

## § 80.61

3W = 3-Way catalyst  
3W+OX = 3-Way catalyst plus an oxidation catalyst

Air Injection:

Air = Air injection

EGR = Exhaust gas recirculation

(2) Test vehicles for the higher emitter sub-fleet shall be selected from the in-use fleet in accordance with paragraphs (a) and (b) of this section and with § 80.59. Test vehicles for the higher emitter sub-fleet are not required to follow the pattern established in paragraph (d)(1) of this section.

(3) The minimum test fleet size is 20 vehicles. Half of the vehicles tested must be included in the normal emitter sub-fleet and half of the vehicles tested must be in the higher emitter sub-fleet. If additional vehicles are tested beyond the minimum of twenty vehicles, the additional vehicles shall be distributed equally between the normal and higher emitter sub-fleets.

(4) For each emitter group sub-fleet, 70 ±9.5% of the sub-fleet must be LDVs, & 30 ±9.5% must be LDTs. LDTs include light-duty trucks class 1 (LDT1), and light-duty trucks class 2 (LDT2) up to 8500 lbs GVWR.

## § 80.61 [Reserved]

## § 80.62 Vehicle test procedures to place vehicles in emitter group sub-fleets.

One of the two following test procedures must be used to screen candidate vehicles for their exhaust THC emissions to place them within the emitter group sub-fleets in accordance with the requirements of § 80.60.

(a) Candidate vehicles may be tested for their exhaust THC emissions using the Federal test procedure as detailed in 40 CFR part 86, with gasoline conforming to requirements detailed in 40 CFR 86.113-90. The results shall be used in accordance with the requirements in § 80.60 to place the vehicles within their respective emitter groups.

(b) Alternatively, candidate vehicles may be screened for their exhaust THC emissions with the IM240 short test procedure.<sup>1</sup> The results from the IM240

<sup>1</sup>EPA Technical Report EPA-AA-TSS-91-1. Copies may be obtained by ordering publication number PB92104405 from the National

## 40 CFR Ch. I (7-1-10 Edition)

shall be converted into results comparable with the standard exhaust FTP as detailed in this paragraph (b) to place the vehicles within their respective emitter groups in accordance with the requirements of § 80.60.

(1) A candidate vehicle with IM240 test results <0.367 grams THC per vehicle mile shall be classified as a normal emitter.

(2) A candidate vehicle with IM240 test results ≥0.367 grams THC per vehicle mile shall be classified as a higher emitter.

## §§ 80.63-80.64 [Reserved]

## § 80.65 General requirements for refiners and importers.

(a) *Date requirements begin.* The requirements of this subpart D apply to all gasoline produced, imported, transported, stored, sold, or dispensed:

(1) At any location other than retail outlets and wholesale purchaser-consumer facilities on or after December 1, 1994; and

(2) At any location on or after January 1, 1995.

(b) *Certification of gasoline and RBOB.* Gasoline or RBOB sold or dispensed in a covered area must be certified under § 80.40.

(c) *Standards must be met on either a per-gallon or on an average basis.* (1) Any refiner or importer, for each batch of reformulated gasoline or RBOB it produces or imports, shall meet:

(i) Those standards and requirements it designated under paragraph (d) of this section for per-gallon compliance on a per-gallon basis; and

(ii) Those standards and requirements it designated under paragraph (d) of this section for average compliance on an average basis over the applicable averaging period.

(2) [Reserved]

(3)(i) For each averaging period, and separately for each parameter that may be met either per-gallon or on average, any refiner shall designate for each refinery, or any importer shall designate its gasoline or RBOB as being subject to the standard applicable to that parameter on either a per-

Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161.

gallon or average basis. For any specific averaging period and parameter all batches of gasoline or RBOB shall be designated as being subject to the per-gallon standard, or all batches of gasoline and RBOB shall be designated as being subject to the average standard. For any specific averaging period and parameter a refiner for a refinery, or any importer may not designate certain batches as being subject to the per-gallon standard and others as being subject to the average standard.

(ii) In the event any refiner for a refinery, or any importer fails to meet the requirements of paragraph (c)(3)(i) of this section and for a specific averaging period and parameter designates certain batches as being subject to the per-gallon standard and others as being subject to the average, all batches produced or imported during the averaging period that were designated as being subject to the average standard shall, *ab initio*, be redesignated as being subject to the per-gallon standard. This redesignation shall apply regardless of whether the batches in question met or failed to meet the per-gallon standard for the parameter in question.

(d) *Designation of gasoline.* Any refiner or importer of gasoline shall designate the gasoline it produces or imports as follows:

(1) All gasoline produced or imported shall be properly designated as either reformulated or conventional gasoline, or as RBOB.

(2) All gasoline designated as reformulated or as RBOB shall be further properly designated as:

(i) Either VOC-controlled or not VOC-controlled;

(ii) In the case of gasoline or RBOB designated as VOC-controlled:

(A) Either intended for use in VOC-Control Region 1 or VOC-Control Region 2 (as defined in § 80.71); or

(B) Designated as "adjusted VOC gasoline" (as defined in § 80.40(c)(1));

(iii) [Reserved]

(iv) For gasoline or RBOB produced, imported, sold, dispensed or used during the period January 1, 1995 through December 31, 1997, either as being subject to the simple model standards, or to the complex model standards;

(v) For each of the following parameters, either gasoline or RBOB which

meets the standard applicable to that parameter on a per-gallon basis or on average:

(A) Toxics emissions performance;

(B) NO<sub>x</sub> emissions performance in the case of gasoline certified using the complex model.

(C) Benzene content;

(D) [Reserved]

(E) In the case of VOC-controlled gasoline or RBOB certified using the simple model, RVP; and

(F) In the case of VOC-controlled gasoline or RBOB certified using the complex model, VOC emissions performance; and

(vi) In the case of RBOB, the gasoline must be designated as RBOB and the designation must include the type(s) and amount(s) of oxygenate required to be blended with the RBOB.

(3) Every batch of reformulated or conventional gasoline or RBOB produced or imported at each refinery or import facility shall be assigned a number (the "batch number"), consisting of the EPA-assigned refiner or importer registration number, the EPA facility registration number, the last two digits of the year in which the batch was produced, and a unique number for the batch, beginning with the number one for the first batch produced or imported each calendar year and each subsequent batch during the calendar year being assigned the next sequential number (*e.g.*, 4321-54321-95-000001, 4321-543321-95-000002, etc.)

(e) *Determination of volume and properties.* (1) Each refiner or importer shall for each batch of reformulated gasoline or RBOB produced or imported determine the volume and the value of each of the properties specified in paragraph (e)(2)(i) of this section, except that the value for RVP must be determined only in the case of reformulated gasoline or RBOB that is VOC-controlled. These determinations shall:

(i) Be based on a representative sample of the reformulated gasoline or RBOB that is analyzed using the methodologies specified in § 80.46;

(ii) In the case of RBOB, follow the oxygenate blending instructions specified in § 80.69(a);

(iii) Be carried out either by the refiner or importer, or by an independent laboratory; and

§ 80.65

40 CFR Ch. I (7-1-10 Edition)

(iv) Be completed prior to the gasoline or RBOB leaving the refinery or import facility for each parameter that the gasoline or RBOB is subject to, or that is used to calculate an emissions performance that the gasoline or RBOB is subject to, under §80.41(a) through (f).

(2) In the event that the values of any of these properties is determined by the refiner or importer and by an independent laboratory in conformance with the requirements of paragraph (f) of this section:

(i) The results of the analyses conducted by the refiner or importer for such properties shall be used as the basis for compliance determinations unless the absolute value of the differences of the test results from the two laboratories is larger than the following values:

Fuel property	Range
Sulfur content .....	25 ppm
Aromatics content .....	2.7 vol %
Olefins content .....	2.5 vol %
Benzene content .....	0.21 vol %
Ethanol content .....	0.4 vol %
Methanol content .....	0.2 vol %
MTBE (and other methyl ethers) content .....	0.6 vol %
ETBE (and other ethyl ethers) content .....	0.6 vol %
TAME .....	0.6 vol %
t-Butanol content .....	0.6 vol %
RVP .....	0.3 psi
50% distillation (T50) .....	5 °F
90% distillation (T90) .....	5 °F
E200 .....	2.5 vol %
E300 .....	3.5 vol %
API Gravity .....	0.3 °API

(ii) In the event the values from the two laboratories for any property fall outside these ranges, the refiner or importer shall use as the basis for compliance determinations:

(A) The larger of the two values for the property, except the smaller of the two results shall be used for oxygenates; or

(B) The refiner or importer shall have the gasoline analyzed for the property at one additional independent laboratory. If this second independent laboratory obtains a result for the property that is within the range, as listed in paragraph (e)(2)(i) of this section, of the refiner's or importer's result for this property, then the refiner's or importer's result shall be used as the basis for compliance determinations.

(f) *Independent analysis requirement.*  
 (1) Any refiner or importer of reformu-

lated gasoline or RBOB shall carry out a program of independent sample collection and analyses for the reformulated gasoline it produces or imports, which meets the requirements of one of the following two options:

(i) *Option 1.* The refiner or importer shall, for each batch of reformulated gasoline or RBOB that is produced or imported, have the value for each property specified in paragraph (e)(2)(i) of this section determined by an independent laboratory that collects and analyzes a representative sample from the batch using the methodologies specified in §80.46.

(ii) *Option 2.* The refiner or importer shall have a periodic independent testing program carried out for all reformulated gasoline produced or imported, which shall consist of the following:

(A) An independent laboratory shall collect a representative sample from each batch of reformulated gasoline that the refiner or importer produces or imports;

(B) EPA will identify up to ten percent of the total number of samples collected under paragraph (f)(1)(ii)(A) of this section; and

(C) The designated independent laboratory shall, for each sample identified by EPA under paragraph (f)(1)(ii)(B) of this section, determine the value for each property using the methodologies specified in §80.46.

(2)(i) Any refiner or importer shall designate one independent laboratory for each refinery or import facility at which reformulated gasoline or RBOB is produced or imported. This independent laboratory will collect samples and perform analyses in compliance with the requirements of this paragraph (f) of this section.

(ii) Any refiner or importer shall identify this designated independent laboratory to EPA under the registration requirements of §80.76.

(iii) In order to be considered independent:

(A) The laboratory shall not be operated by any refiner or importer, and shall not be operated by any subsidiary or employee of any refiner or importer;

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

## Environmental Protection Agency

## § 80.65

(C) The refiner or importer shall be free from any interest in the laboratory; however

(D) Notwithstanding the restrictions in paragraphs (f)(2)(iii) (A) through (C) of this section, a laboratory shall be considered independent if it is owned or operated by a gasoline pipeline company, regardless of ownership or operation of the gasoline pipeline company by refiners or importers, provided that such pipeline company is owned and operated by four or more refiners or importers.

(iv) Use of a laboratory that is debarred, suspended, or proposed for debarment pursuant to the Governmentwide Debarment and Suspension regulations, 2 CFR part 1532, or the Debarment, Suspension and Ineligibility provisions of the Federal Acquisition Regulations, 48 CFR part 9, subpart 9.4, shall be deemed noncompliance with the requirements of this paragraph (f).

(v) Any laboratory that fails to comply with the requirements of this paragraph (f) shall be subject to debarment or suspension under Governmentwide Debarment and Suspension regulations, 2 CFR part 1532, or the Debarment, Suspension and Ineligibility regulations, Federal Acquisition Regulations, 48 CFR part 9, subpart 9.4.

(3) Any refiner or importer shall, for all samples collected or analyzed pursuant to the requirements of this paragraph (f), cause its designated independent laboratory:

(i) At the time the designated independent laboratory collects a representative sample from a batch of reformulated gasoline, to:

(A) Obtain the refiner's or importer's assigned batch number for the batch being sampled;

(B) Determine the volume of the batch;

(C) Determine the identification number of the gasoline storage tank or tanks in which the batch was stored at the time the sample was collected;

(D) Determine the date and time the batch became finished reformulated gasoline, and the date and time the sample was collected;

(E) Determine the grade of the batch (e.g., premium, mid-grade, or regular); and

(F) In the case of reformulated gasoline produced through computer-controlled in-line blending, determine the date and time the blending process began and the date and time the blending process ended, unless exempt under paragraph (f)(4) of this section;

(ii) To retain each sample collected pursuant to the requirements of this paragraph (f) for a period of 30 days, except that this period shall be extended to a period of up to 180 days upon request by EPA;

(iii) To submit to EPA periodic reports, as follows:

(A) A report for the period January through March shall be submitted by May 31; a report for the period April through June shall be submitted by August 31; a report for the period July through September shall be submitted by November 30; and a report for the period October through December shall be submitted by February 28;

(B) Each report shall include, for each sample of reformulated gasoline that was analyzed pursuant to the requirements of this paragraph (f):

(1) The results of the independent laboratory's analyses for each property; and

(2) The information specified in paragraph (f)(3)(i) of this section for such sample; and

(iv) To supply to EPA, upon EPA's request, any sample collected or a portion of any such sample.

(4) Any refiner that produces reformulated gasoline using computer-controlled in-line blending equipment is exempt from the independent sampling and testing requirements specified in paragraphs (f)(1) through (3) of this section and from the requirement of paragraph (e)(1) of this section to obtain test results for each batch prior to the gasoline leaving the refinery, provided that such refiner:

(i) Obtains from EPA an exemption from these requirements. In order to seek such an exemption, the refiner shall submit a petition to EPA, such petition to include:

(A) A description of the refiner's computer-controlled in-line blending operation, including a description of:

(1) The location of the operation;

(2) The length of time the refiner has used the operation;

§ 80.65

40 CFR Ch. I (7-1-10 Edition)

(3) The volumes of gasoline produced using the operation since the refiner began the operation or during the previous three years, whichever is shorter, by grade;

(4) The movement of the gasoline produced using the operation to the point of fungible mixing, including any points where all or portions of the gasoline produced is accumulated in gasoline storage tanks;

(5) The physical lay-out of the operation;

(6) The automated control system, including the method of monitoring and controlling blend properties and proportions;

(7) Any sampling and analysis of gasoline that is conducted as a part of the operation, including on-line, off-line, and composite, and a description of the methods of sampling, the methods of analysis, the parameters analyzed and the frequency of such analyses, and any written, printed, or computer-stored results of such analyses, including information on the retention of such results;

(8) Any sampling and analysis of gasoline produced by the operation that occurs downstream from the blending operation prior to fungible mixing of the gasoline, including any such sampling and analysis by the refiner and by any purchaser, pipeline or other carrier, or by independent laboratories;

(9) Any quality assurance procedures that are carried out over the operation; and

(10) Any occasion(s) during the previous three years when the refiner adjusted any physical or chemical property of any gasoline produced using the operation downstream from the operation, including the nature of the adjustment and the reason the gasoline had properties that required adjustment; and

(B) A description of the independent audit program of the refiner's computer-controlled in-line blending operation that the refiner proposes will satisfy the requirements of this paragraph (f)(4); and

(ii) Carries out an independent audit program of the refiner's computer-controlled in-line blending operation, such program to include:

(A) For each batch of reformulated gasoline produced using the operation, a review of the documents generated that is sufficient to determine the properties and volume of the gasoline produced;

(B) Audits that occur no less frequently than annually;

(C) Reports of the results of such audits submitted to the refiner, and to EPA by the auditor no later than February 28 of each year;

(D) Audits that are conducted by an auditor that meets the non-debarred criteria specified in §80.125 (a) and/or (d); and

(iii) Complies with any other requirements that EPA includes as part of the exemption.

(g) [Reserved]

(h) *Compliance audits.* Any refiner and importer of any reformulated gasoline or RBOB shall have the reformulated gasoline and RBOB it produced or imported during each calendar year audited for compliance with the requirements of this subpart D, in accordance with the requirements of subpart F, at the conclusion of each calendar year.

(i) *Exclusion of previously certified gasoline.* Any refiner who uses previously certified reformulated or conventional gasoline or RBOB to produce reformulated gasoline or RBOB must exclude the previously certified gasoline for purposes of demonstrating compliance with the standards under §80.41. This exclusion must be accomplished by the refiner as follows:

(1)(i) Determine the volume and properties of each batch of previously certified gasoline used to produce reformulated gasoline or RBOB using the procedures in paragraph (e)(1) of this section and §80.66, and the independent analysis requirements in paragraph (f) of this section in the case of previously certified reformulated gasoline.

(ii) In the case of previously certified reformulated gasoline or RBOB determine the emissions performances for toxics and NO<sub>x</sub>, and VOC for VOC-controlled gasoline, and the designations for VOC control.

(iii) In the case of previously certified conventional gasoline determine the exhaust toxics and NO<sub>x</sub> emissions performances.

**Environmental Protection Agency**

**§ 80.65**

(2) Determine the volume and properties, and the emissions performance for toxics and NO<sub>x</sub>, and VOC for VOC-controlled gasoline, of any batch of reformulated gasoline or RBOB produced at the refinery using previously certified gasoline and include each batch in the refinery's compliance calculations without regard to the presence of previously certified gasoline in the batch.

(3) In the case of any parameter or emissions performance standard that the refiner has designated for the refinery to meet on a per-gallon basis under paragraph (d)(2)(v) of this section, the per-gallon standard that applies to any batch of reformulated gasoline or RBOB produced by the refinery is as follows:

(i) When using any previously certified reformulated gasoline or RBOB, the more stringent of:

(A) The per-gallon standard that applies to the refinery under § 80.41; or

(B) The most stringent value for that parameter or emissions performance for any previously certified reformulated gasoline or RBOB used to produce the batch.

(ii) When using any previously certified conventional gasoline, the per-gallon standard that applies to the refinery under § 80.41.

(4) In the case of any parameter or emissions performance standard that the refiner has designated for the refinery to meet on average under paragraph (d)(2)(v) of this section, any previously certified gasoline must be excluded from the refinery's compliance calculations as follows:

(i) Where a refiner uses previously certified reformulated gasoline or RBOB to produce reformulated gasoline or RBOB:

(A) The refiner must include the volume and properties of any batch of previously certified reformulated gasoline or RBOB in the refinery's compliance calculations for the standard under § 80.67(g) as a negative batch, by multiplying the term  $V_i$  in § 80.67(g)(1)(ii) (i.e., the batch volume) times negative 1; and

(B) The negative batch under paragraph (i)(4)(i)(A) of this section must be included in the averaging categories that correspond to the designation re-

garding VOC control of the previously certified gasoline batch when received; and

(C) The net volume of gasoline in the refinery's reformulated gasoline compliance calculations must be positive in each of the following categories where the standard is being met on average:

Standard	Gasoline category that must have net positive volume
(1) Oxygen .....	All RFG <sup>1</sup> .
(2) Benzene .....	All RFG and RBOB.
(3) VOC emissions performance.	(i) RFG and RBOB that is VOC-controlled for Region 1. (ii) RFG and RBOB that is VOC-controlled for Region 2.
(4) Toxics emissions performance.	All RFG and RBOB.
(5) NO <sub>x</sub> emissions performance.	(i) All RFG and RBOB. (ii) RFG and RBOB that is VOC-controlled.

<sup>1</sup>"RFG" is an abbreviation for reformulated gasoline.

(ii) Where a refiner uses previously certified conventional gasoline to produce reformulated gasoline or RBOB:

(A) The refiner must include the volume and properties of any batch of previously certified conventional gasoline as a negative batch in the refiner's anti-dumping compliance calculations under § 80.101(g) for the refinery, or where applicable, the refiner's aggregation under § 80.101(h); and

(B) The net volume of gasoline in the refiner's anti-dumping compliance calculations for the refinery, or, where applicable, the refiner's aggregation under § 80.101(h), must be positive.

(5) The refiner must use any previously certified gasoline that the refiner includes as a negative batch under paragraph (i)(4) of this section in its compliance calculations for the refinery, or where appropriate, the refiner's aggregation, as a component in gasoline production during the annual averaging period in which the previously certified gasoline was included as a negative batch in the refiner's compliance calculations.

(6) (i) Any refiner may use the procedures specified in this paragraph (i) to

## § 80.66

## 40 CFR Ch. I (7–1–10 Edition)

combine previously certified conventional gasoline with reformulated gasoline or RBOB, to reclassify conventional gasoline into reformulated gasoline or RBOB, or to change the designations of reformulated gasoline or RBOB with regard to VOC control.

(ii) The procedures under this section are refinery procedures. Any person who uses the procedures under this section is a refiner who must meet all requirements applicable to refiners under this subpart.

(7) Nothing in this paragraph (i) prevents any party from combining previously certified reformulated gasolines from different sources in a manner that does not violate the prohibitions in § 80.78(a).

[59 FR 7813, Feb. 16, 1994, as amended at 59 FR 36962, July 20, 1994; 59 FR 39289, Aug. 2, 1994; 59 FR 60715, Nov. 28, 1994; 62 FR 60135, Nov. 6, 1997; 66 FR 37165, July 17, 2001; 66 FR 67105, Dec. 28, 2001; 67 FR 8737, Feb. 26, 2002; 71 FR 74567, Dec. 15, 2005; 71 FR 26698, May 8, 2006; 72 FR 2427, Jan. 19, 2007]

### § 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<sub>x</sub>, 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 § 80.46(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<sub>x</sub> 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<sub>x</sub>, 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.

[59 FR 7813, Feb. 16, 1994, as amended at 59 FR 36963, July 20, 1994]

### § 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