

§ 80.68 Compliance surveys.

(a)(1) Beginning January 1, 2007, the compliance surveys for NO_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 ap-

proval 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:

$$ANS_i = \left(\frac{V_{\text{opt-in}}}{V_{\text{orig}}} \times NS_i \right) + NS_i$$

where:

ANS_i = the adjusted number of surveys for year i; i = the opt-in year and each subsequent year

NS_i = the number of surveys according to the schedule in paragraph (c)(1) of this section in year i; i = the opt-in year and each subsequent year

V_{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_{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 according to the criteria set forth in paragraph (d) of this section, the annual decreases in the numbers of surveys prescribed by paragraph (c)(1) of this section, as adjusted by paragraph (c)(2)(i) of this section, shall be adjusted as follows in the year following the year of the failure. Any such adjustment to the number of surveys shall remain in effect so long as any standard for the affected covered area has been adjusted to be more stringent as a result of a failed survey or survey

series. The adjustments shall be calculated according to the following formula:

$$ANS_i = \left(\frac{V_{\text{failed}}}{V_{\text{total}}} \times (NS_{i-1} - NS_i) \right) + NS_i$$

where:

ANS_i = the adjusted number of surveys in year i ; i = the year after the failure and each subsequent year

V_{failed} = the total volume of gasoline supplied to the covered area which failed the survey or survey series in the year of the failure

V_{total} = the total volume of gasoline supplied to all covered areas in the year of the failure

NS_i = the number of surveys in year i according to the schedule in paragraph (c)(1) of this section and as adjusted by paragraph (c)(2)(i) of this section; i = the year after the failure and each subsequent year

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

(4) On each occasion the comprehensive survey program does not occur as specified in the approved plan with regard to any covered area:

(i) Each refiner or importer who supplied any reformulated gasoline or RBOB to the covered area and who has not satisfied the survey requirements described in paragraph (b) of this section shall be deemed to have failed to carry out an approved survey program; and

(ii) The covered area will be deemed to have failed surveys for VOC and NO_x emissions performance, and survey series for benzene and toxic and NO_x emissions performance.

(d) *General survey requirements.* (1) During the period January 1, 1995 through December 31, 1997:

(i) Any sample taken from a retail gasoline storage tank for which the three most recent deliveries were of gasoline designated as meeting:

(A) Simple model standards shall be considered a "simple model sample"; or

(B) Complex model standards shall be considered a "complex model sample."

(ii) A survey shall consist of the combination of a simple model portion and a complex model portion, as follows:

(A) The simple model portion of a survey shall consist of all simple model samples that are collected pursuant to the applicable survey design in a single covered area during any consecutive seven-day period and that are not excluded under paragraph (d)(6) of this section.

(B) The complex model portion of a survey shall consist of all complex model samples that are collected pursuant to the applicable survey design in a single covered area during any consecutive seven-day period and that are not excluded under paragraph (d)(6) of this section.

(iii)(A) The simple model portion of each survey shall be representative of all gasoline certified using the simple model which is being dispensed in the covered area.

(B) The complex model portion of each survey shall be representative of all gasoline certified using the complex model which is being dispensed in the covered area.

(2) Beginning on January 1, 1998:

(i) A survey shall consist of all samples that are collected pursuant to the applicable survey design in a single covered area during any consecutive seven-day period and that are not excluded under paragraph (d)(6) of this section.

(ii) A survey shall be representative of all gasoline which is being dispensed in the covered area.

(3)(i) A VOC survey and a NO_x survey shall consist of any survey conducted during the period June 1 through September 15;

(ii) A sample of gasoline taken at a retail outlet or wholesale purchaser-consumer facility that has within the

Environmental Protection Agency

§ 80.68

past 30 days commingled ethanol blended reformulated gasoline with non-ethanol blended reformulated gasoline in accordance with the provisions in § 80.78(a)(8) shall not be used in a VOC survey required under this section.

(4)(i) A toxics and benzene survey series shall consist of all surveys conducted in a single covered area during a single calendar year.

(ii) A NO_x survey series shall consist of all surveys conducted in a single covered area during the periods January 1 through May 31, and September 16 through December 31 during a single calendar year.

(5)(i) Each simple model sample included in a survey shall be analyzed for oxygenate type and content, benzene content, aromatic hydrocarbon content, and RVP in accordance with the methodologies specified in § 80.46; and

(ii) Each complex model sample included in a survey shall be analyzed for oxygenate type and content, olefins, benzene, sulfur, and aromatic hydrocarbons, E-200, E-300, and RVP in accordance with the methodologies specified in § 80.46.

(6)(i) The results of each survey shall be based upon the results of the analysis of each sample collected during the course of the survey, unless the sample violates the applicable per-gallon maximum or minimum standards for the parameter being evaluated plus any enforcement tolerance that applies to the parameter (*e.g.*, a sample that violates the benzene per-gallon maximum plus any benzene enforcement tolerance but meets other per-gallon maximum and minimum standards would be excluded from the benzene survey, but would be included in the surveys for parameters other than benzene).

(ii) Any sample from a survey that violates any standard under § 80.41, or that constitutes evidence of the violation of any prohibition or requirement under this subpart D, may be used by the Administrator in an enforcement action for such violation.

(7) Each laboratory at which samples in a survey are analyzed shall participate in a correlation program with EPA to ensure the validity of analysis results.

(8)(i) The results of each simple model VOC survey shall be determined as follows:

(A) For each simple model sample from the survey, the VOC emissions reduction percentage shall be determined based upon the tested values for RVP and oxygen for that sample as applied to the VOC emissions reduction equation at § 80.42(a)(1) for VOC-Control Region 1 and § 80.42(a)(2) for VOC-Control Region 2;

(B) The VOC emissions reduction survey standard applicable to each covered area shall be calculated by using the VOC emissions equation at § 80.42(a)(1) with RVP = 7.2 and OXCON = 2.0 for covered areas located in VOC-Control Region 1 and using the VOC emissions equation at § 80.42(a)(2) with RVP = 8.1 and OXCON = 2.0 for covered areas located in VOC-Control Region 2; and

(C) The covered area shall have failed the simple model VOC survey if the VOC emissions reduction average of all survey samples is less than VOC emissions reduction survey standard calculated under paragraph (d)(8)(i)(B) of this section.

(ii) The results of each complex model VOC emissions reduction survey shall be determined as follows:

(A) For each complex model sample from the survey series, the VOC emissions reduction percentage shall be determined based upon the tested parameter values for that sample and the appropriate methodology for calculating VOC emissions reduction at § 80.45;

(B) The covered area shall have failed the complex model VOC survey if the VOC emissions reduction percentage average of all survey samples is less than the applicable per-gallon standard for VOC emissions reduction;

(C) For adjusted VOC gasoline sold in the covered areas described at § 80.70(f) and (i), the covered area shall have failed the complex model VOC survey if the VOC emissions reduction percentage average of all survey samples is less than the weighted average of the applicable per-gallon standards for VOC emissions reduction calculated according to the following formula:

$$WSTD = \frac{VOCU \times n_u + VOCA \times n_a}{n}$$

§ 80.68

40 CFR Ch. I (7-1-13 Edition)

Where:

WSTD=Weighted average of the applicable per-gallon VOC standards.

VOCU=Per gallon VOC standard applicable in the covered area to RFG containing less than 10 percent ethanol by volume.

VOCA=Per gallon VOC standard applicable in the covered area to RFG containing 10 percent ethanol by volume.

n_u=Number of samples in the VOC survey with oxygen content less than 3.5 percent by weight.

n_e=Number of samples in the VOC survey with oxygen content equal to or greater than 3.5 percent by weight.

n=Total number of samples in the VOC survey.

(9)(i) The results of each simple model toxics emissions reduction survey series conducted in any covered area shall be determined as follows:

(A) For each simple model sample from the survey series, the toxics emissions reduction percentage shall be determined based upon the tested parameter values for that sample and the appropriate methodology for calculating toxics emissions performance reduction at §80.42.

(B) The annual average of the toxics emissions reduction percentages for all samples from a survey series shall be calculated according to the following formula²:

$$AATER = \left(\left(\frac{\sum_{i=1}^{s_1} \left(\frac{\sum_{j=1}^{n_1} TER_{1,j}}{n_1} \right)}{s_1} \right)_i \times 0.468 \right) + \left(\left(\frac{\sum_{i=1}^{s_2} \left(\frac{\sum_{j=1}^{n_2} TER_{2,j}}{n_2} \right)}{s_2} \right)_i \times 0.532 \right)$$

Where:

AATER = the annual average toxics emissions reduction

TER_{1,j} = the toxics emissions reduction for sample j of gasoline collected during the high ozone season

TER_{2,j} = the toxics emissions reduction for sample j of gasoline collected outside the high ozone season

n₁ = the number of gasoline samples collected during a one-week survey conducted within the high ozone season

s₁ = the number of one-week surveys conducted within the high ozone season

n₂ = the number of gasoline samples collected during a one-week survey conducted outside the high ozone season

s₂ = the number of one-week surveys conducted outside of the high ozone season

(C) The covered area shall have failed the simple model toxics survey series if the annual average toxics emissions reduction is less than the simple model per-gallon standard for toxics emissions reduction.

(ii) The results of each complex model toxics emissions reduction survey series conducted in any covered area shall be determined as follows:

²The formula requires, first, that the toxic reductions of samples taken in each one-week survey be averaged to obtain an average for each such survey. Then these survey averages are, themselves, averaged separately for high-ozone and non-high-ozone season surveys, to obtain two overall aver-

ages. These overall averages are each to be multiplied by a seasonal weight (0.468 for high-ozone season and 0.532 for non-high ozone season) and the resulting products added together to obtain the average annual toxic emission reduction.

Environmental Protection Agency

§ 80.68

(A) For each complex model sample from the survey series, the toxics emissions reduction percentage shall be determined based upon the tested parameter values for that sample and the appropriate methodology for calculating toxics emissions reduction at § 80.45;

(B) The annual average of the toxics emissions reduction percentages for a survey series shall be calculated according to the formula specified in paragraph (d)(9)(i)(B) of this section; and

(C) The covered area shall have failed the complex model toxics survey series if the annual average toxics emissions reduction is less than the applicable per-gallon complex model standard for toxics emissions reduction.

(10) The results of each NO_x emissions reduction survey and survey series shall be determined as follows:

(i) For each sample from the survey and survey series, the NO_x emissions reduction percentage shall be determined based upon the tested parameter values for that sample and the appropriate methodology for calculating NO_x emissions reduction at § 80.45; and

(ii) The average NO_x emission reduction percentage for each single week-long NO_x survey shall be calculated as the average of all NO_x emission reduction percentages from the survey.

(iii) The covered area shall have failed a NO_x survey if the average NO_x emissions reduction percentage for all survey samples is less than the applicable Phase I or Phase II complex model per-gallon standard for NO_x emissions reduction.

(iv) The average NO_x emission reduction percentage for a NO_x survey series shall be calculated according to the following formula:

$$ANER = \frac{\sum_{i=1}^S \left(\frac{\sum_{j=1}^n NER_j}{n} \right)_i}{S}$$

Where:

ANER = the average NO_x emission reduction percentage for a NO_x survey series,
 n = the number of gasoline samples taken in the course of a week-long NO_x survey,

NER_j = the NO_x emissions reduction percentage for gasoline sample j determined according to the appropriate methodology at § 80.45, and

S = the number of week-long NO_x surveys conducted during the NO_x survey series period

(v) The covered area shall have failed a NO_x survey series if the average NO_x emissions reduction percentage for the series, as computed in paragraph (d)(10)(iv) of this section, is less than the applicable Phase I or Phase II complex model per gallon standard for NO_x emissions reduction.

(11)(i) The results of each benzene content survey series conducted in any covered area shall be determined according to the following formula:

$$AABC = \frac{\sum_{i=1}^S \left(\frac{\sum_{j=1}^n BC_j}{n} \right)_i}{S}$$

Where:

AABC = the annual average benzene content for a benzene content survey series,

n = the number of gasoline samples taken in the course of a week-long benzene content survey,

BC_j = the benzene content for gasoline sample j taken in the course of a week-long benzene content survey, and

S = the number of week-long benzene content surveys conducted during the year.

(ii) If the annual average benzene content computed in paragraph (d)(11)(i) of this section is greater than 1.000 percent by volume, the covered area shall have failed a benzene content survey series.

(12) [Reserved]

(13) Each survey program shall:

(i) Be planned and conducted by a person who is independent of the refiner or importer (the surveyor). In order to be considered independent:

(A) The surveyor shall not be an employee of any refiner or importer;

(B) The surveyor shall be free from any obligation to or interest in any refiner or importer; and

(C) The refiner or importer shall be free from any obligation to or interest in the surveyor; and

(ii) Include procedures for selecting sample collection locations, numbers of samples, and gasoline compositions which will result in:

(A) Simple model surveys representing all gasoline certified using the simple model being dispensed at retail outlets within the covered area during the period of the survey; and

(B) Complex model surveys representing all gasoline certified using the complex model being dispensed at retail outlets within the covered area during the period of the survey; and

(iii) Include procedures such that the number of samples included in each survey or survey series (whichever is applicable) assures that:

(A) In the case of simple model surveys or survey series, the average levels of oxygen, benzene, RVP, and aromatic hydrocarbons are determined with a 95% confidence level, with error of less than 0.1 psi for RVP, 0.05% for benzene (by volume), and 0.1% for oxygen (by weight); and

(B) In the case of complex model surveys or survey series, the average levels of oxygen, benzene, RVP, aromatic hydrocarbons, olefins, T-50, T-90 and sulfur are determined with a 95% confidence level, with error of less than 0.1 psi for RVP, 0.05% for benzene (by volume), 0.1% for oxygen (by weight), 0.5% for olefins (by volume), 5 °F. for T-50 and T-90, and 10 ppm for sulfur; or an equivalent level of precision for the complex model-determined emissions parameters; and

(iv) Require that the surveyor shall:

(A) Not inform anyone, in advance, of the date or location for the conduct of any survey;

(B) Upon request by EPA made within thirty days following the submission of the report of a survey, provide a duplicate of any gasoline sample taken during that survey to EPA at a location to be specified by EPA each sample to be identified by the name and address of the facility where collected, the date of collection, and the classification of the sample as simple model or complex model; and

(C) At any time permit any representative of EPA to monitor the conduct of the survey, including sample collection, transportation, storage, and analysis; and

(v) Require the surveyor to submit to EPA a report of each survey, within thirty days following completion of the survey, such report to include the following information:

(A) The identification of the person who conducted the survey;

(B) An attestation by an officer of the surveyor company that the survey was conducted in accordance with the survey plan and that the survey results are accurate;

(C) If the survey was conducted for one refiner or importer, the identification of that party;

(D) The identification of the covered area surveyed;

(E) The dates on which the survey was conducted;

(F) The address of each facility at which a gasoline sample was collected, the date of collection, and the classification of the sample as simple model or complex model;

(G) The results of the analyses of simple model samples for oxygenate type and oxygen weight percent, benzene content, aromatic hydrocarbon content, and RVP, the calculated toxics emission reduction percentage, and for each survey conducted during the period June 1 through September 15 the VOC emissions reduction percentage calculated using the methodology specified in paragraph (d)(8)(i) of this section;

(H) The results of the analyses of complex model samples for oxygenate type and oxygen weight percent, benzene, aromatic hydrocarbon, and olefin content, E-200, E-300, and RVP, the calculated NO_x and toxics emissions reduction percentage, and for each survey conducted during the period June 1 through September 15, the calculated VOC emissions reduction percentage;

(I) The name and address of each laboratory where gasoline samples were analyzed;

(J) A description of the methodology utilized to select the locations for sample collection and the numbers of samples collected;

(K) For any samples which were excluded from the survey, a justification for such exclusion; and

(L) The average toxics emissions reduction percentage for simple model

samples and the percentage for complex model samples, the average benzene percentage, and for each survey conducted during the period June 1 through September 15, the average VOC emissions reduction percentage for simple model samples and the percentage for complex model samples, and the average NO_x emissions reduction percentage for all complex model samples;

(14) Each survey shall be conducted at a time and in a covered area selected by EPA no earlier than two weeks before the date of the survey.

(15) The procedure for seeking EPA approval for a survey program plan shall be as follows:

(i) The survey program plan shall be submitted to the Administrator of EPA for EPA's approval no later than September 1 of the year preceding the year in which the surveys will be conducted; and

(ii) Such submittal shall be signed by a responsible corporate officer of the refiner, importer, or oxygenate blender, or in the case of a comprehensive survey program plan, by an officer of the organization coordinating the survey program.

(16)(i) No later than December 1 of the year preceding the year in which the surveys will be conducted, the contract with the surveyor to carry out the entire survey plan shall be in effect, and an amount of money necessary to carry out the entire survey plan shall be paid to the surveyor or placed into an escrow account with instructions to the escrow agent to pay the money over to the surveyor during the course of the conduct of the survey plan.

(ii) No later than December 15 of the year preceding the year in which the surveys will be conducted, the Administrator of EPA shall be given a copy of the contract with the surveyor, proof that the money necessary to carry out the plan has either been paid to the surveyor or placed into an escrow account, and if placed into an escrow account, a copy of the escrow agreement.

[59 FR 7813, Feb. 16, 1994, as amended at 59 FR 36963, July 20, 1994; 62 FR 12576, Mar. 17, 1997; 62 FR 68207, Dec. 31, 1997; 66 FR 37165, July 17, 2001; 71 FR 74568, Dec. 15, 2005; 71 FR 26699, May 8, 2006; 72 FR 8543, Feb. 26, 2007]

§ 80.69 Requirements for downstream oxygenate blending.

The requirements of this section apply to all reformulated gasoline blendstock for oxygenate blending, or RBOB, to which oxygenate is added at any oxygenate blending facility, except that paragraph (a)(7) of this section does not apply to adjusted VOC gasoline as defined in § 80.40(c).

(a) *Requirements for refiners and importers.* For any RBOB produced or imported, the refiner or importer of the RBOB shall:

(1) Produce or import the RBOB such that, when blended with a specified type and percentage of oxygenate, it meets the applicable standards for reformulated gasoline;

(2) In order to determine the properties of RBOB for purposes of calculating compliance with per-gallon or averaged standards, conduct tests on each batch of the RBOB by:

(i) Adding the specified type and amount of oxygenate to a representative sample of the RBOB; and

(ii) Determining the properties and characteristics of the resulting gasoline using the methodology specified in § 80.65(e);

(3) Carry out the independent analysis requirements specified in § 80.65(f);

(4) [Reserved]

(5) Transfer ownership of the RBOB only to an oxygenate blender who is registered with EPA as such, or to an intermediate owner with the restriction that it only be transferred to a registered oxygenate blender;

(6) Have a contract with each oxygenate blender who receives any RBOB produced or imported by the refiner or importer that requires the oxygenate blender, or, in the case of a contract with an intermediate owner, that requires the intermediate owner to require the oxygenate blender to:

(i) Comply with blender procedures that are specified by the contract and are calculated to assure blending with the proper type and amount of oxygenate;

(ii) Allow the refiner or importer to conduct the quality assurance sampling and testing required under this paragraph (a); and

(iii) Stop selling any gasoline found not to comply with the standards under