted standards. Will it not be much more likely for that area to fail a subsequent survey since subsequent surveys will be comparing results obtained from samples of largely per gallon RFG to a ratcheted standard? Furthermore, if surveys occur during the first part of a year, before it is known whether surveys were failed late in the previous year, how will regulated parties know the standard against which these survey results will be compared?

Answer: These are two of several questions which are based upon the following *incorrect interpretation of the regulations*: Determination of a survey failure during a year when ratcheted standards are in place is based upon a comparison of the survey results to these ratcheted standards. *This is an incorrect interpretation.* Determination of failure of a survey for a covered area will ALWAYS be based upon a comparison of the survey results with the applicable per gallon standards and this determination is independent of the current status of ratcheted standards applied to averaged RFG for that area. Thus, the choice of some refiners to opt to produce RFG based upon a per gallon standard after a ratcheting occurs would not negatively impact the chances that an area would pass a survey. Likewise, since the per gallon standards against which a survey is compared are always known, the question above as to surveys conducted early in the year is irrelevant.(7/1/94)

9. **Question:** A refiner did not supply gasoline to an area during the year the area fails a survey but begins supplying gasoline to that area the following year when the failure has triggered a ratchet. Is all of that refiner's averaged RFG produced during the following year subject to the ratchet even if the refiner segregates RFG for other non-ratcheted areas from that shipped to the ratcheted area?

Answer: The regulations provide that any ratcheted standards apply to all of the averaged RFG produced at a refinery subject to those ratcheted standards, regardless of where the gasoline is used. The rationale for this approach is that because compliance with the averaged standards is determined at the refinery gate, mechanisms are not included in the regulations to document the properties of a refinery's gasoline by specific covered areas. (Of course, VOC ratchets are region-specific. It is anticipated that Region 1 gasoline will typically be segregated from Region 2 gasoline.) Applying ratcheted standards to only that portion of a refinery's production sent to the covered area with adjusted standards would require the refiner to demonstrate the volume and quality of the refinery's gasoline production that is used in a specific covered area. EPA rejected this approach as unworkable on an industry-wide basis and the regulations do not provide an exception for individual refineries.(7/1/94)

10. **Question:** The regulations require that if "refiners, importers, and oxygenate blenders" supplying a covered area do not complete a survey for that area, then the covered area would be deemed to have failed. Would the subsequent ratchet also apply to "suppliers" to that covered

area? Can the ratcheting of compliance standards, as it relates to average gallon compliance, be used as a penalty on a "by company" as well as a "by region" standard?

Answer: Although, from a practical standpoint in the marketplace, there are "suppliers" in the sense it is used in the question, enforcement of average standards are refiner, blender, and importer-based. Therefore, as is mentioned in Survey Question 2 (above), if a refiner sells RFG to another refiner for downstream retail or wholesale sales, the original refiner must account for the standards in place at the ultimate destination of the gasoline. (As is discussed in Survey Question 3, if the refiner does not know where the product will finally be used, the refiner must assume it has gone to any covered area supplied by any fungible system into which the refinery is distributing gasoline.) Thus, if RFG is brought into a covered area through purchase or exchange by a "supplier" who is other than the producer of the gasoline, this RFG should meet the ratcheted standards. This includes the ratcheted average standard (applicable to the refiner, importer or blender), and the ratcheted maximum/minimum standard (applicable to all parties including those downstream). If RFG brought into an area which has a ratcheted standard by a "supplier" does not, in fact, meet the ratcheted standards for that area, then each regulated party handling this out-of-compliance gasoline would be liable for a violation of the standard in question. Thus, the "supplier" which did not produce the gasoline but which brings the gasoline into the ratcheted covered area is responsible for meeting the ratcheted minimum and maximum standards. Furthermore, the "supplier" is responsible for conducting a quality control program which, as a defense against an enforcement action, must demonstrate that the gasoline meets the maximums or minimums applicable to the area, including ratcheted maximums and minimums in the case of a failed survey area.

Thus, in regards to the last part of this question, average standards are applicable to refiners, importers and blenders and, if ratchets occur, these parties must meet the ratcheted standards on average. These same parties as well as the "suppliers" mentioned above are all responsible for compliance with maximums and minimums. Compliance with "average standards" on an area-by-area basis is effectively brought about by the survey in that, if the survey in a given area is failed, averaged standards for all refiners, importers, and blenders producing gasoline for that area are ratcheted.(7/1/94)

11. **Question:** Section 80.41(p) states that if a maximum or minimum standard is changed to be more stringent, the effective date for such a change shall be ninety days following the date EPA announces the change. Yet in 80.40(k)-(o) it is stated that the more stringent standard goes into effect beginning in the following year. Is this inconsistent?

Answer: In the case of the average standard, a more stringent ratcheted standard will be effective for the entire year even if the ratchet is not announced by EPA until late in the previous year or early in the year of the ratchet. (As is discussed in Survey Question 5 above, the Agency will use every means possible to assure early announcement of survey failures and ratchets.)

Section 80.41(p) clarifies that ratcheted minimums and maximums will become effective 90 days after the ratchet is announced.(7/1/94)

12. **Question:** If there are two surveys for RVP/VOC for a covered area per year and both fail, does this result in two "additive" ratchets for the covered area?

Answer: No. Failure of surveys during a single year are not "additive", i.e., if any or all surveys in an area are failed during a given year, a single ratchet will be applied for the following year. Additionally, as in Survey Question 6 above, if a refiner is supplying gasoline to many covered areas and several of them experience survey failures, the refinery is subject to the most stringent standard applicable to any of the areas. In 1996, no area could be subjected to more than a single ratchet resulting from a 1995 survey failure. Thereafter, however, a single area may be subject to two or more consecutive yearly ratchets. In the case of a refiner supplying this area and other areas with standards which have been ratcheted only once, all of the refiner's gasoline would be subject to the most severe ratchet.(7/1/94)

13. **Question:** Do ratchets resulting from failures of simple model surveys carry over to 1998 complex model standards if there were no survey failures in 1997?

Answer: In the case of VOC, NOx and toxics standards, if no simple or complex model survey failures occur in 1997 and no ratcheted complex model standards apply as a result of complex model survey failures prior to 1997, then no ratcheted standards will be applicable in 1998. This is true even if there are in-place ratcheted simple model standards for these parameters in one or more areas in 1997 due to simple model survey failures during previous years. On the other hand, if simple model failures do occur during 1997, these would cause a ratchet of complex model standards in 1998.

In the case of benzene and oxygen standards, applicable ratchets due to survey failures would carry over from 1997 to 1998 independent of complex or simple model use.

The Agency recognizes that there will be a transition period during which complete turnover of simple model gasoline (remaining in retail station tanks after 1997) to complex model gasoline will occur. This transition period presents some practical problems which will have to be addressed in regards to surveys (and in regards to retail station enforcement of RFG regulations). Since this situation will not occur until 1998, the Agency will address this situation at a later time, after the RFG program is introduced and valuable experience is gained dealing with initial surveys and the initial enforcement of the regulations.

It is important to note that benzene and oxygen are not covered by the above discussion. Any failure of the benzene or oxygen standards would, in fact, result in a ratchet the following year regardless of the year the failure occurs.(7/1/94)

14. **Question:** Under section 80.68(c), a NOx survey series consists of samples collected between January 1 and May 31 or September 16 through December 31. A NOx survey, on the

other hand, consists only of any survey conducted between June 1 and September 15 (the high-ozone season). If there is a NOx survey failure between June 1 and September 15, would a supplying refinery be subject to a NOx ratchet for just the high ozone period or would NOx standards be ratcheted year 'round?

Answer: Any NOx ratchet resulting from a NOx survey or survey series failure would apply to both VOC and non-VOC-controlled gasoline. Thus, NOx standards would be ratcheted year 'round even if the failure occurred only within the high-ozone period. Likewise, if the "survey series" outside the high-ozone period was failed, all NOx standards including those during the high-ozone period would be ratcheted.(7/1/94)

15. **Question:** If the air is found to have failed the VOC or toxics surveys, is the refiner subject to additional burden other than the tightening of the particular specifications as listed in section 80.41?

Answer: Since surveys do not consist of the sampling and analysis of ambient air, the "air" does not pass or fail VOC or toxics surveys. Reformulated gasoline in a specific control area is sampled and analyzed for certain parameters and it is upon the basis of the results of these analyses that an area will pass or fail a survey. Survey failures result in the ratcheting of standards as described in section 80.41. The only other burden for which these refineries would be responsible, would be additional surveys in future years since the required number of future surveys would not decrease as quickly as it otherwise would have.(7/1/94)

16. **Question:** Can those parties responsible for carrying out a survey utilize other methods of assurance that money is available to pay a contractor instead of actually placing the necessary funds in escrow?

Answer: Section 80.68(c)(16) specifically requires the placement in escrow or payment to the surveyor of the full amount of money needed to carry out the survey. The regulations do not provide for any alternative method such as a financial test of self insurance or a demonstration of financial responsibility.(7/1/94)

17. **Question:** Previous EPA handouts such as the one utilized at the NPRA workshop held in March, indicated that 120 surveys must be conducted for the nine original RFG covered areas. In fact, since the California cities which are part of this group are not covered by the survey requirements, shouldn't the 120 surveys apply to only the remaining seven areas?

Answer: Yes, 120 surveys which apply to the original cities currently apply to the seven remaining cities and not to San Diego and Los Angeles.(7/1/94)

18. **Question:** Since the 120 surveys were originally meant to cover nine areas and not seven, shouldn't the 120 surveys (and 80, 60 and 50 surveys for subsequent years) be adjusted downward?

Answer: No. The regulations provide that the 120 surveys (80, 60, and 50 in subsequent years) shall be conducted in 1995. Although the regulations provide for an increased number of surveys as areas opt into RFG, the regulations do not provide for fewer surveys than initially required based on the fact that regulated parties supplying gasoline to California cities are not subject to survey requirements under section 80.81(b)(1).(7/1/94)

19. **Question:** Section 80.68(b)(2) requires an increase in the number of surveys to be conducted under Option 2, the nationwide survey option, based on the amount of gasoline utilized in the opt-in areas. What is the source of the annual gasoline volume data by covered area? When will EPA announce the adjusted number of required surveys for 1995?

Answer: The Agency views the adjusted number of surveys required as most appropriately part of the survey plan as submitted to the Agency. Thus, the Agency will look to the survey plan to define the appropriate methodology to determine the appropriate number of surveys based on the gasoline volumes utilized in opt-in areas and in the original nine cities. Likewise, for the years after 1995, the rate of decrease in the total number of surveys required will itself decrease based upon the gallonage of fuel supplied to areas which fail surveys the previous year. (See Survey Question 20 below.) The method to determine the volume of gasoline in these areas and, thus, the adjusted number of surveys, should be defined in the survey plan. (The areas addressed in the survey plan include not only the opt-in areas but also the gasoline volumes in the original nine cities since the equations in the regulations that determine the year-to-year change in the number of surveys required utilize ratios potentially involving the volumes for all cities in the RFG program, including the original nine envisioned in the Clean Air Act.) EPA will review this methodology as part of its overall review of a survey plan.

A related questions involves the volume of gasoline in the "original nine cities" utilized in the equations to calculate the adjusted number of surveys. It was intended that this volume include the California areas which, under the California exemptions, will not now be included in the actual surveys. As is mentioned in Survey Question 19, the regulations are clear that all nine cities be included in this original volume. Thus the California areas will be included in the volumes for the "original nine cities" (V_{orig}) as specified in the equations of section 80.68(b)(2).(7/1/94)

20. **Question:** Given that the number of surveys required in later years (after 1995) will, in part, be determined by survey failures, when will EPA announce the adjusted number of required surveys for 1996 (or subsequent years)? How can a survey plan be submitted by September 1, 1995, if the adjusted number of surveys for 1996 is not known?

Answer: The survey plan will have to take into account whatever contingencies may occur. Any change in the total number of surveys which may be triggered by areas "passing" or "failing" surveys (see section 80.68(b)(2)(ii)) will not result in any change in the actual areas covered by the surveys. Rather, it will only change the number of surveys required for those areas. Thus, the survey plan will still have to address information such as how representative samples will be identified in each city and all other site-specific factors in planning a survey. In terms of total numbers of surveys, the plan should address the "worst case" contingency of no drop in total surveys required. If the total number of surveys drop, any plan which addresses the "worst case" contingency should accommodate a smaller number of total surveys.

For new opt-in areas, the Administrator has some discretion in setting the date for compliance with introduction of RFG. Utilizing this discretion, and working with the states on scheduling opt-in requests, the Agency will work to facilitate opt-in schedules so as to not disrupt the efficient planning of surveys or introduction of RFG generally.(7/1/94)

21. **Question:** Section 80.67(a)(2) authorizes a compliance procedure for benzene and oxygen averaging on a "covered area" basis. If a refinery participates in a compliance survey, does this section apply? Does this section apply only if a refinery decides to average oxygen or benzene and does not participate in a compliance survey? Do ratchets apply to parties complying with oxygen and benzene averaging under this section?

Answer: The compliance procedure described in this section allows for oxygen and benzene averaging on an area-specific basis. Since the purpose of surveys is to assure that nationwide averaging provides adequate quality gasoline overall on an area-specific basis, a party complying under this section is not subject to the survey requirements, i.e., the refiner or importer need not take part in a survey. It is important to note that a party complying under this section must obtain EPA approval by supplying EPA with a detailed description of the procedures the party will undertake in order to assure that the complying fuel is limited to a specific covered area. EPA believes that a procedure to assure adherence to this type of area-specific averaging would require substantial effort on the part of the complying party.

If a refinery/importer participates in a compliance survey, the averaging provisions and requirements stated in this section do not apply. If a refinery/importer does not take part in a compliance survey then it must either: 1) comply on a per gallon basis or 2) it can choose to average oxygen and benzene (only) under this section and, of course, must comply with all requirements of this section.

Although parties complying with averaging under section 80.67(a)(2)(i) are considered to have met the survey requirements under section 80.68, the regulations do not authorize an exemption for these parties from complying with ratcheted standards for averaged RFG which result from failed surveys. If such parties were not subject to ratcheted average standards, an unworkable enforcement situation would result under which several different maximum and minimum standards would be applicable to the same area.(7/1/94)

22. **Question:** Please describe the survey areas which are currently applicable.

Answer: Attached to this document as Attachment II is a list of the presently applicable survey areas including opt-in areas. This list is current as of June, 1994. (The Agency has promulgated a "corrections notice" which defines these areas.)(7/1/94)

23. **Question:** A previous EPA handout utilized at the NPRA workshop held in March, indicated that survey samples outside of the maximum and minimum standards with no enforcement tolerance applied will not be used to obtain survey values for that parameter. Is this correct?

Answer: No. The handout was incorrect and should read that survey samples outside of the maximum and minimum standards plus any enforcement tolerance applied will not be used to obtain survey values for that parameter. (*See* section 80.68(c)(6)(i).)(7/1/94)

24. **Question:** Could a refiner or importer comply with an RFG standard on average without actively (e.g., financially) participating in compliance survey option 1 or 2? Does section 80.67(a)(1), or any other paragraph in the regulations, mean that a refiner, importer, or oxygenate blender must actively participate in the compliance survey requirements in order to meet the RFG standards on average (with the exception of area-specific oxygen and benzene averaging under section 80.67(a)(2))?

Answer: With the exception of area-specific oxygen and benzene averaging under section 80.67(a)(2), all refiners, importers or oxygenate blenders must actively comply with the survey requirements in order to be eligible to meet RFG standards on average. Section 80.67(a)(1) states that "any refiner, importer, or oxygenate blender that complies with the survey requirements...has the option of meeting the standards...for average compliance...[and] any refiner, importer or oxygenate blender that does not comply with the survey requirements must meet the standards...for per gallon compliance, and does not have the option of meeting standards on average." The survey requirements are specified in section 80.68, which provides two options - a program of compliance surveys performed by a refiner, importer, or oxygenate blender (option 1), or a comprehensive program of surveys conducted under a plan approved by EPA (option 2). Section 80.68(b) does not explicitly identify those refiners, importers, and blenders that are deemed to satisfy the survey requirements under the second option. However, it does reference section 80.68(a) which requires active participation by a refiner, importer or blender, and EPA believes that requiring active participation under 80.68(b) is more likely to result in broader and more comprehensive surveys. Therefore, EPA interprets section 80.68(b) as providing that a refiner, importer or blender will be deemed to have satisfied the survey requirements if they actively participate in a comprehensive survey program.(7/1/94)

25. **Question:** Section 80.68(a)(3) indicates that the penalty for failure to carry out "an approved survey" is the requirement that the regulated party achieve compliance with all per gallon standards for the entire year in question. Does this penalty apply to both survey options or just option 1?

Answer: It applies to both survey options as discussed in the answer to Survey Question 24 (above). EPA interprets sections 80.67 and 80.68 as requiring an active participation in conducting either a survey under option 1 or option 2 as a prerequisite for meeting the standards on average. If a refiner, importer or blender does not actively participate, that party must meet the standards on a per gallon basis.(7/1/94)

26. **Question:** Would survey failures in 1999 result in Phase II ratchets in 2000? Could survey failures prior to 1999 result in Phase II ratchets in 2000?

Answer: All ratchets in place in 1999 and all survey failures which take place in 1999 will apply to Phase II gasoline in 2000, subject to the section 80.41 ratcheting requirements. For example, if an area has been ratcheted by 1% for VOC reductions for the year 1999, and that area also fails a survey in 1999, then Phase II averaged RFG in 2000 is ratcheted by 2% in 2000.(7/1/94)

27. **Question:** With respect to section 80.68(b)(4)(ii), would a failure to conduct a simple model RFG survey NOT result in a Phase I complex model NOx ratchet because simple model RFG has been deemed to comply with the NOx standard?

Answer: One interpretation of the question could include the assumption that a "simple model survey" might not be conducted while a "complex model survey" is conducted. Under the regulations, there are no separate "simple model surveys" and "complex model surveys". There is a single survey consisting of complex model samples and simple model samples. Nevertheless, a survey could be conducted with simple model samples but no complex model samples if no complex model gasoline were being distributed in the area. In such a case, if some simple model sample parameters were failed, there would be a ratchet of those failed simple model parameters but there would be no failure of complex model parameters since no complex model gasoline was found to be in the area. (As is discussed in Survey Question 13 above, benzene and oxygen failures are not covered by this discussion and a failure of these standards would always precipitate a ratchet the following year.) Thus, complex model NOx parameters would not be ratcheted for the following year. (In 1997, however, failure of the simple model VOC or toxics parameters will result in the ratcheting of those parameters for complex model gasoline in 1998.) If a planned survey was not conducted, the regulations are specific that the area would be deemed to have failed for all parameters including NOx. (*See* section 80.68(b)(4).)(7/1/94)

28. **Question:** Are samples collected at retail outlet dispensers acceptable for the compliance survey requirements?

Answer: Details of what is acceptable for purposes of the compliance survey will be specified in the survey plan submitted to the Agency in the September prior to the year of the survey (assuming the plan submitted is approved by EPA). However, it is highly likely that such samples from dispensers at retail stations would indeed be the basis of survey results.(7/1/94)

29. **Question:** A prudent business approach to achieving year-averaging oxy content of RFG above 2.1% and meeting the ROXY requirements would be to over-oxygenate with EtOH in winter to generate ROXY credits and minimize oxy content (from MTBE, etc.) in summer to reduce cost (still staying about 1.5% O2, of course). A survey of a market done in summer could therefore show O2 levels at that point in time lower than 2.0% (but about 1.5%). What are the implications on "ratchet" of the area to higher 02 levels?

Answer: Oxygen is evaluated on a year round basis under the survey. See § 80.68(c)(3). As a result, if oxygen levels in the summer that are below 2.0 wt% are off set by oxygen levels in the winter that are greater than 2.0 wt%, there would be no oxygen ratchet. However, there are separate week-long VOC surveys that depend in part on oxygen levels. Failure of a simple model VOC survey results in a ratchet of the RVP standard.(12/5/94)

30. **Question:** If there is an oxygen survey failure, when would the new oxygen minimum standard be enforced at downstream locations?

Answer: Under 40 CFR § 80.68(c)(12) a covered area has failed an oxygen survey series if the annual average oxygen content from the survey series is less than 2.00 weight percent (wt%). Under 40 CFR § 80.41(o), in the event of a failed oxygen survey series the minimum oxygen content standard is increased by 0.1 wt% beginning the year following the year of the failed survey series. Thus, where a covered area first fails an oxygen survey series, the oxygen minimum standard for that area is "ratcheted" from 1.5 wt% to 1.6 wt% beginning the following year.

40 CFR § 80.41(q) specifies that, with certain limited exceptions, a ratcheted standard applies to each refinery that supplied any RFG to the covered area in question during the year of the survey failure, or during a year the ratcheted standard applies. Imported gasoline is subject to ratcheted standards based on the PADDs where the survey failure occurred and where the gasoline is imported, using rules specified at 40 CFR § 80.41(q)(2). Under 40 CFR § 80.41(p) a ratcheted minimum or maximum standard, such as a ratcheted oxygen minimum standard, applies beginning 90 days following the date EPA announces the change.

Thus, for example, if there were an oxygen survey series failure for one or more covered areas during 1996, and if EPA announced this failure on January 20, 1997, the ratcheted standard would apply beginning 90 days later, on April 20, 1997. Under this example, beginning April 20, 1997, any RFG certified at an applicable refinery or by an applicable importer would be in violation if the oxygen content is less than 1.6 wt%.

The regulations do not specify when a ratcheted standard would be enforced at locations downstream of the refinery or importer level. EPA understands, however, that there is lag time between the date refiners and importers begin producing gasoline to a new standard, and the date this gasoline displaces the earlier gasoline through the distribution system. For this reason, EPA will exercise enforcement discretion and will not enforce a ratcheted standard at downstream locations until 90 days following the date the ratcheted standard applies at the refinery/importer level.

Under the example discussed above, where the ratcheted oxygen standard applies at the refinery/importer level beginning on April 20, 1997, the 1.6 wt% oxygen standard would not be enforced at downstream locations until 90 days later, or July 19, 1997. Beginning on July 19, 1997, under this example, the 1.6 wt% oxygen standard would be enforced at any retail outlet or wholesale purchaser-consumer facility in the relevant covered area, and at any facility upstream of the retail level that is transporting or storing gasoline intended for use in this covered area. This would include facilities such as pipelines or terminals in a fungible distribution system that supplies any gasoline to the relevant covered area, even where these facilities are located outside the covered area in question. (11/12/96)

31. **Question**: Please provide an overview of compliance performance with simple model and status of any ratchets.

Answer: For Simple Model surveys the pass/fail criteria include:

A minimum oxygen annual average of 2.00 weight percent.
A maximum benzene annual average of 1.000 volume percent
A minimum Simple Model toxics reduction annual average of 15.0%

In addition to these annual average "survey series" criteria, a Simple Model VOC reduction standard applies to each seven day survey done during the VOC control season (June 1-September 15). Simple Model VOC emissions and emissions reduction requirements are calculated from RVP and oxygen content, and the required reductions from baseline emissions are 35.3% for VOC control region 1 (South), and 16.7% for VOC control region 2 (North).

In 1996, 146 surveys were conducted in 22 RFG areas. More than 4700 samples from retail gasoline stations were collected. Samples collected outside of California were analyzed for oxygenates, benzene, aromatics and, during the VOC control season, RVP. (A total of 6 surveys were conducted in Los Angeles, San Diego and Sacramento, CA in which only oxygen content

was sampled.). Oxygen survey series failures occurred in eight of the areas surveyed. These areas, shown with their oxygen averages are:

AREA	AVERAGE (wgt. % oxygen)
Atlantic City, NJ	1.90
Baltimore, MD	1.86
Dallas-Fort Worth, TX	1.89
Houston-Galveston, TX	1.86
Norfolk-Virginia Beach, VA	1.87
Philadelphia.-Wilmington, DE-Trenton, NJ	1.95
Richmond, VA	1.85
Washington, D.C.-area	1.90

The annual "survey series" averages for benzene content and toxics reduction met regulatory requirements, although the 1% benzene level was exceeded in certain individual surveys. VOC reduction requ rements were met for each of the summer surveys.

As a consequence of the oxygen survey series failures, the per gallon minimum oxygen requirement for the affected "averaged" RFG is being raised from 1.5% to 1.6%. A Federal Register Notice announcing the oxygen ratchet was published on July 31, 1997 (62 FR 41047). The notice announces the increased standard and describes the covered areas and parties that are subject to the standard. The notice also provides a timetable for enforcement of the new standard. Refiners, importers and oxygenate blenders will be required to meet the new standard 60 days from publication; facilities such as pipelines and terminals 120 days from publication, and retail outlets and wholesale purchaser-consumer facilities 150 days from publication. (11/10/97)

F. Downstream Oxygen Blending Requirements

1. **Question:** Must oxygenate be added to RBOB downstream of the refinery?

Answer: Yes. Oxygenate must be added to RBOB in the proper type and amount regardless of where it is sold. Specifically, section 80.77(a)(7) prohibits any person from combining RBOB with any other gasoline, blendstock, or oxygenate except oxygenate of the type and amount specified for the RBOB type or with other RBOB that has the same requirements related to oxygenate type and amount.

Furthermore, the RFG regulations contain other relevant and specific prohibitions on the transfer and blending of RBOB. Section 80.69(a) requires that refiners and importers only transfer RBOB to downstream oxygenate blenders who are registered with EPA under the RFG program or, if to an intermediate owner, with the restriction that such owner transfer the RBOB only to a registered blender. Section 80.69(b) requires downstream oxygenate blenders to add oxygenate in the proper type and amount to all gasoline designated as RBOB.(10/17/94)

2. **Question:** May a party add more oxygenate to RBOB than is specified in the product transfer documents for the RBOB?

Answer: Section 80.78(a)(7)(i) requires that RBOB may be blended only with oxygenate of the type and amount (or within the range of amounts) specified by the RBOB refiner, and recited in the RBOB product transfer documents. Nevertheless, there is no adverse environmental consequence if a party blends a quantity of oxygenate with RBOB that exceeds the specified amount, provided that the resulting RFG meets the oxygen maximum and substantially similar requirements. Note that under certain circumstances there is an adverse environmental consequence if the oxygenate type which is blended is different than the specified type. In addition, there almost always is an adverse environmental consequence if the amount of oxygenate which is blended is less than the specified amount.

In consequence, EPA will allow parties to view the oxygenate amount specification for RBOB as a minimum, and add oxygenate amounts in excess of that minimum up to the applicable oxygen maximum under § 80.41(g) in the case of simple model RFG, or up to the substantially similar maximum in the case of all RFG. In no case, however, may a party add an oxygen amount which is less than the specified amount, or an oxygenate type which is different than the specified type. For example, if an oxygenate blender obtains non-VOC-controlled any-oxygenate RBOB for which 7.7 vol% ethanol (2.9 wt% oxygen) is specified, the oxygenate blender may blend up to 10 vol% ethanol (4.0 wt% oxygen). The oxygenate blender in this example could not, however, blend less than 7.7 vol% ethanol. EPA intends to modify § 80.78(a)(7)(i) in a future rulemaking to reflect this answer. (4/18/95)

3. **Question:** Would a refinery that receives RBOB from another refinery and blends oxygenate(s) with that RBOB to make RFG also have to register as an oxygenate blender?

Answer: Yes. Under § 80.2(mm), an oxygenate blender means "any person who owns, leases, operates, controls, or supervises an oxygenate blending facility, or who owns or controls the blendstock or gasoline used or the gasoline produced at an oxygenate blending facility." Under § 80.76(a), registration is required for "any oxygenate blender that produces any reformulated gasoline." In addition, the refiner-oxygenate blender would be required to demonstrate compliance with the oxygen standard for the RFG produced in its oxygenate blending capacity separately from the RFG produced as a refiner.(10/31/94)

4. **Question:** If RBOB and oxygenate are blended upstream from the truck in an oxygenate blending facility, which of these parties would be considered an oxygenate blender and have the associated regulatory requirements:

A. Terminal owner (if different than operator)
B. Terminal operator (not product owner)

C. Product owner (in tankage)
D. Customer-exchange partner (ownership transfers at rack spiller)
E. Truck owner (common carrier)

Answer: An oxygenate blender is defined at § 80.2(mm) as "any person who owns, leases, operates, controls, or supervises an oxygenate blending facility, or who owns or controls the blendstock or gasoline used or the gasoline produced at an oxygenate blending facility." An oxygenate blending facility is defined at § 80.2(ll) as "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." Therefore, in the scenario described above, where the gasoline is blended by the terminal upstream from the truck, the terminal would be the oxygenate blending facility and both the owner and operator of the terminal facility would be oxygenate blenders under the regulations. The product owner also would be an oxygenate blender. The customer-exchange partner would be an oxygenate blender if ownership of the product is transferred to him immediately upon blending as the product enters the truck. In this scenario, the customer-exchange partner would own the gasoline at the point where sampling and testing would normally occur, and, therefore, would be in a position to ensure that this is accomplished. The truck owner would not be an oxygenate blender where the truck driver exercises no control over the blending operation, and the truck is not an oxygenate blending facility. The truck owner, however, would be a common carrier under the regulations, subject to carrier liability and defenses. (10/17/94)

5. **Question:** If an oxygenate blender adds oxygenate only to conventional gasoline downstream of the refinery, please confirm that the oxygenate blender is not considered a "refiner" and therefore is not subject to record keeping, reporting, or attest engagement requirements.

Answer: This party would not be considered a "refiner" for purposes of the anti-dumping requirements, and is not required to meet the anti-dumping requirements specified in the question.(7/1/94)

6. **Question:** Is splash blending of oxygenates allowed under the RFG program?

Answer: Yes.(7/1/94)

7. **Question:** If ethanol is splash blended into a truck, does the truck operator become an oxygenate blender? If so, what are the registration, reporting, recordkeeping, and oversight requirements of the trucker? Will two bills of lading (one from a gasoline terminal and one from an ethanol terminal) stapled together be valid documentation of final product?

Answer. The regulations at § 80.2(ll) and (mm) specifically provide that any person who owns, leases, operates, controls or supervises an oxygenate blending facility, the definition of which includes a truck, is an oxygenate blender under the regulations. In addition, the gasoline owner, if different than the truck operator, would meet the oxygenate blender definition. As such, the truck operator and the gasoline owner would be subject to all registration, reporting, recordkeeping, and oversight requirements for oxygenate blenders specified in § 80.69.

In a case where the oxygen standard is being met on a per-gallon basis (and not on average), two bills of lading that contain all the product transfer document information specified in § 80.77 would be appropriate documentation for showing that the proper amount and type of oxygenate are used generally, but these documents would not satisfy the sampling and testing requirements specified under § 80.69(e).

8. **Question:** It is my understanding that if a terminal, registered as an oxygenate blender, blends RBOB and oxygenate into a truck using a computer controlled in-line blender the truck is also considered an oxygenate blender. If this is true, does the truck have to register? If the truck is not registered can the terminal legally sell this blended product to the truck?

Answer: If blending occurs prior to putting the gasoline into the truck, then the terminal is the blending facility. If blending occurs in the truck, then the truck is the blending facility. As discussed in Question 11 of Section VI.A. of the July 1, 1994 "Question and Answer" document, EPA will permit regulated parties to agree among themselves who should register as a blender; however, if the registration requirement is not met, all parties remain liable. EPA recommends that the owner of the gasoline register, and the parties should agree between themselves as to whom will register.(8/29/94)

If more than one party meets the "oxygenate blender" definition, EPA will not enforce registration, reporting, recordkeeping and quality assurance requirements if these requirements are met by at least one of the parties. The parties should agree between themselves which of them will register with EPA. (EPA recommends that the party who owns the gasoline register.) All parties remain liable if the reporting, recordkeeping and quality assurance requirements are not met. Terminals may only transfer RBOB to registered oxygenate blenders.(7/1/94)

9. **Question:** The custody transfer point of the RBOB between the terminal operator and the exchange company is normally at the loading arm connection to the transport. Since the title to the RBOB is therefore held by the exchange company and not the terminal operator at the moment the RBOB enters the blending facility (the transport truck), is the terminal operator still considered an oxygenate blender in this situation? Our interpretation is that, in the case of automated sequential blending, the terminal would be an oxygenate blender because it "controls and supervises" the blending process. Likewise, it is our interpretation that the terminal operator would not be an oxygenate blender in a splash blending situation since the operator does not have

title to the RBOB or ethanol at the time of blending and does not supervise or control the blending process. Is this interpretation correct?

Answer. Your interpretation is correct in the first situation. If, in the second situation, the transport truck operator controls the amounts of products to be splash blended in the truck, your interpretation is also correct.(7/1/94)

10. **Question:** If, in a splash blending situation, the terminal is not an oxygenate blender, would it handle the RBOB as an intermediate owner and transfer title of the RBOB to the exchange customer with the restriction that it only be sold to another intermediate owner of an EPA registered oxygenate blender? Would the exchange company, carrier, and owner of the blended product be responsible for the oxygenate blender oversight provisions and not the terminal operator?

Answer: If a terminal does not meet the oxygenate blender definition, the answer to both questions is "yes."(7/1/94)

11. **Question:** If a refiner produces "specified RBOB" for 3.5% oxygenate (for example, 10% vol EtOH) blending, and an oversight program shows that the downstream blender is adding less than 10% EtOH, who is liable for a compliance violation? If there a violation at all if the actual finished blend still meets the RFG specs? For example, if RBOB is formulated to meet RFG with 8% EtOH, but the refiner sells it as "10% EtOH" RBOB (and uses the 10% in the calculation of its non-oxygenate parameters) to encourage maximum ROXY credits, does an actual blend with 8% EtOH cause a violation?

Answer: If the downstream oxygenate blender is adding oxygenate in amounts other than that specified by the refiner of the RBOB, the blender would be liable for a violation of the regulations regardless of whether the gasoline meets the downstream standards. In such a case, the RBOB refiner would have to recalculate its batch values for the RBOB to reflect that actual level of blending that occurred (e.g., benzene and toxics emissions performance.)(11/28/94)

12. **Question:** Are there different RBOBs for ethanol than for MTBE? Kindly list the types of RBOBs with all the acceptable oxygenates or ethers for each RBOB.

Answer: Yes. The generic RBOB types are as follows: "Any oxygenate," "Any renewable oxygenate," "Any ether," "Any renewable ether," and "Non-VOC controlled renewable ether only." There are several legal oxygenates which may be blended with the various types of RBOB. Please refer to the RFG and renewable oxygenate regulation preambles for a detailed discussion. For example, it would be appropriate to blend ethanol with "any oxygenate" or "any renewable oxygenate" RBOB, but inappropriate to blend ethanol with "Any ether" or "Any renewable ether"

or "Non-VOC controlled renewable ether only" RBOBs. MTBE may appropriately be blended with "any oxygenate," "ether only," (and if the MTBE is from a renewable source "Any renewable oxygenate" or "Non-VOC controlled renewable ether only" RBOB).(8/29/94)

13. **Question:** Is tertiary butyl alcohol (TBA) an acceptable alternative oxygenate to MTBE?

Answer: Tertiary butyl alcohol may be blended in amounts permitted under its section 211(f) waiver. There are several oxygenates available other than the two most common, MTBE and ethanol, and these oxygenates may be legally used if blended in the type and amount specified under EPA's "substantially similar" rule and any section 211(f) waiver than may apply. Parties needing further information about the legality of a particular oxygenate should contact the Field Operations and Support Division Fuels Team at (202) 233-9050.(8/29/94)

14. **Question:** There is considerable confusion regarding the ability of refiners to commingle RBOB produced at different refineries. Some refiners have interpreted 80.69 as requiring separate storage and handling for each RBOB, even when both are "any oxygenate" RBOB. Can "any oxygenate" RBOB be commingled?

Answer: RBOB must be segregated from RFG, and from other RBOB having different oxygenate requirements, to the point of oxygenate blending. There is no need to separate "any oxygenate" RBOB from other "any oxygenate" RBOB.(7/1/94)

15. **Question**: Would it be permissible to combine (i.e., commingle) any-oxygenate RBOB with an RBOB designated for blending with 10 vol% denatured ethanol, provided the new RBOB (resulting from the combination) is designated for blending with 10% denatured ethanol?

Answer: Section 80.78(a)(7) provides that "no person may combine any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate...," and § 80.78(a)(7)(ii), states that an RBOB may be combined with "other RBOB for which the same oxygenate type and amount (or range of amounts) was specified by the refiner or importer." In addition, guidance was provided in the April 18, 1995 Question and Answer document that parties may consider the oxygenate amount specified for RBOB to be a minimum specification, and oxygenate may be added in excess of that minimum up to the applicable oxygen maximum or substantially similar maximum.

As a result, a party could combine RBOB's that have different requirements for oxygenate amount (but not different oxygenate types), provided that the mixture is designated for oxygen blending with the largest oxygen amount specified for any of the RBOBs in the mixture. For example, a party could combine any-oxygenate RBOB with RBOB designated for blending with 10 vol% denatured ethanol, as described in the question, provided that the mixture is designated for blending with 10 vol% ethanol. (8/29/95)

16. **Question:** What is a satisfactory quality assurance program that ensures oxygenates are being added to RBOB at a non-proprietary terminal?

Answer: For refiners and importers who wish to claim the actual oxygenate type and amount blended with RBOB, a program of contractual controls and quality assurance sampling and testing over the downstream oxygenate blending operation must be carried out. Under §§ 80.69(a)(6) and (7), a quality assurance sampling and testing program must be carried out at the facilities of each oxygenate blender who blends any RBOB with any oxygenate. The testing methodology used must be consistent with § 80.46(g). Section 80.69 specifies, among other things, mandatory sampling and testing rates and where samples must be taken.

Refiners and importers have a second compliance option which allows them to make certain default assumptions regarding the type and amount of oxygenate blended downstream. Rather than claim the actual amount of oxygenate blended, these parties make certain default ("worst case") assumptions regarding the type and amount of oxygenate blended downstream. Under §80.69(a)(8), these assumptions are in lieu of the contractual and quality assurance requirements of §§ 80.67(a)(6) and (7).(7/1/94)

17. **Question:** If a refiner of RBOB elects to use "worst case" oxygenate blending assumptions to comply with the RFG regulations in lieu of engaging in quality assurance sampling and testing at the blender's blending facility, does the refiner have a duty to sample or test the RBOB or the end-product RFG at any point after the RBOB is transferred to the oxygenate blender?

Answer: No.(8/29/94)

18. **Question:** If an RBOB refiner elects to engage in a quality assurance program at the blender's blending facility per the terms of a contract with the blender, must the refiner sample and test the RBOB as it is received at the blender's facility? If so, how often must sampling and testing be performed? Should sampling and testing be done at the blender's facility prior to shipment, or after the retail outlet accepts delivery?

Answer: The refiner's quality assurance sampling and testing, under § 80.69(a)(7) must be of the RFG produced at an oxygenate blending facility, and not of the RBOB. The rates for testing are specified in § 80.69(a)(7). With respect to when sampling and testing should be conducted, refer to § 80.69(e)(2)(i).(8/29/94)

19. **Question:** If an RBOB refiner elects to engage in a quality assurance program at the blender's blending facility per the terms of a contract with the blender, must the refiner sample and test the end-product RFG that is shipped from the blender to retail outlets? If so, how often must sampling and testing be performed?

Answer: The refiner should sample and test end-product RFG at the blender's facility.(8/29/94)

20. **Question:** If a refiner ships RBOB to an oxygenate blender at another location, is the refiner responsible for tracking properties following oxygenate addition?

Answer: Refiners are required to determine the properties of each batch of RBOB they produce or import prior to the gasoline leaving the refinery. Under § 80.69(a)(4) the refiner is required to determine that the properties of the RBOB are sufficient to allow the downstream parties to establish, through sampling and testing, whether the RBOB has been altered or contaminated so that it will not meet the applicable RFG standard after the addition of the specified type of oxygenate. If the refiner is complying with § 80.69(a)(6) and (7) [i.e. claiming the actual oxygen content blended by the downstream blender], then the refiner must have a contractual relationship with each downstream blender and conduct a quality assurance and testing program. If the refiner is complying with § 80.69(a)(8), in lieu of the contractual relationship and quality assurance requirements, he may make his compliance calculations based on specified, "worst case" assumptions about oxygen content.(7/1/94)

21. **Question:** If a refiner of RBOB elects to engage in a quality assurance sampling and testing at the non-proprietary blender's facility by contractual provision, can the refiner contract for a third party to perform the quality assurance sampling and testing? If so, can the third party contract to assume the refiner's liability in case the quality assurance program is deficient or ineffective and leads to violations of the applicable standard?

Answer: The refiner could meet the quality assurance sampling and testing requirement through sampling and testing carried out by a third party, although this third party could not be the oxygenate blender. The refiner would be liable, however, for any failure to meet the regulatory requirements, and any contractual agreement between the refiner and the third party would have no effect on the refiner's potential liability.(8/29/94)

22. **Question:** In the case of an RBOB refiner conducting oversight over the RFG produced at a downstream oxygenate blending operation, what standards does EPA intend that the refiner should check through sampling and testing?

Answer: Under § 80.69(a) an RBOB refiner is required to calculate the non-oxygen parameter values for the RFG produced from the RBOB using either the oxygen blending assumptions under § 80.69(a)(8), or the actual oxygen blending levels if the refiner meets the contractual and quality assurance requirements specified in §§ 80.69(a)(6) and (7). The quality assurance provision of § 80.69(a)(7) states that the refiner must use sampling and testing to ensure that the RFG produced by the downstream oxygenate blender meets "applicable standards." The particular standards which are intended are not further specified in that paragraph, however.

EPA believes it is only necessary under § 80.69(a)(7) for the refiner to evaluate the RFG produced by an oxygenate blender for the oxygen type and amount, and not for other RFG standards. The RBOB used in any particular oxygenate blending operation could be from a fungible mixture of RBOBs (with identical requirements for oxygenate type and amount) that were produced at one refinery or at more than one refinery, and that probably would have different target values for the non-oxygen standards. As a result, it would not be meaningful for the refiner to test for the non-oxygen standards at the oxygenate blending facility. In addition, testing for the oxygenate type and amount will confirm whether the blender is using the oxygenate type and amount specified by the RBOB refiner and used by that refiner in their compliance calculations.

EPA believes there is little risk the RFG produced from RBOB will violate a downstream standard under this approach, because the RBOB refiner must specify an oxygenate type and amount for the RBOB such that the resulting RFG will meet all standards. For example, if a particular RBOB requires the dilution of 10 vol% ethanol to meet the benzene standard, the RBOB refiner is required to specify 10 vol% ethanol for the RBOB, and any downstream oxygenate blender who uses this RBOB is required to add 10 vol% ethanol. (4/18/95)

23. **Question:** In § 80.69(a)(2), the procedure for sampling and analysis of RBOB is defined. A hand blend with the specified type and amount of oxygenate is to be prepared and the blended sample analyzed, with those results to be used in compliance calculations. In §80.67(g), compliance totals are defined as the sum of each batch's volume times its parameters. What volume is to be used for RBOB in computing the compliance total -- the actual RBOB volume produced or the implicit volume after blending with the specified oxygenate volume and type?

Answer: The volume after blending with the specified oxygenate volume and type (i.e., the RBOB volume plus oxygenate) should be used for computing the compliance total.(11/28/94)

24. **Question:** Please clarify how the batch properties and volume are determined for a batch of RBOB. Should the volume of oxygenate specified by the refiner to be blended with a batch of RBOB downstream be included in the batch volume reported for the RBOB?

Answer: Yes. Section 80.69(a)(2) requires the refiner to analyze an actual blend of a representative sample of the RBOB and oxygenate using the regulatory methods to determine the properties and characteristics of the resulting RFG. The RBOB is certified based on these results. The batch volume reported for the RBOB is the amount of RBOB plus the amount of oxygenate that the refiner designates must be blended downstream. This amount must be based on the analysis of the representative sample of RBOB and oxygenate. Where § 80.69(a)(8) is applicable (i.e., in lieu of the contractual and quality assurance requirements specified in §§ 80.69(a)(6) and (7), and where the refiner designates RBOB as "any oxygenate" or "ether only"), the refiner must assume that the volume of oxygenate added downstream will be such that the resulting RFG will have an oxygen content of 2.0 weight percent. Where § 80.69(9) is applicable (i.e., in lieu of the contractual and quality assurance requirements specified in §§ 80.69(a)(6) and (7), and where the

refiner does not designate the RBOB as "any oxygenate" or "ether only"), the refiner must assume that the volume of oxygenate added to the RBOB downstream is 4.0 volume percent ethanol.

The batch volume, i.e., the volume of RFG that will result after oxygenate is blended with RBOB downstream, can be calculated using the following formula:

$$V_t = V_g + \left(\frac{R V_g}{1 - R} \right)$$

Where:

V_t = Volume of RFG that will result after oxygenate is blended with RBOB.

R = Portion of RFG that is denatured oxygenate, expressed as a decimal.

V_g = Volume of RBOB.

For example, if a refiner has a 50,000 barrel batch of RBOB, and the refiner designates, based on the analysis of the representative sample, that the resulting RFG must contain 10.0 vol% denatured ethanol, the refiner would mathematically determine the amount of ethanol needed for the batch of resulting RFG to have 10.0 vol% ethanol, and add that amount to the 50,000 barrels of RBOB. In this example, the amount of RFG would be:

$$V_t = 50{,}000 + \left(\frac{0.1 * 50{,}000}{1 - 0.1} \right)$$

$$= 55{,}556$$

Where § 80.69(a)(8) is applicable, the RBOB refiner will have to calculate how much volume of oxygenate is required to result in the RFG batch having a 2.0 weight percent oxygenate. This volume of oxygenate can be calculated using the following formula:

$$V_{oxygenate} = \frac{W\%_{oxygen} \times V_{RBOB} \times d_{RBOB}}{d_{oxygenate} \times ((100 \times F_{oxygenate}) - W\%_{oxygen})}$$

Where

$W\%_{oxygen}$ = weight percent oxygen in final blend

$V_{oxygenate}$ = volume of oxygenate used, exclusive of denaturant

V_{RBOB} = volume of RBOB and denaturant used

$d_{oxygenate}$ = specific gravity of denatured oxygenate used

d_{RBOB} = specific gravity of RBOB used

$F_{oxygenate}$ = oxygen weight fraction for the oxygenate (0.3473 for ethanol; 0.1815 for MTBE)

For example, where a refiner has a 50,000 barrel batch of "any oxygenate" RBOB (including denaturant), and assumes a specific gravity of 0.7420 for the RBOB and a specific gravity of 0.7939 for the denatured ethanol, the amount of the batch would be:

$$V_{oxygenate} = \frac{2 * 50{,}000 * 0.7420}{0.7938 * ((100 * 0.3473) - 2)}$$

$$= 2{,}856$$

$$V_{total} = 50{,}000 + 2{,}856$$

$$= 52{,}856$$

(8/15/95)

25. **Question:** Regarding the requirement in § 80.69(a)(2) that refiners and importers blend a representative sample of an RBOB batch with refinery-specified oxygenate, the composition of specified oxygenate blended in the laboratory is likely to differ from the composition of oxygenate arriving at the blender terminal, in that smaller amounts of oxygenates may be present. May these smaller amounts of oxygenates be included for meeting the refiner's blending instructions where a particular oxygenate type has been specified by the refiner or importer?

Answer: EPA will not consider the refiner's blending instructions to be compromised where the specified oxygenate contains de minimis amounts of other oxygenates resulting in the RFG produced to contain other oxygenates in amounts no more than: 0.4 vol% ethanol, or 0.6 vol% MTBE, ETBE, TAME or t-butanol, or 0.2 vol% methanol. These exceptions apply only if the offending oxygenate is present as a result of operational necessity, and specifically would not apply if the offending oxygenate was intentionally added. See also the October 3, 1995 Question

and Answer document, Prohibitions Section, Question 1, regarding the allowance of de minimis amounts other oxygenates in VOC-controlled RFG. (5/9/95)

26. **Question:** Refiners or importers producing or importing RBOB must blend the proper amount of oxygen with the RBOB and test it for the regulated parameters pursuant to § 80.69(a)(2). Since they are not responsible for the oxygen content, must they test for oxygen, and, if they do test, must they report the results of the test for oxygen?

Answer: Section 80.69(a)(2) requires an RBOB producer or importer to add the specified type and amount of oxygenate to a representative sample of the RBOB and to determine the properties and characteristics of the resulting gasoline using the methodology specified in § 80.65(e). Section 80.69(a)(2) does not exclude oxygen from the parameters to be tested, so the refiner or importer should test for oxygen. Although the regulations do not require the RBOB producer or importer to report the oxygen results of the representative sample blend on its batch report, this test result, which would then be available for the attest engagement or in the event of an enforcement audit, would provide analytical verification of the amount of oxygen added to the representative sample blend.(1/30/95)

27. **Question:** Under the RFG regulations, RBOB cannot be mixed with RFG. However, normal tank blending of oxygenates will require the presence of residual "heels" of RFG from prior batches of RBOB and oxygenate blending, or routinely large portions of the preceding batch impossible to completely move into a pipeline shipment prior to receipt of more RBOB. Will EPA confirm that this mixing is not the subject of the prohibition against mixing RFG and RBOB provided no material is transferred from the blending tank between the time of new RBOB receipt (with oxygenate type and amount matching previous RBOB batches) and addition of the specified type and amount of oxygenate? Testing of finished RFG for required oxygen content and volume would be conducted in accordance with the regulations.

Answer: EPA would not treat the prohibition against mixing RFG and RBOB as having been violated in the situation you describe as long as the volume and oxygen content of the residual RFG from the prior batch have been accounted for by: 1) determining the volume of the portion of RFG left in the tank prior to blending with additional RBOB and oxygenate (the oxygen content of the residual amount will have been determined previously); 2) sampling and testing the entire tank subsequent to blending the additional RBOB and oxygenate to determine its volume and oxygen content; and 3) mathematically subtracting the volume and oxygen content of the residual from those of the entire tank to determine the new batch volume and oxygen content.(12/5/94)

28. **Question:** Section 80.65(e) states that oxygen, benzene, and RVP must be known for each batch of RFG prior to release from the refinery. Does this requirement apply to RBOB?

Answer: Section 80.75(a) requires a refiner or importer of RBOB to report the properties, pursuant to §§ 80.65 and 80.66, of each batch of RBOB it produces or imports. Section 80.69(a)(2) requires refiners and importers of RBOB to test a representative sample of the RBOB and specified oxygenate using the methodology specified in § 80.65(e). Section 80.65(e), therefore, clearly applies to RBOB for purposes of complying with these provisions. Consequently, although § 80.65(e) does not make specific reference to RBOB, EPA believes that the requirement of § 80.65(e) that certain test results must be obtained prior to release of the gasoline by the refiner or importer applies to RBOB. These test results would be reported to EPA pursuant to § 80.75(a) as the properties of the RBOB. Oxygen test results are not required prior to releasing RBOB, but the refiner or importer should retain oxygen test results to support the accuracy of the non-oxygen parameter testing.(1/30/95)

29. **Question:** Can EPA give any additional guidance as to the intent behind § 80.69(a)(4)?

Answer: Section 80.69(a)(4) requires RBOB refiners to determine properties of RBOB which will allow downstream parties to establish if the RBOB has been contaminated, in order to ensure the RFG produced using the RBOB will meet applicable RFG standards. This provision was included in the final rule in order to facilitate quality assurance programs by downstream parties who handle RBOB, particularly where RBOB from a specific refinery is transported as a segregated product. EPA now believes this provision has little value because of the fungible manner in which RBOB is being transported in practice. Moreover, EPA now believes that downstream parties may conduct fully adequate quality assurance programs over RBOB by hand blending the oxygenate type and amount that is specified for the RBOB, and testing for the downstream standards. In consequence, EPA intends to remove § 80.69(a)(4) from the RFG regulations in a future rulemaking, and in the meantime parties need not make the determinations specified in this paragraph. (4/18/95)

30. **Question:** How do you certify a splash blended batch before proper mixing occurs (where mixing occurs during transport)?

Answer: An oxygenate blender "certifies" RFG produced by combining RBOB with oxygenate by adding the proper type and amount of oxygenate. In the case of an oxygenate blender who meets the oxygenate standard on a per-gallon basis, the oxygenate blender is not required to sample and test each batch, but rather to conduct a specified quality assurance program of sampling and testing. The oxygenate blending records would be sufficient to "certify" that a particular batch that is not tested was properly blended. In the case of an oxygenate blender who meets the oxygenate standard on average, every batch must be certified by sampling and testing.

The RFG regulation does not specify the distance or length of time that a batch must be transported in the delivery truck before proper mixing occurs. In order to ensure that proper mixing has occurred, the driver should sample the batch immediately before he places it in the

underground storage tank at the retail station or when the batch reaches its final destination.(7/1/94)

31. **Question:** The answer to Question 10, Section VI.F., of the July 1, 1994 Question and Answer document states that RFG produced by adding oxygenate to RBOB in the compartment of a truck is one batch and that each compartment must be given a different batch number. Isn't this answer inconsistent with § 80.69(c), which states, "other than a truck delivering gasoline to retail outlets or wholesale purchaser consumer facilities?" This section indicates that the retail delivery trucks are not included in the same class as storage tanks. Also, neither § 80.69(d) nor § 80.69(e) require designation of compartments or even truck loads as separate batches and only sampling and oversight are required under § 80.69(e).

Answer: EPA's response in the July 1, 1994 Question and Answer document does not alter the requirements of the reformulated gasoline regulations. The term "batch" is used consistently and appropriately with regard to the regulations. The truck batch numbering requirement discussed in Question 10, Section VI.F., of the July 1, 1994 Question and Answer document applies to truck oxygenate blenders who meet the oxygen standard on average in accordance with § 80.69(b)(4). See also Question 26, Section VI.H. of the July 1, 1994 Question and Answer document for further discussion of this issue.(10/17/94)

32. **Question:** Section 80.69(e) refers to "additional requirements for oxygenate blenders who blend oxygenate in delivery trucks." What type of activity is this intended to cover?

Answer: This section refers to any case where the RBOB and oxygenate is not combined, mixed, and tested in a storage tank before loading into a truck. Thus, the provision includes cases both where the RBOB and oxygenate are sequentially loaded onto a truck, and where the RBOB and oxygenate are combined in a blending header between the storage tanks and the truck.(7/1/94)

33. **Question:** Does section 80.69(e) apply to operations where RBOB is received into a terminal tank from a pipeline or barge and is subsequently blended with oxygenate in a truck?

Answer: The regulatory provision at § 80.69(e) applies to situations where RBOB is blended with oxygenate at a terminal other than in a terminal storage tank (which is addressed in § 80.69(c)). The requirements of § 80.69(e) would apply where RBOB and oxygenate are loaded onto a gasoline delivery truck at the same time. This would be the case where the RBOB and oxygenate are loaded sequentially into a truck at the loading rack, as well as where RBOB and oxygenate are combined in a mixing header that is located between the RBOB storage tank and the truck loading rack. (8/29/95)

34. **Question:** Section 80.69(b), requirements for oxygenated blenders, seems to conflict with 80.69(e), additional requirements for oxygenate blenders who blend oxygenate in trucks. Does

80.69(b)(4) apply to parties covered by 80.69(e)? Does each truck compartment have to be assigned a batch number?

Answer: Section 80.69(b)(4) applies to parties covered by 80.69(e), if they are averaging.

RFG produced by adding oxygenate to RBOB in the compartment of a truck is one batch of RFG and each compartment must be given a different batch number. If blending occurs prior to introducing the RFG into the truck compartment and is designated as a batch, then multiple compartments could be filled with RFG from the single designated batch.(7/1/94)

35. **Question:** The answer to question 11 of Section F states that RFG produced by adding oxygenate to RBOB in the compartment of a truck is one batch and that each compartment must be given a different batch number. Section 80.69(c)of the regulations states "other than a truck delivering gasoline to retail outlets or wholesale purchaser-consumer facilities," which clearly indicates that retail delivery trucks are not included in the same class as storage tanks. Neither section 80.69(d) nor 80.69(e) require designation of compartments or even truck loads as separate batches and only sampling and oversight are required in section (e). It would appear that the Q and A document is in direct conflict with the July 1, 1994 memo signed by K. Stein, C. France, and M. Smith which states that the Q and A does not alter the requirements of the regulations.

Answer: It is assumed that the question and answer referred to is #10 of Section VI. F. of the July 1, 1994 "Reformulated Gasoline and Anti-Dumping Questions and Answers" document. EPA's response does not add or alter the requirements of the final reformulated gasoline regulations. The term "batch" is used consistently and appropriately with regard to the regulations. Also, truck batch numbering applies to truck oxygenate blenders who meet the oxygen standard on average. Please refer to the July 1, 1994 "Question and Answer" document, Question 26, Section VI.H., as well.(8/29/94)

36. **Question:** What testing must an oxygenate blender conduct at the point of blending?

Answer: The requirements for oxygenate blender testing are contained in §§ 80.69(b) through (e) of the regulations.(7/1/94)

37. **Question:** Are truck drivers required to test the last three deliveries to a station if they are from different suppliers?

Answer: Section 80.69(e)(2) requires certain sampling and testing by oxygenate blenders who splash blend and provides that quality assurance testing must be conducted either prior to when the delivery truck driver puts gasoline into the underground tank at the retail outlet, or subsequent to delivery into the underground tank if the last three deliveries to the retail outlet were acquired

from the same blender as the current load. If the oxygenate blender is unable to meet the specified testing frequency at retail outlets where the last three deliveries were from different blenders, the oxygenate blender is required to sample before putting the gasoline in the underground tank, which would require a sample from the delivery truck.(7/1/94)

38. **Question:** Section 80.69(b)(4) indicates that an oxygenate blender that chooses to average is required to test each batch of product. In the case of computer controlled truck blending would documentation of the metered volumes of components be sufficient given an oversight program as outlined in this section?

Answer: EPA has not provided for "metering" of volumes as a substitute for per-batch testing.(7/1/94)

39. **Question:** According to § 80.69(e)(2)(ii)(A) or (B), an oxygenate blender is required to sample and test at a specific rate of blending "occasions." Assume that the oxygenate blender blends the oxygenate in trucks by a computer controlled sequential blender. Is each truck load an "occasion?" Is a truck with multiple compartment grades more than one "occasion?"

Answer: The term "occasion" is used in context to refer to each time RBOB and oxygenate are blended in a truck. In the example given, the product in each truck or in each compartment representing a grade would be the result of a blending "occasion."(8/29/94)

40. **Question:** We believe that computer controlled sequential blending of oxygenates at the rack is at least as accurate as computer controlled in line blending. Is sequential blending of oxygenates at the rack considered sufficiently equivalent to computer in line blending to allow the sampling and testing rates under § 80.69(a)(7)(i)(B) for in line blending?

Answer: For purposes of § 80.69, computer controlled sequential blending is considered to be a form of computer controlled in line blending, and qualifies for the sampling and testing rates applicable to computer controlled oxygenate blending under §§ 80.69(a)(7)(i)(B)(2) and (e)(2)(ii)(A). The fact that the blend is carried out with the help of computer technology provides an additional level of oversight over non-computer controlled splash blending. This extra margin of confidence is the reason for the reduced sampling frequency where computer controlled in line blending is used.

The only concern with sequential blending is whether or not the resulting splash blend will be homogeneous. This can also be a concern for in line blending if the pumping rates of the blendstocks are not consistent throughout the entire blend. For example, if oxygenate is added last in a sequential blend, or if the oxygenate addition of an in line blend finishes at a rate greater

than the target ratio, then portions of the tank compartment will most likely be non-homogeneous.

In either case, sampling can be compromised by the possibility of an unmixed blend. To avoid this problem it is recommended that oxygenate be added to the truck before RBOB during sequential blending in order to facilitate complete blending of the oxygenate.(9/26/94)

41. **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.(11/21/94)

42. **Question:** The RFG regulation specifies a sampling rate of each 500 occasions or at least every 3 months for per gallon parties who use computer controlled in-line blending. EPA has also permitted computer controlled sequential blenders to use this sampling rate.

We use computer controlled sequential blending. Each blending arm is capable of multiple blends. When we reach the 500th occasion of blending on a given blending arm, do we sample only batch #500 (whatever grade that occasion happens to correspond to) or are we required to sample every grade (which means, e.g., we would be required to sample occasions #500, 501 and 502 if the blending arm is capable of three grades)?

Answer: Under § 80.69(e)(2), downstream oxygenate blenders who splash blend oxygenate with RBOB in trucks are required to conduct a quality assurance program of sampling and testing the RFG produced at the blending operation, and under § 80.69(e)(2)(ii)(B) for a computer controlled in-line blending operation the sampling rate must be one sample per each 500 occasions RBOB and oxygenate are blended in trucks, or one sample every three months, whichever is more frequent. EPA does not interpret this regulatory provision as requiring that the sample must be of the 500th blending occasion, but rather it requires that any one blend from among each 500 must be sampled. Further, EPA interprets this regulatory provision as intending that a single truck into which RBOB and oxygenate are splash-blended would constitute one blending "occasion," regardless of whether the truck is loaded with a single grade of RFG or with more than one grade. (4/18/95)

43. **Question:** In the case of RFG oxygenate blenders who splash blend oxygenate in trucks and who wish to meet the oxygen standard on average, what options are available for establishing the oxygen content of the RFG produced? Specifically, is there any option other than every-batch

sampling and testing, which would require sampling and testing every truck (or every truck compartment) for a truck splash blending operation?

Answer: Under § 80.69(b)(4), an RFG oxygenate blender who meets the oxygen standard on average is required to sample and test each batch of RFG produced to determine the batch's oxygen content, and assign a number to the batch for reporting purposes. This every-batch sampling and testing requirement applies regardless of whether the oxygenate blending is carried out in a large terminal tank or through splash blending in trucks.

EPA agrees that every-batch sampling and testing by an oxygenate splash blender would be difficult. As a result, an oxygenate blender may meet the oxygen standard on average without conducting every-batch sampling and testing provided the oxygenate blender meets the following requirements:

1. Computer-controlled oxygenate blending required. The oxygenate blending must becarried out using computer-controlled in-line or sequential blending, that operates in such a manner that the volumes of oxygenate and RBOB are automatically dispensed when a particular grade of gasoline is selected for loading into a truck, and no operator instructions are required regarding the oxygenate-RBOB proportions when an individual truck is loaded. Thus, this alternative averaging approach would not be available where the oxygenate and RBOB are separately metered into a truck, regardless of whether the separate metering occurs at the same terminal or at different terminals.

2. Oxygenate blender must operate blending equipment. The oxygenate blender must be the party who operates the computer-controlled in-line or sequential blending equipment. Thus, this alternative averaging approach would not be available to a party who receives delivery of splash blended RFG into trucks at a terminal if the terminal is not operated by that party, regardless of whether the receiving party is a registered oxygenate blender.

3. Reporting and compliance calculations. The oxygenate blender may base its batch reports and compliance calculations on the volumes and properties of RBOB and oxygenate used during a period not longer than one calendar month. Values must be derived separately for each designation of gasoline (OPRG/VOC, OPRG/non-VOC, non-OPRG/VOC, non-OPRG/non-VOC) at each blending facility. Grade need not be specified for those batches. In calculating the oxygen content of the RFG produced, the oxygenate blender may use assumptions regarding the specific gravities of the oxygenate and RBOB blended, or in the alternative the oxygenate blender may use the measured specific gravities of all oxygenate and RBOB blended in the blending operation. Similarly with regard to the denaturant content of the ethanol (if used), an oxygenate blender may assume the denaturant content is 5 vol% of the ethanol used provided the blender obtains documents from the ethanol supplier which support this assumption and provided the quality assurance sampling and testing (described below) supports this assumption, or in the alternative the denaturant content of ethanol may be measured.

During each oxygen averaging period, however, an oxygenate blender must use only the assumed specific gravities or only the measured specific gravities for all compliance calculations for an oxygenate blending facility. Similarly, during each oxygen averaging period an oxygenate blender must use only the assumed denaturant content of ethanol (if used) or only the measured denaturant content for all compliance calculations for an oxygenate blending facility.

a. The wt% oxygen which may be claimed is calculated using the following equation:

$$W\%_{oxygen} = \left(\frac{(V_{oxygenate} \times d_{oxygenate} \times F_{oxygenate})}{(V_{RBOB} \times d_{RBOB}) + (V_{oxygenate} \times d_{oxygenate})} \right) X\ 100$$

Where

$W\%_{oxygen}$	=	weight percent oxygen in final blend
$V_{oxygenate}$	=	volume of oxygenate used, exclusive of denaturant
V_{RBOB}	=	volume of RBOB and denaturant used
$d_{oxygenate}$	=	specific gravity of denatured oxygenate used
d_{RBOB}	=	specific gravity of RBOB used
$F_{oxygenate}$	=	oxygen weight fraction for the oxygenate (0.3473 for ethanol; 0.1815 for MTBE)

b. In the case of an oxygenate blender who is calculating oxygen content using the assumptions for specific gravity, the following values must be used:

RBOB specific gravity	-	0.7420
denatured ethanol specific gravity	-	0.7939
MTBE specific gravity	-	0.7460

c. An oxygenate blender using the measured specific gravity option must determine, through sampling and testing, the specific gravity for each batch of oxygenate and RBOB used to produce RFG.

d. An oxygenate blender using the measured oxygenate purity option must determine, through sampling and testing, the purity for each batch of oxygenate used to produce RFG.

4. Quality assurance sampling and testing.

a. An oxygenate blender who meets the oxygen standard on average using the procedures described in this answer must conduct a program of quality assurance sampling and testing the RFG produced, using the procedures and at the frequencies specified under § 80.69(e)(2).

b. An oxygenate blender who assumes ethanol has a denaturant content of 5% must conduct a program of quality assurance sampling the ethanol used. The frequency of this sampling and testing must be at least one sample every month. In the event an ethanol sample from this quality assurance program has an oxygenate purity level of less than 92.1%,[18], the oxygenate blender must: 1) use the greater denaturant content for all oxygen compliance calculations for the ethanol that was tested, and; 2) increase the frequency of quality assurance sampling and testing to one sample every two weeks, and must maintain this frequency until four successive samples show an ethanol purity content that is equal to or greater than 92.1%. The formula for calculating denaturant content based upon ethanol purity is 100 volume % fuel ethanol - 0.99 volume % water - (oxygenate purity / 98% purity). For example, if a quality assurance test yielded an oxygenate purity level of 90%, the denaturant content used in the compliance calculations will be calculated as 99.01 vol % - (90/.98), or 7.17 volume % denaturant.

5. Attest procedures. An oxygenate blender who meets the oxygen standard on average using the procedures described in this answer must commission an independent review of the oxygenate blending operation using persons with the qualifications specified in § 80.125. The agreed upon procedures for the independent review should follow the requirements specified in §§ 80.129(a) through (c). In addition, the attester should complete the following attest steps:

a. Obtain a listing of all oxygenate receipts for the previous year, test the mathematical accuracy of the volumetric calculations contained in the listing, and agree the volumetric calculations of the oxygenate receipts to the calculations contained in the material balance analysis.

b. Obtain a listing of the monthly (or lesser period if used by the oxygenate blender) oxygen compliance calculations, test the mathematical accuracy of the listing, and agree the volumetric calculations to the material balance analysis. Select a representative sample of

[18]ASTM D 4806-94 allows for up to 5 volume % denaturant, 1.25 mass % water and 2.0% volume impurities for denatured fuel ethanol. Therefore, the minimum level of ethanol purity would be calculated as (100 volume % fuel ethanol - 5 volume % denaturant - 0.99 volume % water) x 98% purity, or 92.1%.

the oxygen compliance calculations, and determine whether the oxygenate blender is basing its calculations on the assumptions for specific gravity and the denaturant content (if ethanol is used), or on the assumed values. If the oxygenate blender is using measured values, obtain the oxygenate blender's test results for specific gravity and denaturant content for the RBOB and oxygenate used, and agree these test results to the compliance calculations. If the oxygenate blender is using the assumed values, agree the specific gravity and denaturant content used in the compliance calculations with the values specified in this procedure.

c. Agree the sampling and testing frequency of the oxygenate blender's quality assurance program with the sampling and testing rates required by this procedure.

6. Record retention. The oxygenate blender must meet the record keeping requirements that are specified under §§ 80.74(a), (c), and (d), and in addition must meet the record keeping requirements specified under § 80.74(a) for any oxygenate sampling and testing that is performed.

In addition to the alternative averaging approach described above, EPA would be willing to consider other alternative approaches that ensure the integrity of the averaging program.(8/29/95)

44. **Question:** Referring to § 80.69, will EPA consider alternative testing approaches if extreme circumstances prohibit testing as defined by EPA? As an example, the situation may exist where an oxygenate blender is prohibited by state law from taking truck samples. In this case the only way to comply with EPA sampling requirements would be to somehow sample the batch as it is being dropped at its destination. This may be prohibited if the terminal only sells to jobbers. In addition, product sampled from trucks or retail outlets does not necessarily reflect product blended by the oxygenate blender. Residual fuel in trucks and or retail tanks will mix with the terminal product before sampling. A quality oversight of the RBOB in conjunction with meter readings showing proper delivery of oxygenate volumes may better reflect a terminal's product? How does the EPA plan to test in these situations?

Answer: EPA will consider extreme circumstances that may prohibit sampling and testing as required by section 80.69. However, to date, EPA is not aware of such circumstances.

Some state laws may prohibit the opening of truck compartment hatches during loading, unloading and transport operations. Certainly, sampling should not be conducted during these operations. In order to obtain a representative sample with certainty, the transport vehicle must be driven through a series of starts, stops and turns, so that complete mixing will occur. Safety procedures require that transport vehicles are parked for a period of time prior to sampling, to allow electrostatic charges to dissipate, and vapor pressure to stabilize. Only after this stabilization period are the hatches opened. Therefore, hatch opening will not occur during loading, unloading or transport, and subsequently will not result in significant VOC emissions.

For personal safety reasons as well as the increased amount of work required, sampling truck compartments under section 80.69 should be conducted when retail tank sampling is not appropriate under § 80.69(e)(2)(i)(B). However, if truck sampling is required, the sample collector can confirm with the truck driver whether or not the truck is empty prior to loading. If there is reason to confirm by inspecting the compartments to be sampled, that could also be performed prior to loading. The normal heel of the truck compartments after a complete unloading is not enough product to significantly alter the new load.

A quality assurance program consisting of meter readings and RBOB quality at the distributor level leaves out the question of oxygenate blendstock quality. As a result, a quality assurance program must use samples of RFG produced subsequent to the addition of oxygenate.

EPA inspections will occur both at the retail level, and at the terminal level. In the case of splash blended oxygenate, EPA primarily will rely on samples collected at the retail level, but may collect samples from delivery trucks on occasion.(8/29/94)

G. Covered Areas/OPT-In/OPT-Out Issues

1. **Question:** Which cities, including opt-in areas, are covered by this regulation and will have reformulated gasoline? What are the geographical boundaries of the covered areas? How many covered areas are there?

Answer: A complete list of the covered areas current as of June 10, 1994, can be found in Attachment II to this Question and Answer document. The list includes descriptions of the covered areas. The current number of covered areas are 43 (46 if the recently opted-in Wisconsin areas are included).(7/1/94)

2. **Question:** Section 80.70 lists for Virginia the county of Richmond as an opt-in and excludes the city of Richmond. Is this a typographical error?

Answer: Yes. The city of Richmond is considered opted-in, not the county of Richmond.(7/1/94)

3. **Question:** Putnam and Orange Counties in New York were not included in the list of RFG covered areas in § 80.70. Was there exclusion an oversight?

Answer: Yes. A correction has been made to include Putnam and Orange Counties in the New York City reformulated gasoline covered area. These counties are part of the New York City CMSA and are thus appropriately part of the New York City ozone nonattainment area and reformulated gasoline covered area. Putnam and Orange Counties are also included in the New York City CMSA for purposes of the oxygenated fuels program requirement.(7/1/94)

4. **Question:** Does the EPA maintain a single document listing the reclassification of CO and ozone nonattainment areas?

Answer: For information pertaining to the reclassification of CO and ozone nonattainment areas, contact Valerie Broadwell (919-541-3310) or Barry Gilbert (919-541-5238) Ozone/Carbon monoxide Programs Branch, AQMD, MD-15, OAQPS, EPA, Research Triangle Park, North Carolina, 27711.(7/1/94)

5. **Question:** How and when will refiners and gasoline distributors be notified of new areas which opt-in to the RFG program? How much advanced notice will be provided?

Answer: New areas electing to opt-in to the reformulated gasoline program will be announced in a Federal Register notice.(7/1/94)

6. **Question:** If a new area decides to opt-in to the reformulated gasoline program, what determines the effective date that reformulated gasoline must be supplied to that area?

Answer: The effective date of the program in any area which opts into the program is January 1, 1995, or one year after EPA receives the request to include the area in the program, whichever is later. EPA will announce the effective date of new opt-in areas in a Federal Register notice after receipt of a state's petition.(7/1/94)

H. Registration/Record-keeping/Reporting

1. **Question:** Where should registrations and reports be sent?

Answer: U.S. Environmental Protection Agency
Attn: REFGAS (6406J)
1200 Pennsylvania Ave., NW
Washington, DC 20460
(7/1/94)

2. **Question:** Who is required to register for the Reformulated Gasoline and Anti-dumping Program?

Answer: Refiners and importers of conventional gasoline, reformulated gasoline or RBOB and oxygenate blenders producing reformulated gasoline by blending RBOB with oxygenates must

register with EPA prior to producing or importing such products. Independent laboratories must register prior to being specified by refiners or importers on facility registrations.(8/29/94)

3. **Question:** May a company have multiple designations? That is, may a company register as a refiner, an importer, a blender, and a marketer since aspects of our business cover all designations? Does each company have a designation, or can a company choose a designation that best fits the operations of a given facility?

Answer: As discussed above, a company is required to register as a refiner, importer, or oxygenate blender if it produces any reformulated gasoline. A company is also required to register as a refiner or importer if it produces conventional gasoline. A party whose business covers more than one of these designations must register for each designation. There is no registration requirement for a marketer (called a distributor under the RFG regulations).(7/1/94)

4. **Question:** Is the required registration of blenders limited only to those parties who hold title to the product?

Answer: No. Any blender that fits the definition of an oxygenate blender under the regulations is subject to the requirements for oxygenate blenders, including the registration requirements at § 80.76. An oxygenate blender is defined at § 80.2(mm) as any person who owns, leases, operates, controls, or supervises an oxygenate blending facility, or who owns or controls the blendstock or gasoline used or the gasoline produced at an oxygenate blending facility. Similarly, any blender that fits the definition of a refiner is subject to the requirements for refiners, including the registration requirements at § 80.76. A refiner is defined at § 80.2(i) as any person who owns, leases, operates, controls or supervises a refinery (i.e., a plant at which gasoline is produced.) If, for a particular operation, the definition of oxygenate blender or refiner applies to more than one party, the parties may agree that one party will report. However, each party may be liable for noncompliance with applicable regulations.(7/1/94)

5. **Question:** Will ID numbers issued for other EPA programs be used for the reformulated gasoline and anti-dumping programs?

Answer: To a certain extent, yes. If a facility was previously registered for EPA's lead phasedown program that ID will be used for the facility ID (with zeros added to pad out to the new format). If a company is registered in the fuels and fuel additives registration system (FFARS) the FFARS company ID will be used for the company ID. IDs from any other EPA programs will not be valid. EPA plans to issue a list of the phasedown and FFARS IDs.(7/1/94)

6. **Question:** On the registration forms it seems you are forced to check only one primary activity (refiner, oxygenate blender, importer, or independent lab). Do you submit two forms if you are both a refiner and importer?

Answer: No. The final forms have been changed to register each company once for all applicable activities. As before, each facility will be registered separately for each activity that is undertaken at the facility. Import facilities need not be registered individually (see question 10 in this section).(7/1/94)

7. **Question:** Section 80.65(f)(2)(i) & (ii) Independent analysis requirement. states that any importer shall designate one independent laboratory for each import facility at which RFG or RBOB is imported and identify the designated independent laboratory to the EPA according to the registration requirements in § 80.76. However, § 80.76(c)(3) requires separate facility registrations only for refineries and oxygenate blending facilities. How and where do importers provide the required facility information?

Answer: There are two ways that an importer may designate which independent lab(s) it will use. The first, which is reflected in § 80.76(c) of the corrections to the RFG regulations, is to complete a facility registration for each PADD into which it imports gasoline. The importer should indicate the facility name as a PADD (i.e. PADD I) and enter the PADD number as the facility ID number (i.e. 00001). The remaining information, minus the facility address would be completed as for a refinery or oxy blending facility. The second is to register import facilities separately just like a refinery or oxygenate blending facility. An importer may elect either method or use a combination of both. That is, an importer may indicate a single independent lab for its operations in a PADD but supersede that for one or more import facilities by registering each facility with a different independent lab.

Separate import facility registrations only affect independent laboratory designations, however, and such separate registrations have no affect on the requirement that an importer must include all imported gasoline, each year, in its annual compliance calculations.(7/1/94)

8. **Question:** Will an independent laboratory be issued an ID for the entire company or must it register each one of its laboratories individually?

Answer: If an independent sampling and testing firm runs many laboratories but test results will be gathered at and reported to EPA from a single location, the firm may register once at that location. If, however, reporting will be done from several locations, each one should be registered separately.(7/1/94)

9. **Question:** If an importer is unsure of what terminals might be involved in importing gasoline (RFG or conventional), may importers register more terminals than might be used?

Answer: Yes. However, an importer does not need to register each import facility it uses (see previous question).(7/1/94)

10. **Question:** The regulations require that an importer be registered 90 days before imports are received. Does this mean the company or the facility?

Answer: Both. If an importer chooses to register individual import facilities it must register them 90 days prior to shipping into them. However, an importer is only required to register its activities in each PADD (still 90 days in advance) as per § 80.76(c)(3) in the amended regulations.(7/1/94)

11. **Question:** In filing company and facility registrations, if a parent corporation has several subsidiary corporations it desires to register and report to EPA under one company ID number, would it be permissible to register all of the facilities operated by the subsidiaries under only one of the corporations even though for legal and tax purposes they are regarded as separate entities under the umbrella of the one parent corporation? Would it be necessary to obtain a registration number for the parent corporation or could one of the subsidiary corporations take responsibility for compliance for all of the facilities?

Answer: In this situation the parent corporation should register for a company ID # and facilities operated by the subsidiary corporations should be registered as separate facilities but under the parent corporation's company ID #.(8/29/94)

12. **Question:** Will common carriers be required to register their transport trucks as oxygenate blending facilities?

Answer: Normally, only the owner of the gasoline produced at an oxygenate blending operation must register as an oxygenate blender. If a common carrier blends gas in trucks that it owns it must meet all of the requirements for other oxygenate blenders. *But see* answer to Question 1 of the "General Requirements" section of this document.

If an oxygenate blender uses common carriers or its own trucks for splash blending it may register the entire fleet for any single covered areas as a facility and indicate the office where the truck blending operations are coordinated as the blending facility. The office so registered must be at the lowest level at which coordination occurs and geographically closest to each designated RFG area.(8/29/94)

13. **Question**: Does a company that produces RFG have to register <u>all</u> oxygenate blending facilities or just those that produce RFG? All import locations or just those that import RFG?

Answer: Registration is required only for oxygenate blending facilities at which RFG is produced, and not for oxygenate blending facilities where oxygenate is blended with conventional gasoline only. If an oxygenate blender decides to blend RBOB with oxygenates to produce RFG at a facility that has not previously been registered, the facility must be registered three months prior to blending.(10/17/94)

14. **Question:** In a situation where an importer leases tankage from another company, e.g., from a for-hire terminal, who must register such import facility, the company that owns the terminal, the importer that leases the tankage, or both?

Answer: Under § 80.2(r), an importer is defined as "a person who imports gasoline or gasoline blending stocks or components from a foreign country into the United States...." Accordingly, it is the importer of the gasoline, and not the owner of the terminal from whom the importer leases tankage, who must register under § 80.76.(10/17/94)

15. **Question:** The territories and protectorates that are included in the CAA definition of "State" are not per se included in the PADD definition. What are the PADD designations for the Virgin Islands, Puerto Rico, Guam, American Samoa and the Northern Mariana Islands?

Answer: The Virgin Islands and Puerto Rico are in PADD 6; Guam, American Samoa and the Northern Mariana Islands are in PADD 7.(12/5/94)

16. **Question:** The regulations state that a party must register three months prior to producing or importing gasoline or blendstocks under the RFG and anti-dumping Program (40 CFR 80.76). If a party receives its ID numbers from EPA prior to the end of the three month period must he wait to produce or import?

Answer: The party does not need to wait. The three month period was intended to give EPA adequate time to process registrations. A party may proceed with production and importation after receiving an EPA registration number.(1/30/95)

17. **Question:** What is EPA's intent on requiring the location of off-site records on the facility registration?

Answer: EPA needs to know where records are stored so that EPA inspectors may inspect those records. If a facility keeps some or all of its records off-site EPA needs to know the address of the primary off-site storage facility.(7/1/94)

18. **Question:** Will EPA allow the electronic storage of records?

Answer: Yes, so long as reasonable access and audit controls are in place.

19. **Question:** According to the RFG and anti-dumping provisions, a regulated party must keep records for as long as 5 years. Can the original documents, such as bill of ladings, be transferred by a regulated party to micro fiche and allow the original records to be destroyed?

Answer: The regulations do not specify in what form records must be kept. A method of storage which faithfully reproduces records, like micro fiche recording, would be acceptable so long as means of referencing the information are kept on hand and operational for the entire five year retention period.(8/29/94)

20. **Question:** Has EPA issued guidelines for security and audit procedures for electronic recordkeeping systems?

Answer: No. The Agency does not plan to issue such guidelines. EPA recommends that recordkeeping systems be audited by an independent auditing firm to verify the efficacy of security and audit controls.(7/1/94)

21. **Question:** May records, regardless of whether they are paper or electronic, be stored off-site?

Answer: Yes. Refiners, oxygenate blenders and importers must indicate where records will be kept on all facility registrations.(7/1/94)

22. **Question:** Do the recordkeeping and reporting requirements for conventional gasoline under the anti-dumping provisions apply to gasoline produced in 1994?

Answer: No.(7/1/94)

23. **Question**: With regard to the record keeping requirement for test results, please clarify the document which must be kept.

Answer: Section 80.74(a)(2)(iii) requires any regulated party who samples and tests reformulated gasoline or RBOB to maintain records containing the results of the tests. The headnotes of § 80.74 specifies that the record keeping period is five years from the date a record is created. EPA believes this regulation requires that all documents that contain the results of RFG testing must be kept for five years. EPA would consider this requirement to have been met, however, where the original test result is kept, plus any record that contains results for that test that are not identical to the original test result.

Consider, for example, an RFG sample that is analyzed for oxygen by a refiner using a testing apparatus that generates a printout of the test results. In this example the laboratory chemist transfers this oxygen test result, by hand, to a laboratory summary sheet for the sample that includes test results for other parameters. This summary sheet then is used to prepare a typed report of all test results for the sample.

EPA believes that each of the three documents described in this example is a "record containing the results of" tests on RFG, and that § 80.74(a)(2)(iii) requires that each of these documents must be kept for a period of five years. However, EPA would consider the record keeping requirement to have been met if the testing apparatus printout is kept, and, in addition, any other worksheet or report that contains results for that test that differs from the testing apparatus result. (11/12/96)

24. **Question:** Are there different reporting requirements for refiners, importers and oxygenate blenders?

Answer: Yes. See § 80.75 of the regulations.(7/1/94)

25. **Question:** If a party registers a facility as a refinery, oxygenate blending facility or import facility and then does not produce or import gasoline at that facility during an averaging period, must the party report to EPA?

Answer: Refiners, importers, and oxygenate blenders are required to report to EPA only during averaging periods when the party produces or imports some volume of gasoline, even if the party has previously registered with EPA.(9/26/94)

26. **Question:** EPA has required that volumes be reported in gallons, but much of the industry measures volume in barrels. May volume be reported in barrels?

Answer: No. If necessary, convert the volume in barrels to gallons using the proper conversion factor (42 gals/bbl) and round the result to the nearest whole gallon. When rounding fractional values, values from 0.01 to 0.49 should be rounded down to the unit value and values from 0.50 to 0.99 should be rounded up to the next highest unit value.(7/1/94)

27. **Question:** What are the reports required for a refiner who produces RFG under the per gallon option?

Answer: A refiner meeting the certification standards on a per gallon basis must submit quarterly reports for every batch of reformulated gasoline and RBOB produced, as specified in § 80.75(a), and the end of year statement indicated in § 80.75(l).(7/1/94)

28. **Question:** In what form should independent laboratories report batch test results?

Answer: Independent laboratories should use the same reporting forms and EDI formats used by regulated parties for reporting on batch test results. They will not need to report designations for each batch or the results of emissions calculations.(7/1/94)

29. **Question:** How should a party producing reformulated gasoline or RBOB make the designation of per gallon or average for the appropriate fuel parameters?

Answer: If filing by paper, the party should submit the Annual Compliance Designation with its first quarter batch reports. If filing electronically, the first batch report transmitted must include the designations which will apply to each subsequent batch for that calendar year.(7/1/94)

30. **Question:** When you make the annual designation as an importer does it apply to all of your imported gasoline, or can you designate average or per gallon compliance parameters for each import facility?

Answer: Importers must use the same per gallon or average designations for all reformulated gasoline imported each year, regardless of where that reformulated gasoline is imported.(7/1/94)

31. **Question:** What is the final form of the batch identification number?

Answer: A batch ID is made up of the 4 digit company ID, 5 digit facility ID, 2 digit reporting year, and the 6 digit batch number (e.g., CCCC-FFFFF-YY-BBBBBB).(7/1/94)

32. **Question:** May the six digit batch number in the batch ID contain non-numeric characters (i.e., to mark the grade of the batch)?

Answer: No.(7/1/94)

33. **Question:** May batch numbers be used to identify petroleum products other than gasoline or gasoline blendstocks thereby causing gaps in the batch numbering sequence?

Answer: Yes.(7/1/94)

34. **Question:** Must batch numbers be assigned in both numerical and chronological order?

Answer: Batch numbers should be assigned in numerical and chronological order of production (not shipment). If a batch of gasoline must be re-blended because it is out of specification, and an independent laboratory has already sampled the batch, the resulting batch must be assigned a new ID. The volume of the original batch ID should then be reported to EPA as zero. If an independent lab has not sampled the original batch, the refiner may retain the original batch number. In either case, the refiner should ensure that records are kept on the nature of the contamination, corrective measures and original and subsequent sampling and testing.(7/1/94)

35. **Question:** If an importer registers in a PADD, may the importer use a starting point other than zero, within the range of valid batch numbers, for generating the sequential batch numbers at each of its import facilities?

Answer: Yes. As long as no batches are assigned duplicate numbers this would be acceptable.(7/1/94)

36. **Question:** A refinery places two batches of gasoline that have been sampled and certified as reformulated gasoline with the same designation into a tank. Must the refinery assign a new batch ID to the mixture or can it be identified with the two previously assigned batch IDs?

Answer: No new ID is necessary. Batches of reformulated gasoline may be fungibly mixed, subject to the segregation provisions of § 80.78.(7/1/94)

37. **Question:** Are multiple shipments from the same tank multiple batches?

Answer: If a volume of gasoline is placed in a tank, certified (if not previously certified), and is not changed in some way it is considered to be the same batch of gasoline even if several shipments are made from that tank. The volume of the batch for RFG accounting and reporting purposes is the sum of all shipments.(7/1/94)

38. **Question:** Will each compartment of a truck loaded at the rack at the refinery be deemed a different batch of reformulated gasoline and thus need a batch identification number? Could the invoice number serve as the unique identification number for that shipment?

Answer: In the case of reformulated gasoline produced by adding oxygenate to RBOB in a truck, each truck compartment is a separate batch of reformulated gasoline. If the oxygen standard is being met on average, the reformulated gasoline in each compartment must be given a different batch number. If a volume of reformulated gasoline is certified and designated as a batch and then loaded into a truck, multiple compartments could be filled with gasoline from that batch.

The invoice number may only be used for the batch number if it is six digits in length, unique for each batch produced in a year for each truck blender and generated in chronological and numerical order of production of the batch. Non-numeric characters are not allowed in the batch number.(7/1/94)

39. **Question:** Refiners and oxygenate blenders who produce averaged reformulated gasoline must report which covered areas products have been distributed to by each facility. How are these areas to be determined?

Answer: Unless a refiner or oxygenate blender has specific and detailed information indicating otherwise, it must be assumed that products have been delivered to all covered areas serviced by the distribution system(s) used. A list of covered areas as of July 1, 1994 is attached to this document. (For a more detailed discussion of fungibility and covered areas see the responses to Survey questions in this document.)(7/1/94)

40. **Question:** What is the definition of a responsible corporate officer (RCO) who is required to certify some of the submissions involved?

Answer: Under § 80.75(n), reports to EPA must be signed and certified as correct by the owner or a responsible corporate officer of the refiner, importer, or oxygenate blender. "Owner" means the person who is the principal owner of the business. The "responsible corporate officer" means a person who is an officer of the corporation under the laws of incorporation of the state in which the company is incorporated, and who in the corporate structure is the person ultimately responsible for the refining, importing, or oxygenate blending activity. EPA will accept reports that are signed by someone to whom the responsibility is delegated by the owner or an officer of the corporation, provided that the delegation is made in writing, the delegatee is familiar with the RFG and anti-dumping requirements, and the delegatee is no lower in the organization than refinery manager in the case of refiners, manager of the oxygenate blending facility in the case of oxygenate blenders, vice-president in charge of importing activities in the case of importers, or a similar level position.(7/1/94)

41. **Question:** Should batch reports for blended gasoline be submitted by the facility at which gasoline is blended or the facility from which the blended gasoline is shipped?

Answer: The facility where blending occurs.(7/1/94)

42. **Question:** When are NOx Emissions Performance Averaging Reports due?

Answer: With the fourth quarter submissions.(7/1/94)

43. **Question:** How will EDI agreements affect third parties?

Answer: An EDI agreement will be binding only on the Agency and the cosigner of the agreement.(7/1/94)

44. **Question:** The draft version (4/12/94) of the Batch Report for the Reformulated Gasoline and Anti-Dumping Program calls for reporting the oxygen content in weight (mass) percent and oxygenates by volume percent. Both the Simple and Complex models require oxygenate input as percent weight oxygen for compliance calculations. What value does EPA place on reporting oxygenates as volume percent?

Answer: The regulations require that oxygenate content (not oxygen content) of each oxygenate be measured and reported for each batch of gasoline (see §80.65(e)). The oxygenate content measured by a refiner or importer must match that measured by an independent laboratory within a certain volume percent range as per §80.65(e)(2)(i). Since the units specified by §80.65(e)(2)(i) are volume percent there is no choice but to report oxygenate content in those units.(8/29/94)

45. **Question:** Will the EPA accept a mathematical conversion of the oxygen content (weight percent) for each oxygenate to a volume percentage of oxygenate for reporting purposes? Alternately, does EPA expect each refiner or importer to report volume percent as determined by laboratory GC analysis? Close agreement between the two alternatives would clearly be expected; however, minor differences might exist due to conversion factors, etc. Please clarify.

Answer: EPA will accept mathematical conversions from weight percent oxygen from an oxygenate to volume percent oxygenate using the following formula. Refiners, importers and oxygenate blenders must use the method described in §80.46(g) (GC-OFID) to determine the weight percent oxygen from each oxygenate.

$$V_o = \frac{141.5 * W_o}{\rho_o * O_o * (°API + 131.5)}$$

Where: V_o = volume percent oxygenate
W_o = weight percent oxygen in blend from oxygenate
ρ_o = density of oxygenate (g/ml)
O_o = molar weight fraction oxygen in oxygenate

The following densities and weight fractions of oxygen should be used for these calculations:

Oxygenate	Density at 60 °F (gm/ml)	Weight fraction oxygen
ethanol	0.7939	0.3473
ethyl t-butyl ether (ETBE)	0.7452	0.1566
ethyl t-amyl ether (ETAE)	0.7657*	0.1376
methanol	0.7963	0.4993
methyl t-butyl ether (MTBE)	0.7460	0.1815
t-amyl methyl ether (TAME)	0.7752	0.1566
diisopropyl ether (DIPE)	0.7300	0.1566
t-butyl alcohol	0.7922	0.2158
n-propanol	0.8080	0.2662

* This density is at 20 °C.

(9/26/94)

46. **Question:** We assume that a terminal operator who stores gasoline for a terminalling customer is responsible for receiving transfer documentation on RFG and conventional gas moved into the terminal for the customer. The terminal then records and stores copies of the transfer documents, produces a new transfer document at the time of the transfer out of the terminal, and passes this document back to the customer after the move out.

The transfer documents for RFG require only minimum/maximum standards for benzene, oxygen, RVP, etc., rather than actual measurement of these specifications. Since the regulations require refiners and importers to report actual measurement of specs, we are assuming that a terminal does not have to report to the EPA the information on the transfer documents. Is this a correct assumption?

Answer: Yes.(9/12/94)

47. **Question:** By our reading of the regulations, the only reporting required of the oxygenate blender who elects to comply with the oxygen standard on a per gallon basis is a yearly report due the last day of February of each year (beginning in 1996) that states the total volume of RFG produced along with the certification statement. Is our interpretation correct? Are we correct in assuming that batch numbers and individual batch data are not required as part of the report?

Answer: Your interpretation is correct.(10/31/94)

48. **Question:** Regarding a batch for which the blend completion date is on the last day of the EPA reporting quarter, what if shipments, as EPA defines them, are not complete by the time reporting for that quarter is required? Is there going to be any facility to allow a reporter to carry over batches to the next period if the shipments would extend near the reporting deadline?

Answer: Sections 80.65(c) and 80.101(d)(1) require refiners to include in compliance calculations each batch of gasoline that is "produced." As a result, a batch of gasoline should be included in the averaging period when the batch is produced, rather than when the batch is shipped from the refinery. EPA believes that a reasonable interpretation of when a batch is finished being "produced" is the point when the sample is collected which will form the basis for certification of the batch, or in the case of RFG, the point when the batch sample is collected by the independent lab. Even if an RFG batch later is found to be off-spec and corrected before the batch leaves the refinery, the original batch number remains valid, but with a volume of zero (see the answer to Question 3, Section VII.E., in the July 1, 1994 Question and Answer Document.)

Thus, if a refiner combines blendstocks to produce a batch of gasoline and collects the certification sample at 11 PM on December 31, 1995, that batch would be included in the 1995 compliance calculations even though the sample is not analyzed or the gasoline moved from the blending tank until 1996. The volume of the batch would be the volume moved from the blend tank, however, which may not be known until some point in 1996. EPA believes it is likely a party always will know the batch volume by the time reports are due, because batch reports are not due to be filed with EPA until about sixty days following the end of each quarter. In the unlikely event that the gasoline is not moved from the blend tank before the report is due, the refiner should include a batch report based on the volume determined by the independent laboratory. An amended report may be filed subsequent to filing the report for the quarter in which the batch was produced to report the actual shipped volume.

In the case of an in-line blended batch, the batch should be included in the averaging period which encompasses the date and time of the ending point for the batch, because the certification sample will not be fully collected until that point.(11/28/94)

49. **Question:** Question 14, Section VI.C., of the July 1, 1994 Question and Answer Document provides an example of the creation and addition of two different batches to form a composite mixture. All or a portion of this composite is shipped as RFG. How will the refinery account for this shipment under recordkeeping and averaging requirements (assuming the refinery is averaging), based on the scenario outlined in Question 14?

Answer: Question 14 relates to in-line blending operations that have petitioned EPA for and received an exemption from the independent sampling and testing requirements of the RFG regulations. In such petitions, refiners often define a "batch" of in-line blended gasoline as the volume of gasoline blended by the operation through the blender. The gasoline is then certified by the refiner based on the volume that has been sampled by an automated compositor for testing. Once it is certified, this product can then be pumped directly into a pipeline or into a tank for

storage. At this point, it is fungible with other similar product. Accordingly, the batch volume that the refinery accounts for under the recordkeeping requirements and for purposes of averaging is the volume of product that is certified before the product goes into the pipeline or is stored in a storage tank where it may be fungibly mixed.(11/28/94)

50. **Question:** Should actual measured values be used for compliance calculations even when they are below those negligible limit values used in the baseline? For example, if a sulfur content of 10 ppm is measured in a batch of finished gasoline, should 10 ppm be used for compliance calculations instead of 30 ppm?

Answer: The measured values must be reported on the batch reports and used for compliance calculations. (4/18/95)

51. **Question:** When reporting compliance parameters to EPA on the batch reports we are asked to report to a greater degree of precision than the regulations indicate for the standard. An example would be that the per-gallon oxygen content standard is supposed to be 2.0 weight percent. The EPA form asks for two places to the right of the decimal. Would we still be in compliance for the oxygen content if the reported value was 1.95 weight percent?

Answer: You would be in compliance for the example described above. In order to determine compliance EPA will round all values to the appropriate decimal place for the applicable standard. If the digit immediately to the right of the last appropriate decimal place for the standard is 5 to 9 the digit at that decimal place will be rounded up (1.95 will be rounded to 2.0.) If the digit immediately to the right of the appropriate decimal place for the standard is 0 to 4 the value should be truncated (rounded down) at the appropriate decimal place (1.94 will be rounded to 1.9.). (5/9/95)

52. **Question:** The batch report requires reporting the volume percent for six oxygenates -- methanol, MTBE, ethanol, ETBE, TAME and t-butanol. If a refiner or oxygenate blender uses MTBE or ethanol as an oxygenate, and does not include in its calculation of oxygen weight percent any other oxygenates that may be present in the MTBE or ethanol, is it necessary to include the volume percent of those other oxygenates on the batch report form?

Answer: Trace amounts of oxygenates that may be present in MTBE or ethanol do not have to be reported. However, where a refiner reports total oxygen weight percent that includes MTBE or ethanol plus other oxygenates in larger than trace amounts, the volume percent of each of the other oxygenate should be included on the batch report. (8/15/95)

53. **Question:** What will constitute a valid electronic signature for electronic submission of reports to EPA?

Answer: EPA will require that each party who wants to report electronically must sign an agreement that the use of electronic reporting methods will be considered equivalent to paper methods and that personal identification numbers assigned by EPA will be recognized as constituting a valid signature. In addition, each transmission sent to EPA must have embedded in it two personal identification numbers (PINs), one assigned to the company and one assigned to the individual certifying the report.(7/1/94)

54. **Question:** Please clarify what the transaction set control number and report number on the batch report and other EDI maps are. Please detail their specific uses, especially with respect to resubmission of reports. Are these numbers unique on a company or facility basis?

Answer: The transaction set control number (ST02) is a serial or sequential number representing the transmission sequence to EPA. The report number (BTR05) is the sender's own tracking system number which refers the sender back to his own original record.

A previous BTR05 should be inserted to BTR06 when the report is a resubmission; i.e., when BTR01 = 15.

These numbers need not be unique on a company or facility basis. (8/15/95)

55. **Question:** On the batch report map, there is an extra asterisk on the end of line 140 of table 1. Is this a mistake?

Answer: The extra asterisk on the end of line 140 has been corrected in the revised edition of the report. (8/15/95)

56. **Question:** Regarding EDI transmission, a one day response as functional acknowledgment is preferable to five day response time. Why can't EPA commit to provide a one day response?

Answer: EPA will endeavor to provide functional acknowledgments as soon as possible, but no later than five days from receipt of an EDI transmission. The five day time frame was intended to reflect a "worst case" scenario given current resource and other constraints. However, we are still in the first year, "pilot" stage of accepting RFG and anti-dumping reports via EDI and will consider shortening the functional acknowledgment time frame to one day or some other reasonable time period. (3/19/96)

57. **Question:** If we send a report via EDI prior to the reporting deadline, the reporting deadline passes, and then (i.e. after the deadline has passed, but still within the five days EPA has allowed for its functional acknowledgment) EPA sends a functional acknowledgment, can we still be fined if there is something wrong with the file?

Answer: Nothing in the Terms & Conditions Memorandum relieves a party of the requirement to submit timely RFG and anti-dumping reports. However, the reporting party has agreed to maintain records and archives of reports sent via EDI and to resend the transmission within five days if so requested by EPA. Although this does not relieve any reporting party of the requirement to submit a timely report, it acknowledges that a timely report submitted in good faith via EDI may nevertheless have become unintentionally garbled in its transmission and allows the reporting party a reasonable amount of time to send a proper transmission. (3/19/96)

58. **Question:** If re-transmission is necessary due to fault on EPA's part, why won't EPA pay for re-transmission?

Answer: EPA will take all reasonable steps to properly maintain equipment, services, and testing necessary to effectively and reliably send and receive documents via EDI. Although EPA is unable to pay for re-transmission costs, we will exercise the highest degree of care to minimize any error at our end. (3/19/96)

59. **Question:** Further clarification is needed in the Terms & Conditions Memorandum regarding the 'receipt computer.' Specifically, EPA should specify receipt date and time for documents transmitted directly and via a VAN service provider.

Answer: EPA is currently using a VAN. A document is considered received on the date and time that it becomes accessible to EPA at EPA's VAN. (If a document were transmitted directly to EPA, then the document would be received on the date and time that it becomes accessible to EPA at EPA's receipt computer.) This clarification will be included in a future revision to the RFG and Anti-Dumping Program EDI Technical Guidelines. (3/19/96)

60. **Question:** Refiners, importers and oxygenate blenders of California gasoline that have elected to meet any benzene content, oxygen content or toxics emission reduction standard on average for reformulated gasoline produced through February 29, 1996, must submit reports demonstrating compliance for the 1995 reporting year (any reformulated gasoline produced during 1994 and from January 1, 1995 through December 31, 1995) and for the period from March 1, 1995 through February 29, 1996 (see section 80.81(b)(3)). What value should be put in the reports for the
latter averaging period under "reporting year"?

Answer: The value "56" should be placed in the reporting year field for reports covering the averaging period from March 1, 1995, through February 29, 1996.(5/30/96)

I. Product Transfer Documentation

1. **Question:** Where are the product transfer documents requirements found in the RFG regulations and what do they require?

Answer: The product transfer documents (PTD) requirements are found in § 80.77 of the regulations for reformulated gasoline and RBOB and in § 80.106 for conventional gasoline. These sections require that on each occasion when any person transfers title or custody of any gasoline (with the exception of gasoline sold or dispensed at a retail outlet or wholesale purchaser-consumer for use in motor vehicles), the transferor must provide to the transferee the specific information pertaining to the fuel required in the product transfer document sections.

The PTD requirements are not intended to require the creation of any new documentation in most situations. Instead, these requirements intend that parties include the PTD information in the documentation currently used to memorialize the transfer of title or custody of gasoline.(7/1/94)

2. **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.(11/21/94)

3. **Question:** § 80.77 of the proposed rule included conventional gasoline in the requirement for product transfer documents. This section, in the final rule, now excludes conventional gasoline and includes that product in § 80.106. This latter section however, states that it applies only "to product that becomes gasoline upon the addition of oxygenate only." Is it correct to interpret that, except for gasoline that has had an oxygenate added, conventional gasoline transfers do not require PTD's to be in compliance?

Answer: No. All conventional gasoline, including blendstock that requires the addition of oxygenate only, must meet the product transfer document requirements in § 80.106.(7/1/94)

4. **Question:** Unlike the PTD requirements for RFG and RBOB contained in § 80.77, the PTD requirements for conventional gasoline contained in § 80.106 do not indicate that PTD's are not required when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or

wholesale purchaser-consumer facility. Does this mean that retail stations that provide conventional gasoline must provide PTD's to their customers?

Answer: PTD's are not required when conventional gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility. EPA intends to amend the regulations to reflect this.(10/17/94)

5. **Question:** Do PTDs have to accompany gasoline going to customers who receive the product in containers of less than 550 gallons, since these customers are technically not wholesale purchaser-consumers under the regulations?

Answer: Section 80.77 provides that on each occasion when any person transfers custody or title to any RFG or RBOB, other than when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility, the transferor must provide PTDs to the transferee. Section 80.106 of the anti-dumping regulations similarly provides that parties must provide PTDs for the transfer of conventional gasoline. Under the PTD provisions, retailers are not required to provide PTDs to their customers when they dispense gasoline into the customers' motor vehicles, and wholesale purchaser-consumers are not required to provide PTDs to their drivers when gasoline is dispensed into the wholesale purchaser-consumer's vehicles. However, all other parties, including all distributors, are required to provide PTDs to the transferees of the gasoline they distribute. Consequently, any distributor who delivers gasoline to a customer's storage tank, even if the tank is less than a 550 gallon size (and the customer is not a wholesale purchaser-consumer under the regulations), is required to provide PTDs to the transferee. See also the replacement answer to Question 22, Section VI.A., of the July 1, 1994 Question and Answer Document below, which discusses that RFG must be dispensed to all consumers in RFG covered areas.(12/5/94)

6. **Question:** Are distributors who deliver conventional gasoline to retailers and wholesale purchaser-consumers in non-RFG areas required to fulfill the PTD requirements, including the statement in § 80.106(a)(1)(vii)? Do retailers and wholesale purchaser-consumers in non-RFG areas have to retain records?

Answer: The PTD requirements of § 80.106 apply to all distributors of conventional gasoline. However, because the PTD requirements are of little value concerning the delivery of conventional gasoline to a retailer or wholesale purchaser-consumer (or smaller purchaser with a tank of less than 500 gallons) in a non-RFG area, EPA will not require compliance with the PTD requirements in this limited situation. The PTD requirements of § 80.106, however, must be met for all other transfers of conventional gasoline. Note that the PTD requirements of § 80.77 for RFG and RBOB apply to <u>all</u> transfers of RFG and RBOB (other than when the gasoline is sold or dispensed by a retail outlet or wholesale purchaser-consumer facility for use in motor vehicles), including transfers in which RFG or RBOB is delivered to a customer's storage tank, regardless of the size of the tank.

The anti-dumping regulations do not impose recordkeeping requirements for conventional gasoline on parties downstream of the refiner or importer. See § 80.104. All parties in the distribution network must maintain records for RFG and RBOB in accordance with § 80.74, however. (2/21/95)

7. **Question:** The regulations state that, "other than when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility," transfer documents must be exchanged with the requisite information. In many areas of the country, the petroleum industry is using cardlocks, unmanned fueling facilities, to dispense gasoline into motor vehicles. These cardlocks provide access to fleet operators via an electronic card, which is also used to access the pumps. The pumps transmit an electronic message regarding the purchase and the customer is invoiced. There is no opportunity for the delivery of written paper at the time of purchase. In EPA's judgment, are these cardlock facilities considered retail outlets?

Answer: As you describe them, these cardlock facilities would be considered retail outlets for purposes of the product transfer document requirements.(10/31/94)

8. **Question:** Outstanding gasoline exchange balances are commonly closed out between trading partners on an accounting basis because they are too small for an economic physical shipment. These "book transfers" do not in themselves cause the transportation or storage of product. Is it correct to assume that these activities are not subject to a requirement for PTD's?

Answer: The PTD requirements refer only to the transferring of custody or title of any reformulated gasoline, RBOB, or conventional gasoline. If these "book transfers" involve the transferring of custody or title of such fuels then the PTD requirements would be applicable. The PTD information could be included on whatever documents are currently being used to memorialize these transactions for business reasons.(7/1/94)

9. **Question:** Would the following scenario require product transfer documents?

At the end of a month of gasoline transactions, the following shortages apply:

Company A owes 10,000 barrels of product to company B
Company B owes 10,000 barrels of product to company C
Company C owes 10,000 barrels of product to company A

Instead of physically shipping any fuel the companies just correct their books to show everything is even.

Answer: EPA would not consider this a transfer of either custody or title since no actual gasoline is represented by these "book transfers"; however, PTD's must be provided where there is a transfer of title or custody of any volume of actual product (RFG, RBOB or conventional gasoline).(12/5/94)

10. **Question:** If the oxygenate program remains in effect in California after CARB fuel in 1996, would we still need to identify the type and amount of oxygenate to meet the oxygenated program transfer document requirements? or will we be exempt for these record keeping/transfer document requirements?

Answer: With regard to RFG product transfer documentation requirements as applied to California gasoline, § 80.81(c)(9) of the regulations exempts California gasoline (as defined in § 80.81(a)(2)) produced or imported subsequent to March 1, 1996 from the product transfer documentation requirements contained in § 80.77 of the regulations. The wintertime oxygenated program transfer documents are a state of California requirement, EPA exempts California gasoline from the federal RFG PTD requirements but not from state required documents.(7/1/94)

11. **Question:** On the island of Puerto Rico there is no opportunity for transporting a conventional gasoline to an area requiring reformulated gasoline except by ship or barge. Can the PTD and record keeping requirements downstream of the refiners and importers be eliminated in this instance?

Answer: No. All PTD and record keeping requirements apply to the Island of Puerto Rico. The most appropriate way to comply with the PTD requirements is to include the information required by § 80.77 and § 80.106 on documents that are currently being used to memorialize these transactions.(7/1/94)

12. **Question:** EPA has stated that the transferor "must provide to the transferee... product transfer documents." On an import the transferor is a foreign entity presumably not subject to our laws. How do we ensure that the foreign refiner provides all information? As importers are we to generate it ourselves?

Answer: Foreign refiner are not subject to the PTD requirements, unless they are also importers. Importers are required to provide PTD information to all parties to whom they transfer title or custody of RFG, RBOB or Conventional gasoline.(8/29/94)

13. **Question:** Will the EPA provide gasoline transfer document forms?

Answer: No.(7/1/94)

14. **Question:** Is there a required format for the wording of the certification for RFG? If not, is there a re ommended or suggested format for certification in the PTD's, for downstream parties?

Answer: No, to both questions. Section 80.106(a)(1)(vii) does specify certain language for conventional gasoline. (7/1/94)

15. **Question:** One pipeline has notified all shippers and suppliers that their metering ticket will be the official transfer document for all shipments. This appears to be appropriate for a transfer whereby the pipeline is delivering (or transferring custody to a party) but how can it be appropriate when the pipeline is receiving (or being the transferee) product from a shipper? Isn't the shipper required to provide its own document? Or can we rely on the pipeline's ticket which memorializes the transaction?

Answer: EPA does not require that there be an "official" transfer document. While the approach described in the question seems appropriate, the enforcement liability still remains with the transferor. As a result, the transferor should verify that the transferee receives all the PTD information for each batch.(8/29/94)

16. **Question:** We are a domestic refiner who also will be importing (paying customs duties) conventional and reformulated gasoline into our own marketing terminal. It is our understanding that we would be the transferor, not the foreign refiner from whom the product was obtained. If we were importing into another party's terminal, the PTD would have to show them as receiving the product (transferee).

EPA reiterated they expect that most, if not all, of the PTD information would be included on existing type documents. New documents would only be required when there is no existing paper path with the necessary EPA information to follow product movements. If the necessary PTD information is included on the foreign refiner's transfer papers, is it necessary to originate another document since we are the first U.S. party involved in the transfer.

Answer: The foreign refiner's paperwork would satisfy the PTD requirements if you provide it to the transferee and it includes all of the required PTD information, including the proper date and location of the transfer. (10/31/94)

17. **Question:** Is EPA documentation necessary to settle inventory over/short accounts where the volume of gasoline involved is de minimis? If so, what are the parties documenting?

Answer: PTD information is only required when there is a transfer of title or custody of any gasoline (with the exception of gasoline sold or dispensed at a retail outlet or wholesale purchaser-consumer for use in motor vehicles). As a result, PTD information is not required

where no product custody exists, and no transfer of title occurs, provided that the volume of gasoline is de minimis in relation to the volume of gasoline involved in the parties' overall transactions.(9/26/94)

18. **Question:** Where a reformulated gasoline is injected into a "closed" proprietary pipeline, shipped to a "closed" proprietary marketing terminal and loaded into a proprietary truck and no other refiner can physically deliver or receive at these points, is it required to provide PTD's at each of these transfer points?

Answer: The regulations require PTD's on each occasion when any person transfers custody or title of RFG, RBOB or conventional gasoline and conventional gasoline blendstock requiring the addition of oxygenate only. When the custody of gasoline changes within a proprietary distribution system the documents that are currently being used to memorialize the gasoline movement should contain the information specified for PTD's.(7/1/94)

19. **Question:** § 80.77 and § 80.106 states that product transfer documentation must be provided on each occasion when any person transfers custody or title of reformulated gasoline, RBOB or conventional gasoline. It is a common practice for a party to purchase or take title to gasoline but not take physical custody of the product. As an example, a party may buy product (and take title) in a tank and then take physical custody at a later time. Does EPA require that PTD's be provided when title changes or when the receiving party takes physical custody? What if separate parties are taking receipt of the title and the custody?

Answer: The regulations require PTD's on each occasion when any person transfers custody or title of RFG, RBOB or conventional gasoline. Whatever documents (hardcopy or electronic) that are currently utilized for business purposes to memorialize the transaction should be annotated with the PTD information. If the transferee already has received a PTD from a transferor, for a particular delivery of gasoline due to a difference in the time between the change of custody and the change of title, EPA would not require the transferor to provide the transferee with another PTD unless there has been a modification or correction in the information provided on the first PTD between the time of the custody change and the title change. If one party is given title to a particular volume of gasoline and another party is given custody, the transferor should provide an appropriate PTD to each transferee.(7/1/94)

20. **Question:** What, specifically, are the minimum and/or maximum standards required on product transfer documents for benzene, oxygen, and RVP using the simple model?

Answer: As per § 80.77 of the regulations, the PTD's for simple model RFG need to contain the following min/max's.

	Averaged Standards
Benzene	1.3 vol% per gal max.
Oxygen	1.5 wt% per gal min.
	2.7 wt% per gal max. (VOC Controlled)
	3.5 wt% per gal max. (Non-VOC-Controlled)
RVP	7.4 psi per gallon max., VOC Control Region 1
	8.3 psi per gallon max., VOC Control Region 2

PTD's for simple model RFG designated as VOC-controlled must include the minimums and maximums for oxygen, the maximums for benzene and RVP. For simple model RFG not designated as VOC-controlled, the PTD must include the minimum and maximum for oxygen and the maximum for benzene. If a refinery is subject to a ratchet as a result of a survey failure, the min/maxs on the PTDs should reflect the adjusted standard. In the case of RBOB, product transfer documents will not show the minimum or maximum standard for oxygen, but must specify the amount and type of oxygenate which the RBOB requires in order to meet the properties claimed by the refiner or importer of the RBOB.(8/29/94)

21. **Question:** 80.77(d) requires that transfer documentation include "the location of the gasoline at the time of the transfer." Does this mean the physical address of the transferring facility?

Answer: Yes.(7/1/94)

22. **Question:** Section 80.77(d) requires the PTD to provide "the location of the gasoline at the time of the transfer." In a situation where the transferor is a truck carrier, what does the term "location" refer to?

Answer: For the PTD transferred from the terminal to the truck carrier, "the location of the gasoline at the time of the transfer" would be the terminal. For the PTD transferred from the truck carrier to the next party in the distribution chain, the location would be the retail outlet or other location where the gasoline is off-loaded from the truck.(12/5/94)

23. **Question:** Where is it required in the regulations that the PTD's for RFG must designate the finished gasoline as meeting the oxygenate standard on the per-gallon or average? Would it not be sufficient to infer the average standards from the listings of min/max's on the PTD? This requirement is not found in § 80.77.

Answer: The PTD requirements for RFG do not require that gasoline be designated as meeting the standards, including the oxygenate standard, per-gallon or average. Section 80.77 does require that PTD information include the minimum and maximum downstream standards with which the RFG complies. The downstream standards are the same regardless of whether the RFG has been certified as meeting standards per-gallon or on average. The downstream minimum/maximum

standards must be included in the PTD information because these standards are subject to change with regard to specific covered areas in the event of a standard "rachet" as a result of a gasoline quality survey failure under § 80.68.(10/17/94)

24. **Question:** The transfer document requirements state that the name and address of the transferor and transferee be present. When other oil partners, exchangers, are picking up product, will the address of the company headquarters be sufficient since EPA will still be able to trace the path of title and custody to the fuel. In addition, when jobbers pick up product we will have multiple account numbers for one main jobbership. These individual accounts do not contain the address of the jobbership. Is it sufficient that we provide the business name of the jobbership on the transfer document? If the address is later required we could provide it from our internal computer record.

Answer: Yes, the headquarters address of the transferee would be acceptable. When jobbers pick up gasoline they are the transferees in the transaction and the regulations specifically require that an address for all transferees be included on the product transfer documents.(7/1/94)

25. **Question**: We understand it is not necessary to use the words "transferor" and "transferee" on PTD's as long as the parties giving and receiving custody/title are identified. Our concern was with the carrier receiving custody from a marketing terminal and then passing it on to another party. This makes him a transferee and then a transferor. The concern was having the carrier alter the bill of lading to reflect this change. We understand that as long as we show the name and address of the carrier (or show a carrier identification number that is directly related to the carrier's address) on the PTD and also show the party to whom the product is being shipped, we have sufficient information to satisfy the obligation for us as well as the carrier. Please confirm that this is a correct interpretation.

Answer: Your interpretation is correct. If the paperwork properly reflects the chain of custody through the carrier and shows the proper dates and locations for the different transfers, you have met the PTD requirements with regard to the transfer of custody and the carrier can use the same document to meet his PTD requirements. There normally would be additional PTD requirements concerning the transfer of title, however, because by definition a party other than the carrier has title.(10/31/94)

26. **Question:** What information needs to be included on RBOB product transfer documents? Is any information about min/max's required?

Answer: The PTD requirements pertaining to RBOB can be found in § 80.77. They include the type of RBOB and the type and amount of oxygenate to be added as well as the min/max's for benzene and RVP, for VOC controlled RBOB only.(7/1/94)

27. **Question:** Assuming that an RBOB refiner elects to use "worst case" oxygenate blending assumptions in complying with the RFG regulations, is there any special information that the product transfer documents must include other than the requirements set out in § 80.77 of the regulations?

Answer: No, all the product transfer documentation requirements for RBOB are located in § 80.77 of the regulations.(8/29/94)

28. **Question:** Are the min/maxs that are required on the PTD's for RBOB, intended to address the pre-oxygenate blended RBOB or the post-oxygenate blended RBOB?

Answer: The post-oxygenate blended RBOB.(7/1/94)

29. **Question:** EPA has indicated that a batch of RFG should be certified based on the volume shipped out of the refinery from the blending tank. However, where a blend is transferred to a storage tank after blending, the batch may be certified based on the volume transferred from the blending tank to the storage tank. In the latter instance, if an amount of gasoline that is different from the certified batch volume is then shipped out of the refinery from the storage tank, should the volume that is actually shipped out be included on the PTDs?

Answer: Yes. (5/9/95)

30. **Question:** Must the "specific language required," i.e., statement regarding conventional gasoline, be put on terminal truck Bills of Lading?

Answer: Section § 80.106(a)(1) states that on each occasion "when any person transfers custody or title to any conventional gasoline," the transferor must provide to the transferee documents which include the statement contained in § 80.106(a)(1)(vii). Accordingly, the statement must be contained in either the bill of lading or some other document that the terminal provides to the truck carrier.(9/12/94)

31. **Question:** Where is it required in the regulations that the RFG must be designated as summer or winter gasoline on the PTD's? For conventional gasoline? This requirement is not found in either 80.77 or 80.106.

Answer: While there is no requirement to list if RFG is "Summer" or "Winter" gasoline in the PTD requirements for RFG, 80.77 does require that RFG or RBOB be identified as VOC-Controlled for VOC-Control region 1 or VOC-Controlled for VOC-Control region 2 or Not-VOC-

Controlled in the product transfer documents. The appropriate minimum/maximum's are also required to be listed. There is no similar requirements for Conventional gasoline in 80.106.(10/3/94)

32. **Question**: In the case of an integrated company, which is registered as a refiner (we have a company number and four specific numbers for our four refineries that are registered), must our registration number appear on all product transfer documents where some part of our company is a transferor or transferee or only when the specific facilities that are registered are involved in the transaction. Our understanding is that when, for example, we transfer product from one of our marketing terminals (which is not registered as a refiner, importer or oxygenate blender) to a retail gasoline station (also not registered as a refiner, importer or oxygenate blender) that we would not be required to show our EPA registration number on the transfer document; we would only be required to show it when one of our four registered refinery locations was involved in the transfer. Is this correct?

Answer: Sections 80.77(j) and 80.106(a)(1)(vi) require, in the case of transferors or transferees who are refiners, importers or oxygenate blenders, that the EPA assigned registration numbers of those persons be included on the PTDs. EPA has received various comments from industry indicating that parties have encountered difficulties in complying with this requirement, particularly in certain situations downstream of the refiner/importer/blender. EPA also now believes this requirement has only limited value as a means of identifying and tracking the gasoline. As a result, EPA will not require compliance with the requirement that EPA assigned registration numbers be included on PTDs. EPA will address deleting §§ 80.77(j) and 80.106(a)(1)(vi) in a subsequent rulemaking. (2/21/95)

33. **Question:** EPA has stated that product codes would satisfy the product transfer documentation requirements if each downstream party is given the information necessary to know the meaning of the product codes. Please explain how this should be done.

Answer: EPA believes that parties normally are able to meet the product transfer requirements by including the required information in the documents that the parties currently use to memorialize the transfer of title or custody of the gasoline. Therefore, as indicated in the July 1, 1994 "Reformulated Gasoline and Anti-Dumping Questions and Answers" document (Section VI.I., Question 2), product codes that are currently used by parties may be used to fulfill the product transfer documentation requirements, provided that: 1) they include all of the information required by the regulations; 2) they are standardized throughout the distribution system in which they are used; and 3) downstream parties (transferees) are given sufficient information to know the full meaning of the codes. EPA does not require or prescribe any specific means for giving downstream parties sufficient information to know the meaning of the product codes. However, the transferor remains liable if in a given case a transferee has not received adequate information to understand the product codes.(9/26/94)

34. **Question:** EPA has stated that "product codes may never be used to meet the requirements for specific language regarding conventional gasoline." We believe that some pipeline companies have published conventional gasoline specifications with the required statement "This product does not meet the requirements..." with the intent that use of that product's code in the batch designation will meet the product transfer document requirements. Will the EPA accept this?

Answer: No, the specific language regarding conventional gasoline at § 80.106(a)(1)(vi) and certain conventional blendstocks at § 80.106(b), can not be included only in product codes. The actual statements must be included in the product transfer documentation.(8/29/94)

35. **Question:** Would it be permissible to send a manual to downstream parties detailing the minimum and maximum values and requirements of each standardized product code (including different product codes for the difference minimum and maximum standards that would apply in the event of "ratcheted" standards), provided that the actual pipeline ticket contained all the verbiage required by § 80.106(a)(1)(vi) for conventional gasoline and § 80.106(b) for blendstock?

Answer: It would be permissible to use codes to represent all required PTD information except for the statements required under § 80.106(a)(1)(vii) and (b) for conventional gasoline and certain conventional blendstocks. The response to Question 4 of the Product Transfer Document section in the August 29, 1994 Question & Answer document is intended to specify that codes may not be used as a substitute for the language required by these sections. But see the updated answer to Question 2, Section VI.I., of the July 1, 1994 Question and Answer document below, regarding the use of product codes where the information is transferred electronically using electronic data interchange (EDI) for transfers of title.(10/17/94)

36. **Question:** Will product codes, such as are currently in use by pipelines, or fuel descriptions (simple, complex, RBOB), in place of minimums and maximums, be sufficient for compliance with the product transfer document requirements?

Answer: The use of product codes would satisfy the product transfer document requirements of §§ 80.77 and 80.106, provided that: 1) these codes reflect all the information required in these sections, including the applicable minimum and maximum standards; 2) these codes are standardized throughout the distribution system in which they are used; and 3) each downstream party is given sufficient information to know the full meaning of the product codes. In the case of a violation where a downstream party has not, in fact, been given the information necessary to know the meaning of the product codes, the product transfer document requirements of §§ 80.77 and 80.106 will not have been met.

A party may use product codes in the manner described to meet some of the transfer document requirements, and use plain English notations to meet other requirements.

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 information, the specific language regarding conventional gasoline at § 80.106(a)(1)(vi), and regarding certain blendstock at § 80.106(b), may be reflected as product codes and need not be recited verbatim. In all other cases, however, product codes may not be used to meet the requirements for specific language under §§ 80.106(a)(1(vi) and (b).(10/17/94)

37. **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 rational?

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 VI.I., of the July 1, 1994 Question and Answer Document.(11/21/94)

38. **Question:** EPA has 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.(11/21/94)

39. **Question:** Would it be acceptable to provide all required product transfer document information on the bill-of-lading, including the transferee's name, except for the transferee's address, provided that the address is included on a follow-up invoice?

Answer: As long as all product transfer documentation information is provided to the transferee, either prior to, during or immediately following the transfer of title or custody of the gasoline, the PTD requirements are met. As a result, it would be acceptable to provide all PTD information, including the transferee's name, on a truck bill-of-lading, with the transferee's address included on a follow-up invoice.(9/26/94)

40. **Question:** Section 80.77 states that product transfer documents should include the name and address of the transferor and transferee. In the interest of keeping the PTD's as a single document, would it be permissible to retain the addresses of the transferees in a permanent file and not print them on the PTD's? We believe it would be in the best interest of the EPA and the industry to maintain all PTD information within a single document and the addition of the addresses may make it difficult to meet both EPA and Department of Transportation requirements on a single page.

Answer: Under § 80.77(a) and (b), the product transfer documents for each transfer of title or custody must include both the name and address of the transferor and the transferee. However, EPA will consider this requirement to be met in a case where only the names of the transferor and/or the transferee are listed in the documents that are provided at the time of the transfer of title or custody, provided:

1) The normal business practice of the parties is to list only the names of the transferor and/or the transferee;

2) Both the transferor and the transferee know and have records of the required addresses; and

3) The addresses are provided to EPA upon request.

(10/17/94)

41. **Question:** In certain scenarios, codes are used to represent the transferees name and address on the PTD's. For example, when a customer purchases a load of gasoline from a terminal, a common carrier picks up the gasoline at the rack if the customer does not maintain his own fleet of trucks. The computer prepared BOL has all of the required PTD information on it except for

the carriers name and address (a code is used to identify the carrier). Can we continue to use codes on the PTD to identify the transferee, in these cases?

Answer: Since the carrier would be the transferee in such a situation, the carrier's name and address would be required to be included in the PTD information. However, EPA has previously stated that the address of the transferor and transferee does not need to be included in the documentation at the time of transfer, and will extend this allowance to the use of codes in place of the names provided:

1) The normal business practice of the parties is to list only the codes of the transferor and/or the transferee;

2) Both the transferor and the transferee know and have records of the required names and addresses; and

3) The information is provided to EPA upon request.

(12/5/94)

42. **Question:** During a transition period, refiners will produce VOC-controlled RFG that is blended with non VOC-controlled RFG downstream of the refinery in order to blend down RVP prior to the beginning of the VOC season. How will the resultant mixture be classified and identified on the PTD issued for instance by a terminal?

Answer: The resulting gasoline should be listed as non VOC-controlled RFG on the PTD's, unless the resulting blend meets the requirements to be designated as VOC-controlled gasoline.(7/1/94)

43. **Question:** We would expect to purchase or exchange for reformulated gasoline in reformulated areas. At any given time, a tank could contain product from upwards of 3 different commingled RFG batches. As a distributor, is it sufficient to state on a bill of lading that all products conform to RFG, or must each of the batches in this tank be listed on the transfer document?

Answer: This question assumes that PTD's must include batch identification numbers, which is incorrect. PTD's are not required to included the batch number or the name of the refinery that produced the gasoline. A distributor should include all the required information listed in § 80.77 and § 80.106 for the appropriate type of gasoline.

While the name and registration number of the refinery or importer is required for complex model RFG or RBOB gasoline produced prior to January 1, 1998, this RFG or RBOB should not be combined with any other RFG or RBOB that was produced at another refinery or imported by another importer. (7/1/94)

44. **Question:** After a batch of gasoline is certified as RFG, it is given a batch number. How far "downstream" does the batch number follow the material? If a batch is commingled in a terminal with other compatible material belonging to a variety of terminalling customers, does the batch lose its batch number at that time?

Answer: There are no requirements to identify the batch number in the transfer documentation. Once the batch is commingled with other RFG, the refineries' batch numbers are no longer useful to identify the resulting fungible RFG.(10/17/94)

45. **Question**: How should PTD messages be handled for mixtures of simple and complex model RFG? Can we use either simple or complex model message until the end of April 1998?

Answer: Prior to January 1, 1998, simple model and complex model RFG may not be commingled, and under § 80.77(g)(1)(iii), refiners and importers are required to identify RFG or RBOB in product transfer documents as certified under the simple model standards or the complex model standards. However, after January 1, 1998, there is no requirement to identify RFG or RBOB in product transfer documents as certified under the simple model standards or complex model standards. (11/10/97)

46. **Question:** If a purchased lot of certified RFG is combined with another lot of fungible certified RFG in a terminal, and a portion of the mixture is then sold to a third party, what form would the product transfer documentation take? Would it be necessary to convey documentation on a pro rata basis to all purchasers of the blended material?

Answer: There is no specific form or required format for the produce transfer document (PTD) information. It should be included on the documents used to memorialize the transfer of the fuel and should reflect the amount and type of RFG sold or transferred to the third party, as well as the other information required in §80.77. Therefore, it would be necessary to provide PTD information to all purchasers of the blended material for the quantity of RFG that they are receiving custody or title of. (8/29/94)

47. **Question:** Section 80.78(a)(8) prohibits "any person" from combining any VOC-controlled RFG produced using ethanol with any VOC-controlled RFG using any other oxygenate between January 1 and September 15. There is no exclusion from this prohibition for retail outlets or wholesale purchaser-consumer facilities as there is for certain other mixing prohibitions. How is the retail outlet expected to be aware that it is receiving a shipment of gasoline that cannot be commingled with gasoline produced using a different oxygenate?

Answer: The RFG regulations were amended on July 20, 1994, to include a product transfer documentation requirement, found in 80.77(g)(3), requiring the "identification of VOC-controlled reformulated gasoline or RBOB as gasoline or RBOB which contains ethanol, or which does not contain ethanol." This requirement will result in retailers having the necessary information to determine the type of oxygenate used in the gasoline.(10/17/94)

48. **Question:** We would like to preprint as much of the PTD information as possible on our bill of lading for gasoline sales at our terminals. We would like to print a statement such as the following on all tickets: "Maximum RVP of 8.3 psi if gasoline is designated as VOC controlled for Region 2." This would enable us to have the same bill of lading for both the summer and winter period even though this statement would have no effect for gasoline that is not designated as VOC controlled. Is this language acceptable?

Answer: A statement such as the one in the question would be acceptable assuming that the product is also identified as being VOC controlled or not VOC controlled in accordance with § 80.77(g)(1)(i).(1/17/95)

49. **Question:** Does the product transfer documentation have to physically accompany a shipment of gasoline or could the documentation be sent electronically or by facsimile to the destination prior to the delivery arrival?

Answer: Whenever possible the PTD's should accompany the shipment of gasoline. However, in circumstances like pipeline transfers where this would be impossible, the PTD's do not have to physically accompany the shipment. The regulations (§ 80.77 and § 80.106) require that on each occasion when any person transfers custody or title of any reformulated gasoline or RBOB or conventional gasoline, the transferor shall provide the transferee the appropriate PTD's. It does not specify the method required for the transferor to provide this information.(7/1/94)

50. **Question:** Could a refiner rely upon transfer documents produced by a pipeline to meet the refiners (i.e., shipper's) responsibility as it relates to the generation of transfer documents and would such a document provide an adequate defense for the refiner?

Answer: If a refiner is the transferor to a pipeline, then the refiner would be responsible to provide documentation to the pipeline.(7/1/94)

51. **Question:** Who is the transferor and who is the transferee in the case of an exchange transaction? The sequence of physical custody is from terminal to truck to retail outlet, but the sequence of legal custody is from the terminal to exchange partner to marketer to truck driver to retail outlet. How many transfer documents must be generated? Can one document accompany

the shipment, with successive parties adding their respective names to the document upon transfer?

Answer: Any party who is receiving title or custody of the delivery would be considered a transferee, any party who relinquishes title or custody would be considered a transferor and any party who both receives and relinquishes title or custody would be both a transferee and a transferor. All transferors are responsible to provide all of their transferees PTD's containing the appropriate information. In some circumstances (where custody and title are being delivered to the same subsequent parties), it may be possible to utilize just one document that is updated each time the delivery is transferred. But the most appropriate way to meet PTD requirements is to include the PTD information on documents currently used to memorialize the transfer of title or custody.(7/1/94)

52. **Question:** On a shipment from our refinery to a pipeline we are often providing transfer of title to another oil company while simultaneously transferring custody to the pipeline. Pipeline companies are telling us that as long as the shippers code (as part of the batch designation) identifies that exchange partner receiving title, we do not have to generate a separate transfer document to that exchange partner. Is this O.K?

Answer: No. As the transferor, you would be responsible for providing PTD information to any party that directly receives custody or title of a delivery of RFG, RBOB or conventional gasoline from you. In the above scenario you would have to provide PTD information to both the pipeline actually receiving the product and to the other oil company taking title of the gasoline from you.(8/29/94)

53. **Question:** EPA has stated that a Product Transfer Document must be provided to the transferee in an exchange transaction. Is this true when this exchange is instantaneous and the transferee has no ability to alter the product?

Answer: Yes. When any person transfers title or custody of any gasoline (with the exception of gasoline sold or dispensed at a retail outlet or wholesale purchaser-consumer for use in motor vehicles), the transferor must provide to the transferee the specific information pertaining to the fuel required in the product transfer documentation sections, regardless of the transferee's ability to alter the product.(8/29/94)

54. **Question:** Assuming that PTD's are required for exchange transactions and the data could be electronically stored in a manner ensuring the security and integrity of the data, would it be sufficient to provide transferees with access to electronic PTD's if the PTD's contain the same data as the original except for the absence of the drivers signature? Would it be sufficient to make the

PTD's available through an electronic interface or would the transferor be required to electronically transmit?

Answer: The regulations require that the transferor must provide to the transferee documentation that includes all the PTD information, not just make it accessible to the transferee. As a result, the PTD requirements would not be satisfied if the transferee is merely given access to the PTD information.(8/29/94)

55. **Question:** At a recent seminar hosted by SIGMA, EPA officials indicated that transfer documentation would be satisfactory if initiated by the transferee as long as both parties agreed to this system. Please confirm this understanding?

Answer: Your understanding is correct. However, while EPA would not object to a cooperative agreement between the transferor and the transferee, the transferor remains liable if the transferee does not have all the required PTD information for each batch.(9/26/94)

56. **Question:** The EPA has stated that PTD's include documents that reflect the transfer of ownership and physical custody of gas or blendstock, including invoices, receipts, bills of lading, manifests and pipeline tickets. Each of these documents contain different pieces of information required by the EPA. Some specify quality, quantity, parties of transfer, etc. Some are available prior to product shipment and some, such as pipeline meter tickets and final Bills of Lading, are provided after the product moves. Can we assume that the information identifying place of use restrictions, segregation requirements or standards of performance can be provided to the transferee prior to the product shipment? But that other transfer document requirements such as final quantity shipped, can be provided to the transferee after the product moves?

Answer: Yes. The regulations require PTD's be provided by the transferor to the transferee on each occasion when any person transfers custody or title of RFG, RBOB or conventional gasoline. The regulations do not specify at what point in the delivery PTD's are to be provided for each occasion.(7/1/94)

57. **Question:** When a party lifts gasoline at a terminal, there is usually both a transfer of custody (to the carrier) and a transfer of title (to the person taking title). If all required PTD information is given to the carrier through a bill of lading, is it also necessary to provide a separate PTD to the person taking title? If so, does a single PTD suffice when the person taking title utilizes his own truck as opposed to common carrier trucks?

Answer: The transferor must provide PTD information to both the transferee of custody and the transferee of title. As a result, the required PTD information must be provided to both the carrier (the transferee of custody) and the person taking title (the transferee of title). If the the same party

is receiving both custody and title of the fuel (when utilizing his own trucks as opposed to common carrier trucks), the PTD information would only have to be provided to the party a single time. (5/23/95)

58. **Question:** Does EPA make any distinction in terms of timeliness between PTD's which memorialize a transfer of title as opposed to those which memorialize a transfer of custody? For example, exchange statements detailing liftings by an exchange partner ordinarily are prepared only after the close of each month's business. Would such statements meet the PTD requirements if they contain all required PTD information?

Answer: Section 80.77 does not distinguish between transfers of custody and transfers of title. Nevertheless, EPA believes the two situations may be different in terms of the timing necessary for PTD information. In the case of transfers of custody, the PTD information should be transferred before, during, or immediately following the actual transfer because the transferee will have custody of the gasoline in question and must know how to handle it.

In the case of transfer of title, on the other hand, the transferee may choose to rely on the custody transferee to properly handle the gasoline (e.g., where the custody transferee is a common carrier pipeline.) In such a situation, the PTD requirements may be satisfied if the title transferee receives the required information as part of the transfer of the normal business documents used to memorialize the title transfer. This would be true even if the normal business practice is to provide title transfer documents only at the close of each month's business.

In the event the custody transferee's handling of the gasoline results in a violation of the RFG standards, however, the owner of the gasoline (the title transferee) would be presumed liable for the violation, and it would be no defense that this owner had not received the required PTD information.(10/17/94)

59. **Question:** Who is the transferee in a custody transfer where the owner of the receiving tank/truck/barge is different than the operator (scheduler) of the tank/truck/barge, who may also be different from the company that provides the employees of the site? Can a company assume that when multiple parties can be the transferee, that one can take on the role of being the designated responsible party.

Answer: Regarding transfers of custody, PTDs are intended to be given to the person physically taking custody of the product. Where multiple parties are involved in a physical transfer of the product, and the transferor does not know the name of the person physically taking custody of the product, the name of that person may be omitted from the PTD so long as this information has been recorded on some other document that memorializes the transfer of custody of the product, and this information is available to EPA on request. (5/23/95)

60. **Question:** In RFG areas, at unattended cardlock fueling facilities, where should the three most recent PTDs be maintained? It seems to make little sense that they be stored on-site, since the driver normally does not leave any paperwork at the unattended cardlock facility, and an EPA inspector would not have access to them due to the site being unattended. Since the driver normally forwards the PTDs for a transaction at an unattended cardlock fueling facility to the marketer's nearest office, would this be the appropriate location to maintain the PTDs for these transactions?

Answer: In the situation described, it would be acceptable for the PTDs to be maintained at the marketer's nearest office. (5/23/95)

J. California Enforcement Exemptions

1. **Question:** Under § 80.81(b)(2), California refiners are exempt from the independent analysis requirements set forth in § 80.65(f). Does this exemption allow California refiners to use a computer-controlled in-line blending operation without first obtaining an exemption from EPA?

Answer: Yes. Refiners of California gasoline may use computer-controlled in-line blending to produce RFG without obtaining an exemption under § 80.65(f)(4). However, RFG that does not meet the definition of "California gasoline" in § 80.81(a)(2) is subject to the independent analysis requirement, even if it is produced in California, and would require an exemption to allow computer-controlled in-line blending.(7/1/94)

2. **Question:** Starting with the first tender of RFG shipped later this year (1994), transferors are required to provide transferees with transfer documents detailing the type of RFG (VOC or non-VOC, oxygenate program or not, simple or complex) and various minimum or maximum quality statements (oxygen, benzene and RVP for simple model RFG; oxygen, benzene, VOC and NOx for complex model RFG). In California, the Los Angeles and San Diego areas are covered areas for both the RFG and wintertime oxygenated programs. The oxygenated fuels program in California requires 1.8 to 2.2 weight % oxygen for control areas during the winter control periods, as opposed to 2.7% elsewhere. Since RFG sold in California will satisfy the oxygenated program requirements without additional oxygenate, will transfer documents be required to differentiate between RFG and OPRG?

Answer: Not after March 1, 1996. Section 80.81(c)(9) provides an exemption from the RFG product transfer documentation requirements contained in § 80.77 for California gasoline manufactured or imported subsequent to March 1, 1996, that meets the requirements of the California Phase II RFG program. This exemption applies to § 80.77(g)(1)(ii), which requires the proper identification of reformulated gasoline as "[o]xygenated fuels program reformulated gasoline" or "[n]ot oxygenated fuels program reformulated gasoline." California RFG

manufactured prior to March 1, 1996, is subject to the product transfer documentation requirements, however.(7/1/94)

3. **Question:** How will EPA enforce their regulations in California? Will the Agency defer to the California Air Resources Board?

Answer: Prior to the start of the California Phase II RFG program in March 1996, EPA generally will enforce the federal RFG program California in the same manner in which it will be enforced in other parts of the nation. The principal difference is that compliance survey and independent analysis requirements will not apply to California gasoline during that period.

Subsequent to the start of the California Phase II program, EPA will rely to a large extent on the proven ability of CARB to enforce its fuels programs. However, EPA retains the authority to monitor and enforce the federal RFG regulations in California. Such monitoring and enforcement may be done through sampling and testing of California gasoline and/or by the auditing of State-mandated records (which must be retained for 5 years under the federal regulations). In addition, refiners and importers of California gasoline are still subject to the registration (§ 80.76) and batch testing (§ 80.65(e)(1)) requirements of the federal regulations.(7/1/94)

4. **Question:** Since the California winter oxygenate waiver will not allow RFG produced for Southern California during the winter of 1994/1995 and 1995/1996 to exceed 2.2 weight % while aiming for a 2.0 weight % oxygen target, EPA should exempt such gasoline from the OPRG designation provisions of § 80.65(d). Does EPA concur?

Answer: No. Section 80.81(c)(2) exempts refiners, importers and oxygenate blenders of California gasoline manufactured or imported subsequent to March 1, 1996, from the designation of gasoline requirements contained in § 80.65(d). Reformulated gasoline produced or imported prior to that date must be designated in accordance with § 80.65(d).(7/1/94)

5. **Question:** How will the California exemption from EPA's final RFG rule be affected if California postpones the introduction of CARB Phase 2 reformulated gasoline?

Answer: On April 12, 1994, CARB issued a notice of public hearing concerning certain proposed amendments to the State's Phase 2 reformulated gasoline program. The hearing on these amendments was held on June 9, 1994. At this hearing CARB approved changes to the State's Phase 2 reformulated gasoline regulations. These changes included certain implementation dates for the Phase 2 RFG program. Under the pre-existing California regulations, gasoline anywhere in the distribution system was subject to "cap" limits starting on April 1, 1996. The approved revisions change this date to April 15, 1996, for gasoline anywhere in the system except for the fueling of motor vehicles at service stations and other fueling facilities, and to June 1, 1996, for

all fueling facilities.[19] The approved amendments do not change the pre-existing implementation date of March 1, 1996, for compliance with the more stringent "flat" or "averaging" limits for gasoline supplied from a refinery or import facility.

These changes in the implementation dates for the cap limits throughout the distribution system do not affect the timing of the California enforcement exemptions in the federal RFG regulations. The "cap" limits for gasoline leaving refineries and import facilities continues to apply as of March 1, 1996, the date on which most of the enforcement exemptions are based.(7/1/94)

6. **Question:** If a California refiner can certify a CARB Phase 2 alternate gasoline formula using the State's predictive model, and that formula requires less than 1.8 percent oxygen, will it still satisfy the federal RFG specifications?

Answer: No. Under § 80.81(e)(2), if a refiner certifies under an alternative formula, then the exemption does not apply unless the refiner makes certain timely submissions to EPA. The refiner must submit to EPA a written demonstration that the certified gasoline formulation meets each of the complex model per-gallon standards specified in § 80.41(c). The complex model per-gallon standards in § 80.41(c) include a requirement that oxygen content be equal to or greater than 2.0 percent, by weight. A gasoline formulation that contains less than 1.8 percent oxygen would not meet this standard, and the California enforcement provisions would become inapplicable pursuant to the provisions of § 80.81(e)(2)(ii).(7/1/94)

7. **Question:** What oxygen level will be required in reformulated gasoline produced for Southern California during the summer of 1995? What oxygen level will be required in reformulated gasoline produced for Southern California during the summer of 1996? Because the CARB Phase II RFG standards specify a 1.8 to 2.2 weight % oxygen range starting on March 1, 1996, will refiners be allowed to target this range in Southern California during the summer of 1996?

Answer: Reformulated gasoline produced for the Southern California areas covered by the federal RFG program (i.e., San Diego County and the Los Angeles-Anaheim-Riverside area, as defined in § 80.70(a)) will be required to meet the oxygen content as well as other standards specified in the federal regulations during both 1995 and 1996. Although the Agency concluded that the CARB Phase 2 RFG oxygen "flat limit" of 1.8 to 2.2% would in practice be equivalent to the 2.0% minimum oxygen content required by the Clean Air Act[20], this conclusion was made for

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[19] The approved amendments include an exception from the April 15, 1996, compliance date for deliveries of gasoline from bulk plants to service stations and bulk purchaser-consumers. In addition, under the approved amendments it is not illegal to dispense noncomplying gasoline into a motor vehicle after June 1, 1996 if it is shown that the noncompliance was due to gasoline delivered prior to April 15, 1996 (or from a bulk plant prior to June 1, 1996).

[20] See 58 FR 11747 (February 26, 1993).

the purpose of determining whether exemptions from certain enforcement provisions of the federal regulations would be appropriate. Gasoline that qualifies for the enforcement exemptions under § 80.81 must still comply with the federal reformulated gasoline standards even after the start of the CARB Phase 2 program in March 1996, including the oxygen content standards specified in § 80.41 (e.g., at least 2.0% by weight).(7/1/94)

8. **Question:** Although California gasoline is exempted in general, are there compliance requirements that would necessitate independent sampling and testing in that state?

Answer: Yes. Section 80.81(b)(2) provides an exemption from the independent analysis requirements of § 80.65(f) for California gasoline, as defined in § 80.81(a)(2). Reformulated gasoline that does not meet this definition (e.g., RFG that is produced in California but sold or intended for sale outside the State) would be subject to the independent analysis requirements.

In addition, the exemption could be lost under either of two circumstances: (1) A gasoline formulation is certified under the California predictive model or vehicle testing provisions, and its refiner, importer or oxygenate blender does not comply with the requirements of § 80.81(e)(2); and/or (2) A refiner, importer or oxygenate blender has been assessed a penalty for a violation of the federal or California RFG regulations (see § 80.81(e)(3)). In either of these cases, the refiner, importer or oxygenate blender would lose the exemption specified in § 80.81, including the exemption from the independent analysis.(7/1/94)

9. **Question:** Regarding refiners who have a California exemption, is it correct to assume the following for RFG made to be sold in California from January 1, 1995, until March 1, 1996 (the start of the California Phase II RFG program):

A. Even if the refiner averages, it does not have to participate in the retail compliance survey;

B. The refiner does not have to have sampling and testing done by an independent laboratory; and

C. For batch sampling and analysis, the refiner may use methodologies prescribed in Title 13 of the California Code of Regulations in lieu of the EPA-approved methodologies.

Answer:

A. Yes. Section 80.81(b)(1) exempts refiners, importers and oxygenate blenders of gasoline that is sold, intended for sale, or made available for sale as a motor fuel in the State of California from the compliance survey provisions of § 80.68 for such gasoline.

B. Yes. Section 80.81(b)(2) exempts refiners, importers and oxygenate blenders of California gasoline (as defined in § 80.81(a)(2)) from the independent analysis requirements of § 80.65(f) for such gasoline.

C. Yes. Section 80.81(h) allows refiners, importers and oxygenate blenders of California gasoline (as defined in § 80.81(a)(2)) to use a sampling and/or analysis methodology prescribed in Title 13, California Code of Regulations, §§ 2260 et seq., for such gasoline in lieu of any applicable sampling and analysis methodology specified in the federal RFG regulations. Section 2263(a) and (b) of the California regulations prescribes the sampling procedures and test methods for the California Phase II program, and § 2263(c) allows the use of another test method "following a determination by the executive officer that the other method produces results equivalent to the results with the specified method." Thus, the use of any test method determined by CARB to be equivalent to a prescribed method under § 2263(c) of the California regulations is authorized under § 80.81(h) of the federal regulations. However, a refiner that chooses to use California sampling and/or analytical methods for its California gasoline may not use such methods for its non-California gasoline. Section 80.81(h) allows the use of California methodologies only for California gasoline, and not for any other RFG that the regulated party may produce or import.

All of these provisions apply from the start of the federal RFG program on January 1, 1995, until December 31, 1999.(7/1/94)

10. **Question:** Section 80.80(e)(2) generally provides that a refiner or importer that fails to meet the independent analysis requirements of § 80.65(f) may not use the results of sampling and testing carried out by the regulated party as evidence of the properties of gasoline giving rise to a violation. Does this provision apply to California gasoline, which is exempt from the independent testing requirements?

Answer: No. Because § 80.81(b)(2) exempts California gasoline from the § 80.65(f) independent analysis requirements, the "penalty" set forth in § 80.80(e)(2) for failure to meet these requirements is not applicable to such gasoline, unless this exemption is lost under § 80.81(e).(7/1/94)

11. **Question:** Does EPA agree that the California Exemption section of the RFG rule facilitates using the complex model for anti-dumping with the Commencement of CARB Phase 2 RFG effective 3\1\96?

Answer: Section § 80.41(i) of the federal regulation requires that during each calendar year 1995 through 1997 any refinery or importer shall be subject to the simple model standards or the Phase I complex model standards, at the option of the refinery or importer. However, no refinery or importer may be subject to a combination of the simple and complex model standards during the same calendar year. Any refiner or importer that elects to achieve compliance with the anti-

dumping requirements can use either the simple or complex model but must meet the requirements of Subpart D of these regulations for the specified model. If the refiner or importer elects to use the complex model during a period prior to January 1, 1998, then the refiner or importer is subject to the Phase I complex model standards. Therefore, if a refiner or importer elects to use the simple model beginning on January 1, 1996, the regulations prohibit switching to the complex model on March 1, 1996 or at any other time during the same calendar year.(7/1/94)

12. **Question:** What options are available to refiners (and other regulated parties) in California for downgrading federal RFG in 1995, and CARB Phase II RFG in 1996 and beyond, to conventional gasoline for use outside the State of California. Such downgrading may be necessary, for example, at a terminal located in California downstream of the refinery but close to the California border with Arizona or Nevada, and that receives product via a pipeline that also goes into Arizona or Nevada. There undoubtedly will be situations where "California" gasoline is shipped via the pipeline to this terminal, but the terminal tanks are too full to receive all of this "California" gasoline. In such a case it will be necessary to allow the "California" gasoline to continue moving down the pipeline to a terminal outside California. In most cases, this gasoline would have been in fungible storage prior to shipment on the pipeline and the sample obtained at the refinery will not represent the gasoline diverted out of California.

Answer: Normally, RFG may be redesignated as conventional gasoline without any restrictions, so long as the product transfer documents reflect this redesignation, and the redesignated gasoline is in fact used as conventional gasoline. See the Answers to Questions IX-B-13 and 14 of the July 1, 1994 Question and Answer Document. This answer is not true in the case of California gasoline, however, because the testing methods used in California are not required to be the test methods specified in § 80.46. Under § 80.81(h) refiners and importers of California gasoline may use the test methods allowed by California State regulations, in lieu of the § 80.46 test methods. This testing difference is allowed both before and after the CARB Phase II standards become effective in March, 1996. As a result, gasoline produced for use in the State of California does not necessarily meet the testing requirements for federal RFG or anti-dumping compliance.

The options available for redesignating California gasoline as federal conventional gasoline are the following.

First, if the refiner or importer tested the gasoline in question using the test methods specified under § 80.46, the gasoline may be used in or out of the State of California using the same approaches available in the remainder of the country. This would be true in the case of gasoline produced to the federal anti-dumping standards for use outside the Los Angeles or San Diego RFG covered areas before March 1996 (no redesignation would be necessary), or in the case of gasoline produced to the federal RFG standards before March 1996 or to the California Phase II standards beginning in March 1996 (redesignation would be necessary). Note that if the gasoline in question is part of a fungible mixture, in order to use this option all gasoline in the mixture must have been tested using the methods specified under § 80.46.

Second, the gasoline may be used as federal conventional gasoline without having been tested using the methods specified under § 80.46 provided that:

a) The gasoline in question was produced in accordance with the standards and requirements for the State of California, including any testing requirements, and the gasoline in question meets all standards for either RFG (under § 80.41) or for anti-dumping (under § 80.101).

b) The gasoline in question was intended for use in the State of California when produced or imported.

c) The gasoline in question was transported via pipeline, and when shipped was reasonably expected to be delivered to a terminal in the State of California.

d) Due to unforeseen operational necessity the gasoline could not be delivered to any terminal located in the State of California, and the only feasible option was to deliver the gasoline to a terminal located outside the State of California.

e) The parties involved (including the pipeline and the owner of the gasoline in question) retain documents that describe the intended destination of the gasoline and the nature of the operational necessity that resulted in the gasoline being delivered to a terminal outside the State of California.

(8/29/94)

13. **Question:** The California enforcement exemption provided in the RFG regulations can be lost as a result of the assessment of civil, criminal or administrative penalty for violation of the federal RFG or anti-dumping provisions or for violation of CARB's Phase II RFG regulation. The effective party may petition EPA for relief for good cause. Good cause may include a showing that the violation was not a substantial violation of the federal or California RFG standards. However, under a literal interpretation of this provision, a California refiner could lose the enforcement exemption over a trivial manner. Can EPA apply narrower criteria, including establishment of willful wrongdoing criteria and the documentation or repeated offenses over a specific period of time before revocation of the exemption can occur? Additionally, clarification is needed on exemption implications of a settlement between a California refiner and CARB on California Phase II RFG enforcement matters. Can a violation of CARB Phase II RFG regulation not resulting in non-compliance with federal RFG be considered insufficient grounds for losing the exemption?

Answer: Each violation of CARB's RFG standard will be examined for its federal implications on a case-by-case basis.(8/29/94)

14. **Question:** If a California refinery is producing all of its gasoline to CARB specifications but ships a small portion (<5%) to Nevada and Arizona, does that portion have to be recorded and reported as conventional gasoline? The additional recordkeeping and reporting would appear to be a totally wasted effort since gasoline meeting CARB specs will be substantially better in all respects than baseline gasoline.

Answer: Under § 80.81(b)(2), California gasoline (and no other gasoline) is exempt from certain RFG and anti-dumping requirements, such as the requirement to use the test methods specified under § 80.46. California gasoline is defined in § 80.81(a)(2) as "any gasoline that is sold, intended for sale, or made available for sale as a motor vehicle fuel in the State of California...." As a result, gasoline that does not meet this definition would be subject to all federal requirements, including reporting, recordkeeping and testing requirements. For example, gasoline that is produced in California but is sold or intended for sale outside the State would have to meet all requirements that apply to gasoline produced in the remainder of the country. These requirements apply regardless of whether the gasoline in question is used in an RFG covered area outside California and is classified as RFG, or if the gasoline is not used in an RFG covered area and is classified as conventional gasoline.(10/17/94)

15. **Question:** The July 1, 1994 Question and Answer Document discusses the antidumping provisions that impact California gasoline -- a non-RFG California gasoline before 3/1/96 must meet all antidumping requirements (i.e., volumes and properties.) After 3/1/96, California gasoline is exempt from certain enforcement requirements of the antidumping rules. Does this mean that both the fuel parameters and fuel volumes associated with California gasoline are exempt from the antidumping rules, or are the volumes still included when comparing against the 1990 baseline volumes?

Answer: Section 80.81(d) provides that, subsequent to March 1, 1996, refiners, importers and oxygenate blenders of California gasoline shall demonstrate compliance with the RFG and anti-dumping standards specified in §§ 80.41 and 80.90 by excluding the volume and properties of its California gasoline from all of the gasoline (RFG or conventional) it produces that is not California gasoline. This section also provides that this does not exempt any refinery from demonstrating compliance with the standards for all gasoline that it produces or imports. While refiners are generally exempt from recordkeeping, reporting and various other provisions for California gasoline, they are not exempt from the RFG and anti-dumping standards themselves.(11/28/94)

16. **Question:** Should the summer toxics model be used for RFG during the 1995 California VOC transition seasons (i.e., before May 1 and after September 15) when California regulations limit RVP to 7.8 psi?

Answer: RFG that is designated as VOC controlled by the refiner must use the summer model and must comply with the RVP standard for the appropriate VOC control region. RFG that is

designated as non-VOC controlled by the refiner must use the winter model. Refiners may not designate RFG as VOC controlled unless it meets the federal RVP standard for VOC controlled RFG for the appropriate VOC control region. Consequently, California RFG produced to 7.8 psi for use outside the federal VOC control period (i.e., before May 1 and after September 15) would use the winter model. (5/9/95)

17. **Question:** The California Exemption of § 80.81 requires that CARB II producers demonstrate compliance for the offset period (March 1, 1995 through February 28, 1996). May such a refiner shift from the Simple Model to the Early Use Complex Model beginning January 1, 1996? If so, how would the compliance calculations be performed?

Answer: Under § 80.41(I) a refiner may elect, for each calendar year averaging period, to be subject to either the simple model standards or the early complex model standards for the RFG produced, subject to certain conditions and constraints contained in §§ 80.41(I) and (j). In addition, under § 80.78(a)(9)(ii) and (iii) RFG and RBOB produced at a refinery or imported by an importer to meet the early complex model standards must be segregated from all other RFG and RBOB throughout the distribution system, including at the retail level. In effect, this segregation constraint makes early use of the complex model for RFG impractical in most situations.

Under § 80.81(b)(3), producers of "California gasoline," defined in § 80.81(a)(2), who meet standards on average are required to demonstrate compliance for two overlapping averaging periods: January 1, 1995 through December 31, 1995; and March 1, 1995 through February 29, 1996. Beginning March 1, 1996, when the CARB Phase II standards go into effect, certain enforcement exemptions apply to producers of California gasoline.

EPA will allow a producer of California gasoline who is subject to the overlapping averaging periods of § 80.81(b)(3) to elect to be subject to the early complex model standards for the second period (March 1, 1995 through February 29, 1996) even if this producer is subject to the simple model standards for the first period (January 1, 1995 through December 31, 1995). If this election is made, the gasoline produced during the entire second averaging period would be evaluated under the early complex model, however, only the RFG and RBOB produced by this refiner during the period January 1, 1996 through February 29, 1996, would be subject to the segregation constraints of § 80.78(a)(9). (10/31/95)

[NOTE: The following letter was mailed on February 29, 1996.]

Douglas F. Henderson
Executive Director
Western States Petroleum Association
505 No. Brand Blvd., Suite 1400
Glendale, California 91203

Dear Mr. Henderson,

You have requested, on behalf of gasoline refiners in California, that EPA modify certain requirements that apply in California under the federal reformulated gasoline (RFG) regulations. This action is believed necessary due to conflicts between the federal RFG program and the California Phase 2 reformulated gasoline program scheduled to begin on March 1, 1996. This letter addresses three of the matters you have raised. EPA is still evaluating the remaining issues, and will respond separately to those requests.

As you know, section 211(k) of the Clean Air Act (the Act) requires EPA to establish standards for RFG to be used in specified Ozone nonattainment areas (covered areas), as well as standards for non-reformulated, or conventional, gasoline used in the rest of the country, beginning in January, 1995. The RFG covered areas in California are Los Angeles and San Diego, and, beginning June 1, 1996, Sacramento, as a result of its redesignation as a Severe Ozone nonattainment area. The Act requires that RFG result in reductions in VOC and toxics emissions, no increase in NOx emissions, and also sets standards for oxygen, benzene and heavy metals. EPA promulgated the final RFG regulations on December 15, 1993.

During the federal RFG rulemaking, and in response to comments by California refiners, EPA concluded (1) that emission reductions resulting from the California Phase 2 standards are equal to or more stringent than the federal RFG standards, and (2) that the California Air Resources Board's (CARB's) enforcement program will be sufficiently rigorous that compliance with the California Phase 2 standards will be ensured. As a result, 40 CFR § 80.81 of the RFG regulations exempts certain refiners of California Phase 2 gasoline from a number of federal RFG enforcement provisions intended to demonstrate compliance with the federal standards. The federal RFG standards nevertheless apply in California. Moreover, California refiners are not exempt from federal enforcement requirements with regard to gasoline that is delivered for use outside California, because the California Phase 2 standards and the CARB enforcement program do not cover gasoline exported from California.

Use of the California Test Methods.

Both the federal RFG and the California Phase 2 programs require refiners to use certain test methods to demonstrate compliance with the standards applicable under these programs. However, in the case of the tests for four parameters (benzene, sulfur, oxygen, and aromatics) the methods specified under the two programs are different.

The 40 CFR § 80.81 exemption allows California refiners to use the California Phase 2 program's test methods instead of the federal test methods when producing California Phase 2 gasoline that is used in California. However, California refiners are required to use the federal test methods specified under 40 CFR § 80.42 for gasoline that is used outside California, including conventional gasoline subject to the anti-dumping standards specified under 40 CFR § 80.101. You have requested that EPA extend the test method exemption to gasoline produced by California refiners that is exported from California.

EPA now recognizes that under certain conditions it may be appropriate to allow the use of non-federal test methods for gasoline exported from California because of the unique situation that exists in California, as compared to the remainder of the country. In particular, the standards under the California Phase 2 program will result in lower emissions than will result from federal RFG. Moreover, CARB is expected to enforce these standards in a comprehensive, aggressive manner that will result in high compliance.

Therefore, EPA intends to initiate a rulemaking to change the federal RFG regulations to allow this additional testing flexibility for California refiners. In addition, for a limited time and in certain situations, EPA will immediately give California refiners additional testing flexibility. In particular, EPA will not enforce the requirement, at 40 CFR §§ 80.65(e)(1) and 80.101(i)(1)(i)(A), to test gasoline using the federal test methods specified under 40 CFR § 80.46 for benzene, sulfur, oxygen or aromatics, with regard to gasoline that is produced in or imported into California but that is used outside California, provided the refiner or importer meets the following conditions:

(1) The gasoline must be produced at a refinery located in California at which gasoline meeting the California Phase 2 standards and requirements is being produced; or the gasoline must be imported into California from outside the United States as California Phase 2 gasoline that meets the standards and requirements of the California Phase 2 program;

(2) When exported from California, the gasoline must be classified as federal conventional gasoline, and may not be classified as federal RFG; and

(3) The refiner must correlate the results from any non-federal test method to the method specified under 40 CFR § 80.46 for any gasoline that is used outside California. This correlation must be satisfactorily demonstrated to EPA upon request.

Enforcement of the RFG requirements in this manner will expire at the conclusion of the rulemaking to incorporate these changes to the testing method requirements in the federal RFG regulations. EPA intends to complete the rulemaking by September 1, 1997, at which time the requirements will be enforced as promulgated.

Adjustment of the Reid Vapor Pressure Lower Limit.

The federal RFG program includes standards for the volatility, or Reid vapor pressure (RVP), of gasoline. The maximum RVP of RFG is controlled primarily because of the increased VOC emissions that result from gasoline with higher RVP levels.

In addition, the minimum RVP of both reformulated and conventional gasoline is controlled because of limitations in the data that were available to formulate emissions models used in the federal RFG program. The minimum RVP standard also addresses vehicle driveability problems, such as poor starting and running, that can occur when low volatility gasoline does not vaporize in

the vehicle engine. As a result, under 40 CFR § 80.42(c)(1), the nationwide summertime minimum RVP allowed in RFG is 6.6 pounds per square inch (psi), although under 40 CFR § 80.45(f)(1) this minimum RVP standard changes to 6.4 psi beginning in 1998.

The California Phase 2 program sets a maximum summertime volatility standard of 7.0 psi. As a result, during the summer California refiners currently must meet an RVP standard of 6.6 psi minimum (a federal standard) and 7.0 psi maximum (a California standard). You have requested that EPA change the minimum RVP standard for RFG to 6.4 psi in California. In addition, the American Automobile Manufacturers Association has indicated in a letter to EPA that they agree to this change in the case of California gasoline.

EPA believes changing the minimum RVP standard for RFG in California to 6.4 psi is appropriate, and in the very near future intends to implement this change to the RFG standards through rulemaking. Therefore, for a limited time period, EPA will forego enforcement of the 6.6 psi minimum RVP standard for RFG under 40 CFR § 80.42(c)(1) in California, provided the gasoline has an RVP equal to or greater than 6.4 psi.

Enforcement of the RFG requirements in this manner will expire at the conclusion of the rulemaking to change the federal RVP standard in California, which EPA intends to complete by May 1, 1996, at which time the requirements will be enforced as promulgated.

Production of Certain California Gasoline That Does Not Meet the Federal RFG Standard for Oxygen

Section 211(k) of the Clean Air Act requires that the RFG standard for 2.0 weight percent (wt%) oxygen must be met in each covered area. When EPA promulgated the 40 CFR § 80.81 California exemptions, the statewide standards for California Phase 2 gasoline would have been equal to or more stringent than the standards for federal RFG. With regard to oxygen, the California Phase 2 standards included a statewide flat limit of 1.8 to 2.2 wt% oxygen that was considered, in practice, to be equivalent to the federal 2.0 wt% standard. As a result, there was no need to distinguish between California Phase 2 gasoline used in the federally covered areas and California Phase 2 gasoline used in other markets in California, in order to have certainty that RFG standards would be met in each federally covered area in California.

The final California Phase 2 requirements were changed, however, and now allow gasoline that does not meet the federal RFG standard for oxygen. Specifically, under two alternative certification methods there is no minimum oxygen content requirement for California Phase 2 gasoline. However, under 40 CFR § 80.81(e)(2), if a California refiner uses an alternative certification method they must demonstrate to EPA that their gasoline still meets all RFG per-gallon standards, or the enforcement exemption is withdrawn. Therefore, 40 CFR § 80.81, in effect, requires that all California Phase 2 gasoline must meet the federal RFG standards in order to retain the enforcement exemptions. As a result, you have asked EPA to modify its requirements in order to allow California refiners to supply California Phase 2 gasoline containing less than 2.0 wt% oxygen to markets other than the federally covered areas.

EPA believes it is appropriate to modify 40 CFR § 80.81 as you have requested, provided that requirements are implemented that would ensure compliance with the federal oxygen standard for RFG in each covered area in California. EPA further believes that these requirements could consist of annual gasoline quality surveys for oxygen content in each California covered area. EPA reached these conclusions because the California Phase 2 standards, with the exception of oxygen, are more stringent than the standards for federal RFG, including any gasoline formulation certified using the California predictive model. In addition, these standards will be appropriately enforced by CARB. EPA also concludes there is no public health or environmental risk from the changed oxygen requirements in non-federally covered areas.

Therefore, EPA intends to initiate a rulemaking to modify 40 CFR § 80.81 to allow refiners to produce California Phase 2 gasoline containing less than 2.0 wt% oxygen for use outside the federally covered areas provided appropriate annual gasoline quality surveys for oxygen are conducted in each covered area in California. Further, these surveys must show an average oxygen content in each covered area of at least 2.0 wt%.

In addition, for a limited time and under certain conditions, EPA will allow California refiners to produce gasoline that contains less than 2.0 wt% oxygen for use outside the federally covered areas. In particular, EPA will not enforce the requirement at 40 CFR § 80.81(e)(2) that California refiners must demonstrate that federal RFG per-gallon standards are met on each occasion California Phase 2 gasoline is certified under Title 13, California Code of Regulations, section 2265 (dealing with gasoline certification based on the California predictive model), provided that the following conditions are met:

(1) A program of gasoline quality surveys must be conducted in each RFG covered area in California each year to monitor annual average oxygen content; and

(2) The surveys must be conducted in accordance with each requirement specified under 40 CFR §§ 80.68(b) and (c), dealing with surveys for RFG quality, and 40 CFR §§ 80.41(o) through (r), dealing with the effects of survey failures, with the following exceptions:

(a) The surveys must evaluate for oxygen content, and evaluation for other gasoline parameters is optional;

(b) A minimum of four surveys (a survey series) must be conducted in each covered area each calendar year, except that the first survey series must be conducted during the period June, 1996 through May, 1997, and the surveys conducted during the period January through May, 1997 also will be included in the 1997 calendar year survey series;

(c) For 1996 only, the survey program plan under 40 CFR § 80.68(c)(15) must be submitted to EPA no later than May 1, 1996, and the contract with the survey contractor must be in place and the funds must be paid to the contractor or placed into escrow, under 40 CFR § 80.68(c)(16), by June 1, 1996.

Enforcement of the RFG requirements in this manner will expire at the conclusion of the rulemaking to modify 40 CFR § 80.81 with regard to gasoline containing less than 2.0 wt% oxygen and to implement an oxygen gasoline quality survey requirement in California. EPA intends to complete this rulemaking by September 1, 1997, at which time the requirements will be enforced as promulgated.

It is important to note that California Phase 2 gasoline that does not meet the RFG standards, including the oxygen standard, is classified as conventional gasoline. In addition, the flexibility allowed in this letter does not alter the prohibitions under section 211(k)(5) of the Clean Air Act, and 40 CFR § 80.78(a)(1), against selling or dispensing conventional gasoline to ultimate consumers in covered areas, and against selling conventional gasoline for resale in covered areas unless the gasoline is segregated and marked as "conventional gasoline, not for sale to ultimate consumers in a covered area."

If you have questions, you may call Janet Bearden, Acting Director, Air Enforcement Division, Office of Regulatory Enforcement, at 202-564-2260.

Sincerely,
/s/
Steven A. Herman
Assistant Administrator

K. Attest Engagements

1. **Question:** What is the affect of a "clean" attestation and/or regulatory audit on subsequent compliance violations identified?

Answer: An attestation engagement report for the refinery or importer that indicates no discrepancies has no bearing on a violation by the refiner or importer that may be determined by EPA.

With regard to the CPA or CIA who conducted the attestation engagement, any contradiction between an attest engagement report showing no discrepancies by a refiner or importer and a subsequently determined actual violation by that refiner or importer would prompt an inquiry by EPA into the basis for the contradiction. If the violation reasonably should not have triggered a discrepancy notation in the attest report, the matter would be considered closed. If the violation was such that the attestor should have discovered and noted a discrepancy, EPA could raise questions about the quality of the attest engagement, that under certain situations could lead to a action by EPA to debar the attestor. An attestor found to have intentionally submitted a false report to EPA would potentially be subject to the criminal penalties applicable to any party who intentionally submits a false report to the government.(7/1/94)

2. **Question:** Confirm that the attester will designate what is required to turn over a tank from one service to another, and how the barrels should be counted; i.e., from RBOB to conventional, or 3.5 wt% RBOB to 2.7 wt% RBOB.

Answer: The attester will not designate products for the party subject to the attestation engagement requirement. The function of the attestation engagement is to provide an independent analysis of the designations made by the regulated party. The designation of gasolines and RBOB occurs when product has been produced and shipped by a refiner. The attestation engagement is a year-end review of the production and marketing records of the regulated party, after decisions pertaining to product designations have been made.(7/1/94)

3. **Question:** What basis is to be used for reconciliations, volume (gallons or barrels) or weight? What does EPA consider to be perpetual inventory? (Is a plant balancing considered a perpetual inventory?)

Answer: Section 80.128 (Agreed upon procedures for refiners and importers) provides for comparison of records on the basis of volume except in section 80.128(b) which provides for analysis of gasoline inventory reconciliation records. While EPA anticipates that the standard practice is to keep gasoline inventory records on a volume basis, it is conceivable that a company could maintain such records on the basis of weight. Where a company has maintained its gasoline inventory reconciliation analysis and its perpetual inventory on a weight basis that is susceptible to analysis by an attester, that basis would be acceptable to EPA for purposes of section 80.128(b).

Section 80.128(b) refers to a company's "perpetual inventory." EPA intended that this term refer to a company's regular method of keeping a running record of gasoline production and distribution volumes. In most cases, EPA believes that the industry standard practice is to keep a daily record of inventory. To the extent that a "plant balancing" would represent the most stringent customary recordkeeping practiced by a company, the "balancing" may be acceptable to EPA as a perpetual inventory. A company with specific questions with respect to this issue may contact EPA for case-by-case guidance.(7/1/94)

4. **Question**: Will internal auditors be able to perform the attestation audits under the direct supervision of an independent CPA firm? Can the internal audit department meet the attestation requirement using CPAs rather than CIAs?

Answer: Section 80.125(c) provides that an independent CPA (or firm of CPAs) engaged by a refiner, importer or oxygenate blender may complete the attest engagement requirements with the assistance of internal auditors so long as such assistance is in accordance with the Statement on Standards for Attestation Engagements. The Statement provides explicit professional standards for a CPA to be able to attest to the accuracy of records underlying an attestation engagement, including a standard pertaining to independence of mental attitude in performing an engagement. Accordingly, an independent CPA (or firm of CPAs) may be assisted by a company's internal

auditors, but the independent CPA (or firm of CPAs) is ultimately responsible for complying with the Statement and for the representation made in the Attestation Reports required under § 80.130.

Section 80.125(a) requires that CPAs (or firms of CPAs) be independent of the company subject to the attestation engagement. However, company employees who are certified by the Institute of Internal Auditors as Certified Internal Auditors and who are also licensed CPAs, may perform attestation engagements.(7/1/94)

5. **Question:** What is meant by "a simple random sample" in Regulation §80.127(a)? May the sampling be done quarterly?

Answer: The term simple random sample can mean that every combination of selected items has an equal chance of selection. However, that definition is impractical because, in general, it would require the attestation sample selection to begin only at the conclusion of the annual averaging period when the entire population is known. In consequence, EPA will allow judgmental selection of reasonably representative "random sampling" whereby every item in the population has a reasonably equal chance of selection.

Further, EPA encourages, but does not require, early and timely performance of the attestation. Therefore, EPA will not object to the sample being stratified by time whereby about a fourth of the sample may be selected from each of the first three quarters' activity, with reasonable allowance for differences in activity levels of the four quarters.

For example, if the annual population of RFG tenders is reasonably expected to exceed 65 for the 1996 reporting period, the expected sample size under Option 1 of §80.127(b) is 29 tenders. If each quarter's tender activity level were expected to be about the same, in April 1996 the CPA could take a sample of seven items from the first quarter's tenders and perform the attest procedures for those items at that time. The CPA might then take six items from the second quarter and six items from the third quarter and perform the attest procedures for those items later in 1996. In early 1997, the CPA would identify the portion of 1996 tenders attributable to each quarter and select the remaining ten items from the four quarters so as to stratify the sample by time, yet give consideration to the portion of the population in each quarter. In that way the CPA would have randomly sampled by quarter such that each tender would have a reasonably equal chance of selection. The CPA would still issue only one attestation report for the facility which the CPA's client would send to EPA by May 31, 1997. (4/18/95)

[NOTE: The following letter was sent on March 15, 1996.]

Ian A. MacKay, CPA
Director
Federal Government Division
American Institute of Certified Public Accountants
1455 Pennsylvania Avenue, NW

Washington, DC 20004-1081

Re: Alternative Attest Procedures

Dear Mr. MacKay:

Thank you for your January 11, 1996 letter in which you seek EPA approval for alternative attest procedures for use in conjunction with the reformulated gasoline and anti-dumping programs.

As you know, refiners, importers and many oxygenate blenders are required to commission annual attest engagements to review compliance with various aspects of the reformulated gasoline and anti-dumping programs. The minimum attest procedures are specified under 40 CFR Part 80, subpart F. In addition, the chapeau of 40 CFR § 80.128 provides that alternative attest procedures may be used provided that prior approval is obtained from EPA.

As a result of subsequent discussions, Mr. Stephen Chase, of the AICPA's Gasoline Attestation Task Force, has modified the alternative attest procedures for which you are seeking approval to those enclosed with this letter. EPA hereby approves use of the enclosed attest procedures. In particular, ¶ 2 (Agreed-upon procedures for refiners and importers) and ¶ 3 (Agreed-upon procedures for downstream oxygenate blenders) of the enclosed attest procedures may be used as alternatives to 40 CFR §§ 80.128 and 129, respectively. Moreover, ¶ 1 (Definitions) of the enclosed attest procedures may be used in conjunction with the these alternative attest procedures.

An auditor has the option of using either the 40 CFR § 80.128 attest procedures in their entirety, or the ¶ 2 alternative attest procedures in their entirety; and either the 40 CFR § 80.129 attest procedures in their entirety, or the ¶ 3 alternative attest procedures in their entirety. For either section, an auditor may not use a combination of the original attest procedures and the alternative attest procedures. In addition, alternative attest procedures are not being approved for portions of 40 CFR Part 80, subpart F, other than 40 CFR §§ 80.128 and 129.

Thank you for your efforts, and for those of the members of the AICPA's Gasoline Attestation Task Force, to develop alternative attest procedures.

If you have questions, you may call Fielding Lamason, at 202-564-1024.

Yours truly,

/s/

George Lawrence
Reformulated Gasoline Team Leader

¶ 1 Definitions.

The following definitions apply for the purposes of these alternative attest procedures:

(a) *Attestor* means the CPA or CIA performing the agreed-upon procedures engagement under this subpart.

(b) *EPA Reports or Company Documents* may refer to copies of such documents provided to the attestor.

(c) *Foot (or crossfoot)* is an attestation term that 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 attestor 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.

(d) *GTAB* (gasoline-treated-as-blendstock) refers to imported gasoline that is excluded from the import facility's compliance calculations, but is treated as blendstock in a related refinery that includes GTAB in its refinery compliance calculations.

(e) *Laboratory Analysis* means the summary of the 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 should be included. For refineries or importers that produce RFG or RBOB and use the 100% independent lab testing, the laboratory analysis shall consist of the results reported to the refinery or importer by the independent lab. Where assumed properties are used (e.g., for butane) the assumed properties may serve as the test results.

(f) *Non-finished-gasoline petroleum products* for attestation purposes is defined as liquid petroleum products that have boiling ranges greater than 75 degrees Fahrenheit, but less than 450 degrees Fahrenheit, as per ASTM D86 or equivalent.

(g) *Product Transfer Document(s)* means copy(ies) of document(s): *(1)* represented by the refiner/importer/oxygenate blender as having been provided to the transferee, and *(2)* 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).

(h) *Reporting Period* means the time period relating to the reports filed with EPA by the refiner, importer, or oxygenate blender as noted in ¶ 2(a)(1) and ¶ 3(a), and generally is the calendar year. The 1995 Reporting Period includes 1994 activity reported for the first quarter of 1995 as required by 40 CFR §80.75(a)(3).

(i) *Tender* means the transfer of ownership 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).

¶ 2 Agreed-upon procedures for refiners and importers.

The following minimum procedures may be carried out for a refinery and importer that is subject to the requirements of 40 CFR Part 80, subpart F, as an alternative to the procedures under 40 CFR §80.128.

(a) *EPA Reports*.

(1) Obtain and read a copy of the refinery's or importer's reports (except for batch reports) filed with the EPA as required by 40 CFR §§80.75 and 80.105 for the Reporting Period.

(2) In the case of a refiner's report to EPA that represents aggregate calculations for more than one refinery (i.e., more than one facility is listed in section 2.0 of an Anti-Dumping Program Annual Report, or in section 2.0 of a Reformulated Gasoline Sulfur, Olefin and T90 Averaging Report), obtain the refinery-specific volume and property information that was used by the refiner to prepare the aggregate report. Foot and crossfoot the refinery-specific totals and compare to the values in the aggregate report. The procedures in ¶¶ 2(b) through 2(m) then are performed separately for each refinery.

(3) Obtain a written representation from a company representative that the report copies are complete and accurate copies of the reports filed with the EPA.

(b) *Inventory reconciliation analysis*. Obtain an inventory reconciliation analysis for the refinery or importer for the Reporting Period by product type (i.e., reformulated gasoline, RBOB, conventional gasoline, and non-finished-gasoline petroleum products), and perform the following:

(1) Foot and crossfoot the volume totals reflected in the analysis; and

(2) Compare the beginning and ending inventory amounts in the analysis to the refinery's or importer's inventory records.

Note: *If the analysis shows no production of conventional gasoline or if the refinery or importer represents per ¶ 2(l) that it has a baseline less stringent or equal to the statutory baseline, the analysis may exclude non-finished-gasoline petroleum products.*

(c) *Listing of tenders*. For each product type other than non-finished gasoline petroleum products (i.e., reformulated gasoline, RBOB, conventional gasoline), obtain a separate listing of all tenders from the refinery or importer for the Reporting Period. Each listing should provide for each tender the volume shipped and other information as needed to distinguish tenders. Perform the following:

(1) Foot to the volume totals per the listings; and

(2) For each product type listed in the inventory reconciliation analysis obtained in ¶ 2(b), compare the volume total on the listing to the tender volume total in the inventory reconciliation analysis.

(d) *Listing of batches.* For each product type other than non-finished gasoline petroleum products (i.e., reformulated gasoline, RBOB, and conventional gasoline), obtain separate listings of all batches reported to the EPA and perform the following:

(1) Foot to the volume totals per the listings; and

(2) Compare the total volumes in the listings to the production volume in the inventory reconciliation analysis obtained in ¶ 2(b).

(e) *Reformulated gasoline tenders*. Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the listing of reformulated gasoline tenders obtained in ¶ 2(c), and for each tender selected perform the following:

(1) Obtain Product Transfer Document(s) associated with the tender and compare the volume on the tender listing to the volume on the Product Transfer Document(s); and

(2) Inspect the Product Transfer Document(s) evidencing the date and location of the tender and the compliance model designations for the tender (VOC-controlled [Region 1 or 2], non VOC-controlled, OPRG, non-OPRG, and simple or complex model certified).

(f) *Reformulated gasoline batches*. Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the listing of reformulated gasoline batches obtained in ¶ 2(d), and for each batch selected perform the following:

(1) Compare the volume shown on the listing, to the volume listed in section 3.0 of the corresponding batch report submitted to EPA; and

(2) Obtain the refinery's or importer's Laboratory Analysis and compare the properties listed in section 8.0 of the corresponding batch report submitted to EPA, to the properties listed in the Laboratory Analysis.

(g) *RBOB tenders*. Select a sample, in accordance with the guidelines 40 CFR §80.127, from the listing of RBOB tenders obtained in ¶ 2(c), and for each tender selected perform the following:

(1) Obtain Product Transfer Document(s) associated with the tender and compare the volume on the tender listing to the volume on the Product Transfer Document(s); and

(2) Inspect the Product Transfer Document(s) evidencing the type and amount of oxygenate to be added to the RBOB.

(h) *RBOB batches*. Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the listing of RBOB batches obtained in ¶ 2(d), and for each batch selected perform the following:

(1) Obtain from the refiner or importer the oxygenate type and volume, and oxygen volume required to be hand blended with the RBOB, in accordance with 40 CFR §§80.69(a)(2) and (8);

(2) Compare the volume shown on the listing, as adjusted to reflect the oxygenate volume determined under ¶ 2 (h)(1), to the volume listed in section 3.0 the corresponding batch report submitted to EPA; and

(3) Obtain the refinery's or importer's Laboratory Analysis of the RBOB hand blend and compare the oxygenate type and oxygen amount determined under ¶ 2(h)(1), to the tested oxygenate type and oxygen amount listed in the Laboratory Analysis; and compare the properties listed in section 8.0 of the corresponding batch report submitted to EPA, to the properties listed in the Laboratory Analysis.

(4) Categorize the RBOB Batch reports into two groups: *(1)* Group 1 - RBOB Batch reports showing (a) "RBOB-any oxygenate" with ethanol as oxygenate and an oxygen content of 2.0 weight percent, (b) "RBOB-ethers only" with only MTBE as oxygenate and an oxygen content of 2.0 weight percent, or (c) 4.0 volume percent ethanol and no other oxygenate, and *(2)* Group 2 - all other RBOB Batch reports. Perform the following procedures for each Batch report categorized in Group 2 (all others). [No additional procedures need to be performed for RBOB Batch reports categorized in Group 1.]

(i) Obtain and inspect a copy of an executed contract with the downstream oxygenate blender (or with an intermediate owner) evidencing that the contract: *(1)* was in effect at the time of the corresponding RBOB transfer, and *(2)* allowed the company to sample and test the RFG made by the blender.

(ii) Obtain a listing of RBOB blended by downstream oxygenate blenders and the refinery's or importer's oversight test results, and select a representative sample, in

accordance with the guidelines in 40 CFR §80.127, from the listing of test results and for each test selected perform the following:

(A) Obtain the Laboratory Analysis for the batch, and compare the type of oxygenate used and the oxygen content appearing in the Laboratory Analysis to the instructions stated on the Product Transfer Document(s) corresponding to a RBOB receipt immediately preceding the Laboratory Analysis and used in producing the RFG batch selected;

(B) Calculate the frequency or amount of the volume blended between the test selected and the next test; and

(C) Compare the frequency or volume blended between the test selected and the next test to the sampling and testing frequency rates stated in 40 CFR §80.69(a)(7).

(i) *Conventional gasoline and conventional gasoline blendstock tenders*. Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the listing of the tenders of conventional gasoline and conventional gasoline blendstock that becomes gasoline through the addition of oxygenate only, and for each tender selected perform the following:

(1) Obtain Product Transfer Document(s) associated with the tender and compare the volume on the tender listing to the volume on the Product Transfer Document(s); and

(2) Inspect the Product Transfer Document(s) evidencing that the information required in 40 CFR §80.106(a)(1)(vii) is included.

(j) *Conventional gasoline batches*. Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the conventional gasoline batch listing obtained in ¶ 2(d), and for each batch selected perform the following:

(1) Compare the volume shown on the listing, to the volume listed in section 3.0 of the corresponding batch report submitted to EPA; and

(2) Obtain the refinery's or importer's Laboratory Analysis and compare the properties listed in section 8.0 of the corresponding batch report submitted to EPA, to the properties listed in the Laboratory Analysis.

(k) *Conventional gasoline oxygenate blending*. Obtain either *(1)* a written representation from the refiner for the refinery or importer that it has not used any downstream oxygenate blending in its conventional gasoline compliance calculations, or *(2)* a listing of each downstream oxygenate blending facility and its blender, as represented by the

refiner/importer, as adding oxygenate used in the compliance calculations for the refinery or importer.

(1) For each downstream oxygenate blender facility, obtain a listing from the refiner or importer of the batches of oxygenate included in its compliance calculations added by the downstream oxygenate blender and foot to the total volume of batches per the listing;

(2) Obtain a listing from the downstream oxygenate blender of the oxygenate blended with conventional gasoline or sub-octane blendstock that was produced or imported by the refinery or importer and perform the following:

(i) Foot to the total volume of the oxygenate batches per the listing; and

(ii) Compare the total volumes in the listing obtained from the downstream oxygenate blender, to the listing obtained from the refiner or importer in ¶ 2(k)(1).

(3) Where the downstream oxygenate blender is a person other than the refiner or importer, as represented by management of the refinery or importer, perform the following:

(i) Obtain the contract from the refiner or importer with the downstream blender and inspect the contract evidencing that it covered the period when oxygenate was blended;

(ii) Obtain company documents evidencing that the refiner or importer has records reflecting that it conducted physical inspections of the downstream blending operation during the period oxygenate was blended;

(iii) Obtain company documents reflecting the refiner or importer audit over the downstream oxygenate blending operation and inspect these records evidencing the audit included a review of the overall volumes and type of oxygenate purchased and used by the oxygenate blender to be consistent with the oxygenate claimed by the refiner or importer, and that this oxygenate was blended with the refinery's or importer's gasoline or blending stock; and

(iv) Obtain a listing of test results for the sampling and testing conducted by the refiner or importer over the downstream oxygenate blending operation, and select a sample, in accordance with the guidelines in 40 CFR §80.127, from this listing. For each test selected, compare the tested oxygenate volume with the oxygenate volume in the listing obtained from the oxygenate blender in ¶ 2(k)(2) for this gasoline.

(l) *Blendstock tracking*. Either: obtain a written representation from management of the refinery or importer that it has a baseline for each property that is less stringent or equal to the statutory baseline (i.e., it is exempt from blendstock tracking under 40 CFR §80.102(f)(1)(i)); or *(2)* perform the following procedures:

(1) Obtain listings for those tenders of non-finished-gasoline petroleum products classified by the refiner or importer as:

(i) Applicable blendstock which is included in the refinery's or importer's blendstock tracking calculations pursuant to 40 CFR §§80.102(b) through (d);

(ii) Applicable blendstock which is exempt pursuant to 40 CFR §80.102(d)(3) from inclusion in the refinery's or importer's blendstock tracking calculations pursuant to 40 CFR §§80.102(b) through (d); and

(iii) All other non-finished-gasoline petroleum products;

(2) Foot to the totals of the tender volumes contained in the listings obtained from the refinery or importer in ¶ 2(l)(1);

(3) Compare the total volume of tenders per the listings to the total tender volume of non-finished-gasoline products on the gasoline inventory reconciliation analysis obtained in ¶ 2(b); and

(4) Compute and report as a finding the refinery's or importer's ratio of all non-finished petroleum products to total gasoline production. [Total gasoline production is the volume total of the batches from ¶ 2(d) for RFG, RBOB, and conventional gasoline, exclusive of California gasoline.]

Note: *No further procedures must be performed under ¶ 2(l) if: (1) the ratio in ¶ 2(l)(4) is less than or equal to 3%, and (2) the refiner represents in writing that blendstock accounting is not required under 40 CFR §80.102(g). Otherwise*:

(5) Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the tender listing obtained in ¶ 2(l)(1)(ii), and for each tender selected perform the following:

(i) Obtain the refinery's or importer's company documents that evidence the transfer of the product to another party and compare the volumes contained in these records to the listing of tenders; and

(ii) Obtain documents from the refinery or importer that support the exclusion of the applicable blendstock from the blendstock-to-gasoline ratio, and agree that the documented purpose is one of those specified at 40 CFR §80.102(d)(3);

(6) Compare the total tender volume obtained in ¶ 2(l)(1)(ii) to the "total volume of applicable blendstock produced or imported, transferred to others and excluded from blendstock ratio calculations" listed in section 3.3 of the Anti-Dumping Program Annual Report copy received pursuant to ¶ 2(a)(1), or to the refinery-specific volume under ¶ 2(a)(2) used to prepare an aggregate report submitted to EPA.

(7) Compute and report as a finding the refinery's ratio of applicable blendstocks included in the tracking calculation (¶ 2(l)(1)(i)) plus all other non-finished-gasoline petroleum products (¶ 2(l)(1)(iii)), to total gasoline production. [Total gasoline production is the volume total of the batches from ¶ 2(d) for RFG, RBOB, and conventional gasoline, exclusive of California gasoline.]

Note: *No further procedures must be performed under ¶ 2(l) if : (1) the ratio in ¶ 2(l)(7) is less than or equal to 3%, (2) no exceptions were noted in ¶ (2)(l)(5), and (3) the refiner represents in writing that blendstock accounting is not required under 40 CFR §80.102(g) then. Otherwise:*

(8) Select a sample, in accordance with the guidelines in 40 CFR §80.127 , from the listing obtained in ¶ 2(l)(1)(iii), and for each tender selected perform the following:

(i) Obtain the records that evidence the transfer of the product to another party and compare the volume contained in these records to the volume on the listing of tenders; and

(ii) Inspect the product type assigned by the refiner or importer on the transfer document (i.e., alkylate, raffinate, etc.) and agree that this product type is excluded from the applicable blendstock list at 40 CFR §80.102(a).

(9) Compare the total tender volume obtained in ¶ 2(l)(1)(i) to the "total volume of applicable blendstock produced or imported, transferred to others and included in blendstock ratio calculations" listed in section 3.2 of the Anti-Dumping Program Annual Report copy received pursuant to ¶ 2(a)(1), or to the refinery-specific volume under ¶ 2(a)(2) used to prepare an aggregate report submitted to EPA.

(10) Compute and report as a finding the refinery's ratio of applicable blendstocks included in the tracking calculation (¶ 2(l)(1)(i)) to total gasoline production. [Total gasoline production is the volume total of the batches from ¶ 2(d) for RFG, RBOB, and conventional gasoline, exclusive of California gasoline.]

Note: *No further procedures must be performed under ¶ 2(l) if: (1) the ratio in ¶ 2(l)(10) is less than or equal to 3%, and (2) the refiner represents in writing that blendstock accounting is not required under 40 CFR §80.102(g). Otherwise*:

(11) Obtain the refinery's or importer's blendstock-to-gasoline ratios for calendar years 1990 through 1993.

(12) (i) In the case of averaging periods prior to 1998, compute and report as a finding the peak year blendstock-to-gasoline ratio percentage change as required under 40 CFR §102(d)(1)(ii); or

(ii) In the case of averaging periods beginning in 1998, compute and report as a finding the running cumulative compliance period blendstock-to-gasoline ratio as required under 40 CFR §80.102(d)(2)(i), and the cumulative blendstock-to-gasoline ratio percentage change as required under 40 CFR §80.102(d)(2)(ii).

(13) Obtain from the refiner or importer the prior year's peak year blendstock-to-gasoline ratio percentage change (if the prior year was prior to 1998), or running cumulative compliance period blendstock-to-gasoline ratio (if the prior year was 1998 or later).

Note: *No procedures must be performed under ¶ 2(m) if: (1) for the prior year the peak year blendstock-to-gasoline ratio percentage change (for 1995 through 1997), or the cumulative blendstock-to-gasoline ratio percentage change (for 1998 and after), is less than ten; and (2) the refiner represents in writing that blendstock accounting is not required under 40 CFR §80.102(g); otherwise proceed to Blendstock Accounting, ¶ 2(m):*

(m) *Blendstock accounting*.

(1) Obtain listings for those tenders of non-finished-gasoline petroleum products tenders classified by the refinery or importer as:

(i) Blendstock which is included in the compliance calculations for the refinery or importer; and

(ii) All other non-finished-gasoline petroleum products;

(2) Foot the total volume of tenders per the listings;

(3) Compare the total volume of tenders per the listings to the gasoline inventory reconciliation analysis obtained in ¶ 2(b);

(4) Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the listing of blendstock tenders which are included in the compliance calculations for the refinery or importer, and for each tender selected perform the following:

(i) Compare the volumes to company documents evidencing the transfer of the tender to another party;

(ii) Note the Product Transfer Document(s) includes the statement indicating the blendstock has been accounted-for, and may not be included in another party's compliance calculations; and

(5) Compare the total tender volume obtained in ¶ 2(m)(1)(i) to the "total volume of blendstocks included in compliance calculations" listed in section 3.4 of the Anti-Dumping Program Annual Report copy received pursuant to ¶ 2(a)(1), or to the refinery-specific volume under ¶ 2(a)(2) used to prepare an aggregate report submitted to EPA.

(6) Select a sample, in accordance with the guidelines in 40 CFR §80.127, from the listing of tenders of non-finished-gasoline petroleum products that are excluded from the refinery's or importer's compliance calculations, and for each tender selected confirm that company documents demonstrate that the petroleum products were used for a purpose other than the production of gasoline within the United States.

¶ 3 Agreed-upon procedures for downstream oxygenate blenders.

The following minimum procedures may be carried out for an oxygenate blending facility that is subject to the requirements of 40 CFR Part 80, subpart F, as an alternative to the procedures under 40 CFR §80.129.

(a) *EPA Blender Reports*. Obtain and read a copy of the blender's reports (except for Batch reports) filed with the EPA as required by 40 CFR §80.75 for the Reporting Period. Obtain a written representation from a company representative that the copies are complete and accurate copies of the reports filed with the EPA.

(b) Inventory reconciliation analysis. Obtain from the blender an inventory reconciliation analysis for the Reporting Period that summarizes: *(1)* RBOB, RFG, and oxygenate receipts, *(2)* RBOB , RFG, and oxygenate beginning and ending inventories, *(3)* RFG production, and *(4)* RBOB and RFG tenders, and perform the following:

(1) Foot and the crossfoot volume totals reflected in the analysis; and

(2) Compare the beginning and ending inventory amounts in the analysis to the blender's inventory records.

(c) *RBOB receipts*. Obtain a listing of all RBOB receipts for the Reporting Period, and perform the following:

(1) Foot to the total volume of RBOB receipts per the listing;

(2) Compare the total RBOB receipts volume reflected on the listing to the RBOB receipts volume on the inventory reconciliation analysis;

(3) Select a sample, in accordance with the guidelines in 40 CFR §80.127, of RBOB receipts from the listing. For each selected RBOB receipt, obtain product transfer document(s) specifying the type and volume of oxygenate to be added to the RBOB.

(d) *Oxygenate receipts*. Obtain a listing of all oxygenate receipts for the Reporting Period, and perform the following:

(1) Foot to the total volume of oxygenate receipts per the listing;

(2) Compare the total oxygenate receipts volume reflected on the listing to the oxygenate receipts volume on the inventory reconciliation analysis.

(e) *RFG Tenders*. Obtain a listing of all RFG tenders for the Reporting Period, and perform the following:

(1) Foot to the total RFG tenders per the listing;

(2) Compare the total RFG tenders volume reflected on the listing to the RFG tenders volume on the inventory reconciliation analysis;

(3) Select a sample, in accordance with the guidelines in 40 CFR §80.127, of RFG tenders from the listing, and for each tender selected perform the following:

(i) Obtain the Product Transfer Document(s) associated with the tender and compare the volume on the tender listing to the volume on the Product Transfer Document(s).

(ii) Inspect the Product Transfer Document(s) evidencing the date and location of the tender and the compliance model designations for the tender (VOC-controlled [Region 1 or 2], non VOC-controlled, OPRG, non-OPRG, and simple or complex model certified).

(f) *RBOB tenders*. Obtain a listing of all RBOB tenders during the Reporting Period, and perform the following:

(1) Foot to the total volume of RBOB per the listing;

(2) Compare the total RBOB tenders volume reflected on the listing to the RBOB tenders volume on the inventory reconciliation analysis.

(g) *RFG batches*. Obtain a listing of all RFG batches produced during the Reporting Period, and perform the following:

(1) Foot to the total volume of RFG batches produced per the listing;

(2) Compare the total RFG batch volume reflected on the listing to the RFG batch volume on the inventory reconciliation analysis.

(h) *Blenders sampling and testing batches*. For blenders that meet the oxygenate blending requirements by sampling and testing each batch of RFG, select a sample, in accordance with the guidelines in 40 CFR §80.127, of RFG batches from the listing obtained in ¶ 3(g), and for each batch selected perform the following:

(1) Obtain the internal Laboratory Analysis for the batch, and compare the type of oxygenate used and the oxygen content appearing in the Laboratory Analysis to the instructions stated on the Product Transfer Document(s) corresponding to a RBOB receipt immediately preceding the Laboratory Analysis and used in producing the RFG batch selected.

(2) Compare the oxygen content results of the Laboratory Analysis to the corresponding batch information reported to EPA.

(i) *Blenders <u>not</u> sampling and testing each batch*. For blenders that are NOT sampling and testing each batch of RFG, perform the following:

(1) Obtain a listing of the monthly (or lesser period if used by the blender) oxygen compliance calculations, and

(i) Foot the RBOB and oxygenate volumes used in the individual compliance calculations; and

(ii) Compare the totals to the corresponding volumes on the inventory reconciliation analysis.

(2) Select a sample, in accordance with the guidelines in 40 CFR §80.127, of RFG batches on the listing obtained in ¶ 3(g), and for each batch selected perform the following:

(i) Compare the oxygen content information shown on the listing to the oxygen content reflected in the corresponding oxygen compliance calculation; and

(ii) Obtain a written representation from a company representative as to whether the oxygenate blender is basing the calculation on the assumptions for specific gravity and denaturant content (if ethanol is used), or on measured values. If the blender is using measured values, obtain the blender's test results for specific gravity and

denaturant content for the RBOB and oxygenate used, and compare the test results to the compliance calculations. If the blender is using the assumed values for specific gravity and denaturant content, compare the values used in the compliance calculation to the values specified by EPA.

(3) Obtain a listing of reformulated gasoline samples tested in connection with the blenders quality assurance program, and:

(i) Select a sample, in accordance with the guidelines in 40 CFR §80.127, of RFG samples from the list.

(ii) For each RFG sample selected, obtain the corresponding Laboratory Analysis and compare the oxygen content to the ranges specified by the EPA.

(iii) Based on the selected RFG sample's compliance with EPA oxygen content compliance, inspect the listing evidencing that the frequency of the next sample made in connection with the quality assurance program was within EPA specifications under 40 CFR §80.69(e)(2).

(j) *Blenders using assumed values*. For blenders that are using the assumed values for ethanol denaturant content in the oxygen compliance calculation, obtain a chronological list of the ethanol samples tested in connection with the blender's quality assurance program. The listing should show the sampling dates and test results as to the oxygenate purity level. Select a sample, in accordance with the guidelines in 40 CFR §80.127, of ethanol samples from the list and perform the following:

(1) Obtain the Laboratory Analysis corresponding to the selection and compare the oxygenate purity level per the Laboratory Analysis to the level on the list; and

(2) Based on the level of oxygenate purity, inspect the listing evidencing that the frequency of the next sample made in connection with the blender's quality assurance program was at least once a month if oxygenate purity equals or exceeds 92.1%; or at least once every two weeks if oxygenate purity is less than 92.1%, for any of the past four tests.

L. Anti-Dumping Requirements

1. **Question:** Is the transition date for conventional gasoline (subject to Anti-dumping requirements) the same as the December 1, 1994 terminal level date currently indicated for RFG?

Answer: No, the anti-dumping gasoline requirements are for conventional gasoline produced during the averaging period which begins January 1, 1995.(7/1/94)

2. **Question:** If a refiner produces only conventional gasoline, what is the purpose of the added burden of testing, auditing, documentation, and general compliance requirements? Since there is only conventional gasoline produced, there can be no dumping. Also, if the EPA is concerned with other companies dumping into our conventional gasoline pool by selling us blendstocks, the blendstock accounting section would prohibit this. Thus, we come back to the question, "What is EPA's intent with the baseline and compliance requirements for conventional gasoline refiners?" Can
the EPA exempt refiners from the accounting requirements for conventional gasoline? The EPA could exempt conventional gasoline reporting for a baseline volume; however, this implies that the EPA has a hidden agenda to control the future quality, if not the current quality, of conventional gasoline. Is it possible to petition the EPA for an exemption to the accounting and compliance requirements for conventional gasoline?

Answer: The Clean Air Act requires that all conventional gasoline on average be at least as clean as it was in 1990 regardless of who produces the conventional gasoline. Therefore, all refiners and importers are subject to requirements that ensure the quality of their conventional gasoline beginning in 1995. Refiners and importers of conventional gasoline could provide "dirtier" gasoline if not specifically prohibited, regardless of whether they produce or import RFG. Therefore, neither the statute nor the regulations provide for exceptions to these requirements.(7/1/94)

3. **Question:** The applicability of standards in §80.101(c) is not clear. Do these provisions apply by refiner, regardless of how its refineries are aggregated? These provisions should apply to either individual refineries or aggregated refineries, depending on the refiner's choice of grouping refineries according to §80.101(h).

Answer: The standards specified at §80.101(c) apply to individual refineries or refinery groupings as selected by the refiner under § 80.101(h).(7/1/94)

4. **Question:** Refiners with low baseline levels of sulfur and olefins will have difficulty meeting the standards for these parameters under the simple model. Further, the requirement for NOx emission levels beginning in 1998 for conventional gasoline may be lower than NOx levels for Phase I and/or Phase II RFG. How will refiners find equitable treatment under these circumstances?

Answer: The regulations implement the terms of both the Reg Neg agreement and the statute very clearly for conventional gasoline. Sulfur and olefins cannot exceed 125% of the baseline levels under the simple model, and NOx emissions cannot increase over baseline levels beginning in 1998. There are no exceptions to these requirements.(7/1/94)

5. **Question:** If a cargo of conventional gasoline is imported before 1995, but not sold over the rack or to a wholesaler until 1995, is it to be accounted in the 1995 compliance calculation?

Answer: Standards apply to any conventional gasoline produced or imported during the averaging period. Therefore, a cargo of conventional gasoline imported before January 1995 would not be included in the importer's 1995 compliance calculation, even if all or some of the cargo was not sold until 1995.(9/12/94)

6. **Question:** Refiner A is holding some of Refiner B's conventional gasoline in tanks at one of Refiner A's terminals or at Refiner A's refinery. Refiner A adds additional stocks to that gasoline at the request of Refiner B. Who is responsible for including the stocks in their compliance calculation (Refiner A or Refiner B)?

Answer: The definition of "refiner" includes any person who owns, leases, operates, controls or supervises a refinery. Therefore, under this scenario, both the person who owns the gasoline being blended, and the person who owns the terminal tanks would be considered to be refiners. Each person meeting the definition of refiner for a particular refinery operation is independently responsible for the completion of all refinery requirements, such as meeting standards, sampling and testing, record keeping, reporting, and independent audits. However, these refinery requirements must be met only once for any refinery operation. As a result, if the refinery requirements are properly accomplished by one "refiner" for a particular refinery operation, EPA will consider the requirements to have been accomplished by each person who meets the definition of refiner for that operation.

Normally the product owner takes responsibility for meeting the anti-dumping requirements. In the situation described in this question, the owner of the blendstock (who is not identified in the question) therefore would normally take responsibility for the anti-dumping requirements.(7/1/94)

7. **Question:** Does blending oxygenate in conventional gasoline at a terminal require the terminal operator to be registered as an "oxygenate blender?"

Answer: The downstream blender of oxygenates exclusively into conventional gasoline is not subject to the anti-dumping requirements and therefore does not require registration by the operator.(7/1/94)

8. **Question:** Where in the final anti-dumping regulations are oxygenate blenders excluded from the antidumping requirements?

Answer: Although oxygenate blenders have been considered refiners under previous EPA programs, they have been defined separately from refiners under § 80.2 for the purpose of specific requirements under the RFG program. The regulations specify that only refiners and importers are

subject to the anti-dumping requirements. Therefore, oxygenate blenders are excluded from the anti-dumping requirements to the extent that they exclusively add oxygenate, and not other blendstocks such as raffinate, etc.(7/1/94)

9. **Question:** Could a refiner who distributes only in an attainment area produce all or part of his gasoline as RFG and market as conventional gasoline without including the RFG portion in meeting his 1990 baseline requirements? What are the recordkeeping implications?

Answer: It is not a violation to market reformulated gasoline in conventional gasoline areas. Gasoline designated as RFG must still meet all RFG requirements, including recordkeeping, reporting, independent sampling and testing, auditing, etc.(7/1/94)

10. **Question:** If a batch of reformulated gasoline fails to meet the RFG specifications but meets the anti-dumping (i.e. conventional gasoline) specifications, can this batch be certified as conventional gasoline? May it be distributed through a facility located in an RFG area? What is required on the bill of lading? What else is required of the distributor? Is the distributor liable if the recipient sells the conventional gasoline in an RFG area?

Answer: Gasoline that does not meet the requirements for reformulated gasoline may be designated as conventional gasoline prior to leaving the refinery and must be included in the refiner's compliance calculations in accordance with the anti-dumping requirements regardless of its original intended designation. The regulations do not prohibit the distribution of conventional gasoline to a non-covered area from a facility located in a covered area, subject to the applicable controls under § 80.78. But, the facility should take appropriate precautions to ensure that conventional gasoline is not distributed in the covered area.(7/1/94)

11. **Question:** Anti-dumping section 80.101(e) Products to which standards do not apply, indicates that "California gasoline" should be excluded from a refinery's compliance calculations. "California gasoline" is defined in 80.81 as "any gasoline that is sold, intended for sale, or made available for sale as a motor vehicle fuel in the State of California and that (i) is manufactured within the State of California; (ii) is imported into the State of California from outside the United States; or (iii) is imported into the State of California from inside the United States and that is manufactured at a refinery that does not produce reformulated gasoline."

Based on these sections, is it a correct interpretation that starting in 1995 a California refinery or importer producing or importing conventional gasoline solely for the California market would exclude all its gasoline from baseline compliance calculations and therefore not have any reporting requirements?

Answer: Refiners and importers providing gasoline for use in non-RFG areas in California prior to March 1, 1996 must meet all the anti-dumping requirements. Gasoline produced or imported for use in California on or after March 1, 1996 is not subject to the anti-dumping requirements.(7/1/94)

12. **Question:** Since gasoline produced or imported for use in California on or after March 1, 1996 is not subject to the anti-dumping requirements, will all such gasoline be subject to the RFG requirements even if this gasoline is to be used outside to the RFG area?

Answer: This question indicates a misunderstanding of the nature of the enforcement exemption for California gasoline at § 80.81. This exemption is from certain requirements intended to demonstrate compliance with the RFG and anti-dumping requirements, such as independent sampling and testing, and subsequent to March 1, 1996 when the California Phase II standards become effective, certain record keeping and reporting requirements. Section 80.81 is not an exemption from meeting the RFG standards for gasoline used in RFG covered areas or the anti-dumping standards that apply to conventional gasoline. EPA has granted the exemption at § 80.81 because there is a presumption that gasoline produced to meet the California Phase II standards will also meet the federal RFG standards. If any gasoline produced in California does not meet the RFG standards (in the case of gasoline used in the Los Angeles or San Diego RFG covered areas), or the anti-dumping standards (in the case of gasoline used outside these RFG covered areas), the refiner or importer will have violated the RFG/anti-dumping regulations, for which penalties may be assessed.

As a result, gasoline used outside the RFG covered areas in California will be evaluated for compliance with the anti-dumping standards, and not with the RFG standards. As a practical matter, it is likely that gasoline produced to meet the California Phase II standards also would meet the federal anti-dumping standards. Nevertheless, California refiners should evaluate the refinery-specific anti-dumping standards (at § 80.101) that apply to their refineries to ensure these standards are met.(8/29/94)

13. **Question:** Are aliphatic solvents to be considered gasoline under the test of Section 80.102(a)(2), since the addition of oxygenates will result in a marketable gasoline, even if they are marketed for purposes other than gasoline.

Answer: Products such as aliphatic solvents, for which there is documentation to demonstrate that they are not used in the production of gasoline, are not considered gasoline or gasoline blendstocks.(7/1/94)

14. **Question:** Recently, a natural gas pipeline condensate was refused at a fractionator. The condensate met all fractionator specifications and did not contain any hazardous materials.

The operator of the fractionator advised that their facility could only take in previously manufactured materials as a direct result of the anti-dumping rules contained in the reformulated gasoline regulations. Within the anti-dumping Subpart E, we cannot find any mention of previously manufactured materials. However, Subsection 80.102 "Controls applicable to blendstocks" does define "gasoline blendstocks" as products that are produced by a refiner but it also goes on to include other blendstocks with properties certain.

The condensate described herein would not meet the definitional requirements of a gasoline blendstock as its end point would disqualify it as a gasoline (if an oxygenate was added). The fractionator would separate the condensate into a gasoline component and a diesel component.

Is it the intention of the EPA that only manufactured products be used in blending either reformulated or conventional gasoline? Is it the intent to restrict the use of naturally occurring hydrocarbons in a fractionator that produces gasoline?

Answer: The regulations do not prohibit or restrict the use or distribution of any gasoline or gasoline blendstocks regardless of their origin. Compliance with the anti-dumping requirements is based primarily on the properties of finished conventional gasoline. However, for the reasons discussed in the preamble to the final rule, the regulations also require the tracking and accounting of certain "applicable blendstocks" as defined in the regulations. The regulations do not intend to restrict the use of naturally occurring hydrocarbons. (7/1/94)

15. **Question:** A refiner produces a tank of conventional gasoline on December 30, 1995. The tank is not shipped until January 2, 1996. Must the refiner include this batch in his 1995 volume or does he have the option of including it in either 1995 or 1996?

Answer: Compliance for a particular batch of conventional gasoline is based on the date the batch is produced, not shipped. As a result, the batch identified in the question would be included in the 1995 compliance calculations. However, the volume for that batch would be the entire shipped volume, even though the shipment did not occur until 1996.(7/1/94)

16. **Question:** The regulations require a refiner or importer to determine and report properties for each batch of reformulated and conventional gasoline it produces or imports. The wording would indicate that a refiner would report the volume produced into a tank. A better method would be to base the volume on refinery shipments. There are generally official records for refinery shipments such as meter tickets, bills-of-lading or tank gauges. These records can be more easily verified than trying to track refinery production.

Consider the situation where conventional gasoline is shipped from a refinery tank through a meter with a representative composite line sample collected on the shipment. The composite sample is tested in the refiner's lab for the required parameters. Please confirm that this method is acceptable for determining the conventional gasoline properties and volume.

Answer: The method described above is appropriate for determining the volume and properties of a batch of conventional gasoline as required by the anti-dumping regulations provided the sample analyses and volume determination are supported by appropriate documentation.(7/1/94)

17. **Question:** Baseline volumes are determined as the larger of the total volume produced in or shipped from a facility in 1990, excluding gasoline blendstocks and exported gasoline, and including the oxygenate volume under certain circumstances. Compliance volumes are described as volumes produced and shipped during the compliance period. Is there an intentional difference in the volume descriptions of baseline development and compliance records?

Answer: Yes, the difference was intentional. The baseline determination provisions at §§ 80.90 and 80.91 are intended to allow for the largest volume of product possible for determining refinery baseline values and therefore permit the larger of produced or shipped as the 1990 volume. The compliance requirements, however, apply to the volume of gasoline produced and shipped during the compliance period. For consistency between averaging periods, the date of production defines in which averaging period product is included even if shipment occurs after December 31.(7/1/94)

18. **Question:** § 80.101(i)(1) says that conventional gasoline cannot leave a refinery until testing is completed for all parameters used in the compliance calculation. (e)(2) of the same section says that for purposes of meeting (e)(1) a refiner may composite samples and treat that as one batch provided that the composite is not for materials produced or imported over more than one month. May material leave the refinery before analysis is run on the composite? Just a comment, is it really necessary to hold up a batch for at least three hours while an FIA is run for olefins especially since the results of an individual batch are irrelevant for conventional gasoline. Is it EPA's intention to preclude in-line blending of conventional gasoline by this requirement?

Answer: The regulations have been revised at § 80.101(i)(1) to allow conventional gasoline to leave a refinery or importer facility prior to the completion of sample testing. Note that there are additional constraints related to composite samples at § 80.101(i)(2) that must be followed for refiners that use composite sampling. The volume and results of analysis of the composite sample should be treated as if applied to one batch for the purposes of §§ 80.104 and 80.105. Further, this revision to the regulation will allow the continued practice of in-line blending for conventional gasoline. See the "In-Line Blending" section for further discussion of this subject.(7/1/94)

19. **Question:** Conventional gasoline refiners and importers who elect the simple model to determine compliance during the 1995-1997 period will need to test for T90, olefins, sulfur, benzene and aromatics. They must then report T90, olefins, sulfur and exhaust benzene average results on an annual basis. Will these refiners and importers need to test and report any of the

other quality parameters? Will simple model RFG refiners and importers and their independent labs need to test and report T50, E200 or E300?

Answer: No for both questions.(7/1/94)

20. **Question:** For a conventional gasoline refiner that has oxygenate added downstream of the refinery, what sampling frequency and test methods must be used?

Answer: For a refiner of blending stock to include in its compliance calculations the oxygenate used in blending conventional gasoline where the downstream blending was conducted by a person other than the refiner, § 80.101(d)(4)(ii)(B)(2) requires (among other things), that the refiner conduct "periodic sampling and testing of the gasoline produced subsequent to oxygenate blending." The frequency and test methods are not specified in the regulations. However, for any quality assurance testing program under the RFG and anti-dumping regulations, if test methods other than the regulatory test methods are used, adequate correlation to the regulatory test methods must be demonstrated. The frequency of testing under any quality assurance program will depend upon the nature of the specific operation, taking into account all factors, such as prior testing results and opportunity for violations to occur. For further discussion of the what constitutes adequate periodic sampling and testing for a quality assurance program, see Question 11, VII.B., of the July 1, 1994 Question and Answer document.(10/17/94)

21. **Question:** When no oxygenates are added to gasoline, must an oxygenate analysis be performed?

Answer: Under the anti-dumping requirements, the refiner and importer is required to determine the properties of each batch of gasoline required for determining compliance with the applicable standards. Under the simple model, an analysis for oxygenates would clearly be unnecessary. If a particular batch of gasoline has been imported or received from another refiner or the refiner is using the complex model, then a full analysis, including oxygenates, is appropriate. If, however, the refiner has produced conventional gasoline under the complex model from crude oil without the addition of any oxygenates, an analysis for oxygenates would not be necessary. Under the RFG program, a refiner is required to ensure compliance with the applicable oxygen requirements and must test accordingly.(7/1/94)

22. **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.(11/21/94)

23. **Question:** In a situation where Refinery A purchases finished conventional gasoline from Refinery B, Refinery B should include the gasoline in its compliance calculations and Refinery A should exclude it. If Refinery A blends the gasoline with its own blendstocks and, therefore, must mathematically adjust the volume and properties of the average conventional gasoline production to account for the gasoline from Refinery B, what properties should be used in this adjustment, the analysis performed by Refinery B prior to shipment, or the analysis performed by Refinery A as the product was received?

Answer: The analysis of the product that is performed by Refinery A should be used. (4/18/95)

24. **Question:** A refinery has streams (alkylate, butane, platformate, etc.) being blended into two tanks, 95 and 85 octane. Products from these two tanks are in-line blended at the rack to give 87, 89, and 92 octane product. Can just the 85 and 95 octane tanks be certified for all gasoline properties for a specific volume (batch), without actually sampling any product downstream of the in-line blending?

Answer: Conventional gasoline that has been included in a refiner's compliance calculations may be fungibly mixed, including multi-grade mixing, without the need for additional sampling and testing.(8/29/94)

25. **Question:** Could a refinery producing conventional gasoline composite samples up to one month, ship to another location and run testing there?

Answer: Yes. The regulations do not specify where or by whom the testing may be performed. The refiner or importer is ultimately responsible for sampling and testing each batch of conventional gasoline and reporting the results to EPA. Composite sampling is appropriate under the conditions specified at § 80.101(i)(2).(7/1/94)

26. **Question:** For conventional gasolines, the annual compliance report is based on all gasolines. Can one monthly composite be made up of all grades of gasolines and all seasons produced in that month, rather than one composite for each grade and season when compliance is demonstrated with the simple model? the complex?

Answer: For the criteria for using composite samples for compliance calculations, see § 80.101(i)(2).(10/17/94)

27. **Question:** If a refiner elects to use composite sampling and testing as provided for in the regulations, may the refiner use composite sampling for one parameter and perform the required tests for the other relevant properties?

Answer: Section 80.101(i) requires refiners to separately sample each batch of gasoline and blendstocks that are included in anti-dumping compliance calculations, and either separately analyze each sample, or under § 80.101(i)(2), analyze a volume-weighted composite of the samples collected up to a one month period. It would be appropriate to separately analyze the individual batch samples for certain parameters, and to analyze composite samples for those same batches for other parameters. If this approach is used, however, each batch should be reported separately to EPA, by using the individual batch analyses for those parameters separately analyzed and assigning the composite analysis result for composite parameters to all batches included in the composite sample.(10/17/94)

28. **Question:** Confirm that the only specification for a blendstock being added to finished gasoline in early use of the Simple Model is a per gallon specification not exceeding the antidumping baseline exhaust benzene level, (per Section 80.101(g)(3)), and later the exhaust toxic and exhaust NOx baseline levels in 1998 and beyond. This is very important to clearly understand as regular CBOB is not a fungible grade of gasoline. Component blending with finished regular and ethanol is a very important option to blending regular CBOB with ethanol in terminals. This option is critical whenever the refinery that feeds the CBOB terminals requires maintenance or has operational problems, and no other refinery that feeds that terminal makes regular CBOB.

Answer: Under the simple model for 1995-1997, refiners and importers are required to meet standards for exhaust benzene, sulfur, olefins and T90 on an annual average basis for conventional gasoline and, under certain conditions, applicable blendstocks as specified in § 80.102. Beginning in 1998, refiners and importers are required to meet standards for exhaust NOx and toxics emissions on an annual average basis. There are no "per-gallon" requirements for conventional gasoline. The anti-dumping requirements do not preclude the blending of ethanol with finished gasoline or with blendstocks which become gasoline upon the addition of oxygenates.(7/1/94)

29. **Question:** For a refiner producing conventional gasoline, may the election of using the simple or optional complex model until 1998 be changed annually?

Answer: Yes. However, if the Simple Model Standards for reformulated gasoline are used, then the Simple Model Standards for conventional gasoline must be used. If the Complex Model Standards for reformulated gasoline are used, then the Optional Complex Model Standards for conventional gasoline must be used. Beginning on January 1, 1998 only the Complex Model Standards for conventional gasoline are applicable. RFG produced in 1994, however, must use the same model as that chosen for 1995.(7/1/94)

30. **Question:** Reference section 80.101(g) Compliance Calculations: Section 80.101(g)(1) requires the computation of an "annual average value for each parameter or emissions performance during the averaging period." Paragraph (g)(1)(ii) presents an equation for computing averaged parameters based on individual batch data (APARM). Are the values computed for APARM then substituted in the appropriate equations found in 80.45? If so, should the words "for each batch" in paragraphs (g)(1)(iii-v) be eliminated? If not how are averaged values for emissions performance to be calculated from the values of APARM?

Sections 80.101(g)(5) and (6) designate which model to use, summer or winter, to compute batch emissions performance. 40 CFR 80.27 contains both RVP limits by geographical area and by control period. Are "summer gasolines" to be determined by both limits? Should any gasoline produced to the applicable RVP limit be designated as summer regardless of what time of year it was produced? Or should summer gasoline be only that gasoline meeting the RVP limit and produced during the control period?

Answer: Sections 80.101(g)(1)(i) and (ii) have been revised to clarify the simple and complex model calculation requirements. APARM calculations apply only to simple model calculations. The complex model calculations require exhaust benzene, exhaust toxics, and exhaust NOx emissions performance, as applicable, for each batch to be calculated in accordance with the applicable model under 80.45. Product will be considered "Summer gasoline" if it has an RVP less than or equal to the RVP requirements of 80.27, regardless of when it is produced. Product will be considered "Winter gasoline" if it has an RVP in excess of the RVP requirements of 80.27, regardless of when it is produced. Of course, it is necessary to know the area for which the gasoline is produced in order to know the applicable RVP standard under § 80.27.(7/1/94)

31. **Question:** The regulations state that gasolines with RVP equal to or less than the RVP required under 40 CFR 80.27 (Summer Gasoline) shall use the applicable Summer Complex Model under 80.45 and the Winter Model for RVP's greater than that required under 40 CFR 80.27. In most areas of the country 9.0 psi was the summer specification under 40 CFR 80.27. Would this mean that any conventional gasoline produced to an RVP less than or equal to 9.0 psi would use the Summer Complex Model and greater than 9.0 psi would use the Winter Complex Model no matter what time of the year that gasoline is produced? Does the fact that under § 80.27 gasoline in the Southern Areas that goes to an ozone non-attainment area must be 7.8 psi alter this split in any way? Is 9.0 psi gasoline produced in California for distribution to Arizona certified with the Summer or Winter Complex Model?

Answer: Section 80.101(g)(5) and (6) state that the emissions performance of gasoline with an RVP that is equal to or less than that required under § 80.27 must be determined using the appropriate summer complex model and that the emissions performance of gasoline with a higher RVP must be determined using the winter complex model. The intent of the regulations was to clearly distinguish summer and winter gasoline for the purposes of determining compliance. Although the regulations establish a criterion based on actual RVP levels, it also is intended that

gasoline which is produced for use outside the high ozone period (May 1 through September 15 for most of the country, and April 1 through October 30 in California), or is not intended to blend down storage tanks in preparation for the high ozone period, should be evaluated using the winter complex model. For example, gasoline produced beginning at the end of the ozone control period for distribution over the winter months should be evaluated using the winter complex model regardless of the actual RVP of this gasoline. In the situations described in the question, 7.8 psi gasoline should be considered summer gasoline unless it is produced for use clearly outside the high ozone period, and 9.0 psi gasoline produced in California for winter use in Arizona should be considered winter gasoline.(8/29/94)

32. **Question:** Please confirm that the models proposed are appropriate for the following production and consumption scenarios:

Gasoline Produced in LA	Consumed	Model Used
1. March 15, 1995 RFG-7.8 psi	Los Angles	Simple - Summer
2. Sept. 1 1995 RFG-7.2	Los Angles	Simple - Summer
3. Oct. 15 1995 RFG-7.8	Los Angles	Simple - Summer
4. Jan. 15 1998 Conv-9.0	Phoenix	Complex- Summer
5. Jan. 15 1998 Conv-11.0	Flagstaff	Complex- Winter
6. Sept. 1 1998 Conv-7.0	Phoenix	Complex- Summer
7. Nov. 15 1998 Conv-9.0	Seattle	Complex- Summer
8. Nov. 15 1998 Conv-9.0	Portland	Complex- Summer

Answer: Scenarios 1 and 3 are subject to the winter simple model, while scenario 2 is subject to the summer simple model. Scenarios 4, 5, 7, and 8 should use the winter complex model and scenario 6 should use the summer complex model.(9/12/94)

33. **Question:** Is compliance with the optional complex model standards or the complex model standards measured against a refiner's 1990 baseline, or the refiner's compliance baseline?

Answer: Under § 80.101(b)(1), compliance with the anti-dumping simple model standards is measured in relation to a refiner's or importer's compliance baseline, which is calculated using the methodology specified at § 80.101(f). Under §§ 80.101(b)(2) and (3), however, compliance with the optional complex model and complex model is measured in relation to a refiner's or importer's 1990 baseline. This would imply that a refiner's or importer's compliance baseline is not used in conjunction with the optional complex model or the complex model. EPA intended, however, that the compliance baseline would be used to measure compliance with the optional complex model and the complex model. The rationale that gave rise to the compliance baseline that is included in the preamble to the [fill in the correct proposal] is equally appropriate to the simple model, the optional complex model, and the complex model.

EPA intends to correct the language in §§ 80.101(b)(2) and (3) to specifically require use of the compliance baseline in a rulemaking in the near future.(12/5/94)

34. **Question:** In the case of a party who is both a refiner and an importer and who, therefore, is subject to § 80.101(f)(3), what is the impact of refinery groupings under § 80.101(h) on the calculation under § 80.101(f)(3)?

Answer: Section 80.101(f)(3) states that a party who is both a refiner and an importer must calculate a compliance baseline for imported gasoline using the 1990 volume weighted average of all the refiner's individual refinery baselines. Section 80.101(h) allows a refiner who operates more than one refinery to group the refineries for purposes of demonstrating compliance with the anti-dumping standards. These two provisions operate independently, so that a refiner who is subject to § 80.101(f)(3) would use all of its refineries to calculate the imported gasoline compliance baseline, regardless of any refinery groupings under § 80.101(h).(8/29/94)

35. **Question**: Reference section 80.101(f) Compliance Baseline Determinations: **Situation**: A refinery makes all conventional gasoline. For eight months of the year the refinery makes this conventional gasoline to a summer (7.8 psi) RVP specification and to a winter (higher RVP) specification the other four months of the year. In 1998, the refinery increases production of conventional gasoline beyond its 1990 volumes. Is it correct that Veq (paragraph (f)(4)(i) and CBi (paragraph (f)(4)(iii)) are computed without regard for whether the incremental gasoline is produced as summer or winter gasoline? Are the correct values for DBi found in 80.91(c)(5)(iv)-NEW (proposed for Direct Final Rulemaking), the "annual average antidumping statutory baseline"? Are the correct values for Bi the numbers computed pursuant to 80.91(f)(2)(i), the "individual annual average baseline emissions"?

Specific Example: A Hawaiian refinery makes non-VOC controlled conventional gasoline year round. Assuming the refinery complies using the complex model, per paragraph (g)(6), antidumping compliance calculations will use the winter complex model found in 80.45. If this refinery elects to increase production of conventional gasoline in 1998 or later, is it correct, in computing CBi, to use values for DBi found in 80.91(c)(5) (iv)-NEW, the "annual average antidumping statutory baseline" and not the values referred to in 80.91(c)(5)(ii) (column headed "Winter" in chart found in 80.45(b)(3))? If so, this interpretation would appear to force increased production of conventional winter gasoline to meet a combined winter/summer baseline. Was this EPA's intent?

Answer: The intent of the regulations is to ensure that each refiner's and importer's conventional gasoline beginning in 1995 is no dirtier than its 1990 gasoline up to its 1990 volume. Production in excess of the 1990 volume is required to meet the statutory baseline. The regulations have been amended to define the annual average complex model statutory baseline values for exhaust benzene, NOx and toxics which were omitted from the final rule. These values are based on the seasonally weighted summer and winter baseline fuel performance levels. The interpretation

suggested above is generally correct that any increased volume above 1990 levels would have to meet the combined winter/summer statutory baseline performance levels. However, the exact scenario presented above would require an increase in summer gasoline production, not winter gasoline.(7/1/94)

36. **Question:** The compliance baseline parameter calculation includes a component of the statutory baseline even when the volume of conventional gasoline in 1995 is less than or equal to the volume of conventional gasoline in 1990. Is it correct to conclude that, to the extent that a refiner's volume grows in 1995 versus 1990, the refiner will come under statutory guidelines for some of its conventional gasoline production, regardless if that volume growth is reformulated or conventional gasoline?

Answer: Yes.(7/1/94)

37. **Question:** How is excess volume above 1990 baseline volume counted against 1990 refinery baseline parameters? (a) If volume in 1995 is 10% above that of the 1990 volume and 1995 production is 90% RFG and 10% conventional, is the 10% conventional compared against the refinery 1990 baseline, statutory baseline or some combination of both? (b) Same as (a) but using 110% conventional gasoline production? (c) Same as (a) but using 50% conventional and 50% RFG?

Answer: For a refiner or importer whose 1995 total gasoline volume exceeds that of 1990, the revised compliance baseline adjustment equation specified under § 80.101(f)(4)(ii) is used to determine the applicable baseline. This equation adjusts baselines solely on the basis of the overall gasoline volume in an averaging period as compared to baseline 1990 volume, and is independent of the mix between reformulated and conventional gasoline. As a result, in the question presented where the refinery's 1995 gasoline volume increases 10% over the refinery's 1990 baseline volume, the same adjusted compliance baseline would be used for all conventional gasoline produced in 1995, regardless of the mix of RFG and conventional gasoline in 1995.(8/29/94)

38. **Question:** When using the compliance baseline calculation at § 80.101(f)(4)(ii) for the 1995 anti-dumping averaging period, should volumes of RFG produced during 1994 and 1995 be included in the V_a term, or only RFG produced during 1995?

Answer: Only RFG, conventional gasoline, and California gasoline produced during the 1995 anti-dumping averaging period (January 1, 1995 through December 31, 1995) should be included in the compliance baseline calculation for 1995. Therefore, any gasoline produced before January 1, 1995 should be excluded from the 1995 compliance baseline calculation under § 80.101(f)(4)(ii).(12/5/94)

39. **Question:** Does the provision at § 80.101(f)(3), related to the baseline for imported gasoline for a party that is both a refiner and an importer, apply to both imported conventional gasoline and imported RFG, or only to imported conventional gasoline?

Answer: Section 80.101(f)(3) applies only to conventional gasoline, and does not affect the baseline that applies to imported RFG. Section 80.101(f)(3) states that the operation of this section is to create a new "compliance baseline" for imported gasoline. The compliance baseline applies to conventional gasoline only, and not to RFG.(8/29/94)

40. **Question:** How does § 80.101(f)(3) operate in the case of a refinery for which there are more than one persons who meet the definition of refiner? Which of the co-refiners must calculate a compliance baseline for imported gasoline?

Answer: In the case of a refinery for which there is more than one refiner, only the refiner who submits reports to EPA (normally the refiner who principally operates the refinery) would be affected by § 80.101(f)(3). Thus, if this reporting co-refiner is also an importer, this co-refiner would include the refinery in the calculations under § 80.101(f)(3), and no other co-refiner would be impacted by § 80.101(f)(3). If the reporting co-refiner is not also an importer, § 80.101(f)(3) would have no application, even if other co-refiners are also importers.(8/29/94)

41. **Question:** Does a refiner include or exclude a particular refinery which it is selling, or has recently sold, in its volume weighted average baseline calculation for its imported conventional gasoline?

Answer: If a refinery is sold during 1994, then the refiner who owns the refinery on January 1, 1995 is responsible for the compliance of that refinery's conventional gasoline and 1) may include it in an aggergate group with other refineries and 2) must include that refinery in the volume weighted average baseline determination for its imported conventional gasoline. If the refinery is sold after January 1, 1995, then the selling and purchasing refiners must determine compliance for the gasoline produced during each party's ownership, and each party must determine its respective baseline volume based on the period of ownership for each refiner. However, both parties would use the 1990 annual average baseline properties as determined under §§ 80.90 and 91 for evaluating compliance. In addition, if either refiner also imports conventional gasoline, the refiner-importer must include that refinery in its import baseline determination, using the time-apportioned baseline volume and baseline properties to calculate the refinery-average baseline. The purchasing refiner may also aggregate its portion of the ownership with other refineries each owns under § 80.101(h), and under § 80.101(h)(2)(ii) the selling refiner must so aggregate if the refinery previously was part of an aggregation. The refiner must use the time-apportioned baseline volume and the baseline properties to weight this refinery in the aggregate baseline, and the volume and properties of conventional gasoline produced at the refinery during the portion of

the averaging period when the refinery is owned to weight this refinery in the aggregate compliance calculation.

For example, if Refiner A sells the refinery to Refiner B on March 31, then Refiner A would use 1/4 of the 1990 volume as its share of the 1990 baseline volume, and Refiner B would use 3/4 of the 1990 volume as its share of the 1990 baseline volume.(8/29/94)

42. **Question:** What documentation must a refiner or importer obtain to exclude exported gasoline from their compliance calculations per § 80.101(e)(4)?

Answer: Section 80.101(e)(4) does not designate any specific documentation required to exclude exported product from a refiner's or importer's compliance calculations. However, product transfer documents accompanying a product for export should clearly indicate that the product is intended for export only. In addition, refiners and importers of product intended for export should be able to provide some form of evidence that the product was, in fact, exported, such as a receipt from an exporter which includes a statement that the exporter purchased the particular product in question for export only, or other affirmative evidence from the transferee that would provide a reasonable basis to expect that the product in question was exported. Such evidence may be included on the routine business documents that memorialize the transaction between the parties. Regardless of the documentation, however, if the gasoline, in fact, was not exported, it may not be excluded from the refiner's or importer's compliance calculations. (5/9/95)

43. **Question:** For a refiner producing conventional gasoline, may oxygenate added at a non-proprietary terminal be included in the determination of the conventional gasoline properties, provided the refiner has a quality assurance program at the terminal to ensure the oxygenate was added?

Answer: A refiner may include oxygenates added to conventional gasoline by a party downstream of the refinery, including a "non-proprietary terminal," provided the refiner has a program in place to ensure that the oxygenate is added as reported by the refiner as required by § 80.101(d)(4)(ii). This program should include such controls as an appropriate contract with the downstream blender, periodic sampling and testing, and audits and inspections as necessary to ensure that the requirements are being met. These are discussed more fully in the preamble to the final rule.(7/1/94)

44. **Question:** Can a refiner blend oxygenate into purchased conventional gasoline and use the oxygenate to meet its conventional gasoline requirements as long as the oxygenate is not being counted by the producer of the gasoline? Can this blending occur at a refiner owned terminal?

Answer: Section 80.101(d)(4) provides that any oxygenate that is added to conventional gasoline, or gasoline blending stock as described in § 80.101(d)(3), may be included in the refiner's compliance calculations, "where such gasoline or gasoline blending stock is produced or imported during the averaging period" (emphasis added). In the case of oxygenate that is added at a point downstream of the refinery or import facility, the oxygenate may be included "only if the refiner or importer can establish the oxygenate was in fact added to the gasoline or gasoline blendstock produced" (emphasis added). This provision applies to gasoline produced or imported by the refiner or importer who seeks to include the oxygenate in his compliance calculations. A refiner may not purchase conventional gasoline produced or imported by another person, blend it with oxygenate, and include the oxygenate in its compliance calculations.(10/3/94)

45. **Question:** The preamble to the final rule states that "oxygenate added to a refiner's or importer's gasoline or blendstock downstream of the refinery or import facility may be included in the refiner's or importer's compliance calculations only if the refiner or importer is able to demonstrate with certainty that the oxygenate has been added to that party's gasoline." The preamble further states that "as a result of the complexities inherent in tracking gasoline through the fungible distribution system, EPA believes in most cases it will be impracticable for refiners or importers to effectively monitor downstream oxygenate blending with gasoline that is shipped fungibly, and as a result the refiner or importer normally would be precluded from the oxygenate in compliance calculations".

The scenario in question is:

- a refiner ships conventional gasoline produced by the refiner through a common-carrier pipeline;
- batch shipments allow for tracking of the refiner's gasoline within the pipeline;
- shipments are received into the refiner's storage;
- these receipts might be commingled fungibly with conventional gasoline produced by another refiner;
- oxygenate is added at the rack into all of the fungible gasoline.

a) Can the refiner gain oxygen credits for anti-dumping compliance for a prorata share of the oxygenate added to all gasoline, on the basis of the proportion of gasoline blended that was produced by the refiner?

b) Is the refiner's ability to gain oxygen credits impacted, in any way, by the configuration of the common-carrier pipeline (e.g. breakout tanks, batch versus open-stock system, etc.)?

c) Is the refiner's ability to gain oxygen credits impacted, in anyway by the configuration of the refiner's storage (e.g., dedicated versus community, etc.)?

d) Could the accounting be done on a monthly basis, or would the refiner have to track the ratio of gasoline produced by the refiner versus that produced by another refiner after each batch?

Answer:

a) Yes, provided there is sufficient documentation to calculate the proportion of gasoline produced by the refiner, and, all other requirements of §80.101(d)(4)(ii) are met.

b) The configuration would have to be such that the refiner could, indeed, track the proportion of gasoline used in the oxygenate blend that was produced by the refiner.

c) Same as b).

d) The refiner would have to track the ratio of its gasoline to that produced by another refiner for each batch of oxygenate blend produced.(10/17/94)

46. **Question:** Section 80.101(d)(3) states that "Any refiner for each refinery, or any importer, shall include in its compliance calculations. . . any gasoline blending stock produced or imported during the averaging period which becomes conventional gasoline solely upon the addition of an oxygenate." Should the volume reported to the EPA be the blendstock volume or the volume after the addition of the oxygenate (blendstock + oxygenate)?

Answer: Under § 80.101(d)(3), the refiner or importer must include in its compliance calculations the volume of gasoline blending stock that was used in the production of conventional gasoline produced solely upon the addition of oxygenate, and not the volume of gasoline after the addition of the oxygenate. However, under § 80.101(d)(4)(i), the refiner or importer should separately include in its compliance calculations the oxygen added by the refiner or importer. For gasoline produced downstream of the refinery or import facility, if all of the requirements of § 80.101(d)(4)(ii) are met, the refiner or importer may separately include in its compliance calculations the volume of oxygenate that was added to produce the gasoline downstream.(10/17/94)

47. **Question:** In the case of a refiner whose conventional gasoline is blended with oxygenate downstream of the refinery, and where the refiner includes this oxygenate in its anti-dumping compliance calculations, what options are available to the refiner for defining the volume and properties of this oxygenate. In particular, must the refiner report each occasion when the oxygenate is blended (each truck in the case of splash blending), or may the refiner report the total volume and properties of oxygenate used over a larger period of time?

Answer: Under § 80.101(d)(4)(ii)(A), a refiner may include in its refinery anti-dumping compliance calculations the oxygenate added downstream to gasoline produced at that refinery, if the oxygenate is added by the refiner. In addition, under § 80.101(d)(4)(ii)(B), the refiner may include oxygenate added downstream to the refinery's gasoline by someone else provided the

refiner: 1) has a contract with that oxygenate blender that specifies appropriate oxygenate blending procedures; 2) monitors the oxygenate blending operation through periodic audits designed to assess the overall volume and type of oxygenate used; 3) conducts periodic sampling and testing of the gasoline produced; and 4) conducts periodic inspections to ensure the contractual requirements are being met. Under § 80.104(a)(2)(x) refiners are required to maintain records of the oversight required by § 80.101(d)(4)(ii)(B).

Section 80.101(i) requires refiners to separately sample each batch of gasoline and blendstocks that are included in anti-dumping compliance calculations, and either separately analyze each sample, or under § 80.101(i)(2) analyze a volume-weighted composite of the samples collected during up to a one month period. These sampling and analysis requirements thus apply to oxygenate added downstream to a refiner's gasoline where the refiner includes the oxygenate in its compliance calculations.

In the case of compliance under the complex model, the calculation method necessary to include blendstocks in anti-dumping compliance calculations are described in the Preamble to the RFG Final Rule, 59 FR 7806 (February 16, 1994). This calculation method would apply to downstream-blended oxygenate that included in a refiner's compliance calculations under the complex model.

A refiner may include in its refinery compliance calculations the oxygenate added downstream to that refinery's gasoline without separately sampling each batch of oxygenate blended, provided the refiner meets the following requirements:

1. The refiner must comply with the downstream oxygenate blending oversight requirements specified under § 80.101(d)(4)(ii), and the recordkeeping required by § 80.104(a)(2)(x).

2. The refiner's oversight must demonstrate the type and amount of oxygenate that is blended with gasoline produced at the refinery.

3. Each type of oxygenate blended must be reported separately.

4. The oxygenate blended during a maximum of one month may be reported as a single batch.(10/17/94)

48. **Question:** In the case of oxygenate added downstream to a refinery's gasoline, what assumptions can the refiner make about the composition of ethanol? Is the refiner required to test the ethanol for its relevant properties?

Answer: Refiners who include in refinery compliance calculations the ethanol added downstream to the refinery's gasoline may assume that denatured ethanol is used, and that the denaturant comprises 5 vol% of the denatured ethanol. Such a refiner may assume that the remaining 95 vol% of the denatured ethanol is pure ethanol, with the normal properties for that product. The

refiner may include the 95 vol% ethanol in its compliance calculations, but not the 5 vol% denaturant. These assumptions would not be appropriate in a case where a refiner learns through its oversight program, or otherwise knows or should know, that these assumptions are inaccurate with regard to a specific oxygenate blending operation.

A refiner may use a different vol% ethanol in its compliance calculations, and may include the volume and properties of denaturant, where the refiner has data to establish the actual volume and properties of the ethanol and denaturant used.(10/17/94)

49. **Question:** Relative to refinery grouping for baseline purposes: If one of a refiner's refineries is NOT wholly-owned (joint venture with another party), can this refinery be grouped with other refineries that are wholly-owned by that refiner?

Answer: In the case of a refinery that is jointly owned, the gasoline produced at the refinery can only be included in the compliance calculations of one of the joint owner-refiners. In addition, such a jointly-owned refinery may not be aggregated with other refineries for compliance purposes. Where more than one party owns a refinery, these parties should decide who will be responsible for demonstrating compliance with the anti-dumping requirements for gasoline produced at that refinery. However, all owners of that refinery may be liable for violations committed at that refinery.(7/1/94)

50. **Question:** Please clarify how baselines are established and compliance is calculated for blender-refiner terminals, in particular with regard to aggregating.

Answer: Terminals which blend conventional gasoline are considered refineries and thus required to meet the anti-dumping requirements. If such a facility is owned by a refiner with other refineries, the terminal may be aggregated for compliance purposes with other facilities owned by that refiner. The baseline for the aggregated group will be the volume weighted average of all the refineries in the group, including the blending terminal if selected. The volume weighted average is the summation of the products of the baseline for each parameter, or emissions performance, multiplied by the 1990 volume for that facility, divided by the total of 1990 volumes for all facilities in the group. Compliance is determined by calculating the volume weighted average of the each parameter or emissions performance for all conventional gasoline produced at each facility in the group, including blending terminals which are in that group.(7/1/94)

51. **Question:** What is the aggregated baseline when refineries with individual baseline volumes and properties are aggregated with refineries that have the statutory baseline and no 1990 volume, such as terminals?

Answer: When a refiner aggregates refineries that have individual 1990 baselines with refineries that do not have 1990 individual baselines, the aggregate baseline volume is the 1990 volume of the refineries which have individual 1990 baselines, and the aggregate baseline properties is the volume weighted properties of the refineries which have individual 1990 baselines. This method of calculating the aggregate baseline volume and properties is appropriate because refineries without individual baselines are assigned the statutory baseline, and under § 80.101(f) any volume for a refinery (or aggregation of refineries) in excess of the 1990 volume is measured against the statutory baseline properties. Therefore, a refiner is able to measure compliance with the anti-dumping standards using 1990 individual baselines only up to the 1990 baseline volume regardless of how the refiner calculates the aggregation of the baselines for refineries without 1990 individual baselines.(12/5/94)

52. **Question:** Is a new volume correction needed only when the 1990 volume is exceeded on an aggregate basis rather than for each individual refinery? Are new volume corrections to be applied on an annual average basis or seasonally?

Answer: The new volume correction would be required when the 1990 volume is exceeded only on an aggregate basis, and applied on an annual average basis.(7/1/94)

53. **Question:** The July 1, 1994 Question and Answer Document indicates that sulfur, T90, and olefins are the only simple model RFG standards that can be seen on a refinery aggregated basis. We interpret this clarification to apply only to simple model RFG compliance and believe that it does not affect the anti-dumping provisions of § 80.101(b). Please confirm that all simple model anti-dumping standards can be met on a refinery-aggregate basis including sulfur, olefins, T90, and the exhaust benzene standards.

Answer: All simple model anti-dumping standards can be met on a refinery-aggregate basis pursuant to § 80.101(h).(11/28/94)

54. **Question:** Under § 80.91(b)(4), importers that do not have method 1, 2 or 3 type data shall have the statutory parameter values as specified in the regulations as its individual baseline. Under § 80.101(f)(3), any party that is both a refiner and importer and does not establish an individual baseline for its imported product, shall use the volume weighted average of all its individual refinery baselines as the compliance baseline for its imported product. Which is the applicable baseline for imported product?

Answer: Sections 80.90 and 80.91 provide the methodologies and procedures for ascertaining the appropriate data and for determining individual 1990 refiner, refinery or importer baselines based on those data and various other considerations. Section 80.101 establishes the standards applicable to refiners and importers and the methods and requirements for determining

compliance with the anti-dumping statutory provisions. The preambles to the earlier proposals and the final rule discuss at some length the opportunities for certain refiners to take advantage of baseline differences by producing and transferring blendstocks to another party with a less stringent baseline circumventing the intent of the anti-dumping requirements. A similar situation exists for a domestic refiner with a stringent baseline that could "export" gasoline and then immediately import that product at the less stringent statutory baseline, thus circumventing the anti-dumping requirements. Therefore, the regulations state that, for the situation where a party is both a domestic refiner and an importer and for which an individual baseline has not been determined for the imported product, such domestic refiner shall use the volume weighted average of all its refineries for compliance determination purposes for its imported gasoline. Any refinery grouping chosen by the refiner would not alter this determination. A party that is an importer exclusively, however, would be required to meet the statutory baseline if it could not establish an individual 1990 baseline in accordance with § 80.91 of the regulations. Compliance for the imported product shall be demonstrated separate and apart from any other refinery or refinery aggregation group.(7/1/94)

55. **Question:** If an importer becomes a supplier to a marketer who imported gasoline in 1990, can the importer add the marketer's 1990 volume to the importer's 1990 volume? Would the parameter values for the marketer's volume be the CAAA default values?

Answer: If an importer expands its import activities in 1995 by supplying additional marketers with conventional gasoline, the importer's 1990 baseline volume and properties would not change, regardless of the prior activities of the marketers.(7/1/94)

56. **Question:** According to 80.75(k) Reporting requirements for early use of the complex model, early use complex model RFG refiners and importers need to submit an early use election report 60 days prior to the beginning of the calendar year during which such standards would apply. Will a refinery not involved in RFG production but electing early use of the complex model for its conventional gasoline production be required to submit the same report?

Answer: No, the anti-dumping regulations do not require such a report.(7/1/94)

57. **Question:** Section 80.106 states (a) "On each occasion when any person transfers custody or title to any conventional gasoline, the transferor shall provide to the transferee documents which include the following information: ...(1) through (7); (8) The requirements of this paragraph (a) apply to product that becomes gasoline upon the addition of oxygenate only." 80.65(d)(1) "All gasoline produced or imported shall be properly designated as either reformulated or conventional gasoline, or as RBOB." It would appear that 80.106 is referring to a conventional gasoline blendstock for oxygenate blending (CBOB?) which heretofore has not been defined or discussed. Are 80.106(a)(1) - (7) intended for all conventional and conventional oxygenated gasolines? If so,

the CBOB should be so identified to prevent confusion with regular conventional gasoline. Like RBOB, it should also contain the oxygenate information included in 80.77(i)(2) and (3).

Answer: The regulations require that conventional blendstock which will become conventional gasoline solely upon the addition of oxygenate must be considered conventional gasoline for the purpose of complying with the anti-dumping requirements, including the transfer document provisions of § 80.106(a). This corresponds to the requirement at § 80.101(d)(3) that such blendstock must be included in the anti-dumping compliance calculations for conventional gasoline. From a practical standpoint, the transfer documentation would need to indicate that oxygenate must be added and the refiner must undertake certain monitoring and quality assurance efforts to ensure the blending occurs as specified in the regulations, if the refiner is including any oxygenate blended downstream in its compliance calculations.(7/1/94)

58. **Question:** Assume that a marketer/supplier has conventional gasoline inventory in a fungible pipeline/terminal system in a non-RFG area. Effective January 1, 1995, does this company have any responsibility for the quality of that inventory? Responsibility for product brought in after January 1, 1995? What does the company need to put in its contract with a refinery/trader or collect from a refinery/trader to comply with the anti-dumping regulations? What kind, if any, quality assurance program would be required? Would the answers be different if a segregated tank is involved?

Answer: Beginning January 1, 1995, all conventional gasoline must meet the PTD requirements. If the conventional gasoline was produced before January 1, 1995, the refiner may not have initiated the PTDs, but the downstream party nevertheless must include the required information when title or custody is transferred. Whether the marketer/supplier has conventional gasoline in a fungible pipeline/terminal or in segregated tankage, it would have to ensure that the conventional gasoline is not delivered into a reform area. The company does not need to have anything in its contract with respect to anti-dumping, unless it is blending oxygenate that would be counted by the refiner. See requirements under § 80.101(d)(4). Quality assurance would include checking PTD's for refiner reform/conventional designation and ensuring that conventional gasoline is not delivered into any RFG covered area.(10/17/94)

59. **Question:** Do common carriers have any requirements or potential liability pertaining to the anti-dumping provision for conventional gasoline?

Answer: Common carriers (like all other regulated parties) are prohibited from distributing conventional gasoline for use in an RFG covered area, and must comply with the product transfer document requirements of § 80.106.(8/29/94)

VII. Enforcement

A. Prohibitions

1. **Question:** With respect to section 80.65(a), would there be any violation by the terminal located in an RFG covered area selling only conventional gasoline to stations in attainment areas?

Answer: No. However, the terminal should take extra precautions to ensure that no conventional gasoline is distributed to a RFG area. See the discussion in the Prohibitions and Liabilities Section.(7/1/94)

2 **Question:** Is there any problem with supplying RFG designated as VOC-controlled for VOC Control Region 1 to an area requiring VOC Control Region 2 gasoline?

Answer: RFG designated as VOC-controlled for VOC Control Region 1 may be supplied to an area requiring RFG designated as VOC-controlled for VOC Control Region 2. The converse is not true, however.(7/1/94)

3. **Question:** Review of fungibility issues - what types of RFG may or may not be combined: at terminals? at retail? by consumers?

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 or used 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(unless the OPRG contains a minimum of 2.0 wt% oxygen).

Upstream of the retail 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. For a discussion of the handling of the heal of a tank at terminals, see question 4 of the transition section.

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 contain no prohibition against combining VOC-controlled RFG with non-VOC-controlled RFG. As a result, VOC-controlled RFG may be added to a storage tank that contain 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 party who combines VOC-controlled and non-VOC-controlled RFG should treat the mixture as a downgrade to 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.(7/1/94)

4. **Question:** What requirements will be the subject of EPA inspections downstream from the refinery?

Answer: Downstream from the refinery or import facility, EPA will test gasoline for the applicable minimum and maximum parameters.

Prior to January 1, 1998, the Simple Model downstream standards apply: oxygen and benzene content, and RVP during the period May 1 through September 15 (June 1 through September 15 at the retail level). The minimum and maximum standards for these parameters are set out at section 80.41 of the Final Rule.[21]

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[21] With respect to refiners electing to measure compliance under Early Use of the Complex Model, and the establishment of minimum and maximum standards: oxygen and benzene content are identical to the standards under the Simple Model; NOx and VOC standards are 2.5% less stringent than the refiner's calculated per-gallon standard.

From January 1, 1998 through December 31, 1999, the Phase I Complex Model downstream standards apply: these are oxygen and benzene content, and Nox emissions performance, and VOC emissions performance during the period May 1 through September 15 (June 1 through September 15 at the retail level). The benzene maximum and oxygen minimum under the complex model are unchanged from the standards for these parameters under the simple model. The minimums for VOC in Region 1 and Region 2 and for Nox are set out at section 80.41 of the Final Rule.

Beginning January 1, 2000, the Phase II Complex Model downstream standards apply. The oxygen and benzene downstream standards are unchanged. The minimums for VOC in Region 1 and Region 2 are set out in section 80.41 of the Final Rule. The NOx minimum is unchanged from the Phase I Complex Model in the case of RFG not designated as VOC-controlled, and in the case RFG that is VOC-controlled, the NOx minimum is 3.0 percent reduction.

These minimum and maximum standards are subject to change under the gasoline quality survey program. In the event of a survey ratchet, the more stringent standard would be enforced by EPA at the refineries and import facilities for which the adjusted standard applies. In addition, the adjusted minimum/maximum standard will be enforced in the covered area where the adjusted minimum/maximum standard applies.

In addition to the downstream minimum/maximum standards, EPA will inspect and audit downstream parties for all other requirements that apply to them. These downstream EPA inspection and audit activities will include, but are not limited to:

- Audits to see if product transfer documents are being maintained as required, and if product transfer documents are being transferred to the next party in the distribution network as required.

- Audits of distributor terminals that handle RBOB to see if RBOB is dispensed only to registered oxygenate blenders; if ether-only RBOB is dispensed to truck blenders, audit to see if an appropriate basis exists for the distributor-terminal to believe the oxygenate blender is blending with ether oxygenates.

- Audits to verify that RFG being dispensed is proper for time and place of use -- VOC-controlled during May 1 through September 15; VOC controlled for proper VOC-control Region; oxygenated fuels program RFG (OPRG) dispensed in OPRG areas (unless exception for OPRG designated RFG with 2.0 wt% oxygen).

- Audits for compliance with the requirement for segregation of ethanol-based VOC-controlled RFG during January 1 through Sept 15 each year.

- If any complex model RFG is present, audits for compliance with the requirement for segregation of complex RFG from simple RFG, and segregation of complex RFG from

each refinery from any other refinery's complex RFG (unless refineries have identical baselines).

- Audits for segregation of RFG from conventional gasoline, and no deliveries of conventional gasoline into RFG areas. Note however that RFG and conventional gasoline may be mixed and sold in conventional gasoline areas.

- In the case of ethanol blenders, audits for compliance with the requirements that apply to ethanol blenders, including blending of the proper type and amount of oxygenate, and conduct of the required sampling and testing.

(7/1/94)

5. **Question:** Please define any restriction in the RFG program on mixing ethanol and ether fuels.

Answer: Under § 80.78(a)(8), no person may combine VOC-controlled RFG produced using ethanol with VOC-controlled RFG produced using any other oxygenate during the period of January 1 through September 15 of each year. This prohibition applies at all locations in the gasoline distribution system, including at retail outlets and wholesale purchaser-consumer facilities.(7/1/94)

6. **Question:** A company wishes to blend RFG containing ethanol with RFG containing an ether, such as MTBE. May this blending occur during the VOC-controlled season? During the non-VOC-controlled season?

Answer: Under § 80.78(a)(8), and as explained in the answer to Prohibitions Question 1 in the September 26, 1994 Question and Answer Document, RFG may not contain a mixture of ethanol and any other oxygenate during the VOC control season (June 1 through September 15 at the retail level). This precludes mixing ethanol-based RFG with RFG containing other oxygenate during the VOC control season and during the period retail tanks are being blended to meet the VOC control standards in advance of June 1. In fact, § 80.78(a)(8) prohibits mixing VOC controlled RFG containing ethanol with any VOC controlled RFG containing any other oxygenate between January 1 and September 15.

all gasoline, including RFG, is subject to the substantially similar requirements, which prohibits gasoline from containing mixtures of ethanol and other oxygenates where the total oxygen content is greater than 2.7 weight %. The substantially similar restriction (unlike the § 80.78(a)(8) prohibition) is not violated at the retail level, however, if an impermissible mixture results from deliveries to the retail outlet of different gasolines each containing legal types and amounts of oxygenate.(10/17/94)

7. **Question:** In light of the prohibition at § 80.78(a)(8) against mixing VOC-controlled RFG produced using ethanol with any other VOC-controlled RFG during the period January 1 through September 15 each year, how can a retail station change from ethanol-based RFG (that is not VOC-controlled) to MTBE-based RFG (that is VOC-controlled) in advance of the high ozone season, and back to ethanol-based RFG at the conclusion of the high ozone season?

Answer: In the case of the transition at the conclusion of the high ozone season from MTBE-based RFG to ethanol-based RFG, the prohibition at § 80.78(a)(8) would not apply because by its terms this prohibition is limited only to the period through September 15. As a result, beginning on September 16 each year ethanol-based RFG may be delivered to a retail station storage tank that contains MTBE-based RFG. In addition, the ethanol-based RFG that would be delivered subsequent to September 15 probably would not be VOC-controlled. Because the § 80.78(a)(8) prohibition only applies to mixtures of two VOC-controlled RFGs, the post-September 15 mixing would not violate the prohibition for this additional reason.

In the case of the transition in advance of the high ozone season, from ethanol-based RFG to MTBE-based RFG, the § 80.78(a)(8) prohibition would not be violated if MTBE-based RFG is added to a retail station storage tank through normal gasoline deliveries even if the tank contains ethanol-based RFG, provided that these deliveries occur in advance of June 1 of each year and the storage tank is completely transitioned to MTBE-based RFG (i.e., the tank contains no ethanol) beginning on June 1. This process for changing the service of a storage tank does not violate § 80.78(a)(8) because the ethanol-based RFG in the storage tank is not VOC-controlled, and this prohibition only applies to mixtures of two RFGs that are both VOC-controlled.

During the high ozone season for the retail station, June 1 through September 15 each year, the gasoline in the storage tank must be VOC-controlled, and as a result the prohibition at § 80.78(a)(8) would apply and the gasoline in the retail station's storage tank may not have a mixture of ethanol and any other oxygenate.

This answer does not alter the option available to parties for blending the gasoline in storage tanks to meet the RFG standard in advance of the onset of the RFG program, on January 1, 1995 at the retail level and December 1, 1994 at upstream facilities, that is discussed in question IX-A-1 of the July 1, 1994 Question and Answer Document.(9/26/94)

8. **Question:** There are situations where ethanol will be present in very small quantities in RFG produced using other oxygenates. For example, ETBE often contains very small amounts of ethanol, less than 2%. As a result, will EPA apply a de minimis exception to the prohibition against mixing VOC-controlled RFG produced using ethanol with VOC-controlled RFG produced using any other oxygenate because of minimal oxygenate content?

Answer: Section 80.78(a)(8) prohibits the mixing of VOC-controlled RFG produced using ethanol with VOC-controlled RFG produced using any other oxygenate during the period January 1 through September 15. EPA will not consider this prohibition violated, however, in the case of

RFG that was produced using an oxygenate other than ethanol, yet the RFG contains a volume of ethanol that is less than 0.4 vol%. If the RFG was produced using ethanol, EPA will not consider the prohibition violated if the volume of non-ethanol oxygenate is less than the volumes specified in § 80.65(e)(2)(i), i.e., 0.6 vol% in the case of MTBE, ETBE, TAME, or t-butanol, or 0.2 vol% in the case of methanol. These exceptions apply only if the offending oxygenate is present as a result of operational necessity, and specifically would not apply if the offending oxygenate was intentionally added. In addition, parties must meet the standards that apply to VOC controlled RFG without regard to these exceptions.(10/3/94)

9. **Question:** Under section § 80.78(a)(9), early use of complex model gasoline is limited by the requirement that all such gasoline be segregated throughout the distribution system from the point of production to the point of final sale or use. Because this restriction severely limits the fungibility of the product, in most situations, early use complex model gasoline is not economically viable. However, if an reformulated gasoline manufacturer were to produce early use complex model gasoline meeting all of the early use complex model requirements, and also meet all the simple model requirements applicable to refinery compliance, other than the requirements for sulfur, olefins and T90, would it still be necessary to segregate early use complex model gasoline?

Answer:
1. Background.

The requirements for segregating early use complex model gasoline throughout the system, under § 80.78(a)(9), is based upon concerns regarding enforcement of standards downstream, e.g., at retail stations, and the effect complex model gasoline would have on the compliance survey. If complex model and simple model gasoline were freely mixed, or if early complex model gasolines from different refineries were mixed, downstream enforcement would be severely complicated since commingled complying gasolines might not meet all of the standards that are enforced downstream. Furthermore, it would not be apparent against which standards such gasoline should be judged for compliance. Similarly, with the compliance survey, it is required that a complex model survey component and a simple model survey component be performed.[7] If simple and complex model gasolines were commingled, survey results could not be appropriately judged against either complex or simple model standards. Both the enforcement concerns and the compliance survey concerns relate, in part, to the possibility that complex model gasoline may not meet the downstream simple model standards specified in §§ 80.41(a) and (b).

2. Alternative simple model compliance approach.

[7] Since no refiners have notified the Agency as required that they intend to utilize the allowance for early use complex model gasoline, up to this point, the Agency is considering the approval of survey plans which do not include a complex model survey component. Such a plan was approved in 1994 for 1995.

Certain of the advantages of the early complex model may be obtained without creating the problems associated with commingling simple and complex gasoline, however, and without compromising the environmental benefits intended for reformulated gasoline, in the case of reformulated gasoline that meets a combination of certain of the simple model standards and the early complex model standards.[8] In particular, reformulated gasoline certified under the simple model that meets all of the simple model standards except the standards for sulfur, T-90 and olefins, and that also meets all the early complex model standards, would not create the enforcement and survey difficulties anticipated by § 80.78(a)(9). In effect, this would be simple model gasoline for which an alternative approach is used for showing compliance with the simple model standards for sulfur, T-90 and olefins.

Reformulated gasoline produced under this alternative simple model compliance approach would be fungible with other simple model reformulated gasoline downstream of the refinery, because the simple model standards for sulfur, T-90 and olefins are not included in the calculation of any other simple model standards. The environmental benefits associated with the simple model standards for sulfur, T-90 and olefins would be achieved through compliance with the early complex model standards for VOC, toxics and NOx emissions performance. Reformulated gasoline that meets all early use complex model standards would be at least as environmentally clean, and possibly cleaner than, comparable simple model gasoline.

Provided that a refiner or importer has completed the notification and reporting requirements discussed below, and has met all other requirements discussed in this Answer, the party would have the option at the conclusion of an averaging period of showing compliance with either (1) all of the simple model standards, including the standards for sulfur, T-90 and olefins, or (2) all of the simple model standards except the standards for sulfur, olefins and T90 and all early complex model standards.[9] The party must show compliance through one of these options, and may use only one of these options for all reformulated gasoline produced at a refinery, or imported by an importer, during the calendar year averaging period.

Under § 80.41(h)(2)(iii) a refiner that operates more than one refinery must meet the simple model standards for sulfur, T-90 and olefins using the same refinery aggregations that are elected for conventional gasoline compliance under § 80.101(h). As a result of this grouping requirement, a refiner who operates refineries that are aggregated under § 80.101(h) must make the same election regarding the alternative simple model compliance approach discussed in this Answer for each refinery in an aggregation. For example, consider a refiner who operates refineries A, B and C and who elects under § 80.101(h) to aggregate refineries A and B. If this refiner elects to use the alternative simple model compliance approach for refinery A this same

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[8] The alternative simple model compliance approach discussed in this Answer applies to reformulated gasoline, and not to conventional gasoline. See the conventional gasoline discussion, below.

[9] Refiners and importers also would retain the early complex model option as promulgated under § 80.41(j), but subject to the segregation constraints specified under § 80.78(a)(9) and the advance notification requirements under § 80.75(k).

election also must be made for refinery B. The refiner could make a different election for refinery C, however.

3. Standards under the alternative approach.

The simple model standards are specified in §§ 80.41(a) and (b) (for oxygen, benzene and toxics emissions performance, and RVP in the case of VOC-controlled reformulated gasoline) and in § 80.41(h)(2)(i) (for sulfur, T-90 and olefins). Under the alternative simple model compliance approach only the standards for oxygen, benzene, RVP and toxics emissions performance must be met.

The Phase I complex model includes standards for oxygen and benzene that are identical to the simple model standards for these parameters, and standards for VOC, toxics and NOx emissions performance. Under early use complex model, however, the VOC, toxics and NOx emissions reduction levels specified in §§ 80.41 (c) and (d) are not used. Instead, under § 80.41(j) refinery- or importer-specific reduction levels for these emissions performances are calculated using, in part, the refinery- or importer-specific baseline values for sulfur, E-300 and olefins.

Under § 80.65(c) a refiner or importer must elect to meet the early complex model VOC, toxics and NOx standards either on average or on a per-gallon basis. This election also applies under the alternative approach to simple model compliance. The per-gallon versus average election must be made by importers, and by refiners separately for each refinery. Moreover, this election must be made separately for each of the three emissions performance requirements. In the case of a refiner or importer opting for average compliance for VOC or NOx emissions performance, each batch of reformulated gasoline would be subject to the per-gallon minimum standards that are set in conjunction with the average standards. There is no per-gallon minimum associated with the toxics emissions performance average standard. In the case of a refiner or importer opting the per-gallon standards for either VOC, toxics or NOx emissions performance, each batch of reformulated gasoline would be subject to the per-gallon standard.

Under § 80.41(j) the early complex model standards for VOC, toxics and NOx emissions performance are calculated separately for the per-gallon and average standards, and for the per-gallon minimum associated with the average standard. These calculations are based on:

- The per-gallon standards for oxygen, benzene and RVP under § 80.41(a) (in the case of standards that are met on a per-gallon basis), the average and per-gallon minimum/maximum standards for oxygen, benzene and RVP under § 80.41(b) (in the case of standards that are met on average);[10]

[10] Separate summer and winter standards must be calculated for NOx and toxics with the complex model. For summer, the appropriate RVP from § 80.41(a) or (b) should be used. For winter, an RVP of 8.7 should be used. In order to determine annual standards for NOx and toxics, the statutory volume weighting should be applied to the seasonal standards. The statutory volume weighting is 0.396 for summer and 0.604 for winter

- The applicable aromatics value, as specified at § 80.41(j)(2); and

- The refinery's or importer's baseline values for sulfur, E-300 and olefins.[11]

Under § 80.67(a) a refiner or importer may meet the reformulated gasoline standards on average only if the survey requirements of § 80.68 are met. Nevertheless, a refiner or importer using the alternative simple model compliance approach could elect to be subject to the average early complex model standards for VOC, toxics or NOx emissions performance without having met the survey requirements.[12] This departure from the requirements of § 80.67(a) is appropriate because the gasoline produced under the alternative simple model compliance approach is classified as simple model gasoline for purposes of the gasoline quality surveys, and no separate complex model surveys would result from operation of this approach.

If during any averaging period, including the 1995 averaging period, any batch of reformulated gasoline produced at a refinery or imported by an importer failed to meet the per-gallon or minimum VOC, toxics or NOx emissions performance standards discussed above, that refinery or importer would be ineligible for the alternative simple model compliance approach for that averaging period.

The approach discussed in this Answer would not change the manner in which oxygen or benzene credits are created, transferred or used. Oxygen and benzene credits are used only to show compliance with the oxygen and benzene standards, and compliance with all other standards must be shown on the basis of the quality of gasoline produced or imported exclusive of any credit transfers.

4. Testing requirements under the alternative approach.

Under § 80.65(e) a refiner or importer is required to determine certain properties for reformulated gasoline prior to the gasoline leaving the refinery or import facility. In the case of reformulated gasoline subject to the simple model standards, these parameters are limited to oxygen and benzene, and RVP for VOC-controlled reformulated gasoline. In contrast, reformulated gasoline subject to the complex model standards must, prior to release, be analyzed for the full slate of properties specified under § 80.65(e). Any reformulated gasoline produced under the alternative simple model compliance approach is classified as simple model gasoline, and, in consequence, the refiner or importer is required only to meet the simple model pre-release sampling and testing requirements. This approach is appropriate because the purpose of the pre-release sampling and testing is to ensure compliance with the downstream standards, and only the

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[11] In the case of a refiner who has aggregated refineries under § 80.101(h), the volume-weighted average baseline values for sulfur, E-300 and olefins for all refineries in the aggregation would be used.

[12] A refiner or importer who elects to meet the standards for oxygen, benzene, RVP or simple model toxics emissions performance on average would be required, under § 80.67(a), to meet the survey requirements.

simple model downstream standards apply under the alternative simple model compliance approach.

5. Application of model valid range limits.

Since under the alternative approach to simple model compliance reformulated gasoline must meet all the requirements of the early-use complex model as well as all the standards under the simple model (except for the caps on sulfur, olefins, and T90), every batch of reformulated gasoline produced or imported under this approach must meet the valid range limits specified for the simple model in § 80.42(c) and those specified for the complex model in § 80.45(f)(1)(i). These valid range limits delineate the range of values within which the compliance models may be used, and outside of which they may not be used. Therefore, the more stringent valid range limits would apply to every batch. For example, for aromatics content the simple model valid range limits are 0 through 55 vol%, while the complex model valid range limits are 0 through 50 vol%. Thus, no batch of reformulated gasoline produced under the alternative simple model compliance approach could have an aromatics content greater than 50 vol%.

As discussed above, under the early-use complex model a refiner or importer must determine the VOC, toxics and NOx standards with which its reformulated gasoline must comply according to § 80.41(j), based in part on a refinery's or importer's individual baseline levels for sulfur, olefins and E-300. It is possible, however, that a refinery's or importer's baseline values for one or more of these three parameters may fall outside the valid range limits given in § 80.45(f)(1)(i). If this is the case the refiner or importer nevertheless may use the alternative simple model compliance approach by substituting the § 80.45(f)(1)(i) valid range limit for the baseline parameter outside the valid range. Thus, for example, if a refiner has a baseline olefins level that is greater than the 25 vol% limit under § 80.45(f)(1)(i), the refiner may use a value of 25 vol% for purposes of calculating the early complex model standards under § 80.41(j). Note that this flexibility does not apply to any batch of reformulated gasoline produced under this alternative simple model compliance approach; every batch of reformulated gasoline must have fuel parameters which fall within the complex model range limits specified in § 80.45(f)(1)(i).

6. Implications of alternative approach for conventional gasoline.

Any reformulated gasoline for which compliance is achieved under this alternative approach is classified as simple model reformulated gasoline, as described above. As a result, under §§ 80.41(i)(1)(ii)(A) and 80.101(c)(1)(i) any conventional gasoline produced at the same refinery or imported by the same importer also must comply with the simple model standards under § 80.101(b)(1). Consequently, the complex model valid range limits, discussed above, are not relevant to the conventional gasoline produced or imported under this approach. The approach discussed in this Answer would not, however, alter the opportunity for a refiner or importer who produces no reformulated gasoline to produce conventional gasoline in compliance with the optional complex model standards under § 80.101(b)(2).

7. Notification and reporting.

Any refiner or importer who intends to have the option of using this alternative simple model compliance approach for any calendar year averaging period must notify EPA of this intent with the first quarterly report for that year (due on May 31 of each year). This notification must be made as part of the annual compliance designation, and also must specify, separately for VOC, toxics and NOx emissions performance, whether the early complex standard will be met on a per-gallon basis or on average. In addition, the party must include in all batch reports the information necessary to show compliance with both the simple model standards and the early complex model standards. This reporting requirement is discussed more fully below.

In the case of the 1995 averaging period, however, a party could not have satisfied this notification requirement. Therefore, a party who otherwise qualifies may use the alternative simple model compliance approach provided that an updated designation report is submitted with the report for the fourth quarter of 1995 (due on February 29, 1996), and batch reports for all batches produced or imported during the 1995 averaging period are resubmitted at that time to include the necessary information, specified below. EPA will release a revised Annual Compliance Designation form prior to that time.

EPA will modify its "Reformulated Gasoline and Anti-Dumping Electronic Data Interchange Technical Guideline" by adding the code "AS" (alternative approach simple model) to code list 07 (section 8.3.1) for use in properly designating gasoline produced under this method in batch reports submitted via EDI. Parties who will use this approach for 1995 and who have previously filed batch reports during 1995 via electronic data interchange (EDI) must resubmit all such batch reports with the correct designation no later than February 29, 1996. Only the compliance method (simple model, complex model, alternative approach simple model) may be changed in these resubmissions.

The paper batch report will not be modified because the designation of simple or complex is not currently required on that report (it is covered by the designation form). If at the end of 1996 or 1997, after designating the alternative compliance method for the year, a party wishes to use the simple model standards specified in the regulations, the party may either resubmit the Annual Compliance Designation form or resend all EDI batch reports with the proper designation, and subject to the conditions laid out below, no later than the last day of February immediately following the reporting year.

Any party intending to use the approach discussed in this Answer must submit to EPA batch reports with <u>all</u> of the information required to demonstrate compliance with both simple model and early use complex model standards, as discussed above. This requirement applies to batches of reformulated gasoline or RBOB produced in 1994 or 1995 (which must be resubmitted) and to batches produced in 1996 and 1997. Reports previously submitted by independent laboratories need not be resubmitted, however. In addition, in the case of a sample collected by an independent laboratory during the fourth quarter of 1995 which was not analyzed for complex model parameters, if the sample is no longer available the independent laboratory may report only the simple model parameters for that sample.

Additionally, since parties using this alternative approach are making early use of the complex model, they must submit to EPA, at the time of designation, a letter stating the calculated early-use complex model VOC, toxics and NOx emissions performance standards applicable to each refinery, or to each importer, which will use this method. The calculation and reporting of these standards is detailed above, and in §§ 80.41(j) and 80.75(k). On their batch reports, refiners and importers must then report their VOC, NOx and toxics emissions performance as a percent reduction from these emission standards rather than from the statutory baseline emission standards.

Consider, for example, a refiner whose refinery's calculated early-use complex model per-gallon emissions standards are 1036.82 mg/mi for VOC, 38.4311 mg/mi for toxics and 691.6079 mg/mile for NOx. This refiner has elected to meet the early complex model standards on a per-gallon basis. A batch of gasoline produced shows emissions results from the complex model of 1007.53 mg/mile of VOC, 37.0122 mg/mile of toxics and 697.3742 mg/mile of NOx. The refiner would report emissions reductions of 2.8% for VOC (29.29 mg/mi below the applicable standard), 3.7% for toxics (1.4189 mg/mi below the standard) and -0.8% for NOx (5.7663 mg/mi above the standard). This batch would be in violation of the early-use complex model NOx standard, because the NOx emissions performance shows a 0.8% increase in NOx emissions (a -0.8% reduction) relative to the refinery's early complex model NOx standard. (1/22/96)

10. **Question**: Under the alternative Simple Model as described in a Question and Answer dated January 22, 1996, segregation of alternative Simple Model and Simple Model RFG is not required. Must conventional gasoline produced under the Simple Model be segregated from conventional gasoline produced under the early Complex Model?

Answer: There is no requirement for the segregation of Simple Model and early-use Complex Model conventional gasoline. In addition, the alternative Simple Model approach does not apply to conventional gasoline, so this RFG alternative does not alter the conventional gasoline requirements. (5/2/96)

11. **Question**: In terms of setting standards for reformulated gasoline according to §80.41(j), what is the difference between the early-use Complex Model and the alternative Simple Model approach as described in a Question and Answer dated January 22, 1996?

Answer: The process of setting standards for RFG is exactly the same under the early-use Complex Model or the alternative Simple Model. The alternative Simple Model approach requires that a refiner meet standards set under the early-use Complex Model as well as all the standards under the Simple Model, except for the caps on sulfur, olefins, and T90. (5/2/96)

B. Liability and defenses

1. **Question**: Are the liability and defense provisions of this rule structured similarly to those adopted by EPA in its prior motor vehicle fuel programs?

Answer: Yes. The RFG liability and defense provisions are closely modeled after other motor vehicle fuel programs, such as unleaded gasoline, volatility, and diesel sulfur. The final rule establishes liability for a number of prohibited activities that may occur downstream of the refinery or importer. When such a violation is found, the following parties are presumed liable: the operator of the facility at which the violating gasoline is found, and each upstream party, other than carriers, that supplied any of the gasoline found to be in violation. In general, carriers are liable if they cause a violation at a downstream facility. In the case of a facility operating under the brand name of a refiner or importer, that refiner or importer also is presumed liable regardless of whether the refiner supplied any of the gasoline found in violation.

A party presumed liable may establish an affirmative defense by showing: (1) that they did not cause the violation; (2) that product transfer documents indicate the gasoline in question met all relevant requirements; and (3) that they conducted a sufficient quality assurance program. Additional elements must be shown by refiners or importers for violations at branded facilities. These liability and defense provisions are specified at 40 C.F.R. § 80.79.(7/1/94)

2. **Question:** Must each batch of gasoline be traceable from the refinery or importation point to consumption in order to avoid liability if a non-conformance is found?

Answer: No. However, each regulated party (other than a carrier) is presumptively liable for violations of the downstream standards found at facilities downstream from that party. In order to establish a defense the party must show, among other defense elements, that it did not cause the violation. A party normally is able to establish this "did-not-cause" defense element for a violation of a downstream standard by showing through test results that the gasoline in question met all applicable standards when the gasoline was passed to the next downstream party. As a result, a party should be able to "trace" its own gasoline to the extent necessary to be able to identify the specific gasoline supplied to the next parties in the distribution system, and the quality of that gasoline.(7/1/94)

3. **Question:** Will a regulated party's defense fail if test results indicate the product is over the standard but within the EPA announced test tolerance?

Answer: As discussed in the Enforcement Tolerance section of this document, all gasoline downstream of the refinery or importer level may be released if test results for each parameter show the gasoline to be within the applicable standard plus the tolerance for that parameter, provided all other RFG requirements are met.

As a result, in the case of a violation of a downstream standard, a party who is presumptively liable could establish the quality assurance defense element if all of that party's test results are, for each parameter with a downstream standard, within the applicable standard plus the tolerance for that parameter.(7/1/94)

4. **Question:** Company A owns and operates a terminal which it uses exclusively to store finished gasoline. It leases a small portion of its tanks to Company B, who uses the tankage to purchase and blend components together to make gasoline. How can Company A protect itself from liability for a violation detected in one of the leased tanks?

Answer: The definition of "refiner" includes any person who owns, leases, operates, controls or supervises a refinery. Therefore, under this scenario, both the person who owns the gasoline being blended, and the person who owns the terminal tanks would be considered to be refiners. Each person meeting the definition of refiner for a particular refinery operation is independently responsible for the completion of all refinery requirements, such as meeting standards, sampling and testing (including independent sampling and testing), record keeping, reporting, and independent audits. However, these refinery requirements must be met only once for any refinery operation. As a result, if the refinery requirements are properly accomplished by one "refiner" for a particular refinery operation, EPA will consider the requirement to have been accomplished by each person who meets the definition of refiner for that operation.

In the scenario described in the question, Company A could rely on Company B to meet the requirements for that refinery operation. If Company B does not properly meet all the refinery requirements, however, both Company B and Company A would be independently liable for the violation. As a result, Company A should allow Company B to conduct a refinery operation at Company A's facility only if: (1) Company A intends to meet the refinery requirements for the operation; or (2) Company A is fully satisfied Company B will meet these requirements. In addition, should Company A rely on Company B to meet these requirements, Company A should monitor the operation to ensure Company B in fact meets all refinery requirements.(7/1/94)

5. **Question:** If a refiner produces gasoline at the direction and to the specifications of a distributor who will ultimately purchase it, and a violation is discovered at the refinery, will both parties be jointly and severally liable for the violation? How can the distributor protect itself against liability for violations that occur at the refinery?

Answer: In a case where a refiner produces gasoline to specifications that are set by a distributor, and where that gasoline does not meet applicable refiner-level standards, the refiner who actually produces the gasoline clearly would be liable for the standards violation. It would be no defense for the refiner to argue that it only was following the directions of the distributor-transferee of the gasoline produced by the refiner.

In addition, in this scenario the distributor also could meet the definition of "refiner" for the refining operation and could be liable if the gasoline is found in violation of the applicable standards. Contracting for the production of gasoline would amount to "control" over the refining operation, which would result in the distributor-"refiner" being jointly and severally liable for the standards violation.

The distributor could protect itself against liability by including in the processing agreement only specifications for gasoline that meets all applicable standards, and by monitoring the quality of gasoline received from the refinery to ensure it in fact meets all applicable standards. In addition, if the distributor's relationship with the refinery operations is sufficiently close that the distributor, in effect, "operates, controls or supervises" the refinery operation, then the distributor would be a co-refiner. In such a case the distributor-"refiner" should take steps to ensure all the refiner requirements are met, including refiner and independent sampling and testing, record keeping, reporting, and attest engagements. (7/1/94)

6. **Question:** What documentation will be needed downstream to show certification of RFG?

Answer: Downstream of the refinery level, RFG may be considered to be "certified" if it is accompanied by product transfer documents, specified in § 80.77, that identify the gasoline as RFG. Of course, if downstream testing shows that gasoline does not meet applicable downstream standards, then the gasoline could not be considered "certified" RFG.(7/1/94)

7. **Question:** What RFG parameters should parties monitor as part of their downstream quality assurance programs?

Answer: Parties should monitor the applicable downstream standards as part of their downstream quality assurance programs under § 80.79(c). These are: under the simple model, oxygen and benzene, and RVP in the case of VOC-controlled RFG; and under the complex model, oxygen, benzene, and NOx emissions performance, and VOC emissions performance in the case of VOC-controlled RFG.(7/1/94)

8. **Question:** What field test methods are acceptable for oversight programs?

Answer: For purposes of meeting the downstream quality assurance defense element, parties may use any test method, so long as that method is performed in accordance with sound engineering and laboratory principles in a manner which provides reasonable correlation to the methods specified in § 80.46.(7/1/94)

9. **Question:** Since other ASTM methods are being developed that would allow use of one analyzer to obtain benzene, aromatics, and olefins, will EPA allow any of these new methods to be used in reformulated gasoline certification and/or a refiner's defense?

Answer: A refiner that intends to distribute RFG must certify that product using the test methods prescribed in the Final Rule. However, a refiner performing quality assurance testing downstream of the refinery may use other test methods provided these methods have been correlated with EPA's test methods.(7/1/94)

10. **Question:** If RFG is shipped from a refinery to a terminal through a proprietary pipeline system, may the pipeline rely on the refinery and terminal test results to satisfy the quality assurance defense element?

Answer: In a case where EPA documents a downstream standard violation at a proprietary terminal that is served only by a proprietary pipeline that receives gasoline only from a proprietary refinery, the company that owns the refinery, pipeline and terminal (Refiner A) would be presumptively liable for the violation. The quality assurance defense element would not be a factor in such a case because Refiner A would not be able to establish the first defense element - that it did not cause the violation (no other party could have cause a standard violation under such a scenario).

If EPA documents a downstream standard violation at a facility downstream from Refiner A's terminal, e.g., at a retail outlet supplied by this terminal, Refiner A would be presumptively liable for the violation. In such a case, Refiner A could establish the did-not-cause defense element through test results from the terminal showing that all gasoline dispensed met all applicable standards. In addition, because of the unique proprietary refinery-pipeline-terminal scenario, Refiner A could meet the quality assurance program defense element using test results from the refinery and terminal, with no tests collected from the pipeline itself, provided the tests are designed to monitor the various types of violations that could occur during pipeline movements.(7/1/94)

11. **Question:** If a refiner sends RFG to an intermediate party who inadvertently sends it to a region with stricter parameters, is the refiner liable provided the refiner otherwise meets all the elements of its defense?

Answer: In a case where a party (Party A) delivers RFG to another party (Party B), and the gasoline when delivered meets all applicable standards and is accompanied with product transfer documents as required under § 80.77 that inform Party B of the proper time and place of use for the gasoline, Party A normally would not be responsible if Party B later uses this gasoline in a time or place that is not proper. Party A could be liable for this later improper use by Party B,

however, if Party A either knew or reasonably should have known of the improper use by Party B, and did not take steps to prevent the violation.

For example, consider a case where a large volume of non-VOC controlled RFG is delivered to a terminal on April 30, and a violation of the VOC standard is discovered on May 1. In this case the distributor who sold this gasoline to the terminal would be liable for the violation (in addition to the terminal-distributor), because the seller-distributor knew or should have known the delivery would result in a violation.

Another example would be a case where a terminal-distributor located in Philadelphia - which is in VOC-control Region 2 - intends to dispense gasoline that is properly identified for that Region into a truck for retail delivery. If the truck loading documents identify a delivery location in Baltimore - which is VOC-control Region 1 - the terminal-distributor would know or reasonably should know of the impending improper gasoline use. If the terminal-distributor nevertheless dispenses the gasoline, the terminal-distributor would be liable for this violation.

These examples illustrate EPA's requirement that parties may not operate in a manner that will cause violations by other parties, and may not supply gasoline to another party if it is known (or reasonably should be known) that party will use the gasoline in a manner that violates the regulations. In a situation where a party knows or should know that gasoline in its control has been or will be used in violation of the regulations, EPA requires the party take affirmative steps to prevent the violation. If another person refuses to cooperate in the violation prevention, the party should discontinue doing business with that person.(7/1/94)

12. **Question:** What constitutes "periodic sampling and testing"?

Answer: EPA has not defined the frequency or scope of sampling and testing that is necessary to meet the quality assurance program defense element, because there is no single program that is appropriate in all situations. In addition, EPA believes that regulated parties are most familiar with their own operations, and therefore are in the best position to design quality assurance programs that are adequate to ensure the RFG standards are met. Factors that EPA believes are relevant in designing an RFG quality assurance program are: the results of previous sampling; the volume of gasoline in a particular batch (the larger the volume, the greater the justification for sampling and testing that batch); the degree of confidence in the quality of the gasoline which was received; the opportunity for violations while the gasoline is in the possession of the party (e.g., the opportunity for commingling of RFG and conventional gasoline); and the opportunity to deliver RFG in a manner inconsistent with the proper time and place of use.(7/1/94)

13. **Question:** How can a distributor meet the defense elements in the case of gasoline that is obtained from another distributor's terminal through an exchange agreement?

Answer: In the case of a downstream standard violation found at the retail level, under § 80.79(a)(3) each distributor who sold, transported, or stored any of the gasoline found to be in

violation is presumed liable, and in order to establish a defense under § 80.79(b), in addition to other defense elements must show evidence of quality assurance program. As a result, in the case of an exchange agreement, presumptive liability would apply both to the distributor who sold the gasoline to the retail outlet, and to the terminal-distributor who supplied the gasoline in question.

The terminal-distributor could meet the did-not-cause and the quality assurance program defense elements through test results that show the gasoline in question met all applicable standards when dispensed. The seller-distributor could rely on the terminal-distributor's testing to show the gasoline met applicable standards when dispensed from the terminal, if this testing is properly performed.

Assuming the terminal-distributor has adequate test results, the more difficult defense element for the seller-distributor would be showing it did not cause the violation through the delivery truck, for example by mixing with conventional gasoline from a prior truck load. This did-not-cause showing by the seller-distributor would be necessary even in a case where a common carrier truck is used to deliver the gasoline (where the seller-distributor never had physical custody of the gasoline), because the truck carrier is acting as the agent of the seller-distributor.

For practical purposes, the most likely way a seller-distributor could show it did not cause a violation found at a retail outlet is to show who or what did cause the violation. For example, if it could be shown that the violation was caused by delivery from another distributor of gasoline that was off-spec, the seller-distributor would establish the did-not-cause defense element.

Of course, if the seller-distributor has test results from the delivery truck showing the gasoline delivered to the retail outlet met all applicable standards, the seller-distributor would be able to establish a full defense.

In addition, in order to establish a defense the seller-distributor must present evidence of a quality assurance program of sampling and testing, as specified in § 80.79(b)(1)(iii), and product transfer documents for the gasoline in question that indicate the gasoline met all relevant requirements, as specified in § 80.79(b)(1)(ii).(7/1/94)

14. **Question:** Will oversight programs and paper trail need to extend to conventional gasoline in order to comply with anti-dumping?

Answer: The requirements of the anti-dumping program apply only to refiners and importers. As a result, there are no downstream standards or requirements for conventional gasoline, other than those related to the prohibitions against using conventional gasoline in RFG areas, against commingling RFG and conventional gasoline and the requirement to generate transfer documents that correctly identify the gasoline as conventional. Other requirements related to gasoline quality, such as volatility, continue to apply to conventional gasoline, however.(7/1/94)

15. **Question:** Must downstream parties with their own labs use an independent lab for quality assurance sampling and testing?

Answer: Parties may use their own lab, an independent lab, or another party's lab in fulfillment of the quality assurance program defense element. Regardless of which lab does the work, however, the burden remains on the party who is presumed liable to demonstrate that the samples were properly collected and the testing was properly performed.(7/1/94)

16. **Question:** If terminals utilize the services of outside laboratories for periodic sampling and testing, how can the terminal limit exposure to liability in the event non-complying product from the tested tank(s) leaves the terminal during the three or four days before test results are available?

Answer: A terminal-distributor's release of RFG that does not meet applicable standards would constitute a violation of § 80.78(a)(1) for which the distributor would be liable, and it would not be a defense if the violation was caused by a delay in receipt of test results. A terminal-distributor could limit its exposure for such violations, however, by performing as much testing as possible at the terminal. For example, the parameters for which downstream standards apply under the simple model are RVP, oxygen, and benzene. EPA is aware of - and intends to use - field test equipment for these parameters. This field test equipment is appropriate for use by terminal-distributors at terminals, and if used would allow parties to avoid violations from the cause described in the question, at least until the complex model becomes effective in 1998.

Similar field test equipment may be available for use under the complex model. Before 1998 there likely will be advances in testing equipment technology that will allow more field testing of the complex model parameters. EPA hopes to develop complex model screening protocols that are appropriate for use in the field. To the extent these advances materialize, terminal-distributors will be able to monitor RFG quality without the time lag inherent when outside labs are used.(7/1/94)

17. **Question:** May survey samples be used as a substitute for a refiner's quality assurance program for enforcement purposes?

Answer: Surveys may not be used as a substitute for a regulated party's own quality assurance program.(7/1/94)

18. **Question:** Will oversight programs need to be designed differently for per-gallon versus averaging?

Answer: The distinction between RFG certified under the per-gallon versus the average standards only applies at the refinery or importer level. The only standards that apply downstream are per-gallon maximum and minimum standards associated with average standards. Therefore,

the downstream quality assurance program defense element is the same regardless of whether RFG is produced to an average standard or per-gallon standard.(7/1/94)

C. Penalties

1. **Question:** A refiner elects to meet a RFG specification via the "averaging" method. Two-thirds of the way through the averaging period, his tracking of cumulative qualities shows he is just meeting the standard. For the remaining last third of the averaging period the gasoline stays within the maximum or minimum RFG limits but exceeds the averaging standard. As a result the average for the averaging period is off-spec. Ignoring the purchase of credits for oxygen or benzene standards, is the refiner liable for a daily penalty over the entire averaging period, or only the number of days in the last third of the averaging period?

Answer: Section 80.80(c) provides that the refiner would be liable for a daily penalty over the entire averaging period.

Refiners, for each refinery, and importers, must elect to comply with each standard on a per-gallon or average basis at the start of each compliance period. These elections then are applicable throughout that compliance period. During the rulemaking, EPA considered whether to allow refiners and importers to declare their method of compliance on a batch-by-batch basis. This option was rejected out of EPA's concern that a batch-by-batch determination would result in exceedances of nationwide levels for regulated parameters. See 59 Fed. Reg. 7770.

Accordingly, refiners are permitted the flexibility associated with averaging to achieve compliance over the whole compliance period, including the provision to adjust averages through the use of credits only in the case of parameters for which the averaging compliance approach is selected. Moreover, once the option of using an average standard is made, a refiner may not change to the per-gallon standard for that parameter during the averaging period, and an exceedance of the average standard represents a violation of that standard for each day of the averaging period.

The maximum penalty for violations of average standards is $25,000 per violation for each day in the averaging period, plus the economic benefit or saving to the violator. EPA intends to develop a penalty policy that will be used to calculate penalties for use during the administrative phase of enforcement actions, which will take into account factors such as the gravity of the violation, the economic benefit or savings resulting from the violation, the size of the violator's business, the violator's history of compliance with the gasoline quality requirements, and actions taken to remedy the violation.(7/1/94)

2. **Question:** Will EPA waive penalties imposed for late reports if reports are late due to mechanical or electronic failures?

Answer: EPA will not waive penalties arising from late reporting. Reports must be submitted within the times specified in the regulations. EPA believes that parties have ample time (approximately 60 days) to prepare and submit reports following each reporting period. In an individual case where a report is filed late for reasons shown by the reporter to be outside of the reporter's control, EPA may exercise enforcement discretion in determining what enforcement action is appropriate.(7/1/94)

D. Inspections and Audits

1. **Question:** How often does EPA expect to audit refiners, importers, and distributors? Will such audits be conducted by EPA personnel or contract personnel?

Answer: The frequency of audits conducted at the above facilities will depend on a number of factors such as: general compliance rates, compliance history of individual facilities, EPA budget allowances, etc. Based upon the experience of past fuels enforcement programs, it is expected that the above facilities would be audited no more than once per year, unless circumstances would require audits at a greater frequency. These audits will be performed by both EPA and contract personnel.(7/1/94)

E. Remedies

1. **Question:** If reformulated gasoline is found downstream of the refinery to be off specification, what procedures are appropriate for handling this gasoline?

Answer:

Downgrading

In a case where RFG is found to violate any downstream standard, a party may take remedial action for the violation by reclassifying the RFG as conventional gasoline (by "downgrading" the gasoline), and using the gasoline only outside any RFG covered area. The downgraded gasoline must be segregated from all RFG, and the product transfer documents must identify the gasoline as conventional gasoline. There is no requirement that such downgraded gasoline must be included in any downstream party's anti-dumping compliance calculations, however.

If RFG that is designated as VOC-controlled is found to violate a standard that applies only to VOC-controlled RFG, the RFG may be downgraded to non-VOC controlled RFG, and used

outside the VOC control period.[13] The VOC control period is May 1 through September 15 at facilities upstream of the retail level, and June 1 through September 15 at the retail level.

If RFG that is designated as VOC-controlled for VOC Control Region 1 is found to be off-spec for that Region, but to meet the standards applicable to VOC Control Region 2, the gasoline may be downgraded to VOC Control Region 2 RFG, and used only in that Region.

If the off-spec gasoline is found at a retail outlet or wholesale purchaser-consumer facility located in an RFG covered area, all sales of gasoline from the tank must be stopped, and the gasoline removed from the storage tank and transported to an area that is appropriate for the downgraded classification of the gasoline.

When RFG is downgraded, the party should document the circumstances that gave rise to the downgrading. The gasoline in question should be segregated from gasoline having the higher classification, the product transfer documents for the gasoline in question should be changed to the downgraded classification, and the gasoline must not be sold, dispensed, or transported in a manner that is inconsistent with the downgraded classification.

Storage

If during the VOC control period RFG is discovered that does not meet applicable VOC control standards, remedial action for the violation may consist of storing the gasoline in place until the end of the VOC control season on September 16. In such a case, the gasoline must be segregated from gasoline that meets the VOC control standards, documents associated with the gasoline must clearly state the gasoline is not VOC-controlled, and the gasoline must be sealed to prevent its accidental use in advance of September 16.

Blending With Additional RFG

Parties may blend additional RFG with RFG that is discovered to be off-spec a means of remedial action for the violation, subject to certain constraints,[14] to bring the mixture within all applicable standards. In such a case, subsequent to blending the RFG must be sampled and tested to meet all applicable RFG downstream standards.

Blending With Oxygenate

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[13] The standards that apply only to VOC-controlled RFG are: RVP under the simple model; VOC emissions performance under the Phase I complex model; and VOC emissions performance and a separate NOx emissions performance standard under the Phase II complex model.

[14] The constraints on fungible mixing are discussed in the Transition Issues Section, Question 4, and preclude: the mixing of ethanol-based VOC-controlled RFG with non-ethanol-based VOC-controlled RFG during the period January 1 through September 15 of each year; the mixing of RFG designated as OPRG with RFG that is not designated as OPRG; and the mixing of simple model and complex model RFG.

Section 80.78(a)(6) prohibits the blending of any oxygenate with RFG, except that oxygenate may be blended with RFG that is designated as OPRG provided the RFG is used in an oxygenated fuels program area during the oxygenated fuels control period. As a result, any oxygenate may be blended with RFG provided the RFG is designated as OPRG and is used in an oxy fuels program as specified in § 80.78(a)(6). In addition, only in the case of remediation for RFG that violates a downstream standard and regardless of whether the RFG is designated as OPRG or not-OPRG or whether the RFG is used in an oxy fuels program, oxygenate may be blended with off-spec RFG. Whenever oxygenate blending is used as a remedial action, subsequent to blending the RFG must be sampled and tested to meet all applicable RFG downstream standards and requirements, including in the case of VOC-controlled RFG the RVP or VOC emissions reduction standards and the prohibition against mixing ethanol and other oxygenates, and the maximum oxygen content standards. Moreover, any mixture of oxygenates in the resulting blend must conform to an approved oxygenate blend. Allowable oxygenate mixtures are discussed in the Oxy Fuel Section of this document.

The party performing remedial oxygen blending does not need to be registered as an oxygenate blender.

Each of the remedial actions discussed in this answer would be appropriate at all stages in the gasoline distribution system, including pipelines and terminals, and retail outlets and wholesale purchaser-consumer facilities. These remedial actions also would be appropriate for use by refiners and importers who discover that RFG is off-spec subsequent to the gasoline being shipped from the refinery or import facility.

On any occasion when a party takes remedial actions for an RFG violation, using any of the mechanisms discussed in this answer, the party should retain documents that reflect: the reason the party believed the gasoline to be in violation (e.g., test results); the actions taken to correct the violation; and any actions taken to prevent future violations.(11/10/97)

2. **Question:** May RFG that is found to be off-spec downstream of the refinery or import facility be corrected by blending "clean" non-oxygenate blendstocks?

Answer: Any party who combines blendstocks other than oxygenate with RFG is producing gasoline, and must meet all the RFG standards and requirements applicable to a refiner. In addition, all applicable RFG standards must be met by the blendstock only. The blendstock, therefore, in effect must be RFG, and such blending is the equivalent of blending RFG with RFG.

A party who does not meet the RFG refiner standards and requirements can take remedial action for RFG that violates applicable standards using the methods discussed above in Question 1.(7/1/94)

3. **Question:** If reformulated gasoline is found at the refinery to be off specification, what procedures are appropriate for handling this gasoline?

Answer: A case may occur where a refiner discovers RFG at a refinery that does not meet applicable standards, before that gasoline is shipped from the refinery. For example, RFG for which a parameter is being met on average could be found to violate the per-gallon minimum or maximum associated with that parameter, or RFG for which a parameter is being met on a per-gallon basis could be found to violate the per-gallon standard for that parameter.

In such a case, and because none of the gasoline in question has left the refinery, the refiner could prevent any violation by reblending the gasoline to meet all applicable standards before it is shipped. The reblended gasoline then would be a new batch for which the independent sampling and testing requirements must be met. In this situation, the earlier off-spec batch would be reported to EPA, but with a volume of zero. This earlier batch would have to be reported so that the refiner's and the independent lab's records remain synchronized.(7/1/94)

4. **Question**: If a party identifies RFG that is out of spec for a downstream standard, and the party wants to bring the gasoline back into spec by blending it with other RFG or with blendstock, must the party be registered with EPA as a refiner, and must the party meet all the requirements that apply to refinery operations for this blending activity?

Answer: If RFG at a location downstream of the refinery or import facility level is found to violate a downstream standard, a violation of the RFG requirements has occurred for which various parties will be liable, and for which penalties may be assessed by EPA. Section 205 (b) of the Clean Air Act instructs that penalties for violations of the motor vehicle fuels requirements (including the RFG requirements) should take into account "action taken to remedy the violation...." As a result, penalty amounts for violations of the RFG requirements will depend, in part, on actions taken by liable parties to remedy violations. Thus, while remedial actions do not eliminate a violation, such actions normally do reduce the amount of any monetary penalty that must be paid.

In answer to Question 1 in the Remedies section (Section VII-E) of the July 1, 1994 RFG Question and Answer document, EPA described a number of remedial actions that parties may take to correct such a violation of a downstream standard. One of the remedies included in this July 1, 1994 answer was blending with additional RFG, which the party should document as specified in that answer. A party that carries out such remedial blending with RFG does not have to be a registered refiner, and need not meet the RFG refiner requirements, such as for independent sampling and testing and attest engagements. Separate refiner accounting for this type of remedial blending is not necessary because both the off-spec RFG and the blending RFG have already been included in the compliance calculations of a refiner or importer.

A party may take remedial action for a violation by blending with blendstock (a non-gasoline petroleum product), but only if the party is registered with EPA as a refiner, and meets all the refiner requirements. This is necessary because the blendstock used will constitute new RFG volume which must be accounted for. As a result, parties should register with EPA as a refiner in

advance if they believe they may wish to conduct remedial blending with blendstock. If no blendstock blending occurs, there is no requirement to submit reports to EPA or meet any other refiner requirement. If the need for blendstock blending does occur, however, the party is in a position to do so.

If a party who has not registered with EPA as a refiner discovers a downstream standard violation, and the party believes blendstock blending is the most appropriate remedial action, the party should contact EPA. It may be possible in such a case for EPA to issue a refiner registration to the party in an expedited manner. The party should not ship any RFG produced through blendstock blending, however, until all refiner requirements have been met and the party has received a refiner registration number from EPA.(9/26/94)

5. **Question**: What downstream "remedies" are available if a batch of RFG is found to violate the minimum complex model VOC emissions reduction standard?

Answer: The remedies outlined in the December 5, 1994 RFG/Anti-dumping Questions and Answers document (VII.E.1) apply to complex model RFG that is found to violate the minimum VOC emissions reduction standard. (11/10/97)

F. Test Tolerances

1. **Question**: What are the EPA test tolerances for each controlled variable related to RFG?

Answer: The downstream test tolerance for RVP is 0.30 psi. The downstream test tolerance for oxygen is 0.30 wt%. The downstream test tolerance for benzene is 0.21 vol%.(7/1/94)

2. **Question:** Please clarify and resolve the significant digit differences existing between the standard and enforcement tolerance specified, i.e. 8.3 psi RVP with a 0.30 psi enforcement tolerance.

Answer: The significant digit differences between the RVP standard and the enforcement tolerance arise from EPA's desire to resolve any questions about rounding of RVP measurements when an enforcement tolerance has been applied. Accordingly, for example, the 0.30 psi RVP enforcement tolerance would preclude rounding of the second significant digit of the Rvp standard.(7/1/94)

3. **Question:** In its discussion of Enforcement Test Tolerances, EPA states that if test results "show the product to be above the standard, then the product is in violation regardless of whether or not it is within the tolerance." Since this is, technically, a violation how is this reconciled with the requirement that parties in the distribution chain must take corrective action to bring all product into compliance? Can we rely on stated EPA intention to bring no enforcement if samples are over the standard but within tolerance? Are records required for these instances?

Answer: Parties are expected to take corrective action when samples collected at locations downstream of the refinery or import facility exceed an applicable standard for a parameter plus the enforcement tolerance for that parameter. For example, if a distributor takes a sample of RFG taken from a storage tank at a terminal operated by that distributor that serves an RFG covered area, and this sample is analyzed to have a benzene content of 1.50 vol%, this result would be less than the benzene downstream standard (1.3 vol%) plus the benzene enforcement tolerance (0.21 vol%). As a result, the distributor would not be expected to take any action to reduce the benzene content of the RFG in the terminal. In addition, EPA would exercise its enforcement discretion and not pursue an enforcement action as a result of the distributor's test result. This answer would not change if the sample were collected and analyzed by EPA.

Note that the test tolerance does not apply to samples taken and tested at a refinery or import facility.

As a part of any quality assurance program, regulated parties should retain documents that reflect the results of sampling and testing, and any corrective actions that are taken.(7/1/94)

4. **Question:** Confirm that an RFG property measured from a sample collected during an EPA inspection is in technical violation if that property exceeds an applicable standard, but that no enforcement action will be brought by EPA unless the property exceeded the standard in question by at least the enforcement tolerance for that property.

Answer: As stated in the preamble to the RFG final rule, at 59 FR 7764 (February 16, 1994), EPA will not initiate an enforcement action on the basis of a test result from a gasoline sample collected at a facility downstream of the refinery or import facility, unless the test result exceeds the standard for a regulated parameter plus the enforcement tolerance for that parameter.(7/1/94)

5. **Question:** How will the term "tolerances" be interpreted as a practical matter by EPA as it relates to specifications? As a clarification, please respond to the following:

An importer who elects to comply on a "per-gallon" (vs. averaging) basis must meet an RVP maximum specification of 8.1 during the summer months. The EPA has

established a 0.30 psi tolerance for this test. Consider the hypothetical, but likely situation whereby such an importer brings a cargo of RFG into New York Harbor which was determined by an independent inspector abroad to contain 8.1 psi at load. Upon discharge at New York Harbor by another independent inspector, the cargo was found to contain 8.3 psi. This second inspector's results are later confirmed by the EPA. Is this importer in compliance, due to the fact that the product conforms, within the established tolerances to the specifications established by EPA? Does the loadport analysis have any bearing on this matter? In the event the importer is found to be out of compliance, would he be subject to penalties under the Act? If so, would the loadport inspection certificate be construed as a satisfactory defense against an enforcement proceeding?

Answer: As stated in the Preamble to the Final Rule, 59 Fed. Reg. 7764, "refiners and importers may not use the tolerance to expand the applicable standard. Further, product must meet all applicable specifications when it leaves the refinery or import facility. If the refiner or importer results show the product to be above the standard, then the product is in violation regardless of whether or not it is within the tolerance." Further, under § 80.65(e) an importer is required to sample and test each batch of imported gasoline prior to the gasoline leaving the import facility. It is the importer's test result from the gasoline sample collected at the port-of-entry that is the basis for establishing the properties of the imported gasoline. Accordingly, under then hypothetical posed above, the test result of 8.3 psi RVP from the port-of-entry inspection would result in an EPA finding that the product is in violation of the regulations, and the importer would be liable for appropriate penalties.(7/1/94)

6. **Question:** Although min/max standards do not apply to sulfur, olefins and T90, these parameters are regulated for both conventional and RFG. What tolerances will be available for these parameters?

Answer: Under the simple model only oxygen and benzene, and RVP in the case of VOC-controlled RFG, will involve downstream EPA testing for enforcement purposes. EPA has not set enforcement tolerances for standards that apply at the refinery or importer level, such as sulfur, T-90, and olefins. Moreover, enforcement tolerances are only appropriate when measuring for per-gallon or min/max standards. Sulfur, olefins and T-90 are averaging standards. Therefore, EPA does not anticipate issuing enforcement tolerances for sulfur, T-90, or olefins.(7/1/94)

7. **Question:** Will the EPA allow certain pipeline companies to maintain their recently elected 1.18 percent maximum benzene specification, which could tighten supply into major RFG consuming areas?

Answer: EPA has no authority to allow or disallow gasoline specifications that are set by a pipeline or any other party, as long as they are in compliance with the applicable regulations.(8/29/94)

8. **Question:** In theory, each step of the RFG testing chain could yield varying (assuming increased) results due to reproducibility -- what is EPA's position on this?

Answer: It is up to the regulated parties to determine margins of safety. EPA does not get involved in this determination.(8/29/94)

9. **Question:** Exactly where will EPA define downstream and upstream in regards to applying enforcement test tolerances at refineries, including terminals registered as refineries? For example, does the enforcement test tolerance apply to RFG after it has been produced and certified at a refinery and transferred from the blending tank to other tankage at that refinery?

Answer: The enforcement test tolerances (which are relevant only to the "downstream standards" which are oxygen, benzene, and RVP) would apply to samples of RFG collected subsequent to movement of the RFG from the tank in which the certification sampling is conducted, even when these subsequent samples are collected within the refinery or import facility where the gasoline is produced or imported. Thus, a refiner or importer may conduct a quality assurance program of the RFG located at the refinery or import facility that previously has been certified, and use the "downstream" enforcement test tolerances when evaluating the quality assurance samples.(12/5/94)

10. **Question:** In the Preamble to the RFG Final Rule, EPA included an initial enforcement test tolerance for benzene of 0.21 vol%, and described a round robin testing process that would result in a final benzene test tolerance that would be effective beginning January 1, 1996. Is the round robin process proceeding on time, so the final benzene test tolerance will be in place by January 1, 1996?

Answer: The benzene test tolerance round robin program that is described in the Preamble to the RFG Final Rule has not proceeded according to the schedule described there. See, 59 FR 7764 (February 16, 1994). The difficulty has been in identifying the precise nature of the benzene test under the Final Rule. Section 80.46(e) specifies that the benzene test method is ASTM method D-3606-92, but this section also states that "[i]nstrument parameters must be adjusted to ensure complete resolution of the benzene, ethanol and methanol peaks because ethanol and methanol may cause interference with ASTM standard method D-3603-92 when present." The best set of modifications currently known to EPA were recently announced. See, Test Methods Question 1 from the November 21, 1994 Question and Answer Document. EPA now believes the benzene

round robin process may begin in the near future, because the benzene test method issue has been resolved. Nevertheless, it will not be possible to conclude the benzene round robin process within the time discussed in the Preamble to the RFG Final Rule.

Therefore, EPA has decided to extend applicability of the initial benzene enforcement test tolerance (0.21 vol%) beyond January, 1996, until six months after the date upon which EPA announces a new test tolerance to be based upon the outcome of the pending EPA/API round robin test program.(12/5/94)

VIII. Interaction with State Programs

A. Oxyfuel Program

1. **Question:** The federal oxy fuels program requires transfer documents to contain oxygen type and oxygen weight % and volume % information on each oxy gasoline movement. The RFG program requires a min/max oxygen statement which essentially duplicates the oxy program requirements. Is it sufficient to print the RFG required message rather than both the oxy program and RFG program messages?

Answer: The winter oxygenated fuels programs are state, not federal, programs. There are no federal oxy transfer document requirements, merely federal guidance to the states. Generally, the state winter oxy fuels programs do not have product transfer requirements.(7/1/94)

2. **Question:** In areas where an oxy fuels program is in effect, how do these requirements coincide with RFG requirements? In areas where there is an overlap, are any regulatory changes necessary by the state?

Answer: In areas that are covered by both a state's winter oxy fuels and the federal RFG programs, the fuel must comply with both program requirements. Therefore, the more stringent 2.7 wt% minimum requirement of the winter oxy fuels programs must be met during the oxy control period. States do not have to make any regulatory changes.(7/1/94)

3. **Question:** Has there been any discussion about waiving the oxy program for California since the RFG fuel will exceed California's minimum oxy program standards? If the oxy program continues in California do we adhere to the maximum standard of 2.2 wt% instead of the 3.5 wt% maximum for winter RFG.

Answer: California has applied for a waiver under section 211 (m) of the Act from the federally mandated 2.7 wt% oxygen program for their 1.8 wt% minimum, 2.2 wt% maximum oxygen program. EPA has not taken final action on that program. Should EPA approve that California program then the State's 1.8 wt% minimum and 2.2 wt%

maximum would be the applicable state oxygen standard in California. However, RFG produced for the Southern California areas covered by the federal RFG program (i.e., San Diego County and the Los Angeles-Anaheim-Riverside area, as defined in § 80.70(a)) will also be required to meet the federal RFG oxygen content requirement of 2.0 wt%(2.1 wt% oxygen if met on average). Although the Agency concluded that the CARB Phase 2 RFG oxygen "flat limit" of 1.8 to 2.2% would in practice be equivalent to the 2.0% minimum oxygen content required by the Clean Air Act[15], this conclusion was made for the purpose of determining whether exemptions from certain enforcement provisions of the federal regulations would be appropriate. Gasoline that qualifies for the enforcement exemptions under § 80.81 must still comply with the federal reformulated gasoline standards even after the start of the CARB Phase 2 program in March 1996, including the oxygen content standards specified in § 80.41 (e.g., 2.0% oxygen by weight if met as a per-gallon standard).

Therefore, should the California oxy waiver be approved, gasoline in the Southern California covered areas must comply with both the federal 2.0 wt% oxygen requirement and the state's 1.8 wt% minimum oxygen and 2.2 wt% maximum oxygen standards.(7/1/94)

B. Other State Fuels Programs

1. **Question:** Now that EPA has issued final regulations for reformulated and conventional gasoline, what if any state fuel controls are preempted?

Answer: After EPA promulgates a federal fuel control or prohibition under section 211(c)(1) of the Act, state fuel controls respecting the same fuel characteristic or component as the federal regulation are preempted. A state may only adopt and enforce such a fuel control if it is approved by EPA as a SIP revision, after a showing that it is necessary to achieve the NAAQS that the plan implements. Prior to December 15, 1993, EPA had issued regulations under section 211(c)(1) that control the lead content and volatility of gasoline. State controls for these gasoline characteristics or components are subject to the above preemption provision.

The reformulated and conventional gasoline regulations were issued under the authority of both section 211(c)(1) and 211(k). State controls respecting the gasoline characteristics or components controlled or prohibited in the RFG and conventional gasoline regulations are therefore preempted, like state volatility and lead content controls. In general, the gasoline characteristics or components controlled or prohibited under these federal regulations vary depending on the program (RFG or conventional) and the model (simple or complex).(7/1/94)

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[15] See 58 FR 11747 (February 26, 1993).

2. **Question:** Under RFG, can a state provide a volatility allowance for ethanol during the winter months for both RVP and distillation? During the summer, can a state provide ethanol blends a distillation allowance from ASTM requirements?

Answer: There is no federal RVP requirement for RFG that is not VOC-controlled . States are therefore not preempted from regulating wintertime RVP for such fuels.

With respect to state controls on summertime distillation characteristics, the RFG rules establish annual controls on T-90 under the simple model. As such, state controls on T-90 are preempted during the simple model time period. States are not preempted from establishing controls on other distillation characteristics.

It is important to note that even if a state is not preempted and enacts a state fuel control, this does not change the federal requirement for either reformulated or conventional gasoline. The regulated community must still comply with all the applicable federal requirements, notwithstanding the existence of a state fuel control.(7/1/94)

3. **Question:** For areas not required to use RFG, do states have the ability to set ASTM performance specifications and any volatility allowances from those specifications for ethanol blended fuels?

Answer: Areas not required to use RFG are subject to the conventional gasoline and federal volatility regulations. States may not set ASTM performance specifications for characteristics or components that are controlled or prohibited by these federal regulations, subject to approval as a SIP revision. For example, state RVP limits in both conventional and RFG areas are preempted unless they are approved as a SIP revision.(7/1/94)

4. **Question:** Many states have adopted a 1.0 psi waiver for ethanol blends during the RVP control period. In areas where RFG is required, do states need to amend that regulation in any fashion in order to not be in conflict with RFG requirements?

Answer: In areas where RFG is required, states are preempted from having RVP requirements which are different from the RFG simple model requirements unless those requirements are approved by EPA as a SIP amendment which is necessary to attain a national ambient air quality standard. In any case, the federal regulation applies and regulated parties must meet the RVP and other requirements applicable to RFG.(7/1/94)

5. **Question:** Can a state provide a T-50 waiver for oxygenates other than ethanol under EPA waiver limitations?

Answer: Any state waiver for T-50 would not change the federal substantially similar rule or federal fuel waiver requirements. Therefore, such a T-50 waiver would have no force or effect federally. (7/1/94)

6. **Question:** How will RFG impact ASTM motor fuel specifications?

Answer: Fuel marketed in RFG areas must comply with the RFG regulations. If ASTM standards conflict with the RFG regulations, The ASTM standards will, in effect, be superseded.(7/1/94)

IX. Supplemental Questions

A. Transition Issues

1. **Question:** How may regulated parties transition from conventional gasoline to RFG in advance of the December 1, 1994 date terminals serving RFG areas must be on-spec for RFG.

Answer: Section 80.65(a) specifies that the RFG requirements apply to all gasoline produced, imported, transported, stored, sold, or dispensed at terminals that supply gasoline to RFG covered areas beginning on December 1, 1994, and at the retail level in RFG beginning on January 1, 1995. As a result, the prohibition, at § 80.78(a)(10) against combining RFG with conventional gasoline and calling the mixture RFG, does not apply at the terminal and retail levels until December 1, 1994 and January 1, 1995, respectively. Prior to these dates, terminals and retail outlets may place RFG into storage tanks that contain conventional gasoline, in order to turn over their storage tanks to RFG. However, the storage tanks of terminals and retailers must contain only RFG as of December 1 and January 1, respectively.

The RFG requirements apply to refiners and importers beginning on the date these parties first begin producing or importing RFG, however, because this gasoline will be "dispensed at terminals" beginning December 1, 1994, even if the refiner's or importer's RFG production begins in September or October, 1994. In effect, the RFG requirements apply to all gasoline designated by the refiner or importer as RFG, whenever produced or imported.(7/1/94)

2. **Question:** May terminals or distributors supply conventional gasoline to a retail outlet in an RFG covered area during December 1994, if the retail outlet is brought into compliance with the RFG standards by January 1, 1995?

Answer: No. Beginning December 1, 1994 all gasoline deliveries into RFG covered areas must be of RFG only.(7/1/94)

3. **Question:** During the transition into reformulated gasoline, is it permissible prior to December 1, 1994, for a refiner to blend components (either its own manufacture or purchased) with another refinery's finished gasoline and designate that resulting product as reformulated gasoline if all necessary properties are met and if the third-party finished gasoline used in the blend was not designated by the manufacturer as reformulated gasoline?
Answer: Yes, as long as the resulting product is properly sampled and tested and meets the standards for RFG, and all other regulatory requirements for a refiner of RFG are met.(8/29/94)

4. **Question:** When replacing conventional gasoline with RFG at a terminal, is it considered blending if the RFG is mixed with conventional bottoms?

Answer: During the transition period prior to December 1, 1994, certified RFG may be put into tanks that contain conventional gasoline bottoms, as long as the tank is essentially filled with certified RFG gasoline on December 1, 1994, and the gasoline is properly sampled and tested and is in compliance with the RFG downstream standards. After December 1, 1994, the mixing of RFG and conventional gasoline is prohibited.

5. **Question:** It is our understanding that prior to December 1, 1994, a refinery could make RFG quality gasoline, designate it as conventional gasoline and ship it to terminals that, as of December 1st, will be wholly dedicated to RFG markets. Of course, at some point prior to December 1st, these terminals will need to sample and test their gasoline to ensure that is it RFG quality before they can redesignate it as RFG. Would the EPA have any concerns with this approach?

Answer: This can be done to some extent, however, the terminal will need to receive RFG that has been certified as RFG by the refiner or importer in advance of December 1, 1994, so that its tanks essentially will be filled with certified RFG by December 1.(8/29/94)

6. **Question:** Can a finished (say 97 r+m/2) gasoline not conforming to anti-dumping or RFG specs be held in tankage in October or November 1994, and then be blended to RFG?

Answer: Yes. As stated in Question 1 above, the blended product must be properly sampled and tested and meet the standards for RFG, and all other refiner requirements under the regulations must be met.(8/29/94)

7. **Question:** Consider a gasoline retailer or wholesale purchaser-consumer in an RFG covered area who received a delivery of gasoline before December 1, 1994 (which would be conventional gasoline), and due to the normal pattern of gasoline use could not receive another delivery of gasoline until after January 1, 1995. The gasoline in this party's storage tank would be conventional until the storage tank could be turned-over from gasoline deliveries of RFG that occur subsequent to January 1, 1995. An example of a party in this situation is a marina that fills its gasoline tank in the Fall and then closes until the Spring. Will EPA enforce the RFG requirement at a facility such as this beginning January 1, 1995? Does EPA expect a facility such as this to pump out its storage tanks before January 1, 1995 and replace the conventional gasoline with RFG?

Answer: Under §§ 80.65(a) and 80.78(a)(1) retailers and wholesale purchaser-consumers located within an RFG covered area are prohibited from selling, dispensing, or storing gasoline that is not RFG beginning January 1, 1995. As a result, all retail outlets and wholesale purchaser-consumer facilities, including marina retail outlets, are required to have only RFG in their storage tanks beginning January 1, 1995.

Nevertheless, as part of any enforcement action for violation of the RFG requirements EPA will consider the normal patterns of gasoline deliveries to a retail outlet or wholesale purchaser-consumer. EPA will allow a retail outlet or wholesale purchaser-consumer facility to transition from conventional gasoline to RFG subsequent to January 1, 1995 without having to pump-out the storage tank (other than through normal gasoline usage) provided the party is able to demonstrate that the following conditions are met:

1. No deliveries of conventional gasoline were made to the facility after November 30, 1994.

2. The party could not have turned over the gasoline in a storage tank from conventional to RFG through deliveries of RFG prior to January 1, 1995 without pumping out the conventional gasoline in the tank. This condition would be met, for example, in the case of a party (such as the marina described in the question) who required a delivery of gasoline before December 1, 1994 and could not accept another delivery until after January 1, 1995.

3. The party received delivery of the largest possible volume of RFG into the storage tank in question as soon as was possible. Thus, a wholesale purchaser-consumer or retailer who received a large delivery of conventional gasoline before December 1, 1994 should order the largest volume of RFG possible before January 1, 1995, and

should continue to transition the storage tank to RFG as quickly as possible subsequent to January 1, 1995.

4. The pattern of gasoline deliveries into the storage tank in question is consistent with the historical pattern of gasoline deliveries into that tank, and was not the result of a decision to maximize the volume of conventional gasoline purchased in order to minimize the volume of RFG purchased.

(12/5/94)

8. **Question:** How may terminals and retail outlets transition from non-VOC-controlled RFG to 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.

In a case where the RFG in a terminal storage tank does not meet all applicable VOC-controlled RFG standards on May 1 in spite of deliveries of VOC-controlled RFG to that tank, the terminal may not distribute gasoline from that tank. The terminal operator may continue to deliver VOC-controlled RFG to this storage tank subsequent to May 1, however, and begin delivering the RFG as VOC-controlled if and when the RFG achieves the VOC-controlled standards. (4/18/95)

9. **Question:** Section 80.78(a) requires segregation of several categories of gasoline and precludes the mixing of any amount of the gasolines that must be segregated.

EPA recognized the difficulty in changing the service of a storage tank as a result of tank heels, and outlined a 5-step procedure for changing the service of a gasoline storage tank. EPA's description of this procedure does not state that a company will avoid violating the § 80.78(a) segregation prohibition if this procedure is followed, and, therefore, the procedure appears to expose companies to liability for violation of the segregation requirements.

In addition, EPA outlined procedures for dealing with interface mixtures. It is unclear if a party who follows these procedures will be in violation of the § 80.78 segregation prohibitions. If this interface activity is considered a violation, the regulated parties will be exposed during all sequential shipping of gasoline on a pipeline, an activity acknowledged by EPA to be necessary for conducting business and supplying gasoline to the marketplace. Without some type of relief, regulated parties will not be able to ensure delivery of available supplies of RFG.

Will EPA exercise enforcement discretion and not initiate an enforcement action if parties follow the procedures described in the Question and Answer Document, or will EPA enter into written enforcement protocols with regulated parties to ensure no enforcement actions are brought in order to "facilitate the orderly conduct of business."

Answer: A party who follows the procedures for dealing with the change of service for a gasoline storage tank, or for dealing with pipeline interface mixtures, that are described in the Question and Answer Document will be considered by EPA to be acting in a manner that is consistent with the segregation requirements expressed in the regulations.(8/29/94)

10. **Question:** Most refiners will produce simple model RFG during 1995 through 1997, and complex model RFG when required beginning in 1998. How may parties carry out this transition from simple to complex RFG, given the prohibition against mixing simple and complex RFG? How will the survey account for the transition period from simple to complex RFG in late 1997 or early 1998?

Answer: EPA recognizes that the transition from the simple to the complex model in early 1998 will necessarily include a time- period during which the distribution system will contain a mixture of simple and complex RFG. As a result, the gasoline quality surveys, quality assurance programs, and EPA enforcement activities during this transition period will have to take this mixture into account with regard to certain, but not all, downstream standards. EPA intends to issue guidance well in advance of 1998 on this transition from simple to complex RFG.(7/1/94)

11. **Question:** Please explain how the transition from simple to complex model standards will occur?

Answer: Under 40 CFR §§ 80.41(i) and 80.101(c) the simple model standards apply to RFG and conventional gasoline produced or imported prior to January 1, 1998, along with certain limited options to use the complex model early. Also under these sections, the complex model standards apply to RFG and conventional gasoline produced or imported beginning on January 1, 1998. As a result, all gasoline produced or imported prior to January 1, 1998, must meet the simple model standards (or the early complex model standards where a proper election has been made), and all gasoline produced or imported beginning on January 1, 1998, must meet the complex model standards.

In the case of conventional gasoline, where there are no downstream standards, this transition raises no issues regarding enforcement of downstream standards. In the case of RFG, however, there is an issue of when the downstream complex model standards will be enforced.

Under 40 CFR §§ 80.41(a) through (d) the RFG simple model includes standards for oxygen, benzene and simple model toxics emissions performance, and in the case of VOC controlled RFG, for RVP. The complex model includes RFG standards for oxygen and benzene that are the same as under the simple model, for toxics and NOx emissions performance, and in the case of VOC controlled RFG, for VOC emissions performance. The simple and complex model toxics emissions performance standards are not subject to downstream standards, while all other standards are subject to downstream enforcement.

Beginning on January 1, 1998, in most situations the RFG downstream of the refinery/importer level will be a combination of RFG produced to the simple model (RFG certified before January 1, 1998), and RFG produced to the complex model (RFG certified beginning on January 1, 1998) as a result of this transition and the fungible mixing of RFG that occurs. RFG will continue to be a mixture of simple and complex model RFG until complex model RFG displaces the simple model RFG in the system.

During this transition period the oxygen and benzene standards may be enforced without interruption, because these standards are unaffected by the transition from simple to complex model standards. Even during the transition period, in a situation where the RFG located downstream was produced entirely under the simple model, the simple model downstream standards may be enforced, and where the RFG was produced entirely under the complex model, the complex model downstream standards may be enforced. In the case of RFG that is a mixture of simple and complex model RFG, however, the RFG cannot be properly evaluated for compliance with the complex model VOC and NOx emissions performance standards, however. This difficulty results because it is possible for a particular RFG formulation to meet all simple model standards, yet not meet the complex model VOC and NOx emissions performance standards.

This enforcement difficulty is automatically resolved in the case of the VOC emissions performance standard, because under 40 CFR § 80.78(a)(1)(v) the VOC standard does not apply at downstream locations until May 1, 1998, or in the case of retail level facilities, on June 1, 1998. EPA believes the period between January 1, 1998, and May 1, 1998, is an adequate time for the gasoline distribution system to complete the transition to complex model RFG. As a result, the VOC emissions performance standard will be enforced at downstream locations beginning on May 1, 1998, or June 1, 1998, in the case of retail level facilities.

The NOx emissions performance standard, in contrast, applies at all locations beginning on January 1, 1998. As a result of the transition issue discussed above, however, EPA will exercise enforcement discretion and will not enforce the NOx emissions performance standard at downstream locations until May 1, 1998. Unlike for enforcement of the VOC emissions performance standard, however, the NOx emissions performance standard will be enforced at all downstream locations beginning on May 1, 1998, including facilities at the retail level.

An additional category of complex model standards that will be enforced at the refinery/importer level beginning on January 1, 1998 are the complex model limits specified at 40 CFR § 80.45(f)(1)(i). These complex model limit standards will be enforced at downstream locations beginning on May 1, 1998, for the same reasons discussed above.(11/12/96)

B. Downstream Blending Issues

1. **Question:** Please confirm that a terminal can blend complying grades of gasoline to form another grade of gasoline and the terminal would not be considered to be a refiner. An example would be the blending of premium unleaded and unleaded regular to provide mid-grade unleaded.

Answer: The blending of two certified RFG gasolines to make a mid-grade gasoline is permitted provided that the segregation restraints specified in section 80.78 are not violated. The terminal or gasoline station will not be considered a refiner provided no other blendstock is added to the mixture.(7/1/94)

2. **Question:** Can batches of simple model RFG be commingled without recertification?

Answer: Yes, subject to the segregation requirements at section 80.78.(7/1/94)

3. **Question:** A major refiner decides to implement early use of the complex model. That company has product that has the same quality specifications (within the ASTM reproducibility parameters) as the product an importer has in a tank. Can the importer purchase this product? If not, are there any circumstances during early use of the complex model where a company can have product fungibility?

Answer: The importer may purchase the product, however, simple and complex model RFG cannot be mixed upstream of the retail level. Also, prior to January 1, 1998, two complex model RFGs from different refineries or importers cannot be mixed at any point in the distribution system.(7/1/94)

4. **Question:** Is it correct that the regulations do not prohibit the mixing of ETBE RFG and MTBE RFG at any point in the distribution system.

Answer: Yes, provided the segregation restrictions in section 80.78 are met.(7/1/94)

5. **Question:** Can ether RFG and alcohol RFG be mixed outside the VOC season provided the substantially similar requirements are not violated.

Answer: VOC-controlled RFG produced with ethanol cannot be mixed with VOC-controlled any-oxygenate RFG from January 1, through September 15 at any point in the distribution system, including at retail outlets and wholesale-purchaser consumers facilities.(7/1/94)

6. **Question:** Is it correct that the regulations do not prohibit the mixing of RFG with conventional gasoline for sale outside RFG covered areas?

Answer: Yes, provided the resulting gasoline is not sold as RFG and the procedures discussed in question 1 of the remedies section are followed.(7/1/94)

7. **Question:** Is it legal for a retail outlet or wholesale purchaser-consumer facility to commingle RFG which meets the "substantially similar" requirements (e.g., a 15% MTBE blend) with RFG which is produced under a § 211(f) waiver (e.g., a 10% ethanol blend)? Similarly, is it legal for a retail outlet or wholesale purchaser-consumer to commingle conventional gasoline which meets the "substantially similar" requirements with conventional gasoline produced under a § 211(f) waiver? The concern is that the resulting mixture, as dispensed from the pump, would not comply with the substantially similar criteria or one of the waivers.

Answer: It is not a violation of the RFG regulations to commingle two legal RFG products at a retail outlet or wholesale purchaser-consumer facility, or a violation of § 211(f) to commingle two legal conventional gasolines at a retail outlet or wholesale purchaser-consumer facility. However, this could cause compliance problems with the summertime RFG requirements for RFG, or summertime volatility restrictions for conventional gasoline.(8/29/94)

8. **Question:** What procedures must be followed if product is downgraded, e.g., RFG is downgraded to conventional? What procedures apply at the refinery as opposed to downstream?

Answer: There is no prohibition on the sale of RFG in conventional areas. Once a batch of gasoline is certified as RFG and released from the refinery its designation cannot be changed by the refiner. However, the refinery can change the designation of gasoline which has not been fungibly mixed with other certified gasoline before it leaves the refinery. If this is done, appropriate changes in the refinery's records should be made.

When gasoline located downstream of the refinery or import facility is designated as reformulated, but does not meet the applicable RFG downstream standards (plus any applicable enforcement tolerance), the party is prohibited from selling, distributing, transporting, or storing this gasoline as RFG. A party may downgrade RFG to conventional gasoline, and use the gasoline only outside any RFG covered area. There is no requirement that such downgraded gasoline must be included in any party's anti-dumping compliance calculations.

If RFG that is designated as VOC-controlled is found to violate a downstream standard that applies only to VOC-controlled RFG, the RFG may be downgraded to non-VOC controlled RFG, and used outside the VOC control period. The VOC control period is May 1 through September 15 at facilities upstream of the retail level, and June 1 through September 15 at the retail level.

If RFG that is designated as VOC-controlled for VOC Control Region 1 is found to be off-spec for that Region, but to meet the downstream standards applicable to VOC Control Region 2, the gasoline may be downgraded to VOC Control Region 2 RFG, and used only in that Region.

If the off-spec gasoline is found at a retail outlet or wholesale purchaser-consumer facility located in an RFG covered area, all sales of gasoline from the tank must be stopped, and the gasoline removed from the storage tank and transported to an area that is appropriate for the downgraded classification of the gasoline.(7/1/94)

9. **Question:** Simple model gasoline may be released immediately after receiving results for oxygen, benzene, and RVP with other results to follow. If these or other results fail, can this batch be reclassified as conventional if it is diverted away from a RFG area?

Answer: If the batch has not been released or fungibly mixed with certified RFG by the refiner, it may be reclassified. Once a batch of gasoline has been designated by the refiner and released it cannot be reclassified by the refiner. RFG found downstream to violate applicable RFG standards may be corrected by downgrading, however, following the procedures outlined in question 1 of the remedies section.(7/1/94)

10. **Question:** Should a distributor or blender wish to alter the parameters of RFG purchased from others by adding a blending component, are there limitations and/or restrictions on this type of activity? For example, in the Spring, will it be permissible to add a low-pressure blending component to gasoline in order to control volatility? Also, will it be permissible to blend octane deficient gasoline with an octane blending component to restore octane to specification? If blending is allowed can only the end product be tested and certified or is it necessary to certify each blending step? Is blending in the above manner restricted to companies who have a history of blending gasoline or will the uninitiated also be permitted to blend components?

Answer: The addition of a blendstock to certified RFG would result in the blender becoming a refiner under the RFG regulation. Refiners must establish a baseline, register with EPA and comply with all the testing, certification and other refiner requirements under the regulation. In consequence, a blendstock may not be added to RFG unless that blendstock meets all RFG standards. Any company that does meet the requirements of an RFG refiner, however can produce RFG through blending.

RFG which is changed in this manner could, however, be sold outside the RFG covered areas as conventional gasoline. However, the blender is considered a refiner under the antidumping requirements and thus is responsible for the properties of the blendstock which is added to the finished RFG. Antidumping compliance calculations for blendstocks which are added to finished gasoline are discussed in section IX (D) of the preamble to the final regulations at 59 FR 7806.(7/1/94)

11. **Question:** The regulations state that no person may combine any RFG with any non-oxygenated blendstock unless that person meets each requirement specified as a refiner. Does this mean that if any such blending is done at a terminal then they would be required to have the full analytical capabilities required of a refinery. Could metering at the terminal be an acceptable substitute? Can documented blendstocks be blended and certified using meters?

Answer: The addition of a blendstock to certified RFG, or the combination of several blendstocks to produce RFG, would result in the blender becoming a refiner under the RFG regulation with all the testing, certification and other requirements under the regulation. Metering at the terminal is not an acceptable substitute for the sampling and testing requirements for a refiner.(7/1/94)

12. **Question:** What are limitations, if any, on blending RFG with materials for sale into non-RFG markets?

Answer: When RFG is blended with blendstocks, the blender is considered a refiner under the antidumping requirements and thus is responsible for the properties of the blendstock which is added to the finished RFG. Compliance calculations for blendstocks which are added to finished gasoline are discussed in section IX (D) of the preamble to the final regulations at 59 FR 7806.(7/1/94)

13. **Question:** Can material that does not conform with commercial specifications for gasoline still be considered gasoline for compliance with the RFG regulations? For example, could a mixture of butane and MTBE be blended with non-VOC controlled simple model RFG? The butane-MTBE mixture would meet the winter RFG benzene, oxygen, and toxics requirements, but would not conform with ASTM vapor pressure, distillation, and volatility specifications.

Answer: Blending components that are added to RFG must meet the standards for RFG and the party who conducts such blending must meet all requirements that apply to refiners. The regulations, however, do not require them to also conform with commercial specifications for gasoline.(8/29/94)

14. **Question:** Can you blend normal butane and natural gasoline, whose composition cleaner than RFG, and certify it as RFG?

Answer: A party who produces RFG by combining blendstocks is a refiner under the RFG regulations, and is subject to all RFG standards and requirements. See the answer to Question 7, Section IX.B., of the July 1, 1994 Question and Answer document. As a result, a party who combines normal butane and natural gasoline could certify the resulting product as RFG, provided the gasoline meets all RFG standards and the party meets the other refiner requirements, including those involving sampling and testing, independent sampling and testing, recordkeeping, reporting, and independent audits.(10/17/94)

15. **Question:** If a downstream blender alters an RBOB by addition of other hydrocarbons, how is the baseline selected and how is the fuel regulated and reported?

Answer: Section 80.78(a)(7) prohibits any person from combining RBOB with any other gasoline, blendstock, or oxygenate except for oxygenate of the type and amount (or within the range of amounts) specified by the refiner or importer at the time the RBOB was produced or imported, or other RBOB for which the same oxygenate type and amount (or within the range of amounts) was specified by the refiner or importer. Altering RBOB in any other way would be a violation.(8/29/94)

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.[16]

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.

[16] 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.

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.

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

A transmix processor may use the gasoline or gasoline blendstock obtained when transmix is separated to produce RFG or conventional gasoline, so long as the gasoline produced is included in the refinery's RFG and/or anti-dumping compliance calculations for the refinery, and all other refinery requirements are met, including sampling and testing, record keeping, reporting, and attest engagements.

Gasoline produced which is classified as conventional gasoline

In the case of conventional gasoline produced from transmix by a transmix processor, the anti-dumping standards and requirements need not be met provided that the following conditions are met:

First, 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.

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.

Gasoline produced which is classified as RFG

In the case of RFG produced from transmix by a transmix processor, the following option is available:

First, the transmix processor must meet the requirements that apply to refiners, including the requirement to meet refiner RFG standards under §§ 80.41 and 80.65(c)

(with the limited exception described below), sampling and testing under § 80.65(e), independent sampling and testing under § 80.65(f), record keeping under § 80.74, reporting under § 80.75, and attest engagements under §§ 80.125 through 80.128.

Second, the transmix used must be a combination of distillate and RFG, and may not be a mixture of distillate and conventional gasoline. The transmix processor must obtain documents from the transferor of the transmix which certify the gasoline portion of the transmix is RFG, and must retain these documents in the manner specified under § 80.74.

Third, the transmix processor must meet all RFG standards specified in § 80.41(a) or (b), and the standard for T-90 under § 80.41(h)(2)(i) (in the case of transmix processor with the statutory baseline, an annual average T-90 that is equal to or less than 332 °F). The transmix processor need not meet the simple model standards for sulfur and olefins under § 80.41(h)(2)(i) for the RFG produced from transmix. If the transmix processor uses any blendstocks in addition to the transmix, however, the sulfur and olefin standards must be met for these blendstocks.

The 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. The changes in gasoline quality through transmix processing are less critical for conventional gasoline than for RFG.

In the case of RFG produced by a transmix processor following the procedures described in this Answer, however, the RFG will meet all refiner standards which are applicable downstream of the refinery level. Even though a transmix processor who produces RFG is not held to the refiner standard for sulfur and olefins (for which there are no downstream standards), EPA believes a transmix processing operation does cause significant changes in the sulfur and olefin levels from the levels of the RFG portion of the transmix received by the processor.

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.[17] This practice

[17] 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.

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 beginning at least before January, 1994) has been to blend all 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.(11/12/96)

17. **Question:** Must a terminal be registered as a refinery in order to blend transmix?

Answer: EPA has described procedures for pipelines to blend transmix into conventional gasoline and RFG under certain situations. A pipeline that blends transmix into either conventional gasoline or RFG using the procedures described in these answers will not be treated as a refiner, and therefore will not have to be registered as a refiner or to meet the requirements that apply to refiners. However, if the pipeline fails to comply with the procedures that are specified in the transmix blending answer, EPA will treat them as a refiner and require compliance with the registration and other applicable requirements.(10/3/94)

18. **Question:** Can a transmix processor recover gasoline from transmix and call it conventional gasoline without meeting the requirements that apply to a conventional gasoline refiner, and mix the conventional gasoline with other conventional gasoline?

Answer: In the answer to question IX-B-16 of the July 1, 1994 Question and Answer Document, EPA described procedures for transmix processors to follow when producing conventional gasoline or RFG through the transmix processing. In the case of conventional gasoline produced through the transmix processing, and under the conditions specified in the July 1, 1994 Question and Answer Document, the processor need not meet the requirements that apply to conventional gasoline refiners, and the conventional gasoline produced may be fungibly mixed with other conventional gasoline. A transmix processor who produces conventional gasoline must, however, provide product transfer documents that identify the gasoline as conventional and that contain the statement required under § 80.106(a)(1)(vii), that "[t]his product does not meet the requirements for reformulated gasoline, and may not be used in any reformulated gasoline covered area."(10/3/94)

19. **Question:** Will transmix processors be allowed to "stack" ethanol and exceed the maximum allowable oxygenate content without regard to VOC requirements?

Answer: Transmix processors who produce RFG are considered to be refiners and are required to meet all RFG standards and requirements that apply to refiners for the RFG produced, including the standards for oxygen and the renewable oxygenate. To the extent the RFG produced by a transmix processor contains oxygenate that was part of the transmix when received by the processor, this oxygenate may be used by the processor to meet the oxygen standard. If the oxygenate is renewable (e.g., ethanol in the case of non-VOC-controlled RFG, or ETBE in the case of VOC-controlled RFG), the oxygenate may be included in the transmix processor's compliance calculations for renewable oxygenate. If the amount or type of oxygenate in the transmix is inadequate to meet the oxygen or renewable oxygenate standards, the transmix processor has several options for meeting these standards. If the gasoline contains less than the 1.5 wt% minimum oxygen standard, the transmix processor must add sufficient oxygenate to meet this per-gallon standard. If the 1.5 wt% per gallon minimum is met, but not the 2.0 wt% per gallon oxygen standard, the transmix processor may add additional oxygenate. If the RFG will not be designated as VOC-controlled, then the maximum oxygen content standard is 3.5 wt%. If the RFG is VOC controlled, the maximum oxygen content standard is 2.7 wt%. Under the substantially similar requirements different oxygenates may be combined up to 2.7 wt% oxygen, which would allow the processor to add ethanol to the gasoline even if the gasoline contains some other oxygenate. If the 1.5 wt% oxygen minimum is met and the transmix processor meets the oxygen standard on average, oxygen credits may be obtained to meet 2.1 wt% oxygen average standard. Renewable oxygenate credits also may be obtained to meet that standard. Lastly, the transmix processor could designate the gasoline produced as conventional gasoline, in which case none of the RFG standards

would apply. In all cases, the processor may not exceed the oxygen content maximum for RFG, and for VOC controlled RFG must meet the VOC requirements.(10/3/94)

20. **Question:** In the case of parties who wish to blend butane into RFG or conventional gasoline, what options are available for meeting the testing requirements that apply to this activity?

Answer: The addition of blendstock, including butane, to RFG or conventional gasoline would constitute the production of gasoline, with the result that the blender would be considered a refiner under the RFG and anti-dumping regulations, and would be subject to all standards and requirements that apply to refiners. These requirements include meeting the standards applicable to RFG or conventional gasoline, and every-batch sampling. See the answers to Questions IX-B-5 and -7 in the July 1, 1994 Question and Answer Document. Under §§ 80.65(i) and 80.101(e)(1) the RFG or conventional gasoline with which the blendstock is blended must be excluded from the blender-refiner's compliance calculations. In effect, the RFG standards must be met based on the blendstock properties alone. Under § 80.101(i)(1)(i), refiners who produce conventional gasoline by combining blendstock with previously-certified conventional gasoline may determine compliance with the anti-dumping standards by sampling and testing the blendstock following each receipt of blendstock.

A party who blends butane into gasoline will be treated as complying with the refiner requirements without separately sampling and testing each batch of butane received, provided that:

1) The butane is blended with conventional gasoline only, and not with RFG.

2) If the butane is blended into gasoline that will be used during the period May 1 through September 15, the blender-refiner must sample and test the RVP of the gasoline subsequent to each occasion when butane is blended, and the results of this testing must be equal to or less than the applicable volatility standard, without the application of any enforcement tolerance.

3) The blender-refiner obtains specification documents from the supplier of the butane which include the purity of the butane.

a) The butane must be commercial grade, 95% pure butane, and must meet the contaminate levels listed in the following table, which must be reflected in the documents obtained from the butane supplier:

olefins	≤ 1.0 vol%
aromatics	≤ 2.0 vol%
benzene	≤ 0.03 vol%
sulfur	≤ 140 ppm

b) In the alternative, the butane must meet the contaminate levels listed in the following table, which must be reflected in the documents obtained from the butane supplier:

olefins	≤ 10.0 vol%
aromatics	≤ 2.0 vol%
benzene	≤ 0.03 vol%
sulfur	≤ 140 ppm

And the blender-refiner must conduct a quality assurance program of sampling and testing the butane obtained from each separate butane supplier to corroborate the supplier's specification documents. The frequency of butane sampling and testing must be one sample for every 65 truck loads of butane, or every 17 rail cars of butane, received from a butane supplier, or one sample every three months, whichever is more frequent. Analysis of the quality assurance samples must demonstrate the butane complies with the purity levels listed in the table under this item 3-b. In the conduct of the quality assurance program, the butane must be sampled according to ASTM D1265, the butane must be analyzed for aromatics, benzene, and olefin levels using ASTM D2163, and for sulfur content using ASTM D2784.

4) The butane supplier's specification documents must be based on sampling and testing of the supplier's stored butane that reflects the properties of the butane that was delivered to the blender-refiner.

5) The blender-refiner must retain copies of all butane supplier specification documents, and the results of all quality assurance sampling and testing, for a period of five years, and must make these documents available for EPA inspection on request.

6) The blender-refiner may use the purity levels specified in item 3, above, in order to include the butane used in the anti-dumping compliance calculations under § 80.101(g), and may treat the butane received during each calendar month as a single, separate batch.

(10/3/94)

21. **Question:** Please correct § 80.69(e)(2)(v) to refer to § 80.65(e)(2)(i) instead of § 80.70(b)(2)(i).

Answer: This reference will be changed in a subsequent rulemaking. (5/9/95)

C. Importer Issues

1. **Question:** What is the EPA definition of an importer under the RFG final rule?

Answer: EPA's importer definition is found at 40 CFR § 80.4(r), which states that an importer is "a person who imports gasoline or gasoline blending stocks or components from a foreign country into the United States (including the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands)." U.S. Customs Service regulations at 19 CFR § 101.1(l) define an importer as the "person primarily liable for the payment of any duties on the merchandise, or an authorized agent acting on his behalf."

To keep operations for EPA and the Customs Service consistent, the person who is the importer of record for the gasoline with the Customs Service should be the importer for purposes of EPA's RFG and anti-dumping programs. Normally this is the person who owns the gasoline when the import vessel arrives at the U.S. port of entry, or the person who owns the gasoline after it has been discharged by the import vessel into a shore tank, but sometimes it is a licensed customs house broker. The Customs importer of record, whether it is the person who owns the gasoline when it enters the U.S port of entry, the purchaser of the gasoline or the customs house broker, is always responsible for compliance with the RFG and anti-dumping standards and requirements, however.(7/1/94)

2. **Question:** If a terminal receives gasoline that is delivered directly from a foreign source but the operator or owner of the receiving terminal is not the importer of that gasoline, is that terminal still considered to be the import facility? Is it the responsibility of the terminal operator or owner, who is not the importer, to do the testing, certification, recordkeeping, reporting, attest engagements and other functions described as importer responsibilities in the final RFG rules?

Answer: The requirements for certification of RFG are applied to the importer, not the import facility. As described above, the importer is the person who is the importer of record with the Customs Service for the gasoline, and normally is either the person who owns the gasoline when the import vessel arrives at the U.S. port of entry, or the person who owns the gasoline after it has been discharged by the import vessel into a shore tank. A terminal owner or operator who is not the importer would not be responsible for

compliance with the testing and certification requirements, but would, however, be responsible for the requirements applicable to distributors.(7/1/94)

3. **Question:** If one company acquires foreign product in transit, then sells it to a second company while still in transit, who is the importer?

Answer: The importer is the party identified above, the party primarily liable for payment of duties for Customs purposes when the gasoline enters the United States.(7/1/94)

4. **Question:** If foreign product is acquired by an importer through an exchange agreement instead of a sale, does it change identification of the importer for RFG reporting purposes?

Answer: No. The person who is the importer of record for Customs purposes should be the importer for RFG purposes, and this is usually the gasoline owner, regardless of how that ownership was acquired.(7/1/94)

5. **Question:** May import facilities be grouped together for compliance and reporting purposes?

Answer: For the most part, separate import facilities owned by one importer must be grouped together. All compliance demonstrations are to be made based on the aggregate of all gasoline imported into the United States by an importer. This provision is found in § 80.67(b)(2) of the final rule. Please see Question 6 below for an explanation of when this general approach does not apply.(7/1/94)

6. **Question:** When are an importer's facilities subject to different RFG standards?

Answer: There is one situation in which importers must demonstrate compliance for individual import facilities instead of aggregating. Under § 80.67(b)(2)(ii), importers must demonstrate compliance separately for the gasoline imported at facilities which are subject to different RFG standards under § 80.41. The RFG standards for a covered area can change, or "ratchet," as the result of a failed gasoline quality survey in that area. When the standards for a covered area are ratcheted, the gasoline imported by an importer into the PADD containing the covered area, or into one of the PADDs supplying the covered area, would have to meet a separate standard. In this situation, the importer would submit separate compliance reports to EPA for gasoline imported into each PADD or group of PADDs with the same ratcheted standard.(7/1/94)

7. **Question:** If an importer has more than two import terminals, may the importer of record elect "per gallon" compliance for some import terminals and "average" compliance for other import terminals, or must all imported RFG be designated consistently?

Answer: All RFG must be designated consistently. For each of the RFG parameters, an importer must elect compliance on either a per-gallon basis or an average basis. These elections apply to all of the importer's facilities.(7/1/94)

8. **Question**: At what point in the import process must shipments of imported gasoline be sampled in order to meet the RFG and anti-dumping requirements?

Answer: Section 80.65(e)(1) requires importers to determine the properties applicable to the RFG standards for each batch of imported gasoline designated as RFG prior to the gasoline leaving the import facility, by analyzing a representative sample from the batch using the test methods specified in § 80.46. Section 80.101(i)(1) similarly requires an importer to determine the properties applicable to the anti-dumping standards for each batch of imported conventional gasoline by analyzing a sample using the § 80.46 test methods. In the case of conventional gasoline, under § 80.101(i)(2) the samples from more than one batch of conventional gasoline may be combined into a composite sample and analyzed together, following procedures specified in that section.

These sections thus require that a sample of each batch of imported gasoline must be collected before the batch is combined with any other gasoline or blendstock that is not a part of that imported batch. As a result, in order to meet the requirements, any batch of imported gasoline must be sampled before the batch is off-loaded from a ship into a shore tank if that shore tank contains any amount of any product. This is because a sample from such a shore tank would be a mixture of imported gasoline and the other product, and would therefore not be representative of the gasoline that being imported. For these reasons, a sample of each batch of imported gasoline must be collected before the ship is off-loaded at the port of entry. In the case of imported RFG, the independent lab and the importer (if the importer is using the 10% independent analysis option) must collect a sample of the imported gasoline, and it must be determined that the measurements are consistent with certifiable RFG, before the ship is off-loaded.

The different ship compartments normally must be considered different batches of gasoline, because the gasoline may not be homogeneous across multiple compartments. In the case of imported conventional gasoline, composite samples from multiple batches are allowed, so a volume-weighted composite from the gasoline in different compartments of a ship may be analyzed for anti-dumping compliance purposes. The volume of a batch of imported conventional gasoline must be the off-loaded volume, however, and normally would be established by the importer based on shore tank measurements.

In the case of RFG, the importer and independent lab may treat the gasoline in different compartments of a ship as a single batch only if the importer or lab has a strong basis to believe that the gasoline is homogeneous across the compartments, but such a determination would require analysis of the different compartment samples for most of the RFG parameters. The minimum set of parameters that may be used to establish homogeneity are the following: API Gravity, sulfur, benzene, E200, and E300. Only if the different compartments of a ship have the same values for each of these parameters, within the ASTM repeatability range for each parameter, may the gasoline in different ship compartments be considered to be homogeneous.

In the alternative, EPA will accept the analysis of samples collected from different ship compartments that are combined into a single volume-weighted composite sample, provided the compartments are off-loaded into a single shore tank. EPA believes such a composite sample would be representative of the overall quality of the gasoline in the multiple ship compartments, following the mixing of this gasoline in the shore tank. If the gasoline is not completely homogeneous when in the different ship compartments, presumably the gasoline will be mixed to the point of homogeneity in the shore tank.

As a second alternative, EPA will accept the analysis of samples collected from different ship compartments that are combined into a single volume-weighted composite sample, provided that each shore tank into which the imported RFG is off-loaded is also sampled and tested to establish that the imported RFG meets the downstream standards without the application of any enforcement tolerances.[18] Under this approach, any RFG contained in the shore tank before the imported RFG is added (the tank "bottom") must be sampled and tested for the downstream standards using the § 80.46 test methods. After the imported RFG is added to the tank, the entire tank again must be sampled and tested for the downstream standards using the § 80.46 test methods. The volume and properties of the tank bottom must then be subtracted from the post-addition test results, to mathematically determine the levels for the downstream standard parameters for the imported RFG. Only if these shore tank test results are within the downstream standards without the application of any enforcement tolerance may the ship composite sample be used to certify the imported RFG.

As a third alternative, EPA will accept the analysis of samples collected from different ship compartments that are combined into a single volume-weighted composite sample, provided that each individual vessel compartment is shown, through sampling and testing, to meet all applicable downstream standards without the application of any enforcement tolerance.

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[18] The RFG downstream standards are the per-gallon maximums or minimums associated with the following average standards: under the simple model, oxygen and benzene, and RVP in the case of VOC-controlled RFG; under the complex model, oxygen, benzene, and NOx emissions performance, and VOC emissions performance in the case of VOC-controlled RFG.

The rationale for the second and third alternatives to treating each ship compartment as a separate batch is that these procedures will ensure that even if the gasoline on the ship is not homogeneous, none of the gasoline violates the minimum and maximum standards.

Under either of these alternative approaches, a composite sample would be inappropriate to establish the RVP of imported RFG, because the process of preparing a composite sample renders any RVP result suspect. The importer and independent lab could, however, test a ship composite sample (if allowed as discussed above) for all properties other than RVP, and only separately analyze the compartment samples for RVP. The RVP of the multiple-compartment batch could then be derived mathematically from the separate RVP analyses for each compartment. As in the case of conventional gasoline, the volume of imported RFG must be the off-loaded volume, and normally would be established by the independent lab based on shore tank measurements.

Any imported RFG that is sampled and tested using the composite approaches discussed above would be considered a single batch for purposes of assigning batch numbers and reporting to EPA.

The approaches for testing imported RFG involving composite samples from multiple ship compartments, as discussed above, would not be appropriate if the importer or independent lab has any reason to believe the gasoline will not be homogeneous when released from the import facility. (10/31/95)

9. **Question:** A foreign cargo of RFG is to be imported into several terminals. Can the cargo be certified before discharge at the first U.S. port of entry and that certification used for all subsequent ports of entry, or must it be tested and certified separately at each U.S. port of entry?

Answer: Certification of every batch of imported RFG must occur separately for Customs purposes at <u>each</u> U.S. port of entry. For example, if a vessel goes first to New York to discharge half its cargo, then proceeds on to Philadelphia to discharge the rest, each half is a separate batch, and each batch is separately imported at each port. Each batch therefore would also be separately tested, certified, and reported as RFG.(7/1/94)

10. **Question:** Must imported RFG be tested at the import facility or may the importer use the test results from a foreign source, or alternatively, from vessel samples secured from the vessel after loading is completed? Many independent labs operate internationally. Also, must all labs be registered with EPA?

Answer: Importers must certify each batch of RFG and conventional gasoline based upon samples collected after the vessel carrying the gasoline has entered the U.S. port of entry where the gasoline will be discharged. Under § 80.65(f)(2)(ii), importers must

identify the designated independent laboratory to EPA under the registration requirements found in § 80.76.(7/1/94)

11. **Question:** EPA has stated that RFG imports must be tested and certified before off-loading a marine vessel. Must this certification occur while the vessel is docked, or may it occur while the vessel is at anchor? If a vessel is certified while at anchor, may the gasoline be transported to shore tanks using smaller vessels ("lightering"), with product transfer documents to document the transfers?

Answer: Imported gasoline normally must be certified while the gasoline is on board the marine vessel used to transport the gasoline to the United States, and the certification sampling must be performed subsequent to the vessel's arrival in the port where the gasoline will be off-loaded. This sampling may not be performed while the vessel is at the foreign loading port or at sea. Thus, certification sampling could be performed while the vessel is at anchor in the U.S. port of entry and before the vessel actually docks at the import terminal. In the case of harbors that may have more than one port designation for U.S. Customs purposes (e.g., the New York harbor area), only a single certification is necessary even if the gasoline is off-loaded at terminals located in more than one U.S. Customs "port" within that same harbor. If the ship sails from one U.S. port to another that is not part of the same harbor (e.g., from Baltimore to New York), separate certifications are necessary for the gasoline off-loaded in each port.

In addition, when the gasoline on a vessel has been fully certified (each vessel compartment is certified separately, or the homogeneity of the gasoline in the vessel's compartments is established and the vessel's gasoline is certified using a composite sample protocol), the gasoline may be transferred to shore tanks using smaller vessels or barges (lightered) as fully certified RFG or conventional gasoline. These lightering transfers may be to terminals located in any harbor, and are not restricted to terminals located in the harbor where the ship is anchored. For example, certified RFG could be transferred from a ship anchored in New York harbor to a lightering vessel and transported to Albany, New York or Providence, Rhode Island without separately certifying the gasoline upon arrival in Albany or Providence. In this lightering situation transfers to a lightering vessel must meet the product transfer document requirements.(12/5/94)

12. **Question:** What options for meeting the importer requirements are available to an importer who imports gasoline into the United States by truck? How does such an importer meet the every-batch sampling and testing requirements, since every truck (or truck compartment) would be considered a separate batch?

Answer: A party who imports RFG into the United States must meet all importer requirements for each batch of imported RFG, including those involving sampling and testing, independent sampling and testing, record keeping, reporting, and attest, regardless of the mode of transportation for the RFG when imported.

An importer who imports conventional gasoline (but not RFG) into the United States by truck may meet the importer sampling and testing requirements by:

1. Importing conventional gasoline that meets the anti-dumping standards, specified at § 80.101(b), on an every-gallon basis.

    a. The standards may be met separately for "summer" gasoline and for "winter" gasoline, based on the baseline applicable to the importer for these two periods. Any gasoline with an RVP that is equal to or less than 9.0 psi and is intended for use during the period May 1 through September 15 must be considered "summer" gasoline, and all other gasoline must be considered "winter" gasoline. In the alternative, the standards may be met for all gasoline throughout the year on the basis of the annual baseline applicable to the importer.

    b. In the case of an importer who is subject to the statutory baseline, the "summer," "winter," and annual baseline values are specified at § 80.91(c)(5).

2. Demonstrating that every gallon of imported gasoline meets the anti-dumping standards, through test results from the truck-loading terminal that is the source of gasoline for import into the United States.

    a. The gasoline at the truck-loading terminal must be tested for each applicable parameter specified under § 80.65(e)(2)(i), using the test methods specified under § 80.46.

    b. The importer must obtain a copy of the terminal's test results for each truck load of gasoline that is imported into the United States.

3. Treating each truck load of imported gasoline as a separate "batch" for purposes of assignment of batch numbers under § 80.101(i), record keeping under § 80.104, and reporting under § 80.105, although the batches over a one month period may be combined into a single "batch" under the terms of § 80.101(i)(2).

4. Conducting a program of periodic quality assurance sampling and testing over the gasoline obtained from each truck-loading terminal, to ensure the accuracy of the truck-loading terminal's test results.

    a. The quality assurance samples must be obtained from the truck-loading terminal by the importer, and the date of sample collection must not be known in advance by the terminal.

    b. The importer must test each sample (or use an independent lab to test the sample) for the parameters specified under § 80.65(e)(2)(i) using the test

methods specified under § 80.46, and the results must correlate with the terminal's test results within the ranges specified under § 80.65(e)(2)(i).

c. The frequency of quality assurance sampling and testing must be at least one sample for each fifty trucks loaded by the importer at a terminal, or one sample per month, whichever is more frequent.

5. The importer must include the testing and quality assurance testing specified in this answer in the annual attest engagement, and attest engagement report, required under § 80.105(c) and §§ 80.125 through 80.130.

6. EPA inspectors or auditors must be given full and immediate access to the truck-loading terminal and any laboratory at which samples of gasoline collected at the terminal are analyzed, and be allowed to conduct inspections, review records, collect gasoline samples, and perform audits. These inspections or audits may be either announced or unannounced.

(8/29/94)

13. **Question**: What options are available to an importer who wishes to import product that meets the definition of gasoline, but who wishes to further process this gasoline to meet the standards for conventional gasoline or RFG after the gasoline arrives at the U.S. port of entry?

Answer: Under the reformulated gasoline (RFG) final rule an importer must include all imported product that meets the definition of gasoline in the importer's compliance calculations for either RFG or conventional gasoline. If this imported gasoline is then processed by blending with additional blendstock, the subsequent blending constitutes a refinery operation for which all refiner requirements must be met, including refinery standards, refiner sampling and testing, independent sampling and testing in the case of RFG, record keeping, reporting, and attest engagements. Further, the RFG or anti-dumping standards for such an operation must be met solely on the basis of the blendstocks used, and the previously imported (and previously accounted-for) gasoline may not be included. This is true regardless of whether the subsequent blending-refining is conducted by the original importer of the gasoline, or by another party.

A company that is an importer may exclude gasoline imported by that company from the company's importer compliance calculations, provided that the company uses the gasoline as a blendstock in a refinery operated by the company, and includes the gasoline-treated-as-blendstock (GTAB) in the company's refinery compliance calculations. This accounting of GTAB must occur as follows:

1) The GTAB must be included in the compliance calculations for gasoline produced at a refinery operated by the same company that is the importer, for which the company meets all refiner standards and requirements.

2) The importer-company may not transfer title to the GTAB to another party until the GTAB has been used to produce gasoline and all refinery standards and requirements have been met for the gasoline produced.

3) The refinery at which the GTAB is used to produce gasoline must be physically located at 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.

4) The GTAB must be completely segregated from any gasoline, whether conventional or RFG, and including any gasoline tank bottoms, prior to the point of blending, and sampling and testing, in the company's refinery operation. The GTAB may, however, be added to a gasoline blending tank where the gasoline tank bottom is not included in as part of the batch volume for the prior batch. In addition, the GTAB may be placed into a storage tank that contains other GTAB imported by that importer. The GTAB also may be discharged into a tank containing finished gasoline of the same category as the gasoline which will be produced using the GTAB (i.e., conventional gasoline or RFG, and if RFG the same category with regard to VOC control and OPRG) provided the blending process is performed in that same tank.

5) The company must account for the properties and volume of gasoline produced using GTAB in a manner that excludes the volume and properties of any gasoline that previously has been included in any refiner's or importer's compliance calculations. Thus, if GTAB and blendstock are combined in a storage tank that also contains a tank bottom of gasoline, the tank bottom-gasoline must be the same category as the gasoline which will be produced using the GTAB i.e., conventional gasoline or RFG, and if RFG the same category with regard to VOC control and OPRG. The gasoline tank bottom may not be included in the company's refinery compliance calculations for that batch of gasoline. This exclusion of previously-accounted-for gasoline should be accomplished using the following approach.

   a) Determine the volume and properties of any tank bottom that is gasoline before any gasoline production begins.

   b) Add the GTAB plus any blendstock to the storage tank, and completely mix the tank.

c) Determine the volume and properties of the gasoline contained in the storage tank after blending is complete. Mathematically subtract the volume and properties of the tank bottom to determine the volume and properties of the GTAB plus blendstock added, which is reported to EPA as a batch of gasoline produced.

d) All sampling and testing, including the sampling and testing of tank bottoms, must be carried out using the independent sampling and testing provisions at § 80.65(f) if the gasoline being produced is RFG.

e) In the alternative, a company that has a "blending" tank that is used only to combine GTAB and blending components (and no gasoline is added to the tank), may account for the gasoline produced in such a blending tank by sampling and testing for the properties of the batch after GTAB and blendstock are added and mixed, and reporting the volume of gasoline shipped from that tank, at the analyzed properties, up to the point a new blend is produced by adding new GTAB and blendstock.

6) The finished gasoline produced using the GTAB (including the imported product and any blendstocks blended with the GTAB) must be evaluated for compliance using the baseline that applies to the company in its importer capacity, and not in its refiner capacity. In a case where the gasoline being produced using GTAB is conventional gasoline, the company should use the importer baseline that would apply in the absence of § 80.101(f)(3). The following formulas must be used to

calculate the adjusted refinery baseline where GTAB is used to produce conventional gasoline:

If $(V_{Ref} - V_{GTAB}) > V_B$; then

$$AB_i = \frac{(V_{1990} * RB_i) + (V_{CGTAB} * IB_i) + ((V_a - V_{1990} - V_{CGTAB}) * SB_i)}{V_a}$$

If $(V_{Ref} - V_{GTAB}) < V_B$; then

$$AB_i = \frac{((V_{Conv} - V_{CGTAB}) * RB_i) + (V_{CGTAB} * IB_i)}{V_{Conv}}$$

Where:

AB_i = Adjusted baseline for parameter or emissions performance i.

V_{1990} = 1990 baseline volume for the refinery.

V_a = Volume of RFG, conventional gasoline and RBOB produced at the refinery during the year (averaging period) in question.

V_{RFG} = Volume of RFG and RBOB produced at the refinery during the year in question.

V_{Conv} = Volume of conventional gasoline produced at the refinery during the year in question.

V_{RGTAB} = Volumes of GTAB, and blendstocks combined with GTAB, used to produce RFG at the refinery during the year in question.

V_{CGtab} = Volumes of GTAB, and blendstocks combined with GTAB, used to produce conventional gasoline at the refinery during the year in question.

RB_i = 1990 refinery baseline for parameter or emissions performance i.

IB_i = Baseline for parameter or emissions performance i that applies to the GTAB importer-refiner in its importer capacity.

SB_i = Statutory baseline for parameter or emissions performance i.

The following formula must be used to calculate the adjusted refinery baseline where GTAB is used to produce RFG:

$$AB_i = \frac{(V_{RGTAB} * IB_i) + ((V_{RFG} - V_{RGTAB}) * RB_i)}{V_{RFG}}$$

Note that under 40 CFR §§ 80.81(d) and 80.101(e)(3) RFG and conventional gasoline used in California subsequent to March 1, 1996, must be excluded from compliance calculations for gasoline used outside California, with the exception that this gasoline is included in the compliance baseline calculations under 40 CFR § 80.101(f)(4).

7) The company must meet all importer sampling and testing requirements that apply to imported gasoline for the GTAB. Consistent with paragraph 4 above, this may be accomplished by receiving GTAB into a storage tank that contains other GTAB that previously had been imported by that importer. In such a case the volume and properties of the 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 subsequent to receipt of the new product.

   In addition, sampling and testing of imported RFG as GTAB may be based on vessel composite samples without regard to whether the gasoline in individual ship compartments separately meets the RFG downstream standards.

8) The company must include the volume and properties of each batch of GTAB in the quarterly importer reports to EPA, but with a notation that the batch is not included in the importer compliance calculations because the product is GTAB. Any GTAB that ultimately is not used in the company's refinery operation (e.g., a tank bottom of GTAB at the conclusion of the refinery operation), must be treated as newly imported gasoline, for which all required sampling and testing, and record keeping must be accomplished, and included in the company's importer compliance calculations for the averaging period when this sampling and testing occurs.

9) The company must retain records that reflect the importation, sampling and testing, and physical movement of any GTAB, and must make these records available to the CPA or CIA attester, or to EPA, on request.

10) The company must require the CPA or CIA who conducts the company's annual attest engagement, pursuant to § 80.65(h) and §§ 80.125 through 130, to specifically review the accounting for each batch of GTAB, to attest that all GTAB was included in the company's refinery compliance calculations in

accordance with the procedures specified in this Answer, and to include the details of this review in the attest report.

The following is a hypothetical example to illustrate the calculations which would be used to determine the baselines and compliance for both conventional and RFG for a company (Company A) that operates two domestic refineries and imports gasoline, and that imports product classified as GTAB. In this example, only the sulfur baseline and compliance calculations are included, but the same methodology should be used for the other regulated parameters.

The following table lists Company A's 1990 individual refinery baseline volumes and baseline sulfur levels for Refinery 1 and Refinery 2. Company A also imported 8 units of gasoline in 1990, and under § 80.91(b)(4) Company A's 1990 importer sulfur baseline is the statutory baseline, or 338 ppm.

The following table also lists, for 1995, the volumes and sulfur levels for the conventional gasoline and RFG produced at Refinery 1 and Refinery 2, the volume of GTAB processed, and the volume of non-GTAB imported gasoline and its sulfur level. Each of these volumes and sulfur levels represent a number of separate batches. In this example Company A transferred all of the imported product classified as conventional and RFG GTAB to Refinery 1 for further processing. In addition, the product blended with the GTAB at Refinery 1 is included in Refinery 1's 1995 conventional gasoline volume of 41 units and RFG volume of 15 units.

	1990 BASELINE		1995	
	Volume	Sulfur	Volume	Sulfur
DOMESTIC REFINERY				
Refinery 1	20	300 ppm		
Conventional			41[1]	310 ppm[1]
RFG			15[2]	275 ppm[2]
Refinery 2	15	315 ppm		
Conventional			18	335 ppm
RFG			7	300 ppm
IMPORTED GASOLINE	8	338 ppm		
Non-GTAB Conventional			10	315 ppm
RFG			4	290 ppm
GTAB Conventional			16[3]	
RFG			3[3]	
STATUTORY		338 ppm		

[1] The Refinery 1 1995 conventional gasoline volume and sulfur content include the non-GTAB volume (25 units) and the GTAB volume processed into conventional gasoline (16 units).

[2] The Refinery 1 1995 RFG volume and sulfur content include the non-GTAB volume (12 units) and the GTAB volume processed into RFG (3 units).

[3] The GTAB volume includes the volume of blendstocks combined with the GTAB to produce gasoline. See paragraph 6, above.

The following set of calculations represents the methodology for determining the compliance baseline, applicable standard, and compliance calculation that would apply to Company A for its importer activity, and for Refinery 1 and Refinery 2. In addition, a

separate set of calculations represents the methodology for determining compliance if Refinery 1 and Refinery 2 are aggregated under § 80.101(h).

Imported Gasoline:

Conventional Gasoline --

Calculate the volume-weighted average baseline for Refinery 1 and Refinery 2 in accordance with § 80.101(f)(3), which is necessary for the compliance baseline adjustment for conventional gasoline under § 80.101(f)(4).

$$\textit{Importer Compliance Baseline} = \frac{(20 * 300) + (15 * 315)}{35}$$
$$= 306.4 \textit{ ppm}$$

Calculate the adjusted baseline that applies to conventional gasoline imported by Company A under § 80.101(f)(4) using the volume-weighted average baselines of Refinery 1 and Refinery 2 (306.4 ppm) up to Company A's 1990 import volume (8 units) and a total import volume (V_a) of 14 units.

Under § 80.101(b)(1)(ii) the anti-dumping sulfur standard is 125% of Company A's adjusted compliance baseline for its importer activity.

$$\textit{1995 Importer Sulfur Standard} = 1.25 * 319.9$$
$$= 400 \textit{ ppm}$$

The average sulfur content of Company A's imported conventional gasoline in 1995 was 315 ppm, which means Company A has met the anti-dumping sulfur standard of 400 ppm in its importer capacity.

Reformulated Gasoline --

The average sulfur content of Company A's 1995 imported RFG is 290 ppm, which means Company A has met the statutory baseline sulfur standard of 338 ppm in its importer capacity.

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Refineries 1 and 2; Not Aggregated:

The following refinery baseline and compliance calculations assume Company A did not aggregate Refinery 1 and Refinery 2 under § 80.101(h).

Refinery 1 (including GTAB):

Conventional Gasoline --

Calculate the sulfur adjusted compliance baseline that applies for conventional gasoline for Refinery 1. Because the total volume of gasoline (RFG, RBOB and conventional) produced during 1995, minus the volume of GTAB and blendstocks added to GTAB is greater than Refinery 1's 1990 baseline volume, the first equation from paragraph 6 above is used. This equation uses Refinery 1's 1990 baseline for sulfur (300 ppm) and the 1990 baseline volume (20 units); Company A's importer baseline for sulfur exclusive of § 80.101(f)(3), i.e., the statutory baseline, (338 ppm) and the volume of GTAB and blendstocks combined with GTAB to produce conventional gasoline at Refinery 1 (16 units); and the remaining volume of gasoline produced at Refinery 1 (20 units) at the statutory baseline for sulfur (338 ppm).

Under § 80.101(b)(1)(ii) the sulfur standard is 125% of Refinery 1's adjusted compliance baseline.

$$1995\ Sulfur\ Standard = 1.25 * 324.4$$
$$= 406\ ppm$$

The average sulfur content of Refinery 1's conventional gasoline in 1995 was 310 ppm, which means Company A has met the anti-dumping sulfur standard of 406 ppm for Refinery 1.

Reformulated Gasoline --

Calculate the RFG sulfur baseline for Refinery 1 as the volume weighted average of Refinery 1's 1990 baseline sulfur level (300 ppm) for the non-GTAB RFG volume (12 units) and the GTAB volume (3 units) at the importer's RFG baseline (338 ppm).

$$AB = \frac{(12 * 300) + (3 * 338)}{15}$$
$$= 308\ ppm$$

The average sulfur content of Refinery 1's RFG in 1995 was 275 ppm, which means Refinery 1 has met its RFG sulfur standard of 308 ppm.

Refinery 2:

Conventional Gasoline --

Calculate the adjusted sulfur compliance baseline for Refinery 2 under § 80.101(f)(4) using the Refinery 2 1990 baseline sulfur level (315 ppm) for the 1990 baseline volume (15 units) and a total volume (V_a) of 25 units which includes 18 units of conventional gasoline and 7 units of RFG produced at Refinery 2.

Under § 80.101(b)(1)(ii) the sulfur standard is 125% of Refinery 2's compliance baseline.

$$1995\ Sulfur\ Standard = 1.25 * 324.2$$
$$= 405\ ppm$$

The average sulfur content of Refinery 2's conventional gasoline in 1995 was 335 ppm, which means Company A has met the anti-dumping sulfur standard of 405 ppm for Refinery 2.

Reformulated Gasoline --

The average sulfur content of the RFG produced at Refinery 2 was 300 ppm, which means Company A has met the RFG sulfur baseline of 315 ppm for Refinery 2.

Refineries 1 and 2 Aggregated (including the GTAB processed at Refinery 1):

Conventional Gasoline --

The following refinery baseline and compliance calculations assume Company A elected to aggregate Refinery 1 and Refinery 2 under § 80.101(h).

Calculate the adjusted sulfur compliance baseline in the aggregate for Refinery 1 and Refinery 2 under § 80.101(f)(4) using the formula provided in step 6 of the protocol described above for both Refinery 1 and Refinery 2.

Under § 80.101(b)(1)(ii), the sulfur standard is 125% of the aggregate compliance baseline.

$$1995\ Sulfur\ Standard = 1.25 * 324.4$$
$$= 405\ ppm$$

The 1995 average sulfur level for Refinery 1 and Refinery 2 aggregated is the volume weighted average for the two refineries.

$$Average\ Sulfur\ Content = \frac{(41 * 310) + (18 * 335)}{59}$$
$$= 318\ ppm$$

The average sulfur content for Refinery 1 and Refinery 2 aggregated is 318 ppm, which means that Company A has met the conventional gasoline standard for sulfur of 405 ppm for these refineries when aggregated for 1995.

Reformulated Gasoline --

Under § 80.41(h)(2)(iii) Company A must achieve compliance for the average sulfur, T-90, and olefins of the RFG produced using the same refinery aggregation as is used for conventional gasoline. Therefore, first calculate the volume-weighted average sulfur baseline for Refinery 1 and Refinery 2.

$$Aggregate\ Sulfur\ Baseline = \frac{(20 * 300) + (15 * 315)}{35}$$
$$= 306\ ppm$$

Calculate the RFG sulfur standard as the volume-weighted sulfur baseline for Refinery 1 and Refinery 2 (306 ppm) at the 1995 non-GTAB RFG volume for Refinery 1 (12 units) plus the RFG volume for Refinery 2 (7 units), and the importer baseline (338 ppm) at the volume of GTAB plus blendstocks added to GTAB processed into RFG (3 units).

$$RFG\ Sulfur\ Baseline = \frac{((12 + 7) * 306) + (3 * 338)}{22}$$

$$= 310\ ppm$$

Calculate the average sulfur content of the RFG produced at Refinery 1 and Refinery 2.

$$Average\ Sulfur\ Content = \frac{(15 * 275) + (7 * 300)}{22}$$

$$= 283\ ppm$$

The average sulfur content of the RFG produced at Refinery 1 and Refinery 2 is 283 ppm, which means Company A has met the RFG sulfur standard of 310 ppm for Refinery 1 and Refinery 2. (11/12/96)

14. **Question:** May an importer classify imported product as GTAB when that product meets all the EPA requirements for RFG or conventional gasoline, and take advantage of any specification "slack" in imported gasoline through component blending under the GTAB guidance?

Answer: An imported product that meets the definition of gasoline may be classified as GTAB by the importer if the conditions specified in the August 29, 1994 Question and Answer document are satisfied, regardless of whether the gasoline meets the commercial or regulatory standards for RFG or conventional gasoline when imported. As a result, imported product that meets the definition of gasoline (i.e., meets commercial specifications for octane, etc.) and meets all importer RFG or anti-dumping standards, may be classified as GTAB and blended with blendstocks by the importer provided the importer meets all the GTAB conditions. For example, in a case where the product produced using GTAB is RFG, and where the benzene content of the imported product is less than 1.00 vol% and the importer in question is meeting the benzene standard on a per-gallon basis, additional benzene may be blended with the imported product up to the 1.00 vol% per gallon benzene standard for RFG.(12/5/94)

15. **Question:** U.S. Customs regulations allow duty free entry for certain products produced in the United States that are exported from one U.S. port and imported at another U.S. port. These products are classified under U.S. Customs regulations as American Goods Returning to the U.S. This approach has been used, for example, in the case of certain gasoline and distillate products that are produced at U.S. refineries located on the Gulf coast and transported by ship to terminals located in Canada, and where the product then is transported by truck to markets in the United States. What standards and

requirements apply to imported gasoline in the case of gasoline that is classified by the U.S. Customs Service as American Goods Returning to the U.S.?

Answer: 40 CFR §§ 80.65 and 80.101 require importers of RFG or conventional gasoline to meet applicable standards, and to meet other requirements including sampling, testing, record keeping, and reporting. EPA considers gasoline to be imported for purposes of the RFG and anti-dumping programs if it consists, in whole or in part, of gasoline produced at refineries located outside the United States and imported into the United States. As a result, EPA does not consider gasoline to be imported for purposes of the RFG and anti-dumping programs where the gasoline has been classified as American Goods Returned to the U.S. by the U.S. Customs Service, provided that the gasoline was produced at a refinery located within the United States and has not been mixed with gasoline produced at a refinery located outside the U.S. This gasoline must be included in the RFG or anti-dumping compliance calculations by the producing refiner, using that refiner s individual baseline where applicable. In addition, because the gasoline has been included in the producing refiner s compliance calculations, all of the gasoline that was exported must ultimately be classified as American Goods Returned to the U.S. and none may be used in a foreign country. Moreover, the gasoline classified as American Goods Returned to the U.S. may not be combined with any gasoline produced at a foreign refinery prior to being imported into the United States.

Thus, under the example described in the question -- of gasoline produced at a U.S. refinery located on the Gulf coast and transported to markets in the U.S. via a terminal in Canada -- the Canadian terminal would need dedicated tankage for gasoline classified as American Goods Returned to the U.S. in order for the U.S. importer to avoid treating the gasoline as imported gasoline for the RFG or anti-dumping programs. Gasoline from these tanks could supply only U.S. markets, and the gasoline classified as American Goods Returned to the U.S. could not be fungibly mixed at the Canadian terminal with any gasoline produced at a non-U.S. refinery. In addition, none of the gasoline that was produced at the U.S. refinery and included in the refinery s compliance calculations could be used in Canadian markets.

Any refiner who includes in refinery compliance calculations gasoline that has been exported because the gasoline will be classified as American Goods Returned to the U.S., or any importer who excludes from the importer standards and requirements gasoline that has been so classified, should retain copies of all documents submitted to, or issued by, the U.S. Customs Service regarding this classification of the gasoline.(10/31/95)

X. Exemptions Under § 325(a)(1)

1. **Question:** Will EPA consider exempting Guam or the Northern Mariana Islands from the RFG/Anti-dumping regulations pursuant to § 325(a)(1) of the Clean Air Act, subject to a request from the Governor of these territories?

Answer: Section 325(a)(1) of the Clean Air Act (Act) 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 any requirement under the Act[19] if the Administrator finds that compliance with such requirement 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. Accordingly, before EPA can consider exempting Guam or the Northern Mariana Islands from the RFG/Anti-dumping regulations, a petition must be submitted to EPA by the Governor of the territory detailing why compliance is not feasible or is unreasonable due to factors unique to the territory.(9/12/94)

[19]Other than section 112 or any requirement under section 110 or part D necessary to attain or maintain a national primary ambient air quality standard.

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