§ 80.66 Calculation of reformulated gasoline properties.

(a) All volume measurements required by these regulations shall be temperature adjusted to 60 degrees Fahrenheit.

(b) The percentage of oxygen by weight contained in a gasoline blend, based upon its percentage oxygenate by volume and density, shall exclude denaturants and water.

(c) The properties of reformulated gasoline consist of per-gallon values separately and individually determined on a batch-by-batch basis using the methodologies specified in §80.46 for each of those physical and chemical parameters necessary to determine compliance with the standards to which the gasoline is subject, and per-gallon values for the VOC, NO\textsubscript{X}, and toxics emissions performance standards to which the gasoline is subject.

(d) Per-gallon oxygen content shall be determined based upon the weight percent oxygen of a representative sample of gasoline, using the method set forth in §80.46(g). The total oxygen content associated with a batch of gasoline (in percent-gallons) is calculated by multiplying the weight percent oxygen content times the volume.

(e) Per-gallon benzene content shall be determined based upon the volume percent benzene of a representative sample of a batch of gasoline by the method set forth in §80.36(e). The total benzene content associated with a batch of gasoline (in percent-gallons) is calculated by multiplying the volume percent benzene content times the volume.

(f) Per-gallon RVP shall be determined based upon the measurement of RVP of a representative sample of a batch of gasoline by the sampling methodologies specified in appendix D of this part and the testing methodology specified in appendix E of this part. The total RVP value associated with a batch of gasoline (in RVP-gallons) is calculated by multiplying the RVP times the volume.

(g)(1) Per gallon values for VOC and NO\textsubscript{X} emissions reduction shall be calculated using the methodology specified in §80.45 that is appropriate for the gasoline.

(2) Per-gallon values for toxic emissions performance reduction shall be established using:

(i) For gasoline subject to the simple model, the methodology under §80.42 that is appropriate for the gasoline; and

(ii) For gasoline subject to the complex model, the methodology specified in §80.45 that is appropriate for the gasoline.

(3) The total VOC, NO\textsubscript{X}, and toxic emissions performance reduction values associated with a batch of gasoline (in percent reduction-gallons) is calculated by multiplying the per-gallon percent emissions performance reduction times the volume of the batch.

§ 80.67 Compliance on average.

The requirements of this section apply to all reformulated gasoline and RBOB produced or imported for which compliance with one or more of the requirements of §80.41 is determined on average (“averaged gasoline”).

(a) Compliance survey required in order to meet standards on average. (1) Any refiner or importer that complies with the compliance survey requirements of §80.68 has the option of meeting the
standards specified in §80.41 for average compliance in addition to the option of meeting the standards specified in §80.41 for per-gallon compliance; any refiner or importer that does not comply with the survey requirements must meet the standards specified in §80.41 for per-gallon compliance, and does not have the option of meeting standards on average.

(2)(i)(A) A refiner or importer that produces or imports reformulated gasoline that exceeds the average standard for benzene (but not for other parameters that have average standards) may use such gasoline to offset reformulated gasoline which does not achieve this average standard, but only if the reformulated gasoline that does not achieve this average standard is sold to ultimate consumers in the same covered area as was the reformulated gasoline which exceeds the average standard; provided that:

(B) Prior to the beginning of the averaging period when the averaging approach described in paragraph (a)(2)(i)(A) of this section is used, the refiner or importer obtains approval from EPA. In order to seek such approval, the refiner or importer shall submit a petition to EPA, such petition to include:

(1) The identification of the refiner and refinery, or importer, the covered area, and the averaging period; and

(2) A detailed description of the procedures the refiner or importer will use to ensure the gasoline is produced by the refiner or is imported by the importer and is used only in the covered area in question and is not used in any other covered area, and the record keeping, reporting, auditing, and other quality assurance measures that will be followed to establish the gasoline is used as intended; and

(C) The refiner or importer properly completes any requirements that are specified by EPA as conditions for approval of the petition.

(ii) Any refiner or importer that meets the requirements of paragraph (a)(2)(i) of this section will be deemed to have satisfied the compliance survey requirements of §80.68 for the covered area in question.

(b) Scope of averaging. (1) Any refiner shall meet all applicable averaged standards separately for each of the refiner’s refineries:

(2)(i) Any importer shall meet all applicable averaged standards on the basis of all averaged reformulated gasoline and RBOB imported by the importer; except that

(ii) Any importer to whom different standards apply for gasoline imported at different facilities by operation of §80.41(i), shall meet the averaged standards separately for the averaged reformulated gasoline and RBOB imported into each group of facilities that is subject to the same standards; and

(3) [Reserved]

(c) RVP and VOC emissions performance reduction compliance on average. (1) The VOC-controlled reformulated gasoline and RBOB produced at any refinery or imported by any importer during the period January 1 through September 15 of each calendar year which is designated for average compliance for RVP or VOC emissions performance on average must meet the standards for RVP (in the case of a refinery or importer subject to the simple model standards) or the standards for VOC emissions performance reduction (in the case of a refinery or importer subject to the complex model standards) which are applicable to that refinery or importer as follows:

(i) Gasoline and RBOB designated for VOC Control Region 1 must meet the standards for that Region which are applicable to that refinery or importer; and

(ii) Gasoline and RBOB designated for VOC Control Region 2 must meet the standards for that Region which are applicable to that refinery or importer.

(2) In the case of a refinery or importer subject to the simple model standards, each gallon of reformulated gasoline and RBOB designated as being VOC-controlled may not exceed the maximum standards for RVP specified in §80.41(b) which are applicable to that refiner or importer.

(3) In the case of a refinery or importer subject to the complex model standards, each gallon of reformulated
gasoline designated as being VOC-controlled must equal or exceed the minimum standards for VOC emissions performance specified in §80.41 which are applicable to that refinery or importer.

(d) **Toxics emissions reduction and benzene compliance on average.** (1) The averaging period for the requirements for benzene content and toxics emission performance is January 1 through December 31 of each year.

(2) The reformulated gasoline and RBOB produced at any refinery or imported during the toxics emissions performance and benzene averaging periods that is designated for average compliance for these parameters shall on average meet the standards specified for toxics emissions performance and benzene in §80.41 which are applicable to that refinery or importer.

(3) Each gallon of reformulated gasoline may not exceed the maximum standard for benzene content specified in §80.41 which is applicable to that refinery or importer.

(e) **NO\textsubscript{X} compliance on average.** (1) The averaging period for NO\textsubscript{X} emissions performance is January 1 through December 31 of each year.

(2) The requirements of this paragraph (e) apply separately to reformulated gasoline and RBOB in the following categories:

(i) All reformulated gasoline and RBOB that is designated as VOC-controlled; and

(ii) All reformulated gasoline and RBOB that is not designated as VOC-controlled.

(3) The reformulated gasoline and RBOB produced at any refinery or imported by any importer during the NO\textsubscript{X} averaging period that is designated for average compliance for NO\textsubscript{X} shall on average meet the standards for NO\textsubscript{X} specified in §80.41 that are applicable to that refinery or importer.

(f) [Reserved]

(g) **Compliance calculation.** To determine compliance with the averaged standards in §80.41, any refiner for each of its refineries at which averaged reformulated gasoline or RBOB is produced, and any importer that imports averaged reformulated gasoline or RBOB shall, for each averaging period and for each portion of gasoline for which standards must be separately achieved, and for each relevant standard, calculate:

(1)(i)(A) The compliance total using the following formula:

\[
\text{COMPLIANCE TOTAL} = \sum_{i=1}^{n} V_i \times \text{std}
\]

Where:

- \(V_i\) is the volume in gallons of gasoline batch \(i\).
- std is the standard for the parameter being evaluated.
- \(n\) is the number of batches of gasoline produced or imported during the averaging period.

(B) For computation of the VOC performance standard compliance total, \(Std\) for each VOC control region is determined by the following formula:

\[
\text{Std} = \frac{\sum_{i=1}^{n_u} VU_i + \sum_{i=1}^{n_a} VA_i}{\sum_{i=1}^{n_u} VU_i + \sum_{i=1}^{n_a} VA_i}
\]

Where, for gasoline and RBOB designated for that VOC control region:

- \(Std\) is the value to be used in the compliance total formula.
- \(Std_u\) is the averaged VOC emissions performance reduction standard applicable to reformulated gasoline and RBOB not designated for compliance with the adjusted VOC gasoline standard.
- \(Std_a\) is the averaged VOC emissions performance reduction standard applicable to reformulated gasoline and RBOB designated for compliance with the adjusted VOC gasoline standard.
- \(VU_i\) is the volume of batch \(i\) not designated for compliance with the adjusted VOC gasoline standard.
- \(VA_i\) is the volume of batch \(i\) designated for compliance with the adjusted VOC gasoline standard.
- \(n_u\) is the number of batches produced or imported and not designated for compliance with the adjusted VOC gasoline standard.
- \(n_a\) is the number of batches produced or imported and designated for compliance with the adjusted VOC gasoline standard.

(C) The actual total using the following formula:

\[
\text{ACTUAL TOTAL} = \sum_{i=1}^{n} (V_i \times \text{parm}_i)
\]
Where:

\[ V_i = \text{the volume in gallons of gasoline batch } i. \]

\[ \text{parm}_i = \text{the parameter value of gasoline batch } i. \]

\[ n = \text{the number of batches of gasoline produced or imported during the averaging period.} \]

(ii) [Reserved]

(2) For each standard, compare the actual total with the compliance total.

(3) For the VOC, NO\textsubscript{X}, and toxics emissions performance standards, the actual totals must be equal to or greater than the compliance totals to achieve compliance.

(4) For RVP and benzene standards, the actual total must be equal to or less than the compliance totals to achieve compliance.

(5) If the actual total for the benzene standard is greater than the compliance total, credits for this parameter must be obtained from another refiner or importer in order to achieve compliance:

(i) [Reserved]

(ii) The total number of benzene credits required to achieve compliance is calculated by subtracting the compliance total from the actual total benzene.

(6) If the actual total for the benzene standard is less than the compliance totals, credits for this parameter are generated.

(i) [Reserved]

(ii) The total number of benzene credits which may be traded to another refinery or importer is calculated by subtracting the actual total from the compliance total for benzene.

(7) In 2006 only, compliance with the oxygen standards in §80.41 may be based on the volume and oxygen content of all reformulated gasoline produced or imported during the period January 1, 2006, through May 5, 2006 or the volume and oxygen content of all oxygenated reformulated gasoline produced or imported during the 2006 annual averaging period (January 1 through December 31).

(h) Credit transfers. (1) Compliance with the averaged standards specified in §80.41 for benzene (but for no other standards or requirements) may be achieved through the transfer of benzene credits provided that:

(i) The credits were generated in the same averaging period as they are used;

(ii) The credit transfer takes place no later than fifteen working days following the end of the averaging period in which the reformulated gasoline credits were generated;

(iii) The credits are properly created;

(iv) The credits are transferred, either through inter-company or intra-company transfers, directly from the refiner or importer that creates the credits to the refiner or importer that uses the credits to achieve compliance; and

(v) Benzene credits are not used to achieve compliance with the maximum benzene content standards in §80.41.

(2) No party may transfer any credits to the extent such a transfer would result in the transferor having a negative credit balance at the conclusion of the averaging period for which the credits were transferred. Any credits transferred in violation of this paragraph are improperly created credits.

(3) In the case of credits that were improperly created, the following provisions apply:

(i) Improperly created credits may not be used to achieve compliance, regardless of a credit transferee’s good faith belief that it was receiving valid credits;

(ii) No refiner or importer may create, report, or transfer improperly created credits; and

(iii) Where any credit transferor has in its balance at the conclusion of any averaging period both credits which were properly created and credits which were improperly created, the properly created credits will be applied first to any credit transfers before the transferor may apply any credits to achieve its own compliance.

(i) Average compliance for reformulated gasoline produced or imported before January 1, 1995. In the case of any reformulated gasoline that is intended to be used beginning January 1, 1995, but that is produced or imported prior to that date:

(1) Any refiner or importer may meet standards specified in §80.41 for average compliance for such gasoline, provided the refiner or importer has the option of meeting standards on average for
§ 80.68 Compliance surveys.

(a)(1) Beginning January 1, 2007, the compliance surveys for NO\textsubscript{X} emissions performance under this section shall cease to be required.

(2) Beginning January 1, 2011, the compliance surveys for toxics emissions performance under this section shall cease to be required.

(b) Compliance survey option 1. In order to satisfy the compliance survey requirements, any refiner or importer shall properly conduct a program of compliance surveys in accordance with a survey program plan which has been approved by the Administrator of EPA in each covered area which is supplied with any gasoline for which compliance is achieved on average that is produced by that refinery or imported by that importer. Such approval shall be based upon the survey program plan meeting the following criteria:

(1) The survey program shall consist of at least four surveys which shall occur during the following time periods: one survey during the period January 1 through May 31; two surveys during the period June 1 through September 15; and one survey during the period September 16 through December 31.

(2) The survey program shall meet the criteria stated in paragraph (d) of this section.

(3) In the event that any refiner or importer fails to properly carry out an approved survey program, the refiner or importer shall achieve compliance with all applicable standards on a per-gallon basis for the calendar year in which the failure occurs, and may not achieve compliance with any standard on an average basis during this calendar year. This requirement to achieve compliance per-gallon shall apply ab initio to the beginning of any calendar year in which the failure occurs, regardless of when during the year the failure occurs.

(c) Compliance survey option 2. A refiner or importer shall be deemed to have satisfied the compliance survey requirements described in paragraph (b) of this section if a comprehensive program of surveys is properly conducted in accordance with a survey program plan which has been approved by the Administrator of EPA. Such approval shall be based upon the survey program plan meeting the following criteria:

(1) The initial schedule for the conduct of surveys shall be as follows:

(i) 120 surveys shall be conducted in 1995;

(ii) 80 surveys shall be conducted in 1996;

(iii) 60 surveys shall be conducted in 1997;

(iv) 70 surveys shall be conducted in 1998 and thereafter.

(2) This initial survey schedule shall be adjusted as follows:

(i) In the event one or more ozone nonattainment areas in addition to the nine specified in §80.70, opt into the reformulated gasoline program, the number of surveys to be conducted in the year the area or areas opt into the program and in each subsequent year shall be increased according to the following formula:

\[
\text{ANS}_i = \frac{V_{\text{opt-in}}}{V_{\text{orig}}} \times \text{NS}_i + \text{NS}_i
\]

where:

\(\text{ANS}_i\) = the adjusted number of surveys for year \(i\);

\(i\) = the opt-in year and each subsequent year

\(\text{NS}_i\) = the number of surveys according to the schedule in paragraph (c)(1) of this section in year \(i\);

\(V_{\text{opt-in}}\) = the total volume of gasoline supplied to the opt-in covered areas in the year preceding the year of the opt-in

\(V_{\text{orig}}\) = the total volume of gasoline supplied to the original nine covered areas in the year preceding the year of the opt-in

(ii) In the event that any covered area(s) fails a survey or survey series