For the reasons set forth in the preamble, parts 80, 85 and 86 of title 40, of the Code of Federal Regulations are amended as follows:

PART 80-REGULATION OF FUELS AND FUEL ADDITIVES

1. The authority citation for part 80 continues to read as follows: Authority: Secs. 114, 211, and 301(a) of the Clean Air Act, as amended (42 U.S.C. 7414, 7545 and 7601(a)).

2. Section 80.2 is amended by removing and reserving paragraph (aa) and revising paragraphs (d),(h), (s) and (gg) to read as follows:

§ 80.2 Definitions.

* * * * *

(d) <u>Previously certified gasoline</u> means gasoline or RBOB that previously has been included in a batch for purposes of complying with the standards for reformulated gasoline, conventional gasoline or gasoline sulfur, as appropriate.

* * * * *

(h) <u>Refinery</u> means any facility, including but not limited to, a plant, tanker truck, or vessel where gasoline or diesel fuel is produced, including any facility at which blendstocks are combined

to produce gasoline or diesel fuel, or at which blendstock is added to gasoline or diesel fuel.

(s) <u>Gasoline blending stock</u>, <u>blendstock</u>, <u>or component</u> means any liquid compound which is blended with other liquid compounds to produce gasoline.

* * * * *

(aa) [Reserved]

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(gg) <u>Batch of gasoline</u> means a quantity of gasoline that is homogeneous with regard to those properties that are specified for conventional or reformulated gasoline.

* * * * *

3. Section 80.46 is amended by revising paragraphs (a) and (h) to read as follows:

§ 80.46 Measurement of reformulated gasoline fuel parameters.

(a) <u>Sulfur</u>. Sulfur content of gasoline and butane must be determined by use of the following methods:

(1) The sulfur content of gasoline must be determined by use of American Society for Testing and Materials (ASTM) standard method D 2622-98, entitled "Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry."

(2) The sulfur content of butane must be determined by the use of ASTM standard methodD 3246-96, entitled "Standard Test Method for Sulfur in Petroleum Gas by Oxidative

Microcoulometry."

* * * * *

(h) <u>Incorporations by reference</u>. ASTM standard methods D 2622-98, D 3246-96, D 3606-92, D 1319-93, D 4815-93, and D 86-90 with the exception of the degrees Fahrenheit figures in Table 9 of D 86-90, are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 C.F.R. part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428. Copies may be inspected at the Air Docket Section (LE-131), room M-1500, U.S. Environmental Protection Agency, Docket No. A-97-03, 401 M Street, SW, Washington, DC 20460, or at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, DC.

4. Subpart H is added to read as follows:

Subpart H-Gasoline Sulfur

General Information

Sec.

80.180 [Reserved]

80.185 [Reserved]

80.190 Who must register with EPA under the sulfur program?

Gasoline Sulfur Standards

80.195 What are the gasoline sulfur standards for refiners and importers?

80.200 What gasoline is subject to the sulfur standards and requirements?

80.205 How is compliance with the annual refinery or importer average and corporate pool average sulfur level determined?

80.210 What sulfur standards apply to gasoline downstream from refineries and importers?

80.211 [Reserved]

80.212 What requirements apply to oxygenate blenders?

Geographic Phase-In Program

80.215 What is the scope of the geographic phase-in program?

- 80.216 What standards apply to gasoline produced or imported for use in the GPA?
- 80.217 How does a refiner or importer apply for the GPA standards?

80.218 [Reserved]

- 80.219 Designation and downstream requirements for GPA gasoline.
- 80.220 What are the downstream standards for GPA gasoline?

Hardship Provisions for Qualifying Small Refiners

- 80.225 What is the definition of a small refiner?
- 80.230 Who is not eligible for the hardship provisions for small refiners?
- 80.235 How does a refiner obtain approval as a small refiner?
- 80.240 What are the small refiner gasoline sulfur standards?
- 80.245 How does small refiner apply for a sulfur baseline?
- 80.250 How is the small refiner sulfur baseline and volume determined?
- 80.255 Compliance plans and demonstration of commitment to produce low sulfur gasoline.
- 80.260 What are the procedures and requirements for obtaining a hardship extension?

80.265 How will the EPA approve or disapprove of a hardship extension application?

80.270 Can a refiner seek temporary relief from the requirements of this subpart?

Allotment Trading and Averaging, Banking and Trading(ABT) Programs

Allotment Trading

80.275 How are allotments generated and used?

ABT Program - General Information

80.280 [Reserved]

80.285 Who may generate credits under the ABT program?

80.290 How does a refiner apply for a sulfur baseline?

ABT Program - Baseline Determination

80.295 How is a refinery sulfur baseline determined?

80.300 [Reserved]

ABT Program - Credit Generation

80.305 How are credits generated during the time period 2000 through 2003?

80.310 How are credits generated beginning in 2004?

ABT Program - Credit Use

80.315 How are credits used and what are the limitations on credit use?

80.320 [Reserved]

80.325 [Reserved]

Sampling, Testing and Retention Requirements for Refiners and Importers

80.330 What are the sampling and testing requirements for refiners and importers?

80.335 What gasoline sample retention requirements apply to refiners and importers?

80.340 What standards and requirements apply to refiners producing gasoline by blending blendstocks into previously certified gasoline (PCG)?

80.345 [Reserved]

80.350 What alternative sulfur standards and requirements apply to importers who transport gasoline by truck?

80.355 [Reserved]

Recordkeeping and Reporting Requirements

80.360 [Reserved]

- 80.365 What records must be kept?
- 80.370 What are the sulfur reporting requirements?

80.371 [Reserved]

80.372 [Reserved]

80.373 [Reserved]

Exemptions

80.374 What if a refiner or importer is unable to produce gasoline conforming to the

requirements of this subpart?

80.375 What requirements apply to California gasoline?

80.380 What are the requirements for obtaining an exemption for gasoline used for research,

development or testing purposes?

Violation Provisions

80.385 What acts are prohibited under the gasoline sulfur program?

80.390 What evidence may be used to determine compliance with the prohibitions and

requirements of this subpart and liability for violations of this subpart?
80.395 Who is liable for violations under the gasoline sulfur program?
80.400 What defenses apply to persons deemed liable for a violation of a prohibited act?
80.405 What penalties apply under this subpart?

Provisions for Foreign Refiners With Individual Sulfur Baselines

80.410 What are the additional requirements for gasoline produced at foreign refineries having individual small refiner sulfur baselines, foreign refineries granted temporary relief under § 80.270, or baselines for generating credits during 2000 through 2003?

Attest Engagements

80.415 What are the attest engagement requirements for gasoline sulfur compliance applicable to refiners and importers?

Subpart H – Gasoline Sulfur

General Information

§ 80.180 [Reserved]

§ 80.185 [Reserved]

§ 80.190 Who must register with EPA under the sulfur program?

(a) Refiners and importers who are registered by EPA under § 80.76 are deemed to be registered for purposes of this subpart.

(b) Refiners and importers subject to the standards in § 80.195 who are not registered by EPA under § 80.76 must provide to EPA the information required by § 80.76 by November 1, 2003, or not later than three months in advance of the first date that such person produces or imports gasoline, whichever is later.

(c) Refiners with any refinery subject to the small refiner standards under § 80.240, or refiners subject to the geographic phase-in area (GPA) standards under § 80.216, who are not registered by EPA under § 80.76 must provide to EPA the information required under § 80.76 by December 31, 2000.

(d) Any refiner who plans to generate credits or allotments under §§ 80.305 or 80.275 in any year prior to 2004 who is not registered by EPA under § 80.76 must register under § 80.76 no later than September 30 of the year prior to the first year of credit generation. Any refiner who plans to generate credits in 2000 who is not registered by EPA under § 80.76 must register under § 80.76 no later than 90 days from [date of publication].

Gasoline Sulfur Standards

§ 80.195 What are the gasoline sulfur standards for refiners and importers?

(a)(1) The gasoline sulfur standards for refiners and importers, excluding gasoline produced by small refiners subject to the standards at § 80.240, and gasoline designated as GPA

gasoline under § 80.219(a), are as follows:

	Gasoline sulfur standards		
	for the averaging period beginning		
			January 1, 2006
	January 1, 2004	January 1, 2005	and subsequent
Refinery or Importer Average	Not Applicable	30.00	30.00
Corporate Pool Average	120.00	90.00	Not applicable
Per-Gallon Cap	300	300	80

(2) The sulfur standards and all compliance calculations for sulfur under this subpart are in parts per million (ppm) and volumes are in gallons.

(3) The averaging period is January 1 through December 31 of each year.

(4) The standards under this paragraph (a) for all imported gasoline shall be met by the importer.

(b) (1) The refinery or importer annual average gasoline sulfur standard is the maximum average sulfur level allowed for gasoline produced at a refinery or imported by an importer during each calendar year starting January 1, 2005.

(2) The annual average sulfur level is calculated in accordance with § 80.205.

(3) The refinery or importer annual average gasoline sulfur standard may be met using credits as provided under §§ 80.275 or 80.315.

(4) In 2005 only, the refinery or importer annual average sulfur standard may be met using

credits or allotments as provided under § 80.275 or credits as provided under § 80.315.

(c)(1) The corporate pool average gasoline sulfur standards applicable in 2004 and 2005 are the maximum average sulfur levels allowed for a refiner's or importer's gasoline production from all of the refiner's refineries or all gasoline imported by an importer in a calendar year. The corporate pool average standards for a party that is both a refiner and an importer are the maximum average sulfur levels allowed for all the party's combined gasoline production from all refineries and imported gasoline in a calendar year.

(2) The corporate pool average is calculated in accordance with the provisions of § 80.205.

(3) The corporate pool average standard may be met using sulfur allotments under § 80.275.

(4) The corporate pool average standards do not apply to approved small refiners subject to the small refiner gasoline sulfur standards under § 80.240.

(5)(i) Joint ventures, in which two or more parties collectively own and operate one or more refineries, will be treated as a separate refiner under this section.

(ii)One partner to a joint venture may include one or more joint venture refineries in its corporate pool for purposes of complying with the corporate pool average standards. The joint venture will be in compliance for such joint venture refinery(ies) if the partner's corporate pool average meets the corporate pool average standards. The joint venture entity must demonstrate compliance with the corporate pool average standards for any refinery(ies) owned by the joint venture that are not included in one partner's corporate pool.

(d)(1) The per-gallon cap standard is the maximum sulfur level allowed for each batch of

gasoline produced or imported starting January 1, 2004.

(2) In 2004 only, a refiner or importer may produce or import gasoline with a per-gallon sulfur content greater than 300 ppm, to a maximum of 350 ppm, provided the following conditions are met:

(i) The refinery or importer becomes subject to an adjusted per-gallon cap standard in2005, calculated using the following formula:

ACS =
$$300 - (S_{max} - 300)$$

where:

ACS = Adjusted cap standard

 S_{max} = Maximum sulfur content of any gasoline produced at a refinery or imported by an importer during 2004

(ii) The adjusted cap standard calculated under paragraph (d)(2)(i) of this section applies to all gasoline produced at a refinery or imported by an importer during 2005.

(iii) The refinery or importer remains subject to the 30.00 average standard under paragraph (a) of this section for 2005.

(iv) The provisions of this paragraph (d)(2) apply to gasoline designated as GPA gasoline under § 80.219.

(v) The provisions of this paragraph (d)(2) do not apply to small refiners as defined in §

80.225.

§ 80.200 What gasoline is subject to the sulfur standards and requirements?

For the purpose of this subpart, all reformulated and conventional gasoline and RBOB, collectively called "gasoline" unless otherwise specified, is subject to the standards and requirements under this subpart, with the following exceptions:

(a) Gasoline that is used to fuel aircraft, racing vehicles or racing boats that are used only in sanctioned racing events, provided that:

(1) Product transfer documents associated with such gasoline, and any pump stand from which such gasoline is dispensed, identify the gasoline either as gasoline that is restricted for use in aircraft, or as gasoline that is restricted for use in racing motor vehicles or racing boats that are used only in sanctioned racing events;

(2) The gasoline is completely segregated from all other gasoline throughout production, distribution and sale to the ultimate consumer; and

(3) The gasoline is not made available for use as motor vehicle gasoline, or dispensed for use in motor vehicles, except for motor vehicles used only in sanctioned racing events.

(b) California gasoline as defined in § 80.375.

(c) Gasoline that is exported for sale outside the U.S.

§ 80.205 How is the annual refinery or importer average and corporate pool average sulfur level determined?

(a) The annual refinery or importer average and corporate pool average gasoline sulfur level is calculated as follows:

$$S_a = \frac{\sum_{i=1}^{n} (V_i \times S_i)}{\sum_{i=1}^{n} V_i}$$

Where:

- $S_a =$ The refinery or importer annual average sulfur value, or corporate pool average sulfur value, as applicable
- V_i = The volume of gasoline produced or imported in batch i.
- S_i = The sulfur content of batch i determined under § 80.330.
- n = The number of batches of gasoline produced or imported during the averaging period.
- i = Individual batch of gasoline produced or imported during the averaging period.

(b) All annual refinery or importer average or corporate pool average calculations shall be conducted to two decimal places.

(c) A refiner or importer may include oxygenate added downstream from the refinery or import facility when calculating the sulfur content, provided the following requirements are met:

(1) For oxygenate added to conventional gasoline, the refiner or importer must comply

with the requirements of \$ 80.101(d)(4)(ii).

(2) For oxygenate added to RBOB, the refiner or importer must comply with the requirements of § 80.69(a).

(d) Refiners and importers must exclude from compliance calculations all of the following:

(1) Gasoline that was not produced at the refinery;

(2) In the case of an importer, gasoline that was imported as Certified Sulfur-FRGAS;

(3) Blending stocks transferred to others;

(4) Gasoline that has been included in the compliance calculations for another refinery or importer; and

(5) Gasoline exempted from standards under § 80.200.

(e) (1) A refiner or importer may exceed the refinery or importer annual average sulfur standard specified in § 80.195 for a given averaging period for any calendar year through 2010, creating a compliance deficit, provided that in the calendar year following the year the standard is not met, the refinery or importer shall:

(i) Achieve compliance with the refinery or importer annual average sulfur standard specified in § 80.195; and

(ii) Use additional sulfur credits sufficient to offset the compliance deficit of the previous year.

(2) No refiner or importer may have a compliance deficit in any year after 2010. Any deficit that exists in 2010 must be made up in 2011.

(f) For refiners subject to the corporate pool average who produce some GPA gasoline,

the refinery average sulfur value for its GPA gasoline shall be the average sulfur value after applying credits.

§ 80.210 What sulfur standards apply to gasoline downstream from refineries and importers?

The sulfur standard for gasoline at any point in the gasoline distribution system downstream from refineries and import facilities, including gasoline at facilities of distributors, carriers, oxygenate blenders, retailers and wholesale purchaser-consumers ("downstream location"), shall be determined in accordance with the provisions of this section.

(a) <u>Definition</u>. <u>S-RGAS</u> means gasoline that is subject to the standards under § 80.240 or § 80.270, including Certified Sulfur-FRGAS as defined in § 80.410, except that no batch of gasoline may be classified as S-RGAS if the actual sulfur content is less than the applicable pergallon refinery cap standard specified in § 80.195.

(b) <u>Standards for gasoline that does not qualify for S-RGAS downstream standards</u>. The following standards apply to any gasoline that does not qualify for S-RGAS downstream standards under in paragraph (d) of this section:

(1) Starting February 1, 2004 the sulfur content of gasoline at any downstream location other than at a retail outlet or wholesale purchaser-consumer facility, and starting March 1, 2004 the sulfur content of gasoline at any downstream location, shall not exceed 378 ppm.

(2) Except as provided in § 80.220(a), starting February 1, 2005 the sulfur content of gasoline at any downstream location other than at a retail outlet or wholesale purchaser-consumer facility, and starting March 1, 2005 the sulfur content of gasoline at any downstream location, shall not exceed 326 ppm.

(3) Except as provided in § 80.220(a), starting February 1, 2006 the sulfur content of gasoline at any downstream location other than at a retail outlet or wholesale purchaser-consumer facility, and starting March 1, 2006 the sulfur content of gasoline at any downstream location, shall not exceed 95 ppm.

(c) <u>Standards for gasoline that qualifies for S-RGAS downstream standards</u>. In the case of any gasoline that qualifies for S-RGAS downstream standards under paragraph (d) of this section, the sulfur standard shall be the downstream standard for the gasoline calculated under paragraph (f) of this section. In the case of mixtures of gasoline that qualify for different S-RGAS downstream standards, the sulfur standard shall be the highest downstream standard applicable to any of the S-RGAS in the mixture.

(d) <u>Gasoline that qualifies for S-RGAS downstream standards</u>. Gasoline qualifies for S-RGAS downstream standards if all of the following conditions are met:

(1) The gasoline must be comprised in whole or part of S-RGAS.

(2) Product transfer documents applicable to the gasoline when received at that location must represent that the gasoline contains S-RGAS.

(3) Except as provided in paragraph (d)(4) of this section, the gasoline must have been sampled and tested at that location subsequent to the most recent receipt of gasoline at that location, and the test result must show a sulfur content greater than:

(i) 350 ppm starting February 1, 2004;

(ii) 300 ppm starting February 1, 2005; and

(iii) 80 ppm (or in the GPA, 300 ppm) starting February 1, 2006.

(4) This sampling and testing condition does not apply for gasoline at any retail outlet,

wholesale purchaser-consumer facility, or contained in any transport truck.

(e) <u>Product transfer document information for S-RGAS</u>. (1) On each occasion when any refiner or importer of S-RGAS transfers custody or title to such gasoline, the refiner or importer shall provide to the transferee documents that include the following information:

(i) Identification of the gasoline as being S-RGAS; and

(ii) The downstream standard applicable to the batch of gasoline under paragraph (f) of this section.

(2) Where gasoline in whole or part is classified as S-RGAS when received by the transferor, and where the gasoline transferred meets the conditions under paragraph (d) of this section, the transferor shall provide to the transferee, on each occasion when custody or title to gasoline is transferred, documents that include the following information:

(i) Identification of the gasoline as S-RGAS; and

(ii) The applicable downstream standard under paragraph (c) of this section.

This does not apply when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility.

(3) No person shall classify gasoline as being S-RGAS except as provided in paragraphs(e)(1) and (e)(2) of this section.

(4) Product codes may be used to convey the information required by paragraphs (e)(1) and (e)(2) of this section if such codes are clearly understood by each transferee.

(f) <u>Downstream standards applicable to S-RGAS when produced or imported</u>. (1) The downstream standard applicable to any gasoline classified as S-RGAS when produced or imported shall be calculated using the following equation:

$$D = S + 105 \text{ x} ((S+2)/10^4)^{0.4}$$

Where:

D= Downstream sulfur standard.

S = The sulfur content of the refiner's batch determined under § 80.330.

(2) Where more than one S-RGAS batch is combined, prior to shipment, at the refinery or import facility where the S-RGAS is produced or imported, the downstream standard applicable to the mixture shall be the highest downstream standard, calculated under paragraph (f)(1) of this section, for any S-RGAS contained in the mixture.

§ 80.211 [Reserved]

§ 80.212 What requirements apply to oxygenate blenders?

Effective January 1, 2004, oxygenate blenders who blend oxygenate into gasoline downstream of the refinery that produced the gasoline or the import facility where the gasoline was imported, are not subject to the requirements of this subpart applicable to refiners for this gasoline, but are subject to the requirements and prohibitions applicable to downstream parties and the prohibition specified in § 80.385(e).

§ 80.213 [Reserved]

§ 80.214 [Reserved]

Geographic Phase-In Program

§ 80.215 What is the scope of the geographic phase-in program?

(a) <u>Geographic phase-in area</u>. (1) The following states comprise the geographic phase-in area (GPA) subject to the provisions of the geographic phase-in program: North Dakota,
 Montana, Idaho, Wyoming, Utah, Colorado, New Mexico, and Alaska.

(2) Additional counties or tribal lands in states adjacent to the states identified in paragraph (a) of this section will be included in the GPA if any of the following criteria is met:

(i) Approximately 50% or more of the total volume of gasoline in the county or tribal land in 1999, as measured at the terminal(s) and bulk station(s) in the county or tribal land, was received from a refinery or refineries located in the area specified in paragraph (a)(1) of this section; or

(ii) Approximately 50% or more of the total volume of gasoline dispensed in the county or tribal land in 1999 was received from a refinery or refineries located in the area specified in paragraph (a)(1) of this section; or

(iii) Approximately 50% or more of the total commercial and private dispensing outlets in the county or tribal land in 1999 were supplied by gasoline produced by a refinery or refineries located in the area specified in paragraph (a)(1) of this section. (3) The criteria of paragraph (a)(2)(i), (ii) and (iii) of this section are without regard to the method of gasoline delivery (e.g, pipeline, truck, rail or barge). The criteria of paragraphs
(a)(2)(ii) and (a)(2)(iii) of this section are without regard to whether the gasoline was transported directly from the refinery to the dispensing outlet or distributed through a terminal or bulk station.

(b) <u>Duration of the program</u>. The geographic phase-in program applies to the 2004, 2005, and 2006 annual averaging periods.

(c) <u>Persons eligible</u>. Any refiner or importer who produces or imports gasoline for use in the geographic area under paragraph (a) of this section is eligible to apply for the geographic phase-in program. The provisions of the geographic phase-in program shall apply to imported gasoline through the importer.

§ 80.216 What standards apply to gasoline produced or imported for use in the GPA?

(a)(1) The refinery or importer annual average sulfur standard for gasoline produced or imported for use in the geographic area under § 80.215 shall be the lesser of:

(i) 150 ppm; or

(ii) The refinery's or importer's 1997/1998 average sulfur level, calculated in accordance with § 80.295, plus 30 ppm.

(2) In the case of any refinery whose actual annual sulfur average decreases to a level lower than the refinery's annual average sulfur standard established under paragraph (a)(1) of this section during the period 2000 through 2003, the standard applicable to that refinery from 2004 through 2006 shall be the lowest average sulfur content for any year in which the refinery

generated allotments or credits under § 80.275(a) or § 80.305 plus 30 ppm, not to exceed 150 ppm.

(b) The per-gallon cap standard for gasoline produced or imported for use in the GPA under paragraph (a) of this section shall be 300 ppm, except as specified in § 80.195(d).

(c) The refinery or importer annual average sulfur level is calculated in accordance with the provisions of § 80.205.

(d) The refinery or importer annual average standard under paragraph (a) of this section may be met using sulfur allotments or credits as provided under §§ 80.275 and 80.315.

(e) Gasoline produced by approved small refiners subject to the standards under § 80.240 is not subject to the standards under paragraphs (a) and (b) of this section.

(f)(1) A refiner or importer whose gasoline production or volume of imported gasoline in 2004 or 2005 is comprised of \geq 50% of gasoline designated as GPA gasoline under § 80.219 shall not be required to meet the corporate pool average standards under § 80.195 for its gasoline production or imported gasoline during the applicable averaging period.

(2) A refiner or importer whose gasoline production or volume of imported gasoline in 2004 or 2005 is comprised of less than 50% of gasoline designated as GPA gasoline under § 80.219 must meet the corporate pool average standards under § 80.195 for all the refiner's gasoline production or the importer's volume of imported gasoline during the applicable averaging period.

(g) The provisions for compliance deficits under § 80.205(e) do not apply to gasoline subject to the standards under paragraphs (a) and (b) of this section.

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§ 80.217 How does a refiner or importer apply for the GPA standards?

(a) To apply for the GPA standards under § 80.216, a refiner or importer must submit an application in accordance with the provisions of § 80.290.

(b) Applications under paragraph (a) of this section must be submitted by December 31, 2000.

(c)(1) If approved, EPA will notify the refiner or importer of each refinery's or the importer's annual average sulfur standard for gasoline produced for use in the GPA for the 2004 through 2006 annual averaging periods.

(2) If disapproved, the refiner or importer must comply with the standards in § 80.195 for gasoline produced for use in the GPA.

(d) If EPA finds that a refiner or importer provided false or inaccurate information on its application under this section, upon notice from EPA, the refiner's or importer's application will be void ab initio.

§80.218 [Reserved]

§ 80.219 Designation and downstream requirements for GPA gasoline.

The requirements and prohibitions specified in this section apply during the period January 1, 2004 through December 31, 2006.

(a) Designation. Any refiner or importer shall designate any gasoline produced or

imported that is subject to the standards under § 80.216 as "GPA" gasoline.

(b) <u>Product transfer documents</u>. (1) On each occasion that any person transfers custody or title to gasoline designated as GPA gasoline, other than when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility, the transferor shall provide to the transferee documents that include the following information:

(i) Identification of the gasoline as being GPA gasoline;

(ii) A statement that the gasoline may not be distributed or sold for use outside the geographic phase-in area.

(2) Except for transfers to truck carriers, retailers and wholesale purchaser-consumers, product codes may be used to convey the information required by paragraph (b)(1) of this section if such codes are clearly understood by each transferee.

(3) The requirements under paragraph (b)(1) of this section are in addition to the requirement under § 80.210(e), where appropriate, to identify gasoline as being S-RGAS.

(c) <u>GPA gasoline use prohibitions</u>. (1) All parties in the distribution system, including refiners, importers, distributors, carriers, oxygenate blenders, retailers and wholesale purchaser-consumers, are prohibited from:

(i) Selling, offering for sale, dispensing, distributing, storing or transporting GPA gasoline for use outside the geographic phase-in area; and

(ii) Commingling GPA gasoline with gasoline not designated as GPA gasoline unless the mixture is classified as GPA gasoline.

(2) Gasoline not designated as GPA gasoline may be distributed or sold for use in the geographic phase-in area.

§ 80.220 What are the downstream standards for GPA gasoline?

(a) <u>GPA gasoline</u>. (1) During the period February 1, 2004 through January 31, 2005, the sulfur content of GPA gasoline at any downstream location other than at a retail outlet or wholesale purchaser-consumer facility, and during the period March 1, 2004 through February 28, 2005, the sulfur content of GPA gasoline at any downstream location shall not exceed 378 ppm.

(2) During the period February 1, 2005 through January 31, 2007, the sulfur content of GPA gasoline at any downstream location other than at a retail outlet or wholesale purchaserconsumer facility, and during the period March 1, 2005 through February 28, 2007, the sulfur content of GPA gasoline at any downstream location shall not exceed 326 ppm.

(b) <u>GPA gasoline mixed with S-RGAS</u>. Notwithstanding the requirements in paragraph (a) of this section, the sulfur standard applicable to a mixture of GPA gasoline and S-RGAS gasoline at a downstream location shall be the greater of the standard under paragraph (a) of this section or the standard determined under § 80.210.

Hardship Provisions for Qualifying Small Refiners

§ 80.225 What is the definition of a small refiner?

(a) A <u>small refiner</u> is defined as any person, as defined by 42 U.S.C. § 7602(e), who:
(1) Produces gasoline at a refinery by processing crude oil through refinery processing units;

(2) Employed an average of no more than 1,500 people, based on the average number of employees for all pay periods from January 1, 1998 to January 1, 1999, and

(3) Had an average crude capacity less than or equal to 155,000 barrels per calendar day(bpcd) for 1998.

(4) For the purpose of determining the number of employees and crude capacity under paragraph (a) of this section, the refiner shall include the employees and crude capacity of any subsidiary companies, any parent company and subsidiaries of the parent company, and any joint venture partners.

. (b) The definition under paragraph (a) of this section applies to domestic and foreign refiners. For any refiner owned by a governmental entity, the number of employees as specified in paragraph (a) of this section shall include all employees of the governmental entity.

(c) If, without merger with, or acquisition of, another business unit, a company with approved small refiner status under § 80.235 exceeds 1,500 employees, or a corporate crude capacity of 155,000 bpcd after January 1, 1999, it will be considered a small refiner for the duration of the small refiner program.

(d) Notwithstanding the definition in paragraph (a) of this section, refiners who acquire a refinery after January 1, 1999, or reactivate a refinery that was shutdown or was non-operational between January 1, 1998 and January 1, 1999, may apply for small refiner status in accordance with the provisions of § 80.235.

§ 80.230 Who is not eligible for the hardship provisions for small refiners?

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(a) The following are not eligible for the hardship provisions for small refiners:

(1) Refiners of refineries built after January 1, 1999;

(2) Refiners who exceed the employee or crude oil capacity criteria under § 80.225(a)(2) on January 1, 1999, but who meet these criteria after that date, regardless of whether the reduction in employees or crude capacity is due to operational changes at the refinery or a company sale or reorganization;

(3) Importers; and

(4) Refiners who produce gasoline other than by processing crude oil through refinery processing units.

(b)(1) Refiners who qualify as small under § 80.225, and subsequently employ more than 1,500 people as a result of merger with or acquisition of or by another entity, are disqualified as small refiners. If this occurs the refiner shall notify EPA in writing no later than 20 days following this disqualifying event.

(2) Any refiner who qualifies as small under § 80.225 may elect to meet the standards under § 80.195 by notifying EPA in writing no later than November 15 prior to the year the change will occur.

(3) Any refiner whose status changes under paragraphs (b)(1) or (2) of this section shall meet the standards under § 80.195 beginning with the first averaging period subsequent to the status change.

§ 80.235 How does a refiner obtain approval as a small refiner?

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(a) Applications for small refiner status must be submitted to EPA by December 31, 2000, except for applications submitted pursuant to § 80.225(d), which must be submitted by June 1, 2002.

(b) Applications for small refiner status must be sent to: U.S. EPA, Attn: Sulfur Program (6406J), 401 M Street, SW, Washington, DC 20460. For commercial delivery: U.S. EPA, Attn: Sulfur Program (6406J), 501 3rd Street, NW, Washington, DC 20001.

(c) The small refiner status application must contain the following information for the company seeking small refiner status, plus any subsidiary companies, any parent company and subsidiaries of the parent company, and any joint venture partners:

(1)(i) A listing of the name and address of each location where any employee worked during the 12 months preceding January 1, 1999; the average number of employees at each location based upon the number of employees for each pay period for the 12 months preceding January 1, 1999; and the type of business activities carried out at each location, or

(ii) In the case of a refiner who acquires a refinery after January 1, 1999, or reactivates a refinery that was shutdown between January 1, 1998, and January 1, 1999, a listing of the name and address of each location where any employee of the refiner worked since the refiner acquired or reactivated the refinery; the average number of employees at any such acquired or reactivated refinery during each calendar year since the refiner acquired or reactivated the refinery; and the type of business activities carried out at each location.

(2) The total corporate crude capacity of each refinery as reported to the Energy Information Administration (EIA) of the U.S. Department of Energy (DOE). The information submitted to EIA is presumed to be correct. In cases where a company disagrees with this information, the company may petition EPA with appropriate data to correct the record within 60 days after the company submits its application for small refiner status.

(3) A letter signed by the president, chief operating or chief executive officer of the company, or his/her designee, stating that the information contained in the application is true to the best of his/her knowledge.

(4) Name, address, phone number, facsimile number and E-mail address (if available) of a corporate contact person.

(d) For joint ventures, the total number of employees includes the combined employee count of all corporate entities in the venture.

(e) For government-owned refiners, the total employee count includes all government employees.

(f) Approval of small refiner status for refiners who apply under § 80.225(d) will be based on all information submitted under paragraph (c) of this section. Where appropriate, the employee and crude oil capacity criteria for such refiners will be based on the most recent 12 months of operation.

(g) EPA will notify a refiner of approval or disapproval of small refiner status by letter.

(1) If approved, EPA will notify the refiner of each refinery's applicable baseline standard and volume, and per-gallon cap under § 80.240.

(2) If disapproved, the refiner must comply with the standards in § 80.195.

(h) If EPA finds that a refiner provided false or inaccurate information on its application for small refiner status, upon notice from EPA the refiner's small refiner status will be void ab initio. (i) Upon notification to EPA, an approved small refiner may withdraw its status as a small refiner. Effective on January 1 of the year following such notification, the small refiner will become subject to the standards at § 80.195.

§ 80.240 What are the small refiner gasoline sulfur standards?

(a) The gasoline sulfur standards for an approved small refiner are as follows:

	Temporary Sulfur Standards		
	Applicable from January 1, 2004 through December 31, 2007		
Refinery	Annual Average		
Baseline Sulfur Level		Per Gallon Cap	
0 to 30	30.00	300	
31 to 200	Baseline level	300	
201 to 400	200.00	300	
401 to 600	50% of baseline	Factor of 1.5 times the	
		average standard	
601 and above	300.00	450	

(b) The refinery annual average sulfur standards must be met on an annual calendar year basis for each refinery owned by a small refiner. The refinery annual average sulfur level is calculated in accordance with the provisions of § 80.205.

(c)(1) The refinery annual average standards specified in paragraph (a) of this section

apply to the volume of gasoline produced by a small refiner's refinery up to the lesser of:

(i) 105% of the baseline gasoline volume as determined under \$ 80.250(a)(1); or

(ii) The volume of gasoline produced at that refinery during the averaging period by processing crude oil.

(2) If a refiner exceeds the volume limitation in paragraph (c)(1) of this section during any averaging period, the annual average sulfur standard applicable to the refiner for that averaging period is calculated as follows:

$$S_{sr} = \frac{\left(V_b \times S_b\right) + \left(AF \times \left(V_a - V_b\right)\right)}{V_a}$$

Where:

 S_{sr} = Small refiner annual average sulfur standard.

 V_{b} = Applicable volume under paragraph (c)(1) of this section.

 V_a = Averaging period gasoline volume

 S_{b} = Small refiner sulfur baseline as determined under § 80.250.

AF = Adjustment factor (120 in 2004; 90 in 2005; and 30 in 2006 and thereafter)

(3) The small refiner average standards under paragraph (a) of this section may be met using sulfur allotments or credits as provided under §§ 80.275 or 80.315.

(4) The provisions for compliance deficits under § 80.205(e) do not apply to small refiners subject to the standards under this section.

(d) In the case of any refiner with small refiner status who generates sulfur allotments or credits pursuant to §§ 80.275(a) or 80.305, the baseline applicable to that refiner's refinery for purposes of establishing the standard for the refinery under paragraph (a) of this section beginning in 2004 shall be the lowest annual average sulfur content for any year during the period in which the refiner generated allotments or credits.

§ 80.245 How does a small refiner apply for a sulfur baseline?

(a) Any refiner seeking small refiner status must apply for a refinery sulfur baseline by the deadline under § 80.235 for each of the refiner's refineries by providing the following information:

(1) A sulfur baseline and baseline volume for every refinery calculated in accordance with § 80.250.

(2) The following information for each batch of gasoline produced in 1997-1998:

(i) Batch number assigned to the batch under § 80.65(d) or § 80.101(i);

(ii) Volume; and

(iii) Sulfur content.

(3) For any refiner who acquires a refinery after January 1, 1999, or reactivates a refinery that was shut down or non-operational between January 1, 1998, and January 1, 1999, the average sulfur level and average volume of gasoline produced during each year the refinery was in operation after the refinery was acquired or reactivated. Where appropriate, the baseline sulfur level and volume for such refineries will be determined based on the annual average for the most

recent year of operation.

(b) The sulfur baseline application must be submitted to the address specified in § 80.235(b).

§ 80.250 How is the small refiner sulfur baseline and volume determined?

(a)(1) The small refiner baseline volume is determined for each refinery as follows:

$$V_b = \frac{\sum_{i=1}^n (V_i)}{2}$$

Where:

 $V_b =$ Baseline volume.

 $V_i = Volume of gasoline batch i.$

- n = Total number of batches of gasoline produced from January 1, 1997 through
 December 31, 1998.
- i = Individual batch of gasoline produced from January 1, 1997 through December 31, 1998.
- (2) The small refiner sulfur baseline is determined for each refinery as follows:

$$S_{b} = \frac{\sum_{i=1}^{n} (V_{i} \times S_{i})}{\sum_{i=1}^{n} V_{i}}$$

Where:

- S_{b} = Small refiner sulfur baseline.
- $V_i = Volume of gasoline batch i.$
- $S_i = Sulfur content of batch i.$
- n = Total number of batches of gasoline produced from January 1, 1997 through
 December 31, 1998.
- i = Individual batch of gasoline produced from January 1, 1997 through December 31, 1998.

(b) Foreign refiners who do not have an approved refinery baseline under § 80.94 must follow the procedures specified in § 80.410(b).

(c) If at any time a small refinery baseline is determined to be incorrect, the corrected baseline applies ab initio and the annual average standards and cap standards are deemed to be those applicable under the corrected information.

§ 80.255 Compliance plans and demonstration of commitment to produce low sulfur

gasoline.

The requirements of this section apply to any refiner approved for small refiner standards who wishes to be eligible for a hardship extension under § 80.260.

(a) <u>Compliance commitment</u>. By no later than June 1, 2004, any refiner who is approved for small refinery standards must submit a preliminary report to EPA which outlines the refiner's timeline for compliance and a project plan which discusses permits, capital commitments and engineering plans for making the necessary modifications to produce gasoline that meets the 30 ppm refinery average and 80 ppm per-gallon cap sulfur standards under § 80.195 on or before January 1, 2008. Documents showing activities and progress in these areas should be provided, if available.

(b) <u>Demonstration of Progress</u>. (1) By no later than June 1, 2005, the small refiner must submit a report to EPA that states in detail the progress toward compliance with the 30 ppm refinery average and 80 ppm cap sulfur standards to date based on their timeline and project plan. The report must include copies of:

(i) Approved permits for construction of the equipment, or the permit application if approval is still pending;

(ii) Contracts for design and construction; and

(iii) Any available evidence of having secured the necessary financing to complete the required construction.

(iv) If the refiner anticipates any difficulties in meeting its compliance commitments under this section, the refiner must submit a detailed report of all efforts made to date and the factors that may cause delay, including costs, specification of engineering or other design work needed and reasons for delay, specification of equipment needed and any reasons for delay, potential equipment suppliers and history of negotiations, and any other relevant information. If unavailability of equipment is a factor, the report must include a discussion of other options considered and the reasons these other options are not feasible.

(2) By no later than June 1, 2006, the small refiner must submit to EPA evidence that onsite construction has begun and that, absent unforeseen difficulties, the small refiner will be producing complying gasoline by January 1, 2008. If construction has not begun, the refiner must demonstrate that it has made all reasonable efforts to begin construction, that substantial progress is being made to begin construction as soon as possible, and that construction can be completed in time to begin production of gasoline that complies with the standards of § 80.195 by January 1, 2008.

(c) <u>Additional information</u>. The Administrator may request any additional information necessary to determine a refiner's commitment and/or progress toward meeting the standards in § 80.195 by 2008.

(d) <u>Failure to comply with requirements</u>. Any small refiner who fails to submit the progress reports required under this section will not be eligible for a hardship extension under § 80.260.

§ 80.260 What are the procedures and requirements for obtaining a hardship extension?

(a) An approved small refiner who has filed the reports specified in § 80.255 may apply to

EPA for a hardship extension of the small refiner standards for calendar years 2008 and 2009. The application must be submitted in writing no later than January 1, 2007, to U.S. EPA, Attn: Sulfur Program (6406J), 401 M Street, SW, Washington, D.C. 20460. For commercial (nonpostal) delivery: U.S. EPA, Attn: Sulfur Program, 501 3rd Street NW, Washington, DC 20001.

(b) The application must specify the factors that demonstrate a significant economic hardship and must provide a detailed discussion regarding the inability of the refinery to produce gasoline meeting the requirements of § 80.195. Such an application must include, at a minimum, the following information:

(1) Documentation of efforts made to obtain necessary financing, including:

(i) Copies of loan applications for the necessary financing of the construction of appropriate sulfur reduction technology and other equipment procurements or improvements; and

(ii) If financing has been disapproved or is otherwise unsuccessful, documents supporting the basis for that disapproval and evidence of efforts to pursue other means of financing.

(2) A detailed analysis of the reasons the refinery is unable to produce gasoline meeting the standards of § 80.195 in 2008, including costs, specification of equipment still needed, potential equipment suppliers, and efforts already completed to obtain the necessary equipment;

(3) If unavailability of equipment is part of the reason for the inability to comply, a discussion of other options considered, and the reasons these other options are not feasible;

(4) If relevant, a demonstration that a needed or lower cost technology is immediately unavailable, but will be available in the near future, and full information regarding when and from what sources it will be available;

(5) Schematic drawings of the refinery configuration as of January 1, 1999 and as of the

date of the hardship extension application, and any planned future additions or changes;

(6) If relevant, a demonstration that a temporary unavailability exists of engineering or construction resources necessary for design or installation of the needed equipment;

(7) If sources of crude oil lower in sulfur than what the refiner is currently using are available, full information regarding the availability of these different crude sources, the sulfur content of those crude sources, the cost of the different crude sources over the past five years, and an estimate of gasoline sulfur levels achievable by the refinery if the lower sulfur crude sources were used;

(8) A discussion of any sulfur reductions that can be achieved from current levels;

(9) The date the refiner anticipates compliance with the standards in § 80.195 can be achieved at its refinery;

(10) An analysis of the economic impact of compliance on the refiner's business (including financial statements from the last 5 years, or for any time period up to 10 years, at EPA's request); and

(11) Any other information regarding other strategies considered, including strategies or components of strategies that do not involve installation of equipment, and why meeting the standards in § 80.195 beginning in 2008 is infeasible.

(d) The hardship extension application must contain a letter signed by the president or the chief operating or chief executive officer of the company, or his/her designee, stating that the information contained in the application is true to the best of his/her knowledge.

§ 80.265 How will the EPA approve or disapprove a hardship extension application?

(a) EPA will evaluate each application for hardship extension on a case-by-case basis. The factors considered for a hardship extension may include: the refiner's financial position and efforts to obtain capital funding; the refiner's efforts to procure necessary equipment, obtain design and engineering services and construction contractors; the availability of desulfurization equipment; and any other relevant factor. An extension will be granted for a refinery for the 2008 averaging period if the small refiner who owns the refinery adequately demonstrates that severe economic hardship would result if compliance with the standards in § 80.195 is required in 2008, or that compliance with the standard in 2008 is not feasible for reasons beyond the refiner's control, and that the refiner has made the best efforts possible to achieve compliance with the national standards by January 1, 2008. Upon reapplication by the refiner, if EPA determines that further relief is appropriate, EPA may grant a further extension through the 2009 averaging period. In no case will a further extension for the 2009 averaging period be granted unless the refiner demonstrates conclusively that it has financing in place and that it will be able to complete construction and meet the national gasoline sulfur standards no later than December 31, 2009.

(b) EPA may request more information, if necessary, for evaluation of the application. If requested information is not submitted within the time specified in EPA's request, or any extensions granted, the application may be denied.

(c) EPA will notify the refiner of approval or disapproval of hardship extension by letter.

(1) If approved, EPA will also notify the refiner of the date that full compliance with the standards specified at § 80.195 must be achieved or what interim sulfur levels or schedules apply, if any.

(2) If disapproved, beginning January 1, 2008, the refinery is subject to the requirements

in § 80.195. Refiners who receive an extension for the 2008 averaging period shall meet the standards in § 80.195 beginning on January 1, 2009, unless EPA grants an extension of the hardship relief for an additional year. If such an additional extension is granted, the refiner shall meet the standards in § 80.195 on January 1, 2010.

(d) Refiners who receive a hardship extension may be required to meet more stringent standards than those which apply to them during 2007, and/or could be required to offset excess sulfur levels. EPA may impose reasonable conditions on an extension, such as requiring segregation of the small refiner's gasoline or requiring the gasoline to be sold for use in older vehicles only.

§ 80.270 Can a refiner seek temporary relief from the requirements of this subpart?

(a) EPA may permit a refiner to produce and distribute gasoline which does not meet the requirements of this subpart if the refiner demonstrates that:

(1) Unusual circumstances exist that impose extreme hardship and significantly affect ability to comply by the applicable date, and

(2) It has made best efforts to comply with the requirements of this subpart (including making efforts to obtain credits and/or allotments).

(b) Applications must be submitted to EPA by September 1, 2000. Relief may be granted from some or all of the requirements of this subpart, at EPA's discretion; however, EPA reserves the right to deny applications for appropriate reasons, including unacceptable environmental impact. Approval to distribute gasoline which does not meet the requirements of this subpart may be granted for such time period as EPA determines is appropriate, but shall not extend beyond January 1, 2008.

(c) (1) Applications must include a plan demonstrating how the refiner will comply with the requirements of this subpart as expeditiously as possible. The plan shall include a showing that contracts are or will be in place for engineering and construction of desulfurization equipment, a plan for applying for and obtaining any permits necessary for construction, a description of plans to obtain necessary capital, and a detailed estimate of when the requirements of this subpart will be met.

(2) Applications must include a detailed description of the refinery configuration and operations, including, at a minimum, the following information:

(i) the portion of gasoline production that is produced using an FCC unit,

(ii) the refinery's hydrotreating capacity,

(iii) the refinery's total reformer unit throughput capacity,

(iv) the refinery's total crude capacity,

(v) total crude capacity of any other refineries owned by the same entity,

(vi) total volume of gasoline production at the refinery,

(vii) total volume of other refinery products,

(viii) geographic location(s) in which gasoline will be sold..

(3) Applications must include, at a minimum, the following information:

(i) detailed description of efforts to obtain capital for refinery investments,

(ii) bond rating of entity that owns the refinery,

(iii) estimated capital investment needed to comply with the requirements of this subpart

by the applicable date.

- (4) Applicants must also provide any other relevant information requested by EPA.
- (d) EPA may impose any reasonable conditions on waivers granted under this paragraph.

Allotment Trading and Averaging, Banking and Trading (ABT) Programs

Allotment Trading

§ 80.275 How are allotments generated and used?

(a) <u>Generation of allotments and credits in 2003</u>. (1) During 2003 only, any domestic or foreign refiner may have the option to generate credits in accordance with the provisions of \$ 80.305 or generate allotments and credits under paragraph (a)(2) of this section.

(2) If the average sulfur content of the gasoline produced at a refinery is less than the refinery's baseline as determined under § 80.295 and is 60 ppm or less, allotments and credits may be generated using the following procedures. This paragraph (a) does not apply to importers.

(i) If the average sulfur content of the gasoline produced at a refinery is less than or equal to 30, and the refinery's sulfur baseline is greater than 120, the following procedures apply:

 $SA_{TypeB} = (30 - S_a) \times V$

 $SA_{TypeA} = (V \times 90) \times 0.8$

$$CR = (S_{Base} - 120) \times V$$

(ii) If the average sulfur content of the gasoline produced at a refinery is less than or equal to 30, and the refinery's sulfur baseline is greater than 30 but less than or equal to 120, the following procedures apply:

$$SA_{TypeB} = (30 - S_a) \times V$$

$$SA_{TypeA} = ((S_{Base} - 30) \times V) \times 0.8$$

(iii) If the average sulfur content of the gasoline produced at a refinery is less than or equal to 30, and the refinery's sulfur baseline is less than or equal to 30, the following procedures apply:

$$SA_{TypeB} = (S_{Base} - S_a) \times V$$

(iv) If the average sulfur content of the gasoline produced at a refinery is greater than 30, and the refinery's sulfur baseline is greater than 120, the following procedures apply:

$$SA_{TypeA} = ((120 - S_a) \times V) \times 0.8$$

$$CR = (S_{Base} - 120) \times V$$

(v) If the average sulfur content of the gasoline produced at a refinery is greater than 30, and the refinery's sulfur baseline is less than or equal to 120, the following procedures apply:

$$SA_{TypeA} = ((S_{Base} - S_a) \times V) \times 0.8$$

(vi) For purposes of the equations under paragraphs (a)(1)(i) through (v) of this section, the following definitions apply:

SA_{TypeB}	=	Type B sulfur allotments generated
SA_{TypeA}	=	Type A sulfur allotments generated
CR	=	Credits generated
S _{Base}	=	Refinery's sulfur baseline value under § 80.295
S _a	=	Average sulfur content of the gasoline produced at the refinery
		during 2003 (or for a foreign refinery, all gasoline produced during
		2003 that was imported into the U.S.)
V	=	Volume of gasoline produced at the refinery during 2003 (or for a
		foreign refinery, all gasoline produced during 2003 that was
		imported into the U.S.)

(b) <u>Generation of allotments in 2004 and 2005</u>. During 2004 and 2005 only, refiners and importers that have corporate pool average sulfur levels below the corporate pool average standards under § 80.195 may generate sulfur allotments separately for each year using the

following procedures.

(1) If the average sulfur content of the gasoline produced or imported is less than 30 the following procedures apply:

$$SA_{TypeB} = (30 - S_a) \times V_a$$

 $SA_{TypeA} = (S_{PS} - 30) \times V_a$

(2) If the average sulfur content of the gasoline produced or imported is equal to or greater than 30 the following procedures apply:

$$SA_{TypeA} = (S_{PS} - S_a) \times V_a$$

(3) For purposes of the equations under paragraphs (a)(2)(i) through (ii) of this section, the following definitions apply:

$\mathrm{SA}_{\mathrm{TypeB}}$	=	Type B sulfur allotments generated
SA_{TypeA}	=	Type A sulfur allotments generated
\mathbf{S}_{a}	=	Corporate pool average sulfur level for the year
S_{PS}	=	Corporate pool average standard (120 in 2004; 90 in 2005)
V _a	=	Total volume of gasoline produced and/or imported during the year

(c) <u>Use of sulfur allotments to meet standards</u>. (1) Refiners and importers may use Type A and Type B sulfur allotments to meet the corporate pool average standards under § 80.195, except that if allotments generated in 2003 or 2004 are used to meet the corporate pool standard in 2005 the allotments generated in 2003 or 2004 shall be reduced in value by 50%.

(2) Small refiners subject to the standards under § 80.240, and refiners and importers of gasoline designated as GPA gasoline under § 80.219, may use sulfur allotments to meet their annual average refinery or importer standards.

(d) <u>Transfers of sulfur allotments</u>. Sulfur allotments generated under this section may be transferred, provided that:

(1) No allotment may be transferred more than twice: the first transfer by the refiner or importer who generated the allotment may only be made to a refiner or importer who intends to use the allotment; if the transferee cannot use the allotment, it may make the second, and final, transfer only to a refiner or importer who intends to use the allotment. In no case may an allotment be transferred more than twice before being used or terminated.

(2) The allotment transferor must apply any allotments necessary to meet the transferor's corporate pool average standard before transferring allotments to any other refiner or importer or before converting allotments into credits.

(3) The transferor must supply to the transferee records indicating the year of generation and type of the allotments, the identity of the refiner or importer who generated the allotments, and the identity of the transferring party, if it is not the same part that generated the allotments.

(4) The transferor must inform the transferee whether any transferred allotments are Type A allotments or Type B allotments, as defined in paragraphs (a) and (b) of this section.

(5) In the case of allotments that have been calculated or created improperly, or are otherwise determined to be invalid, the following provisions apply:

(i) Invalid allotments cannot be used to achieve compliance with the transferee's corporate pool average standard or to be converted to credits, regardless of the transferee's good faith belief that the allotments were valid.

(ii) The refiner or importer who used the allotments, and any transferor of the allotments, must adjust their allotment records and reports and sulfur calculations as necessary to reflect the proper allotments.

(iii) Any allotments remaining after correcting for the improperly created allotments must first be applied to correct the invalid transfers before the transferor may transfer any other allotments or before converting allotments into credits.

(e) <u>Conversion of allotments into credits</u>. A refiner or importer may convert allotments into credits using the following procedures.

(1) Type A allotments may be converted into credits with the same requirements and limitations on use that apply under § 80.315 to credits generated in 2000 through 2003.

(2) Type B allotments may be converted into credits with the same requirements and limitations on use that apply under § 80.315 to credits generated in 2004 and later, based on the year of creation of the allotment.

(f) <u>Small refiners</u>. Small refiners subject to the standards under § 80.240 may not generate sulfur allotments under paragraph (b) of this section.

(g) <u>GPA gasoline</u>. GPA gasoline that is included in the refiner's or importer's corporate pool average under § 80.216(f)(2) must be included in the calculations under paragraph (b) of this

section. No refiner or importer may generate allotments in 2004 or 2005 who is not required to meet the corporate pool average standards.

ABT Program - General Information

§ 80.280 [Reserved]

§ 80.285 Who may generate credits under the ABT program?

(a) <u>Credit generation in 2000 through 2003</u>. (1) Credits may be generated in 2000 through 2003 under § 80.305 by refiners who produce gasoline from crude oil, and are:

(i) Refiners who establish a sulfur baseline under § 80.295;

(ii) Foreign refiners with approved baselines under § 80.94, or baselines established in accordance with § 80.410; or

(iii) Small refiners for any refinery subject to the standards under § 80.240, using their small refiner baseline established under § 80.250.

(2) Importers and oxygenate blenders may not generate credits under § 80.305.

(b) <u>Credit generation beginning in 2004</u>. (1) Credits may be generated beginning in 2004 under § 80.310 by:

(i) Refiners and importers subject to the standards under § 80.195;

(ii) Refiners and importers of gasoline designated as GPA gasoline under § 80.219, using the lesser of: 150 ppm; or the refiner's or importer's baseline calculated under § 80.295; or the refinery's lowest annual average sulfur content for any year from 2000 through 2003 during which the refiner generated credits (for any party generating credits under both paragraphs (b)(1)(i) and (b)(1)(ii), such credits must be calculated separately); or

(iii) Small refiners for any refinery subject to the standards under § 80.240, using refinery's standard established under § 80.240.

(2) Generation of credits for all imported gasoline shall be through the importer.

(3) Oxygenate blenders may not generate credits under § 80.310.

§ 80.290 How does a refiner apply for a sulfur baseline?

(a) The refiner must submit an application to EPA which includes the information required under paragraph (c) of this section no later than September 30 of the year in which the refiner plans to begin generating credits, or the refiner or an importer plans to sell gasoline in the geographic phase-in area in accordance with § 80.217.

(b) The sulfur baseline request must be sent to: U.S. EPA, Attn: Sulfur Program (6406J),
401 M Street SW, Washington, DC 20460. For commercial (non-postal) delivery: U.S. EPA,
Attn: Sulfur Program, 501 3rd Street NW, Washington, DC 20001

(c) The sulfur baseline application must include the following information:

(1) A listing of the names and addresses of all refineries owned by the corporation for which the refiner is applying for a sulfur baseline.

(2) The annual average gasoline sulfur baseline for gasoline produced in 1997-1998, for each refinery for which the refiner is applying for a sulfur baseline, calculated in accordance with § 80.295.

(3) A letter signed by the president, chief operating or chief executive officer, of the company, or his/her delegate, stating that the information contained in the sulfur baseline determination is true to the best of his/her knowledge.

(4) Name, address, phone number, facsimile number and E-mail address of a corporate contact person.

(5) The following information for each batch of gasoline produced in 1997-1998:

(i) Batch number assigned to the batch under § 80.65(d) or § 80.101(i);

(ii) Volume; and

(iii) Sulfur content.

(d) Foreign refiners who do not have an approved refinery baseline under § 80.94 must follow the procedures specified in § 80.410(b).

(e) Within 60 days of receipt of an application under this section, EPA will notify the refiner of approval of the refinery's baseline or of any deficiencies in the application.

(f) If at any time the baseline submitted in accordance with the requirements of this section is determined to be incorrect, EPA will notify the refiner of the corrected baseline.

(g) Any refiner that seeks temporary relief under § 80.270 shall apply for a refinery sulfur baseline in accordance with the provisions of this section and § 80.295, and if applicable, § 80.410(b), no later than September 1, 2000.

ABT Program - Baseline Determination

§ 80.295 How is a refinery sulfur baseline determined?

(a) A refinery's gasoline sulfur baseline for the purpose of generating credits during years2000 through 2003 is calculated using the following equation:

$$S_{Base} = \frac{\sum_{i=1}^{n} (V_i \times S_i)}{\sum_{i=1}^{n} V_i}$$

Where:

 $S_{Base} = Sulfur$ baseline value.

 $V_i = Volume of gasoline batch i.$

 $S_i =$ Sulfur content of gasoline batch i.

n = Total number of batches of gasoline produced during January 1, 1997 through
 December 31, 1998.

i = Individual batch of gasoline produced during January 1, 1997 through December 31, 1998.

(b) Any refiner who, under § 80.65 or § 80.101(d)(4), included oxygenate blended downstream in compliance calculations for 1997-1998 must include this oxygenate in the baseline calculations for sulfur content under paragraph (a) of this section.

ABT Program - Credit Generation

§ 80.305 How are credits generated during the time period 2000 through 2003?

(a) Credits must be calculated as follows:

$$\mathbf{CR}_{a} = \mathbf{V}_{a} \mathbf{x} (\mathbf{S}_{\text{Base}} - \mathbf{S}_{a})$$

Where:

 CR_a = Credits generated for the averaging period.

 V_a = Total volume of gasoline produced during the averaging period at the refinery.

 S_{Base} = Sulfur baseline value for the refinery established under § 80.250 or § 80.295.

 $S_a = Actual annual average sulfur level for gasoline produced during the averaging period by the refinery exclusive of any credits.$

(b) The refiner may include any oxygenates included in its RFG or conventional gasoline volume under §§ 80.65 and 80.101(d)(4), respectively, for the purpose of generating credits.

(c) Credits under this program are in units of "ppm-gallons".

(d) Refiners may generate credits for gasoline produced during an averaging period only if the annual average sulfur level for the gasoline produced during the averaging period is less than 0.90 of the refiners baseline under §§ 80.250 or 80.295. (e) Credits generated in accordance with the above must be identified by the year of creation.

§ 80.310 How are credits generated beginning in 2004?

(a) A refiner for any refinery, or an importer, may generate credits in 2004 and thereafter if the annual average sulfur level for gasoline produced or imported for the averaging period is less than the applicable refinery or importer annual average sulfur standard for that refinery or importer in that year. (b) Credits are calculated as follows:

$$CR_a = V_a x (S_{std} - S_a)$$

Where:

- CR_a = Credits generated for the averaging period.
- V_a = Total annual volume gasoline produced at a refinery or imported during the averaging period.
- S_{std} = 30 ppm; or the sulfur standard for a small refinery established under § 80.240; or, for gasoline designated as GPA gasoline under § 80.219, the lesser of 150 ppm, the refinery's or importer's baseline calculated under § 80.295, or the refinery's lowest annual average sulfur content for any year from 2000 through 2003 during which the refinery generated credits or allotments.
- $S_a = Actual annual average sulfur level of gasoline produced at a refinery or imported during the averaging period exclusive of any credits.$

(c) Credits generated in accordance with this section must be identified by the year of creation.

ABT Program - Credit Use

§ 80.315 How are credits used and what are the limitations on credit use?

(a) <u>Credit use</u>. Credits may be used, to meet the applicable refinery or importer annual average sulfur standards under §§ 80.195, 80.216, or 80.240, provided that:

(1) Sulfur credits used were generated pursuant to the requirements of this subpart, and

(2) The requirements of paragraphs (b) and (c) of this section are met.

(b) <u>Credit transfers</u>. (1) Credits obtained from other persons may be used to meet the annual average standards specified in §§ 80.195, 80.216, or 80.240 if all the following conditions are met:

(i) The credits are generated and reported according to the requirements of this subpart.

(ii) The credits are used in compliance with the limitations regarding the appropriate periods for credit use in this subpart.

(iii) Any credit transfer takes place no later than the last day of February following the calendar year averaging period when the credits are used.

(iv) No credit may be transferred more than twice: the first transfer by the refiner or importer who generated the credit may only be made to a refiner or importer who intends to the use the credit; if the transferee cannot use the credit, it may make the second, and final, transfer only to a refiner or importer who intends to use the credit. In no case may a credit be transferred more than twice before being used or terminated.

(v) The credit transferor must apply any credits necessary to meet the transferor's applicable average standard, before transferring credits to any other refiner or importer.

(vi) No credits may be transferred that would result in the transferor having a negative credit balance.

(vii) Each transferor must supply to the transferee records indicating the years the credits

were generated, the identity of the refiner or importer who generated the credits, and the identity of the transferring party, if it is not the same party that generated the credits.

(2) In the case of credits that have been calculated or created improperly, or are otherwise determined to be invalid, the following provisions apply:

(i) Where a refiner's baseline has been determined to be incorrect under § 80.250(d) or § 80.290(f), any credits generated, banked, used or traded must be adjusted to reflect the corrected baseline.

(ii) Invalid credits cannot be used to achieve compliance with the transferee's averaging standard, regardless of the transferee's good faith belief that the credits were valid.

(iii) The refiner or importer who used the credits, and any transferor of the credits, must adjust their credit records and reports and sulfur calculations as necessary to reflect the proper credits.

(iv) Any properly created credits existing in the transferor's credit balance after correcting the credit balance, and after the transferor applies credits as needed to meet the average standard at the end of the compliance year, must first be applied to correct the invalid transfers before the transferor trades or banks the credits.

(c) <u>Limitations on credit use.</u> (1) Credits generated prior to 2004 may only be used for demonstrating compliance with the refinery or importer annual average standards under § 80.195 during the 2005 and 2006 averaging periods. Such credits may be used to demonstrate compliance with the standards under § 80.216 during the 2004 through 2006 averaging periods, and with the standards under § 80.240 during the 2004 through 2007 averaging periods, and the 2008 and 2009 averaging periods, if allowed under the terms of a hardship extension under §

80.265.

(2) Credits generated in 2004 or later may only be used for demonstrating compliance with standards during an averaging period within five years of the year of generation.

(3) A refiner or importer possessing credits must use all credits prior to falling into compliance deficit under § 80.205(e).

(4) Credits may not be used to meet corporate pool average standards under § 80.195.

§ 80.320 [Reserved]

§ 80.325 [Reserved]

Sampling, Testing and Retention Requirements for Refiners and Importers

§ 80.330 What are the sampling and testing requirements for refiners and importers?

(a) <u>Sample and test each batch of gasoline</u>. (1) Refiners and importers shall collect a representative sample from each batch of gasoline produced or imported and test each sample to determine its sulfur content for compliance with requirements under this subpart prior to the gasoline leaving the refinery or import facility, using the sampling and testing methods provided in this section.

(2) Except as provided in paragraph (a)(3) of this section, the requirements of this section apply beginning January 1, 2004, or January 1 of the first year of allotment or credit generation

under § 80.275 or § 80.305, whichever is earlier.

(3) Prior to January 1, 2004, for purposes of meeting the sampling and testing requirements of this section for conventional gasoline, any refiner may, prior to analysis, combine samples of gasoline from more than one batch of gasoline or blendstock and treat such composite sample as one batch of gasoline or blendstock pursuant to the requirements of 40 CFR § 80.101(i)(2).

(4) Any refiner who produces reformulated gasoline or conventional gasoline using computer-controlled in-line blending equipment may meet the testing requirement of paragraph (a)(1) of this section under the terms of an exemption granted under § 80.65(f)(4).

(b) <u>Sampling methods</u>. For purposes of paragraph (a) of this section, refiners and importers shall sample each batch of gasoline by using one of the following methods:

(1) Manual sampling of tanks and pipelines shall be performed according to the applicable procedures specified in one of the two following methods:

(i) American Society for Testing and Materials (ASTM) method D 4057-95, entitled"Standard Practice for Manual Sampling of Petroleum and Petroleum Products."

(ii) Samples collected under the applicable procedures in ASTM method D 5842-95, entitled "Standard Practice for Sampling and Handling of Fuels for Volatility Measurement," may be used for measuring sulfur content if there is no contamination present that could affect the sulfur test result.

(2) Automatic sampling of petroleum products in pipelines shall be performed according to the applicable procedures specified in ASTM method D 4177-95, entitled "Standard Practice for Automatic Sampling of Petroleum and Petroleum Products." (c) <u>Test method for measuring the sulfur content of gasoline</u>. (1) For purposes of paragraph (a) of this section, refiners and importers shall use the method provided in § 80.46(a)(1) to measure the sulfur content of gasoline they produce or import.

(2) Except as provided in § 80.350 and in paragraph (c)(1) of this section, any ASTM sulfur test method for liquefied fuels may be used for quality assurance testing under § 80.400, or to determine whether gasoline qualifies for a S-RGAS downstream standard, if the protocols of the ASTM method are followed and the alternative method is correlated to the method provided in § 80.46(a)(1).

(d) <u>Test method for sulfur in butane</u>. (1) Refiners and importers shall use the method provided in § 80.46(a)(2) to measure the sulfur content of butane when the butane constitutes a batch of gasoline.

(2) Except as provided in paragraph (d)(1) of this section, any ASTM sulfur test method for gaseous fuels may be used for quality assurance testing under §§ 80.340(b)(4) and 80.400, if the protocols of the ASTM method are followed and the alternative method is correlated to the method provided in § 80.46(a)(2).

(e) <u>Incorporations by reference</u>. ASTM standard practices D 4057-95, D 4177-95 and D 5842-95 are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 C.F.R. part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428. Copies may be inspected at the Air Docket Section (LE-131), room M-1500, U.S. Environmental Protection Agency, Docket No. A-97-03, 401 M Street, SW, Washington, DC 20460, or at the Office of the Federal Register, 800 North Capitol Street, NW.,

Suite 700, Washington, DC.

§ 80.335 What gasoline sample retention requirements apply to refiners and importers?

(a) <u>Sample retention requirements</u>. Beginning January 1, 2004, or January 1 of the first year allotments or credits are generated under §§ 80.275 and 80.305, whichever is earlier, any refiner or importer shall:

(1) Collect a representative portion of each sample analyzed under § 80.330(a), of at least330 ml in volume;

(2) Retain sample portions for the most recent 20 samples collected, or for each sample collected during the most recent 21 day period, whichever is greater;

(3) Comply with the gasoline sample handling and storage procedures under § 80.330(b) for each sample portion retained; and

(4) Comply with any request by EPA to:

(i) Provide a retained sample portion to the Administrator's authorized representative; and

(ii) Ship a retained sample portion to EPA, within 2 working days of the date of the request, by an overnight shipping service or comparable means, to the address and following procedures specified by EPA, and accompanied with the sulfur test result for the sample determined under § 80.330(a).

(b) <u>Sample retention requirement for samples subject to independent analysis</u>
 <u>requirements</u>. (1) Any refiner or importer who meets the independent analysis requirements under
 § 80.65(f) for any batch of reformulated gasoline or RBOB will have met the requirements of

paragraph (a) of this section, provided the independent laboratory meets the requirements of paragraph (a) of this section for the gasoline batch.

(2) For samples retained by an independent laboratory under paragraph (b) of this section, the test results required to be submitted under paragraph (a) of this section shall be the test results determined under § 80.65(e).

(c) <u>Sampling compliance certification</u>. Any refiner or importer shall include with each annual report filed under § 80.370, the following statement, which must accurately reflect the facts and must be signed and dated by the same person who signs the annual report:

I certify that I have made inquiries that are sufficient to give me knowledge of the procedures to collect and store gasoline samples, and I further certify that the procedures meet the requirements of the ASTM procedures required under § 80.330.

§ 80.340 What standards and requirements apply to refiners producing gasoline by blending blendstocks into previously certified gasoline (PCG)?

(a) Any refiner who produces gasoline by blending blendstock into PCG must meet the requirements of § 80.330 to sample and test every batch of gasoline as follows:

(1)(i) Sample and test to determine the volume and sulfur content of the PCG prior to blendstock blending.

(ii) Sample and test to determine the volume and sulfur content of the gasoline subsequent

to blendstock blending.

(iii) Calculate the volume and sulfur content of the blendstock, by subtracting the volume and sulfur content of the PCG from the volume and sulfur content of the gasoline subsequent to blendstock blending. The blendstock is a batch for purposes of compliance calculations and reporting. For purposes of § 80.340(a) of this subpart, compliance with the applicable cap standard under § 80.195(a) shall be determined based on the sulfur content of the gasoline subsequent to blendstock blending.

(2) In the alternative, a refiner may sample and test each batch of blendstock when received at the refinery to determine the volume and sulfur content, and treat each blendstock receipt as a separate batch for purposes of compliance calculations for the annual average sulfur standard and for reporting. This alternative applies only if every batch of blendstock used at a refinery during an averaging period has a sulfur content that is equal to, or less than, the applicable per-gallon cap standard under §§ 80.195 or 80.216.

(b) Refiners who blend only butane into PCG may meet the sampling and testing requirements by using sulfur test results of the butane supplier, provided that the following requirements are also met:

(1) The sulfur content of the butane received from the butane supplier must not exceed the following sulfur standards on a per-gallon basis as follows:

(i) 120 ppm in 2004, and 30 ppm for 2005 and any subsequent year;

(ii) Except that the per-gallon sulfur content of butane blended to PCG that is designated as GPA gasoline shall not exceed 150 ppm from January 1, 2004 through December 31, 2006.

(2) The refiner obtains test results from the butane supplier that demonstrate that the

sulfur content of each load of butane supplied does not exceed the applicable per-gallon sulfur standard under paragraph (b)(1) of this section through test results of samples of the butane contained in the storage tank from which the butane blender is supplied.

(i) Testing for the sulfur content of the butane by the supplier must be subsequent to each receipt of butane into the supplier's storage tank, or the testing must be immediately before transfer of butane to the butane blender.

(ii) The testing must be performed by the method specified in \$ 80.46(a)(2).

(iii) The butane blender must obtain a copy of the butane supplier's test results, at the time of each transfer of butane to the butane blender, that reflect the sulfur content of each load of butane supplied to the butane blender.

(3) The sulfur content and volume of each batch of gasoline produced is that of the butane the refiner blends into gasoline for purposes of calculating compliance with the standards in §§ 80.195 and 80.216.

(4) The refiner must conduct a quality assurance program of sampling and testing for each butane supplier that demonstrates the butane sulfur content does not exceed the applicable pergallon sulfur standard in paragraph (b)(1) of this section. The frequency of butane sampling and testing, for each butane supplier, must be one sample for every 500,000 gallons of butane received, or one sample every 3 months, whichever results in more frequent sampling.

(5) If any of the requirements of this section are not met, in whole or in part, for any butane blended into gasoline, that butane is deemed in violation of the gasoline sulfur standards in § 80.195 or § 80.216, as applicable.

§ 80.350 What alternative sulfur standards and requirements apply to importers who transport gasoline by truck?

Importers who import gasoline into the United States by truck may comply with the following requirements instead of the requirements to sample and test every batch of gasoline under § 80.330, and the annual sulfur average and per-gallon cap standards otherwise applicable to importers under §§ 80.195 and 80.216:

(a) <u>Alternative standards</u>. The imported gasoline must comply with the standards in paragraphs (a)(1) or (a)(2) as follows:

(1)(i) The applicable average standards, corporate average standards and per-gallon standards under § 80.195(a)(1);

(ii) Except that imported gasoline that is designated for use in the geographic phase-in area from January 1, 2004 through December 31, 2006 must comply with an average standard of 150 and a per-gallon standard of 300 ppm; or

(2)(i) In 2004, a per-gallon standard of 120 ppm, and in 2005 and subsequent years a pergallon standard of 30 ppm;

(ii) Except that imported gasoline that is designated for use in the geographic phase-in area from January 1, 2004 through December 31, 2006 must comply with a per-gallon standard of

150 ppm.

(b) <u>Terminal testing</u>. The importer may use test results for sulfur content testing conducted by the terminal operator, for gasoline contained in the storage tank from which trucks used to transport gasoline into the United States are loaded, for purposes of demonstrating compliance with the standards in paragraph (a) of this section, provided the following conditions are met:

(1) The sampling and testing shall be performed after each receipt of gasoline into the storage tank, or immediately before each transfer of gasoline to the importer's truck.

(2) The sampling and testing shall be performed using the methods specified in§ 80.330(b) and 80.46(a)(1), respectively.

(3) At the time of each transfer of gasoline to the importer's truck for import to the U.S., the importer must obtain a copy of the terminal test result that indicates the sulfur content of the truck load.

(c) <u>Quality assurance program</u>. The importer must conduct a quality assurance program, as specified in this paragraph, for each truck loading terminal.

(1) Quality assurance samples must be obtained from the truck-loading terminal and tested by the importer, or by an independent laboratory, and the terminal operator must not know in advance when samples are to be collected.

(2) The sampling and testing must be performed using the methods specified in § 80.330(b) and 80.46(a)(1), respectively.

(3) The quality assurance test results for sulfur must differ from the terminal test result by

no more than the ASTM reproducibility of the terminal's test results, as determined by the following equation:

$$R = 105 \text{ x} ((S+2)/10^4)^{0.4}$$

Where:

R = ASTM reproducibility.

S = Sulfur content based on the terminal's test result.

(4) The frequency of the quality assurance sampling and testing must be at least one sample for each fifty of an importer's trucks that are loaded at a terminal, or one sample per month, whichever is more frequent.

(d) <u>Party required to conduct quality assurance testing</u>. The quality assurance program under paragraph (c) of this section shall be conducted by the importer. In the alternative, this testing may be conducted by an independent laboratory that meets the criteria under § 80.65(f)(2)(iii), provided the importer receives, no later than 21 days after the sample was taken, copies of all results of tests conducted.

(e) <u>Assignment of batch numbers</u>. The importer must treat each truck load of imported gasoline as a separate batch for purposes of assigning batch numbers and maintaining records under § 80.365, and reporting under § 80.370.

(f) <u>EPA inspections of terminals</u>. EPA inspectors or auditors, and auditors conducting attest engagements under § 80.415, 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 must be allowed to conduct inspections, review records, collect gasoline samples, and perform audits. These inspections or audits may be either announced or unannounced.

(g) <u>Certified Sulfur-FRGAS</u>. This section does not apply to Certified Sulfur-FRGAS.

(h) <u>Reporting Requirements</u>. Any importer who elects to comply with the alternative standards in paragraph (a) of this section shall comply with the following requirements:

(1) All importer recordkeeping and reporting requirements under §§ 80.365 and 80.370, except as provided in paragraph (h)(2) of this section.

(2) An importer who elects to comply with the alternative standards in paragraph (a)(2) of this section must certify in the annual report whether it is in compliance with the applicable pergallon batch standard set forth in paragraph (a)(2) of this section, in lieu of providing the information required by § 80.370(a) regarding annual average sulfur content and compliance with the average standard under § 80.195.

(i) <u>Effect of noncompliance</u>. If any of the requirements of this section are not met, all gasoline imported by the truck importer during the time any requirements are not met is deemed in violation of the gasoline sulfur average and per-gallon cap standards in §§ 80.195 or 80.216, as applicable. Additionally, if any requirement is not met, EPA may notify the importer of the violation and, if the requirement is not fulfilled within 10 days of notification, the truck importer may not in the future use the sampling and testing provisions in this section in lieu of the provisions in § 80.330.

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§ 80.360 [Reserved]

Recordkeeping and Reporting Requirements

§ 80.365 What records must be kept?

(a) <u>Records that must be kept</u>. Beginning January 1, 2004, any person who produces, imports, sells, offers for sale, dispenses, distributes, supplies, offers for supply, stores, or transports gasoline, shall keep records that contain the following information:

(1) The product transfer document information required under §§ 80.77, 80.106, 80.210 and 80.219;

(2) For any sampling and testing for sulfur content required under this subpart:

(i) The location, date, time and storage tank or truck identification for each sample collected;

(ii) The name and title of the person who collected the sample and the person who performed the test;

(iii) The results of the test as originally printed by the testing apparatus, or where no printed result is produced, the results as originally recorded by the person who performed the test; and (iv) Any record that contains a test result for the sample that is not identical to the result recorded under paragraph (a)(2)(iii) of this section.

(b) <u>Additional records that refiners and importers must keep</u>. Beginning January 1, 2004, or January 1 of the first year allotments or credits are generated under §§ 80.275 or 80.305, whichever is earlier, any refiner for each of its refineries, and any importer for the gasoline it imports, shall keep records that include the following information:

(1) For each batch of gasoline produced or imported:

(i) The batch volume;

(ii) The batch number assigned under § 80.65(d)(3) and the appropriate designation under paragraph (b)(1)(i) of this section; except that if composite samples of conventional gasoline representing multiple batches produced subsequent to December 31, 2003 are tested under § 80.101(i)(2) for anti-dumping compliance purposes, for purposes of this subpart a separate batch number must be assigned to each batch using the batch numbering procedures under § 80.65(d)(3);

(iii) The date of production or importation; and

(iv) If appropriate, the designation of the batch as GPA gasoline under § 80.219,California gasoline under § 80.375, exempt gasoline for research and development under § 80.380, or for export outside the United States.

(2) Information regarding credits and allotments, separately kept for credits and for allotments; separately kept according to the year of creation for the credits and for the allotments; and for credit generation or use starting in 2004, separately kept for GPA gasoline and other

gasoline. Information shall be kept separately for different types of allotments and credits generated under §§ 80.275(e)(1), 80.275(e)(2), 80.305 and 80.310:

(i) The number in the refiner's or importer's possession at the beginning of the averaging period;

(ii) The number generated;

(iii) The number of used,

(iv) If any were obtained from or transferred to other parties, for each other party its name, its EPA refiner or importer registration number, and the number obtained from, or transferred to, the other party;

(v) The number that expired at the end of the averaging period;

(vi) The number of allotments, by type, that were converted into credits under §80.275(e);

(vii) The number in the refiner's or importer's possession that will carry over into the subsequent averaging period; and

(viii) Contracts or other commercial documents that establish each transfer of credits and allotments from the transferor to the transferee.

(3) The calculations used to determine the applicable refiner baseline under § 80.250 or § 80.295.

(4) The calculations used to determine compliance with the applicable sulfur average standards of §§ 80.195, 80.216, 80.240, or 80.270.

(5) The calculations used to determine the number of credits or allotments generated

under §§ 80.305, 80.310 or 80.275.

(6) The calculations used to determine any applicable adjusted cap standard under § 80.195(d).

(7) A copy of all reports submitted to EPA under § 80.370.

(c) <u>Additional records importers must keep</u>. Any importer shall keep records that identify and verify the source of each batch of certified Sulfur-FRGAS and non-certified Sulfur-FRGAS imported and demonstrate compliance with the requirements for importers under § 80.410(o).

(d) <u>Length of time records must be kept</u>. The records required in this section shall be kept for five years from the date they were created; except that

(1) <u>Transfers of credits and allotments</u>. Records relating to credit and allotment transfers, except as provided in paragraph (d)(2) of this section, shall be kept by the transferor for 5 years from the date the credits or allotments are transferred, and shall be kept by the transferee for 5 years from the date the credits or allotments were transferred, used or terminated, whichever is later.

(2) <u>Early Credits</u>. (i) Where the party generating the credits does not transfer the credits, records must be kept for 5 years from the date of creation, use or termination whichever is later.

(ii) Where early credits are transferred, records relating to such credits shall be kept by both parties for 5 years from the date the credits were transferred, used or terminated, whichever is later.

(e) <u>Make records available to EPA</u>. On request by EPA the records required in paragraphs (a), (b) and (c) of this section shall be provided to the Administrator's authorized

representative. For records that are electronically generated or maintained the equipment and software necessary to read the records shall be made available, or if requested by EPA, electronic records shall be converted to paper documents which shall be provided to the Administrator's authorized representative.

§ 80.370 What are the sulfur reporting requirements?

Beginning with the 2004 averaging period, or the first year credits or allotments are generated under §§ 80.275 or 80.305, whichever is earlier, and continuing for each averaging period thereafter, any refiner or importer shall submit to EPA annual reports that contain the information required in this section, and such other information as EPA may require.

(a) <u>Refiner and importer annual reports</u>. Any refiner, for each of its refineries, and any importer for the gasoline it imports, shall submit a report for each calendar year averaging period that includes the following information, and in the case of a refiner or importer producing or importing both GPA gasoline and other gasoline, the information shall be separately reported:

(1) The EPA importer, or refiner and refinery facility registration numbers;

(2) The applicable baseline, average standard, and adjusted cap standard as follows:

(i) For the years 2000 through 2003, the applicable baseline under § 80.250 or § 80.295.

- (ii) For the 2004 averaging period and subsequent averaging periods:
- (A) All applicable average standards under §§ 80.195, 80.216, 80.240 or 80.270;
- (B) All applicable adjusted cap standards under § 80.195(d), with the 2005 report

identifying both the 2004 and 2005 applicable adjusted cap standards.

(3) The total volume of gasoline produced or imported;

(4) The annual average sulfur content of the gasoline produced or imported;

(5) The annual average sulfur level after inclusion of any credits and allotments;

(6) Information, separately provided, for credits and allotments, and separately by year of creation, as follows:

(i) The number of credits and allotments at the beginning of the averaging period;

(ii) The number of credits and allotments generated;

(iii) The number of credits and allotments used;

(iv) If any credits or allotments were obtained from or transferred to other parties, for each other party its name and EPA refiner or importer registration number, and the number of credits or allotments obtained from or transferred to the other party ;

(v) The number of credits and allotments that expired at the end of the averaging period;

(vi) The number of credits and allotments that will carry over into the subsequent averaging period; and

(vii) The number of each type of allotments converted to credits;

(7) For each batch of gasoline produced or imported during the averaging period:

(i) The batch number assigned under § 80.65(d)(3) and the appropriate designation under § 80.365; except that if composite samples of conventional gasoline representing multiple batches produced subsequent to December 31, 2003, are tested under § 80.101(i)(2) for anti-dumping compliance purposes, for purposes of this subpart a separate batch number must be assigned to each batch using the batch numbering procedures under 80.65(d)(3);

(ii) The date the batch was produced;

(iii) The volume of the batch; and

(iv) The sulfur content of the batch as determined under § 80.330; and

(8) When submitting reports under this paragraph (a) of this section, any importer shall exclude certified Sulfur-FRGAS.

(b) <u>Additional reporting requirements for importers</u>. Any importer shall report the following information for Sulfur-FRGAS imported during the averaging period:

(1) The EPA refiner and refinery registration numbers of each foreign refiner and refinery where the certified Sulfur-FRGAS was produced; and

(2) The total gallons of certified Sulfur-FRGAS and non-certified Sulfur-FRGAS imported from each foreign refiner and refinery.

(c) <u>Corporate pool average reports</u>. (1) Annual reports filed under this section for the 2004 and 2005 averaging periods must include the party's corporate pool average as determined under § 80.205.

(2) If the party submitting the annual report under paragraph (c)(1) is a refiner with more than one refinery or is a refiner who also imports gasoline, then for the purposes of this paragraph, the party shall report the information required for individual refineries and for importers under paragraph (a) of this section, also in the aggregate for all the gasoline produced and imported during the calendar year.

(3) Refiners and importers exempted from corporate pool standards under §§ 80.216 or

80.240 are exempt from reporting the information required under paragraphs (c)(1) and (c)(2) of this section.

(d) <u>Report submission</u>. Any annual report required under this section shall be:

(1) Signed and certified as meeting all of the applicable requirements of this subpart by the owner or a responsible corporate officer of the refiner or importer; and

(2) Submitted to EPA no later than the last day of February for the prior calendar year averaging period.

(f) <u>Attest Reports</u>. Attest reports for refiner and importer attest engagements required under § 80.415 shall be submitted to the Administrator by May 31 of each year for the prior calendar year averaging period.

§ 80.371 [Reserved]

§ 80.372 [Reserved]

§ 80.373 [Reserved]

Exemptions

§ 80.374 What if a refiner or importer is unable to produce gasoline conforming to the requirements of this subpart?

In appropriate extreme and unusual circumstances (*e.g.*, natural disaster or Act of God) which are clearly outside the control of the refiner or importer and which could not have been avoided by the exercise of prudence, diligence, and due care, EPA may permit a refiner or importer, for a brief period, to distribute gasoline which does not meet the requirements of this subpart provided the refiner or importer meets all the criteria, requirements and conditions contained in § 80.73 (a) through (e).

§ 80.375 What requirements apply to California gasoline?

(a) <u>Definition</u>. For purposes of this subpart "California gasoline" means any gasoline designated by the refiner as for use in California.

(b) <u>California gasoline exemption</u>. California gasoline that complies with all the requirements of this section is exempt from all other provisions of this subpart.

(c) <u>Requirements for California gasoline</u>. (1) Each batch of California gasoline must be designated as such by its refiner or importer;

(2) Designated California gasoline must be kept segregated from gasoline that is not California gasoline, at all points in the distribution system;

(3) Designated California gasoline must ultimately be used in the State of California and not used elsewhere;

(4) In the case of California gasoline produced outside the State of California, the transferors and transferees must meet the product transfer document requirements under

§ 80.81(g); and

(5) Gasoline that is ultimately used in any part of the United States outside of the State of California must comply with the standards and requirements of this subpart, regardless of any designation as California gasoline.

(d) <u>Use of California test methods and off site sampling procedures</u>. In the case of any gasoline that is not California gasoline and that is either produced at a refinery located in the State of California or is imported from outside the United States into the State of California, the refiner or importer may, with regard to such gasoline:

(1) Use the sampling and testing methods approved in Title 13 of the California Code of Regulations instead of the sampling and testing methods required under § 80.330; and

(2) Determine the sulfur content of gasoline at off site tankage as permitted in § 80.81(h)(2).

§ 80.380 What are the requirements for obtaining an exemption for gasoline used for research, development or testing purposes?

Any person may request an exemption from the provisions of this subpart for gasoline used for research, development or testing ("R&D") purposes by submitting to EPA an application that includes all the information listed in paragraph (b) of this section.

(a) <u>Criteria for an R&D exemption</u>. For an R&D exemption to be granted, the proposed test program must:

(1) Have a purpose that constitutes an appropriate basis for exemption;

(2) Necessitate the granting of an exemption;

(3) Be reasonable in scope; and

(4) Have a degree of control consistent with the purpose of the program and EPA's monitoring requirements.

(b) <u>Information required to be submitted</u>. To demonstrate each of the four elements in paragraphs (a)(1) through (4) of this section, the application required under this section must include the following information:

(1) A statement of the purpose of the program demonstrating that the program has an appropriate R&D purpose.

(2) An explanation of why the stated purpose of the program cannot be achieved in a practicable manner without performing one or more of the prohibited acts under § 80.385.

(3) To demonstrate the reasonableness of the scope of the program:

(i) An estimate of the program's beginning and ending dates;

(ii) An estimate of the maximum number of vehicles and engines involved in the program, and the number of miles and engine hours that will be accumulated on each;

(iii) The sulfur content of the gasoline expected to be used in the program; and

(iv) The quantity of gasoline that exceeds the applicable sulfur standard that is expected to be used in the program.

(4) With regard to control, a demonstration that the program affords EPA a monitoring capability, including at a minimum:

(i) A description of the technical and operational aspects of the program;

(ii) The site(s) of the program (including street address, city, county, State, and zip code);

(iii) The manner in which information on vehicles and engines used in the program will be recorded and made available to EPA;

(iv) The manner in which results of the program will be recorded and made available to EPA;

(v) The manner in which information on the gasoline used in the program (including quantity, sulfur content, name, address, telephone number and contact person of the supplier, and the date received from the supplier), will be recorded and made available to EPA;

(vi) The manner in which distribution pumps will be labeled to insure proper use of the gasoline where appropriate;

(vii) The name, address, telephone number and title of the person(s) in the organization requesting an exemption from whom further information on the application may be obtained; and

(viii) The name, address, telephone number and title of the person(s) in the organization requesting an exemption who is responsible for recording and making available the information specified in paragraphs (b)(4)(iii), (iv) and (v) of this section, and the location in which such information will be maintained.

(c) <u>Additional requirements</u>. (1) The product transfer documents associated with R&D gasoline must identify the gasoline as such, and must state that the gasoline is to be used only for research, development, or testing purposes.

(2) The R&D gasoline must be designated by the refiner or importer as exempt R & D

gasoline.

(3) The R & D gasoline must be kept segregated from non-exempt gasoline at all points in the distribution system of the gasoline.

(4) The R&D gasoline must not be sold, distributed, offered for sale or distribution, dispensed, supplied, offered for supply, transported to or from, or stored by a gasoline retail outlet, or by a wholesale purchaser-consumer facility, unless the wholesale purchaser-consumer facility is associated with the R&D program that uses the gasoline.

(d) <u>Memorandum of exemption</u>. The Administrator will grant an R&D exemption upon a demonstration that the requirements of this section have been met. The R&D exemption will be granted in the form of a memorandum of exemption signed by the applicant and the Administrator (or delegate), which may include such terms and conditions as the Administrator determines necessary to monitor the exemption and to carry out the purposes of this section, including restoration of motor vehicle emissions control systems. Any violation of such a term or condition of the exemption or any requirement under this section will cause the exemption to be void ab initio.

(e) <u>Effects of exemption</u>. Gasoline that is subject to an R&D exemption under this section is exempt from other provisions of this subpart provided that the gasoline is used in a manner that complies with the memorandum of exemption granted under paragraph (d) of this section.

Violation Provisions

§ 80.385 What acts are prohibited under the gasoline sulfur program?

No person shall:

(a) <u>Averaging violation</u>. Produce or import gasoline that does not comply with the applicable sulfur average standard under § 80.195, § 80.216 or § 80.240.

(b) <u>Cap standard violation</u>. Produce, import, sell, offer for sale, dispense, supply, offer for supply, store or transport gasoline that does not comply with the applicable sulfur cap standard under § 80.195, § 80.216, § 80.210, § 80.220 or § 80.240.

(c) <u>Causing an averaging, cap standard, or geographic phase-in area (GPA) use violation</u>. Cause another person to commit an act in violation of paragraph (a), (b), or (f) of this section.

(d) <u>Causing violating gasoline to be in the distribution system</u>. Cause gasoline to be in the distribution system which does not comply with an applicable sulfur cap standard under § 80.195, § 80.210, § 80.216, § 80.220 or § 80.240; a sulfur average standard under § 80.195, § 80.216 or § 80.240; or a GPA use prohibition under § 80.219(c).

(e) <u>Denatured ethanol violation</u>. Blend into gasoline denatured ethanol with a sulfur content higher than 30 ppm.

(f) <u>GPA use violation</u>. Produce, import, sell, offer for sale, dispense, supply, offer for supply, store or transport gasoline that does not comply with a GPA use prohibition under § 80.219(c).

§ 80.390 What evidence may be used to determine compliance with the prohibitions and

requirements of this subpart and liability for violations of this subpart?

(a) Compliance with the sulfur standards of this subpart shall be determined based on the sulfur level of the gasoline, measured using the methodologies specified in §§ 80.330(b) and 80.46(a). Any evidence or information, including the exclusive use of such evidence or information, may be used to establish the sulfur level of gasoline if the evidence or information is relevant to whether the sulfur level of gasoline would have been in compliance with the standards if the appropriate sampling and testing methodology had been correctly performed. Such evidence may be obtained from any source or location and may include, but is not limited to, test results using methods other than those specified in §§ 80.330(b) and 80.46(a), business records, and commercial documents.

(b) Determinations of compliance with the requirements of this subpart other than the sulfur standards, and determinations of liability for any violation of this subpart, may be based on information obtained from any source or location. Such information may include, but is not limited to, business records and commercial documents.

§ 80.395 Who is liable for violations under the gasoline sulfur program?

(a) <u>Persons liable for violations of prohibited acts</u>. (1) <u>Averaging violation</u>. Any refiner or importer who violates § 80.385(a) is liable for the violation.

(2) Causing an averaging violation. Any refiner, importer, distributor, reseller, carrier,

retailer, wholesale purchaser-consumer, or oxygenate blender who causes another party to violate § 80.385(a), is liable for a violation of § 80.385(c).

(3) <u>Cap standard violation</u>. Any refiner, importer, distributor, reseller, carrier, retailer, wholesale purchaser-consumer, or oxygenate blender who owned, leased, operated, controlled or supervised a facility where a violation of § 80.385 (b) occurred, is deemed in violation of § 80.385(b).

(4) <u>Causing a cap standard violation</u>. Any refiner, importer, distributor, reseller, carrier, retailer, wholesale purchaser-consumer, or oxygenate blender who produced, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation or storage of gasoline that violates § 80.385(b), is deemed in violation of § 80.385(c).

(5) <u>GPA use violation</u>. Any refiner, importer, distributor, reseller, carrier, retailer, wholesale purchaser-consumer, or oxygenate blender who produced, imported, sold, offered for sale, dispensed, supplied, offer for supply, stored, transported, or caused the transportation or storage of gasoline that violates § 80.385(f), is deemed in violation of § 80.385(f).

(6) <u>Causing a GPA use violation</u>. Any refiner, importer, distributor, reseller, carrier, retailer, wholesale purchaser-consumer, or oxygenate blender who causes another party to violate § 80.385(f), is deemed liable for a violation of § 80.385(c).

(7) <u>Branded refiner/importer liability</u>. Any refiner or importer whose corporate, trade, or brand name, or whose marketing subsidiary's corporate, trade, or brand name appeared at a facility where a violation of § 80.385(b) or (f) occurred, is deemed in violation of § 80.385(b) or

(f), as applicable.

(8) <u>Causing violating gasoline to be in the distribution system</u>. Any refiner, importer, distributor, reseller, carrier, or oxygenate blender, who owned, leased, operated, controlled or supervised a facility from which gasoline was released into the distribution system which does not comply with an applicable sulfur cap standard, a sulfur averaging standard, or a GPA use prohibition, is deemed in violation of § 80.385(d).

(9) <u>Carrier causation</u>. In order for a carrier to be liable under paragraphs (a)(2), (4), (6), or (8) of this section, EPA must demonstrate, by reasonably specific showing by direct or circumstantial evidence, that the carrier caused the violation.

(10) <u>Denatured ethanol violation</u>. Any oxygenate blender who violates § 80.385(e) is liable for the violation.

(11) <u>Parent corporation liability</u>. Any parent corporation is liable for any violations of this subpart that are committed by any of its wholly-owned subsidiaries.

(12) <u>Joint venture liability</u>. Each partner to a joint venture is jointly and severally liable for any violation of this subpart that occurs at the joint venture facility or is committed by the joint venture operation.

(b) <u>Persons liable for failure to meet other provisions of this subpart</u>. (1) Any refiner, importer, distributor, reseller, carrier, wholesale purchaser-consumer, retailer, or oxygenate blender who fails to meet a provision of this subpart not addressed in paragraph (a) of this section is liable for a violation of that provision.

(2) Any refiner, importer, distributor, reseller, carrier, wholesale purchaser-consumer,

retailer, or oxygenate blender who caused another person to fail to meet a requirement of this subpart not addressed in subsection (a) of this section, is liable for causing a violation of that provision.

§ 80.400 What defenses apply to persons deemed liable for a violation of a prohibited act?

(a) Any person deemed liable for a violation of a prohibition under § 80.395 (a)(3)through (8), will not be deemed in violation if the person demonstrates that:

(1) The violation was not caused by the person or the person's employee or agent; and

(2) The person conducted a quality assurance sampling and testing program, as described in paragraph (d) of this section. A carrier may rely on the quality assurance program carried out by another party, including the party who owns the gasoline in question, provided that the quality assurance program is carried out properly. Retailers and wholesale purchaser-consumers are not required to conduct quality assurance programs.

(b) In the case of a violation found at a facility operating under the corporate, trade or brand name of a refiner or importer, or a refiner's or importer's marketing subsidiary, the refiner or importer must show, in addition to the defense elements required under paragraphs (a)(1) and (2) of this section, that the violation was caused by:

(1) An act in violation of law (other than the Clean Air Act or this Part 80), or an act of sabotage or vandalism;

(2) The action of any refiner, importer, retailer, distributor, reseller, oxygenate blender,

carrier, retailer or wholesale purchaser-consumer in violation of a contractual agreement between the branded refiner or importer and the person designed to prevent such action, and despite periodic sampling and testing by the branded refiner or importer to ensure compliance with such contractual obligation; or

(3) The action of any carrier or other distributor not subject to a contract with the refiner or importer, but engaged for transportation of gasoline, despite specifications or inspections of procedures and equipment which are reasonably calculated to prevent such action.

(c) Under paragraph (a) of this section for any person to show that a violation was not caused by that person, or under paragraph (b) of this section to show that a violation was caused by any of the specified actions, the person must demonstrate by reasonably specific showing, by direct or circumstantial evidence, that the violation was caused or must have been caused by another person and that the person asserting the defense did not contribute to that other person's causation.

(d) <u>Quality assurance and testing program</u>. To demonstrate an acceptable quality assurance and testing program under paragraph (a)(2) of this section, a person must present evidence of the following:

(1) A periodic sampling and testing program to ensure the gasoline the person sold, dispensed, supplied, stored, or transported, meets the applicable sulfur standard; and

(2) On each occasion when gasoline is found not in compliance with the applicable sulfur standard:

(i) The person immediately ceases selling, offering for sale, dispensing, supplying, offering

for supply, storing or transporting the non-complying product; and

(ii) The person promptly remedies the violation and the factors that caused the violation (for example, by removing the non-complying product from the distribution system until the applicable standard is achieved and taking steps to prevent future violations of a similar nature from occurring).

(3) For any carrier who transports gasoline in a tank truck, the quality assurance program required under this paragraph (d) need not include periodic sampling and testing of gasoline in the tank truck, but in lieu of such tank truck sampling and testing, the carrier shall demonstrate evidence of an oversight program for monitoring compliance with the requirements of this subpart relating to the transport or storage of gasoline by tank truck, such as appropriate guidance to drivers regarding compliance with the applicable sulfur standard and product transfer document requirements, and the periodic review of records received in the ordinary course of business concerning gasoline quality and delivery.

§ 80.405 What penalties apply under this subpart?

(a) Any person liable for a violation under § 80.395 is subject to civil penalties as specified in section 205 of the Clean Air Act for every day of each such violation and the amount of economic benefit or savings resulting from each violation.

(b) Any person liable under § 80.395(a)(1) or (2) for a violation of the applicable sulfur averaging standard or causing another party to violate that standard during any averaging period,

is subject to a separate day of violation for each and every day in the averaging period. Any person liable under § 80.395(b) for a failure to fulfill any requirement for credit or allotment generation, transfer, use, banking, or deficit correction, is subject to a separate day of violation for each and every day in the averaging period in which invalid credits or allotments are generated or used.

(c)(1)Any person liable under § 80.395(a)(3), (4), (5), or (6) for a violation of an applicable sulfur per gallon cap standard under § 80.195, § 80.210, § 80.216, § 80.220 or § 80.240; a GPA use prohibition under § 80.219(c); or of causing another party to violate a cap standard or a GPA use prohibition, is subject to a separate day of violation for each and every day the non-complying gasoline remains any place in the gasoline distribution system.

(2) Any person liable under § 80.395(a)(8) for causing gasoline to be in the distribution system which does not comply with an applicable sulfur cap standard, a sulfur averaging standard, or a GPA use prohibition, is subject to a separate day of violation for each and every day that the non-complying gasoline remains any place in the gasoline distribution system.

(3) For purposes of paragraph (c) of this section, the length of time the gasoline in question remained in the gasoline distribution system is deemed to be twenty-five days, unless a person subject to liability or EPA demonstrates by reasonably specific showings, by direct or circumstantial evidence, that the non-complying gasoline remained in the gasoline distribution system for fewer than or more than twenty-five days.

(d) Any person liable under § 80.395(b) for failure to meet, or causing a failure to meet, a provision of this subpart is liable for a separate day of violation for each and every day such

provision remains unfulfilled.

Provisions for Foreign Refiners with Individual Sulfur Baselines

§ 80.410 What are the additional requirements for gasoline produced at foreign refineries having individual small refiner sulfur baselines, foreign refineries granted temporary relief under § 80.270, or baselines for generating credits during 2000 through 2003?

(a) <u>Definitions</u>. (1) A foreign refinery is a refinery that is located outside the United States, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (collectively referred to in this section as "the United States").

(2) A foreign refiner is a person who meets the definition of refiner under § 80.2(i) for a foreign refinery.

(3) A small foreign refiner is a refiner that meets the definition of a small refiner under § 80.225.

(4) "Sulfur-FRGAS" means gasoline produced at a foreign refinery that has been assigned an individual refinery sulfur baseline under §§ 80.250 or 80.295, or has been granted temporary relief under § 80.270, and that is imported into the United States.

(5) "Non-Sulfur-FRGAS" means gasoline that is produced at a foreign refinery that has not been assigned an individual refinery sulfur baseline, gasoline produced at a foreign refinery with an individual refinery sulfur baseline that is not imported into the United States, and gasoline produced at a foreign refinery with an individual sulfur baseline during a year when the foreign refiner has opted to not participate in the Sulfur-FRGAS program under paragraph (c)(3) of this section.

(6) "Certified Sulfur-FRGAS" means Sulfur-FRGAS the foreign refiner intends to include in the foreign refinery's sulfur compliance calculations under § 80.205 pursuant to § 80.240 or § 80.270 or credit calculations under §§ 80.305 or 80.310 and allotment calculations under § 80.275(a), and does include in these compliance calculations when reported to EPA.

(7) "Non-Certified Sulfur-FRGAS" means Sulfur-FRGAS that is not Certified Sulfur-FRGAS.

(b) <u>Baseline establishment</u>. Any foreign refiner who does not have an approved refinery baseline under § 80.94 may submit a petition to the Administrator for an individual refinery sulfur baseline pursuant to §§ 80.245 and § 80.250, a baseline for generating credits or allotments under §§ 80.290 and 80.295, or a baseline for temporary refinery relief under §§ 80.270 and 80.295.

(1) The refiner shall follow the procedures specified in §§ 80.91 through 80.93 to establish the volume and sulfur content of gasoline that was produced at the foreign refinery and imported into the United States during 1997 and 1998 for purposes of establishing baselines under §§ 80.250 or 80.295.

(2) In making determinations for foreign refinery baselines EPA will consider all information supplied by a foreign refiner, and in addition may rely on any and all appropriate assumptions necessary to make such determinations.

(3) Where a foreign refiner submits a petition that is incomplete or inadequate to establish an accurate baseline, and the refiner fails to cure this defect after a request for more information, EPA will not assign an individual refinery sulfur baseline.

(c) <u>General requirements for foreign refiners with individual refinery sulfur baselines</u>. A foreign refiner of a refinery that has been assigned an individual sulfur baseline under § 80.250 or § 80.295 must designate all gasoline produced at the foreign refinery that is exported to the United States as either Certified Sulfur-FRGAS or as Non-Certified Sulfur-FRGAS, except as provided in paragraph (c)(3) of this section.

(1) In the case of Certified Sulfur-FRGAS, the foreign refiner must meet all provisions that apply to refiners under this subpart H.

(2) In the case of Non-Certified Sulfur-FRGAS, the foreign refiner shall meet all the following provisions, except the foreign refiner shall substitute the name Non-Certified Sulfur-FRGAS for the names "reformulated gasoline" or "RBOB" wherever they appear in the following provisions:

(i) The designation requirements in this section.

(ii) The recordkeeping requirements under § 80.365.

(iii) The reporting requirements in § 80.370 and this section.

(iv) The product transfer document requirements in this section.

(vi) The prohibitions in this section and § 80.385.

(vii) The independent audit requirements under § 80.415, paragraph (h) of this section, §§ 80.125 through 80.127, § 80.128(a),(b),(c),(g) through (i), and § 80.130.

(3)(i) Any foreign refiner that generates sulfur credits under § 80.305 during the period 2000 through 2003, or allotments under § 80.275(a) during 2003, and any small refiner generating credits under § 80.310, shall designate all Sulfur-FRGAS as Certified Sulfur-FRGAS for any year that such credits are generated.

(ii) Any foreign refiner that has been assigned an individual sulfur baseline for a foreign refinery under §§ 80.250 or 80.295 may elect to classify no gasoline imported into the United States as Sulfur-FRGAS, provided the foreign refiner notifies EPA of the election no later than November 1 of the prior calendar year.

(iii) An election under paragraph (c)(3)(ii) of this section shall:

(A) Apply to an entire calendar year averaging period, and apply to all gasoline produced during the calendar year at the foreign refinery that is used in the United States; and

(B) Remain in effect for each succeeding calendar year averaging period, unless and until the foreign refiner notifies EPA of a termination of the election. The change in election shall take effect at the beginning of the next calendar year.

(d) <u>Designation</u>, product transfer documents, and foreign refiner certification</u>. (1) Any foreign refiner of a foreign refinery that has been assigned an individual sulfur baseline must designate each batch of Sulfur-FRGAS as such at the time the gasoline is produced, unless the refiner has elected to classify no gasoline exported to the United States as Sulfur-FRGAS under paragraph (c)(3)(i) of this section.

(2) On each occasion when any person transfers custody or title to any Sulfur-FRGAS prior to its being imported into the United States, it must include the following information as part

of the product transfer document information in this section:

(i) Identification of the gasoline as Certified Sulfur-FRGAS or as Non-Certified Sulfur-FRGAS; and

(ii) The name and EPA refinery registration number of the refinery where the Sulfur-FRGAS was produced.

(3) On each occasion when Sulfur-FRGAS is loaded onto a vessel or other transportation mode for transport to the United States, the foreign refiner shall prepare a certification for each batch of the Sulfur-FRGAS that meets the following requirements.

(i) The certification shall include the report of the independent third party under paragraph(f) of this section, and the following additional information:

(A) The name and EPA registration number of the refinery that produced the Sulfur-FRGAS;

(B) The identification of the gasoline as Certified Sulfur-FRGAS or Non-Certified Sulfur-FRGAS;

(C) The volume of Sulfur-FRGAS being transported, in gallons;

(D) In the case of Certified Sulfur-FRGAS:

(1) The sulfur content as determined under paragraph (f) of this section; and

(2) A declaration that the Sulfur-FRGAS is being included in the compliance calculations under § 80.205 or credit calculations under § 80.305 or allotments under § 80.275(a) for the refinery that produced the Sulfur-FRGAS.

(ii) The certification shall be made part of the product transfer documents for the Sulfur-

FRGAS.

(e) <u>Transfers of Sulfur-FRGAS to non-United States markets</u>. The foreign refiner is responsible to ensure that all gasoline classified as Sulfur-FRGAS is imported into the United States. A foreign refiner may remove the Sulfur-FRGAS classification, and the gasoline need not be imported into the United States, but only if:

(1)(i) The foreign refiner excludes:

(A) The volume of gasoline from the refinery's compliance calculations under § 80.205; and

(B) In the case of Certified Sulfur-FRGAS, the volume and sulfur content of the gasoline from the compliance calculations under § 80.205 or credit calculations under § 80.305.

(ii) The exclusions under paragraph (e)(1)(i) of this section shall be on the basis of the sulfur content and volumes determined under paragraph (f) of this section; and

(2) The foreign refiner obtains sufficient evidence in the form of documentation that the gasoline was not imported into the United States.

(f) <u>Load port independent sampling, testing and refinery identification</u>. (1) On each occasion Sulfur-FRGAS is loaded onto a vessel for transport to the United States a foreign refiner shall have an independent third party:

(i) Inspect the vessel prior to loading and determine the volume of any tank bottoms;

(ii) Determine the volume of Sulfur-FRGAS loaded onto the vessel (exclusive of any tank bottoms present before vessel loading);

(iii) Obtain the EPA-assigned registration number of the foreign refinery;

(iv) Determine the name and country of registration of the vessel used to transport the Sulfur-FRGAS to the United States; and

(v) Determine the date and time the vessel departs the port serving the foreign refinery.

(2) On each occasion Certified Sulfur-FRGAS is loaded onto a vessel for transport to the United States a foreign refiner shall have an independent third party:

(i) Collect a representative sample of the Certified Sulfur-FRGAS from each vessel compartment subsequent to loading on the vessel and prior to departure of the vessel from the port serving the foreign refinery;

(ii) Prepare a volume-weighted vessel composite sample from the compartment samples, and determine the value for sulfur using the methodology specified in § 80.330 by:

(A) The third party analyzing the sample; or

(B) The third party observing the foreign refiner analyze the sample;

(iii) Review original documents that reflect movement and storage of the certified Sulfur-

FRGAS from the refinery to the load port, and from this review determine:

(A) The refinery at which the Sulfur-FRGAS was produced; and

(B) That the Sulfur-FRGAS remained segregated from:

(1) Non-Sulfur-FRGAS and Non-Certified Sulfur-FRGAS; and

(2) Other Certified Sulfur-FRGAS produced at a different refinery;

(3) The independent third party shall submit a report:

(i) To the foreign refiner containing the information required under paragraphs (f)(1) and

(2) of this section, to accompany the product transfer documents for the vessel; and

(ii) To the Administrator containing the information required under paragraphs (f)(1) and (2) of this section, within thirty days following the date of the independent third party's inspection. This report shall include a description of the method used to determine the identity of the refinery at which the gasoline was produced, assurance that the gasoline remained segregated as specified in paragraph (n)(1) of this section, and a description of the gasoline's movement and storage between production at the source refinery and vessel loading.

(4) The independent third party must:

(i) Be approved in advance by EPA, based on a demonstration of ability to perform the procedures required in this paragraph (f);

(ii) Be independent under the criteria specified in § 80.65(e)(2)(iii); and

(iii) Sign a commitment that contains the provisions specified in paragraph (i) of this section with regard to activities, facilities and documents relevant to compliance with the requirements of this paragraph (f).

(g) <u>Comparison of load port and port of entry testing</u>. (1)(i) Any foreign refiner and any United States importer of Certified Sulfur-FRGAS shall compare the results from the load port testing under paragraph (f) of this section, with the port of entry testing as reported under paragraph (o) of this section, for the volume of gasoline and the sulfur value; except that

(ii) Where a vessel transporting Certified Sulfur-FRGAS off loads this gasoline at more than one United States port of entry, and the conditions of paragraph (g)(2)(i) of this section are met at the first United States port of entry, the requirements of paragraph (g)(2) of this section do not apply at subsequent ports of entry if the United States importer obtains a certification from the vessel owner, that meets the requirements of paragraph (s) of this section, that the vessel has not loaded any gasoline or blendstock between the first United States port of entry and the subsequent port of entry.

(2)(i) The requirements of this paragraph (g)(2) apply if:

(A) The temperature-corrected volumes determined at the port of entry and at the load port differ by more than one percent; or

(B) The sulfur value determined at the port of entry is higher than the sulfur value determined at the load port, and the amount of this difference is greater than the reproducibility amount specified for the port of entry test result by the American Society of Testing and Materials (ASTM).

(ii) The United States importer and the foreign refiner shall treat the gasoline as Non-Certified Sulfur-FRGAS, and the foreign refiner shall exclude the gasoline volume and properties from its gasoline sulfur compliance calculations under § 80.205.

(h) <u>Attest requirements</u>. The following additional procedures shall be carried out by any foreign refiner of Sulfur-FRGAS as part of the applicable attest engagement for each foreign refinery under § 80.415.

(1) The inventory reconciliation analysis under § 80.128(b) and the tender analysis under
§ 80.128(c) shall include Non-Sulfur-FRGAS in addition to the gasoline types listed in
§ 80.128(b) and (c).

(2) Obtain separate listings of all tenders of Certified Sulfur-FRGAS, and of Non-Certified Sulfur-FRGAS. Agree the total volume of tenders from the listings to the gasoline inventory

reconciliation analysis in § 80.128(b), and to the volumes determined by the third party under paragraph (f)(1) of this section.

(3) For each tender under paragraph (h)(2) of this section where the gasoline is loaded onto a marine vessel, report as a finding the name and country of registration of each vessel, and the volumes of Sulfur-FRGAS loaded onto each vessel.

(4) Select a sample from the list of vessels identified in paragraph (h)(3) of this section used to transport Certified Sulfur-FRGAS, in accordance with the guidelines in § 80.127, and for each vessel selected perform the following:

(i) Obtain the report of the independent third party, under paragraph (f) of this section, and of the United States importer under paragraph (o) of this section.

(A) Agree the information in these reports with regard to vessel identification, gasoline volumes and test results.

(B) Identify, and report as a finding, each occasion the load port and port of entry parameter and volume results differ by more than the amounts allowed in paragraph (g) of this section, and determine whether the foreign refiner adjusted its refinery calculations as required in paragraph (g) of this section.

(ii) Obtain the documents used by the independent third party to determine transportation and storage of the Certified Sulfur-FRGAS from the refinery to the load port, under paragraph (f) of this section. Obtain tank activity records for any storage tank where the Certified Sulfur-FRGAS is stored, and pipeline activity records for any pipeline used to transport the Certified Sulfur-FRGAS, prior to being loaded onto the vessel. Use these records to determine whether the Certified Sulfur-FRGAS was produced at the refinery that is the subject of the attest engagement, and whether the Certified Sulfur-FRGAS was mixed with any Non-Certified Sulfur-FRGAS, Non-Sulfur-FRGAS, or any Certified Sulfur-FRGAS produced at a different refinery.

(5)(i) Select a sample from the list of vessels identified in paragraph (h)(3) of this section used to transport certified and Non-Certified Sulfur-FRGAS, in accordance with the guidelines in § 80.127, and for each vessel selected perform the following:

(ii) Obtain a commercial document of general circulation that lists vessel arrivals and departures, and that includes the port and date of departure of the vessel, and the port of entry and date of arrival of the vessel. Agree the vessel's departure and arrival locations and dates from the independent third party and United States importer reports to the information contained in the commercial document.

(6) Obtain separate listings of all tenders of Non-Sulfur-FRGAS, and perform the following:

(i) Agree the total volume of tenders from the listings to the gasoline inventory reconciliation analysis in § 80.128(b).

(ii) Obtain a separate listing of the tenders under paragraph (h)(6) of this section where the gasoline is loaded onto a marine vessel. Select a sample from this listing in accordance with the guidelines in § 80.127, and obtain a commercial document of general circulation that lists vessel arrivals and departures, and that includes the port and date of departure and the ports and dates where the gasoline was off loaded for the selected vessels. Determine and report as a finding the country where the gasoline was off loaded for each vessel selected. (7) In order to complete the requirements of this paragraph (h) an auditor shall:

(i) Be independent of the foreign refiner;

(ii) Be licensed as a Certified Public Accountant in the United States and a citizen of the United States, or be approved in advance by EPA based on a demonstration of ability to perform the procedures required in § 80.125 through 130 and this paragraph (h); and

(iii) Sign a commitment that contains the provisions specified in paragraph (i) of this section with regard to activities and documents relevant to compliance with the requirements of \$\$ 80.125 through 80.130, \$ 80.415 and this paragraph (h).

(i) <u>Foreign refiner commitments</u>. Any foreign refiner shall commit to and comply with the provisions contained in this paragraph (i) as a condition to being assigned an individual refinery sulfur baseline.

(1) Any United States Environmental Protection Agency inspector or auditor will be given full, complete and immediate access to conduct inspections and audits of the foreign refinery.

(i) Inspections and audits may be either announced in advance by EPA, or unannounced.

(ii) Access will be provided to any location where:

(A) Gasoline is produced;

(B) Documents related to refinery operations are kept;

(C) Gasoline or blendstock samples are tested or stored; and

(D) Sulfur-FRGAS is stored or transported between the foreign refinery and the United States, including storage tanks, vessels and pipelines.

(iii) Inspections and audits may be by EPA employees or contractors to EPA.

(iv) Any documents requested that are related to matters covered by inspections and audits will be provided to an EPA inspector or auditor on request.

(v) Inspections and audits by EPA may include review and copying of any documents related to:

(A) Refinery baseline establishment, including the volume and sulfur content, and transfers of title or custody, of any gasoline or blendstocks, whether Sulfur-FRGAS or Non-Sulfur-FRGAS, produced at the foreign refinery during the period January 1, 1997 through the date of the refinery baseline petition or through the date of the inspection or audit if a baseline petition has not been approved, and any work papers related to refinery baseline establishment;

(B) The volume and sulfur content of Sulfur-FRGAS;

(C) The proper classification of gasoline as being Sulfur-FRGAS or as not being Sulfur-FRGAS, or as Certified Sulfur-FRGAS or as Non-Certified Sulfur-FRGAS;

(D) Transfers of title or custody to Sulfur-FRGAS;

(E) Sampling and testing of Sulfur-FRGAS;

(F) Work performed and reports prepared by independent third parties and by independent auditors under the requirements of this section and § 80.415 including work papers; and

(G) Reports prepared for submission to EPA, and any work papers related to such reports.

(vi) Inspections and audits by EPA may include taking samples of gasoline or blendstock, and interviewing employees.

(vii) Any employee of the foreign refiner will be made available for interview by the EPA

inspector or auditor, on request, within a reasonable time period.

(viii) English language translations of any documents will be provided to an EPA inspector or auditor, on request, within 10 working days.

(ix) English language interpreters will be provided to accompany EPA inspectors and auditors, on request.

(2) An agent for service of process located in the District of Columbia will be named, and service on this agent constitutes service on the foreign refiner or any employee of the foreign refiner for any action by EPA or otherwise by the United States related to the requirements of this subpart H.

(3) The forum for any civil or criminal enforcement action related to the provisions of this section for violations of the Clean Air Act or regulations promulgated thereunder shall be governed by the Clean Air Act, including the EPA administrative forum where allowed under the Clean Air Act.

(4) United States substantive and procedural laws shall apply to any civil or criminal enforcement action against the foreign refiner or any employee of the foreign refiner related to the provisions of this section.

(5) Submitting a petition for an individual refinery sulfur baseline, producing and exporting gasoline under an individual refinery sulfur baseline, and all other actions to comply with the requirements of this subpart H relating to the establishment and use of an individual refinery sulfur baseline constitute actions or activities that satisfy the provisions of 28 U.S.C. section 1605(a)(2), but solely with respect to actions instituted against the foreign refiner, its agents and employees in

any court or other tribunal in the United States for conduct that violates the requirements applicable to the foreign refiner under this subpart H, including conduct that violates Title 18 U.S.C. section 1001 and Clean Air Act section 113(c)(2).

(6) The foreign refiner, or its agents or employees, will not seek to detain or to impose civil or criminal remedies against EPA inspectors or auditors, whether EPA employees or EPA contractors, for actions performed within the scope of EPA employment related to the provisions of this section.

(7) The commitment required by this paragraph (i) shall be signed by the owner or president of the foreign refiner business.

(8) In any case where Sulfur-FRGAS produced at a foreign refinery is stored or transported by another company between the refinery and the vessel that transports the Sulfur-FRGAS to the United States, the foreign refiner shall obtain from each such other company a commitment that meets the requirements specified in paragraphs (i)(1) through (7) of this section, and these commitments shall be included in the foreign refiner's baseline petition.

(j) <u>Sovereign immunity</u>. By submitting a petition for an individual foreign refinery baseline under this section, or by producing and exporting gasoline to the United States under an individual refinery sulfur baseline under this section, the foreign refiner, its agents and employees, without exception, become subject to the full operation of the administrative and judicial enforcement powers and provisions of the United States without limitation based on sovereign immunity, with respect to actions instituted against the foreign refiner, its agents and employees in any court or other tribunal in the United States for conduct that violates the requirements applicable to the foreign refiner under 40 C.F.R. Part 80, subpart H, including conduct that violates Title 18 U.S.C. section 1001 and Clean Air Act section 113(c)(2).

(k) <u>Bond posting</u>. Any foreign refiner shall meet the requirements of this paragraph (k) as a condition to being assigned an individual refinery sulfur baseline.

(1) The foreign refiner shall post a bond of the amount calculated using the following equation:

$$Bond = G \ \mathbf{x} \ \$ \ 0.01$$

Where:

Bond = amount of the bond in U. S. dollars

G = the largest volume of gasoline produced at the foreign refinery and
 exported to the United States, in gallons, during a single calendar year among the most
 recent of the following calendar years, up to a maximum of five calendar years: the
 calendar year immediately preceding the date the baseline petition is submitted, the
 calendar year the baseline petition is submitted, and each succeeding calendar year
 (2) Bonds shall be posted by:

(i) Paying the amount of the bond to the Treasurer of the United States;

(ii) Obtaining a bond in the proper amount from a third party surety agent that is payable to satisfy United States administrative or judicial judgments against the foreign refiner, provided EPA agrees in advance as to the third party and the nature of the surety agreement; or (iii) An alternative commitment that results in assets of an appropriate liquidity and value being readily available to the United States, provided EPA agrees in advance as to the alternative commitment.

(3) If the bond amount for a foreign refinery increases, the foreign refiner shall increase the bond to cover the shortfall within 90 days of the date the bond amount changes. If the bond amount decreases, the foreign refiner may reduce the amount of the bond beginning 90 days after the date the bond amount changes.

(4) Bonds posted under this paragraph (k) shall:

(i) Be used to satisfy any judicial judgment that results from an administrative or judicial enforcement action for conduct in violation of this subpart H, including where such conduct violates Title 18 U.S.C. section 1001 and Clean Air Act section 113(c)(2),

 (ii) Be provided by a corporate surety that is listed in the United States Department of Treasury Circular 570 "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds", and

(iii) Include a commitment that the bond will remain in effect for at least five (5) years following the end of latest averaging period that the foreign refiner produces gasoline pursuant to the requirements of this Subpart H.

(5) On any occasion a foreign refiner bond is used to satisfy any judgment, the foreign refiner shall increase the bond to cover the amount used within 90 days of the date the bond is used.

(l) [Reserved]

(m) <u>English language reports</u>. Any report or other document submitted to EPA by an foreign refiner shall be in English language, or shall include an English language translation.

(n) <u>Prohibitions</u>. (1) No person may combine Certified Sulfur-FRGAS with any Non-Certified Sulfur-FRGAS or Non-Sulfur-FRGAS, and no person may combine Certified Sulfur-FRGAS with any Certified Sulfur-FRGAS produced at a different refinery, until the importer has met all the requirements of paragraph (o) of this section, except as provided in paragraph (e) of this section.

(2) No foreign refiner or other person may cause another person to commit an action prohibited in paragraph (n)(1) of this section, or that otherwise violates the requirements of this section.

(o) <u>United States importer requirements</u>. Any United States importer shall meet the following requirements.

(1) Each batch of imported gasoline shall be classified by the importer as being Sulfur-FRGAS or as Non-Sulfur-FRGAS, and each batch classified as Sulfur-FRGAS shall be further classified as Certified Sulfur-FRGAS or as Non-certified Sulfur-FRGAS.

(2) Gasoline shall be classified as Certified Sulfur-FRGAS or as Non-Certified Sulfur-FRGAS according to the designation by the foreign refiner if this designation is supported by product transfer documents prepared by the foreign refiner as required in paragraph (d) of this section, unless the gasoline is classified as Non-Certified Sulfur-FRGAS under paragraph (g) of this section.

(3) For each gasoline batch classified as Sulfur-FRGAS, any United States importer shall

perform the following procedures.

(i) In the case of both Certified and Non-Certified Sulfur-FRGAS, have an independent third party:

(A) Determine the volume of gasoline in the vessel;

(B) Use the foreign refiner's Sulfur-FRGAS certification to determine the name and EPA-assigned registration number of the foreign refinery that produced the Sulfur-FRGAS;

(C) Determine the name and country of registration of the vessel used to transport the Sulfur-FRGAS to the United States; and

(D) Determine the date and time the vessel arrives at the United States port of entry.

(ii) In the case of Certified Sulfur-FRGAS, have an independent third party:

(A) Collect a representative sample from each vessel compartment subsequent to the vessel's arrival at the United States port of entry and prior to off loading any gasoline from the vessel;

(B) Prepare a volume-weighted vessel composite sample from the compartment samples; and

(C) Determine the sulfur value using the methodologies specified in § 80.330, by:

(1) The third party analyzing the sample; or

(2) The third party observing the importer analyze the sample;

(4) Any importer shall submit reports within thirty days following the date any vessel transporting Sulfur-FRGAS arrives at the United States port of entry:

(i) To the Administrator containing the information determined under paragraph (o)(3) of

this section; and

(ii) To the foreign refiner containing the information determined under paragraph (o)(3)(ii) of this section.

(5)(i) Any United States importer shall meet the requirements specified in § 80.195 for any imported gasoline that is not classified as Certified Sulfur-FRGAS under paragraph (o)(2) of this section.

(p) <u>Truck Imports of Certified Sulfur-FRGAS produced at a Small Refinery</u> (1) Any refiner whose Certified Sulfur-FRGAS is transported into the United States by truck may petition EPA to use alternative procedures to meet the following requirements:

(i) Certification under paragraph (d)(5) of this section;

(ii) Load port and port of entry sampling and testing under paragraphs (f) and (g) of this section;

(iii) Attest under paragraph (h) of this section; and

(iv) Importer testing under paragraph (0)(3) of this section.

(2) These alternative procedures must ensure Certified Sulfur-FRGAS remains segregated from Non-Certified Sulfur-FRGAS and from Non-Sulfur-FRGAS until it is imported into the United States. The petition will be evaluated based on whether it adequately addresses the following:

(i) Provisions for monitoring pipeline shipments, if applicable, from the refinery, that ensure segregation of Certified Sulfur-FRGAS from that refinery from all other gasoline;

(ii) Contracts with any terminals and/or pipelines that receive and/or transport Certified

Sulfur-FRGAS, that prohibit the commingling of Certified Sulfur-FRGAS with any of the following:

(A) Other Certified Sulfur-FRGAS from other refineries.

(B) All Non-Certified Sulfur-FRGAS.

(C) All Non-Sulfur-FRGAS.

(iii) Procedures for obtaining and reviewing truck loading records and United States import documents for Certified Sulfur-FRGAS to ensure that such gasoline is only loaded into trucks making deliveries to the United States;

(iv) Attest procedures to be conducted annually by an independent third party that review loading records and import documents based on volume reconciliation, or other criteria, to confirm that all Certified Sulfur-FRGAS remains segregated throughout the distribution system and is only loaded into trucks for import into the United States.

(3) The petition required by this section must be submitted to EPA along with the application for small refiner status and individual refinery sulfur baseline and standards under § 80.240 and this section.

(q) <u>Withdrawal or suspension of a foreign refinery's baseline</u>. EPA may withdraw or suspend a baseline that has been assigned to a foreign refinery where:

(i) A foreign refiner fails to meet any requirement of this section,

(ii) A foreign government fails to allow EPA inspections as provided in paragraph (i)(1) of this section;

(iii) A foreign refiner asserts a claim of, or a right to claim, sovereign immunity in an

action to enforce the requirements in this subpart H; or

(iv) A foreign refiner fails to pay a civil or criminal penalty that is not satisfied using the foreign refiner bond specified in paragraph (k) of this section.

(r) <u>Early use of a foreign refinery baseline</u>. (1) A foreign refiner may begin using an individual refinery baseline before EPA has approved the baseline, provided that:

(i) A baseline petition has been submitted as required in paragraph (b) of this section;

(ii) EPA has made a provisional finding that the baseline petition is complete;

(iii) The foreign refiner has made the commitments required in paragraph (i) of this section;

(iv) The persons who will meet the independent third party and independent attest requirements for the foreign refinery have made the commitments required in paragraphs (f)(3)(iii) and (h)(7)(iii) of this section; and

(v) The foreign refiner has met the bond requirements of paragraph (k) of this section.

(2) In any case where a foreign refiner uses an individual refinery baseline before final approval under paragraph (r)(1) of this section, and the foreign refinery baseline values that ultimately are approved by EPA are more stringent than the early baseline values used by the foreign refiner, the foreign refiner shall recalculate its compliance, ab initio, using the baseline values approved by EPA, and the foreign refiner shall be liable for any resulting violation of the conventional gasoline requirements.

(s) <u>Additional requirements for petitions, reports and certificates</u>. Any petition for a refinery baseline under § 80.250 or § 80.295, any alternative procedures under paragraph (r) of

this section, any report or other submission required by paragraphs (c), (f)(2), or (i) of this section, and any certification under paragraph (d)(3) of this section shall be:

(1) Submitted in accordance with procedures specified by the Administrator, including use of any forms that may specified by the Administrator.

(2) Be signed by the president or owner of the foreign refiner company, or by that person's immediate designee, and shall contain the following declaration:

I hereby certify: (1) that I have actual authority to sign on behalf of and to bind [insert name of foreign refiner] with regard to all statements contained herein; (2) that I am aware that the information contained herein is being certified, or submitted to the United States Environmental Protection Agency, under the requirements of 40 C.F.R. Part 80, subpart H and that the information is material for determining compliance under these regulations; and (3) that I have read and understand the information being certified or submitted, and this information is true, complete and correct to the best of my knowledge and belief after I have taken reasonable and appropriate steps to verify the accuracy thereof.

I affirm that I have read and understand the provisions of 40 C.F.R. Part 80, subpart H, including 40 C.F.R. § 80.410 [insert name of foreign refiner]. Pursuant to Clean Air Act section 113(c) and Title 18, United States Code, section 1001, the penalty for furnishing false, incomplete or misleading information in this certification or submission is a fine of up to \$10,000, and/or imprisonment for up to five years.

Attest Engagements

§ 80.415 What are the attest engagement requirements for gasoline sulfur compliance applicable to refiners and importers?

In addition to the requirements for attest engagements that apply to refiners and importers under §§ 80.125 through 80.130, and § 80.410, the attest engagements for importers and refiners must include the following procedures and requirements each year.

(a) <u>Baseline</u>. (1) Obtain the EPA sulfur baseline approval letter for the refinery to determine the refinery's applicable sulfur baseline and baseline volume under §§ 80.250 or 80.295.

(2) If the year being reviewed is 2004 through 2006 (2007 for refineries with small refiner status) and the refinery or importer produced or imported any GPA gasoline under § 80.216 or the refiner has approved status for a small refinery:

(i) Obtain the refinery's annual sulfur reports for 2000 through 2003, and

(ii) Determine whether the annual average sulfur level for any year credits were generated for 2000 through 2003 was less than the baseline level under paragraph (a)(1) of this section.

(3) If the annual average sulfur content for any year credits were created for 2000 through 2003 was less than the baseline level under paragraph (a)(1) of this section, report as a finding the lowest annual sulfur level as the new baseline value. For GPA gasoline add 30 ppm to obtain the GPA standard, not to exceed 150 ppm.

(4) If the refinery being reviewed is a small refinery and the annual volume under

paragraph (b)(2)of this section is greater than the baseline volume, calculate the applicable standard in accordance with § 80.240(c).

(5) Obtain a written representation from the company representative stating the sulfur value that the company used as its baseline and agree that number to paragraphs (a)(1) through (a)(4) of this section and to the reports to EPA.

(b) <u>EPA reports</u>. (1) Obtain and read a copy of the refinery's or importer's annual sulfur reports filed with EPA for the year.

(2) Agree the yearly volume of gasoline reported to EPA in the sulfur reports with the inventory reconciliation analysis under § 80.128.

(3) For the years 2004 through 2006, calculate the annual volume and average sulfur level for gasoline classified as GPA gasoline under §§ 80.216 and 80.219, and calculate the annual volume and average sulfur level for gasoline not classified as GPA gasoline, and agree these values with the values reported to EPA.

(4) Except as provided in paragraph (b)(3) of this section, calculate the annual average sulfur level for all gasoline and agree that value with the value reported to EPA.

(5) Obtain and read a copy of the refinery's or importer's sulfur credit report.

(c) <u>Credit generation before 2004</u>. In the case of a refinery that only generates credits during 2000 through 2003:

(1) Obtain a written representation from the company representative stating the refinery produces gasoline from crude oil.

(2) Compute and report as a finding the sulfur baseline from paragraph (a) of this section

multiplied by 0.9.

(3) Obtain the annual average sulfur level from paragraph (b)(4) of this section.

(4) If the sulfur value under paragraph (c)(3) of this section is less than the sulfur value under paragraph (c)(2) of this section, compute and report as a finding the difference between the annual average sulfur level and the refinery's sulfur baseline from paragraph (a) of this section.

(5) Compute and report as a finding the total number of sulfur credits generated by multiplying the value in paragraph (c)(4) of this section by the volume of gasoline in paragraph (b)(2) of this section, and agree this value with the value reported to EPA.

(d) <u>Credit generation in 2004 and thereafter</u>. The following procedures shall be completed for a refinery or importer that generates credits in 2004 and thereafter.

(1) Obtain the annual average sulfur level for gasoline not classified as GPA from paragraph (b)(3) of this section.

(2) If the sulfur value under paragraph (d)(1) of this section is less than 30 ppm, compute and report as a finding the difference between the sulfur level under paragraph (d)(1) of this section and 30 ppm.

(3) Compute and report as a finding the total number of sulfur credits generated by multiplying the value calculated in paragraph (d)(2) of this section by the volume of gasoline not classified as GPA in paragraph (b)(3) of this section, and agree this number with the number reported to EPA.

(4) Obtain the annual average sulfur level for gasoline classified as GPA from paragraph(b)(3) of this section.

(5) If the sulfur value under paragraph (d)(4) of this section is less than the applicable level under § 80.310, compute and report as a finding the difference between the sulfur level under paragraph (d)(4) of this section and the appropriate level in § 80.310.

(6) Compute and report as a finding the total number of sulfur credits generated by multiplying the value calculated in paragraph (d)(5) of this section by the volume of gasoline classified as GPA in paragraph (b)(3) of this section, and agree this number with the number reported to EPA.

(7) If the refiner has an approved status as a small refinery, obtain the annual average sulfur level for gasoline from paragraph (b)(4) of this section.

(8) If the sulfur value under paragraph (d)(7) of this section is less than the applicable standard under § 80.240, compute and report as a finding the difference between the sulfur level under paragraph (d)(7) of this section and the appropriate standard under § 80.240.

(9) Compute and report as a finding the total number of sulfur credits generated by multiplying the value calculated in paragraph (d)(8) of this section by the volume of gasoline in paragraph (b)(4) of this section, and agree this number with the number reported to EPA.

(e) <u>Credit purchases and sales</u>. The following attest procedures shall be completed for a refinery or importer that is a transferor or transferee of credits during an averaging period.

(1) Obtain contracts or other documents for all credits transferred to another refinery or importer during the year being reviewed; compute and report as a finding the number and year of creation of credits represented in these documents as being transferred away; and agree with the report to EPA.

(2) Obtain contracts or other documents for all credits received during the year being reviewed; compute and report as a finding the number and year of creation of credits represented in these documents as being received; and agree with the report to EPA.

(f) <u>Credits required for non-GPA gasoline</u>. The following attest procedures shall be completed for refineries and importers in 2005 and thereafter (2004 and thereafter for refineries having standards under § 80.240).

(1) Obtain the annual average sulfur level for gasoline not classified as GPA from paragraph (b)(3) of this section.

(2) If the value in paragraph (f)(1) of this section is greater than 30 ppm (or greater than the small refinery standard), compute and report as a finding the difference between 30 ppm (or the standard under § 80.240) and the value in paragraph (f)(1) of this section.

(3) Compute and report as a finding the total sulfur credits required by multiplying the value in paragraph (f)(2) of this section times the volume of gasoline not classified as GPA in paragraph (b)(3) of this section, and agree with the report to EPA.

(4) Obtain the refiner's or importer's representation as to the portion of the deficit under paragraph (f)(3) of this section that was resolved with credits, the portion that was resolved with allotments in 2005 only or that was carried forward as a deficit under § 80.205, and agree with the report to EPA (refineries subject to standards under § 80.240 cannot carry deficits forward).

(g) <u>Credits required for GPA gasoline</u>. The following attest procedures shall be completed in 2004 through 2006 for a refinery or importer that produces gasoline subject to the geographic phase-in area standards under § 80.216.

(1) Obtain the annual average sulfur level for the refinery's or importer's GPA gasoline from paragraph (b)(3) of this section.

(2) If the value in paragraph (g)(1) of this section is greater than the refinery's or importer's baseline plus 30 ppm under § 80.216, as determined in paragraph (a) of this section or 150 ppm, whichever is less, compute and report as a finding the difference between the annual average sulfur level and the baseline level plus 30 ppm, or 150 ppm, whichever is less.

(3) Compute and report as a finding the total sulfur credits and/or allotments required by multiplying the value in paragraph (g)(2) of this section times the volume of GPA gasoline from paragraph (b)(3) of this section.

(4) Obtain the refiner's or importer's representation as to the portion of the deficit under paragraph (g)(3) of this section that was resolved with credits, or the portion that was resolved with allotments in 2004 or 2005 only (compliance deficits for GPA gasoline cannot be carried forward.

(h) <u>Credit expiration</u>. The following attest procedures shall be completed for a refinery or importer that possesses credits during an averaging period.

(1) Obtain a list of all credits in the refiner's or importer's possession at any time during the year being reviewed, identified by the year of creation of the credits.

(2) If the year being reviewed is 2006 and thereafter, except in the case of gasoline produced for use in the GPA and gasoline produced by small refiners, determine whether any credits identified in paragraph (h)(1)of this section or Type A sulfur allotments created under paragraph (i) of this section and converted to credits were created before 2004, and if so, report

as a finding this number of expired credits.

(3) If the year being reviewed is 2008 and thereafter, determine whether any credits identified in paragraph (h)(1) or Type B sulfur allotments created under paragraph (i) of this section and converted to credits were created more than 5 years before the year being reviewed, and if so, report as a finding this number of expired credits (for example, unused credits created during the 2004 averaging period expire at the end of the 2009 averaging period).

(i) Optional credit and allotment generation in 2003.

The following requirements apply to any refinery that generates credits and allotments in 2003 under § 80.275(a).

(1) Obtain a written representation from the company representative stating the refinery produces gasoline from crude oil.

(2) Obtain the refinery baseline value from paragraph (b)(1), the annual volume from paragraph (b)(2) and the annual average sulfur level from paragraph (b)(4) of this section.

(3) Based on the annual sulfur level and refinery baseline, determine which subparagraph under § 80.275(a)(1) applies.

(4) Using the applicable equations under § 80.275(a)(1), recalculate the sulfur allotments, by type, and credits and report as a finding.

(j) <u>Credit reconciliation</u>. The following attest procedures shall be completed each year credits were in the refiner's or importer's possession at any time during the year.

(1) Obtain the credits remaining or the credit deficit from the previous year from the refiner's or importer's report to EPA for the previous year.

(2) Compute and report as a finding the net credits remaining at the conclusion of the year being reviewed by totaling:

(i) Credits remaining from the previous year; plus

(ii) Credits generated under paragraphs (c), (d) and (i) of this section; plus

(iii) Allotments generated under paragraph (i) of this section which are converted to

credits; plus

(iv) Credits purchased under paragraph (e) of this section; minus

(v) Credits sold under paragraph (e) of this section; minus

(vi) Credits used under paragraphs (f) and (g) of this section; minus

(vii) Credits expiring under paragraph (h) of this section; minus

(viii) Credit deficit from the previous year.

(3) Agree the credits remaining or the credit deficit at the conclusion of the year being reviewed with the report to EPA.

(4) If the refinery or importer had a credit deficit for both the previous year and the year being reviewed, report this fact as a finding.

(k)Sulfur allotments in 2004 and 2005.

The following requirements apply to any refinery or importer that is subject to corporate pool average standards under § 80.195.

(1) <u>Corporate pool average</u>. (i) Obtain the annual average sulfur level for the refiner or importer from the sulfur report filed with EPA for all gasoline subject to corporate pool standards
 (all gasoline produced and imported, except that if 50% or greater of the gasoline volume was

GPA gasoline the refiner or importer is not subject to the corporate pool average).

(ii) Compute and report as a finding the company's gasoline volume subject to corporate pool standards and average sulfur level for gasoline subject to corporate pool standards, and agree with the values reported to EPA.

(2) Allotment generation.

(i) For 2004, if the corporate pool average is less than 120 ppm, compute and report as a finding the number and type of sulfur allotments generated in accordance with the applicable provisions under § 80.275(b).

(ii) For 2005, if the corporate pool average is less than 90 ppm, compute and report as a finding the number and type of sulfur allotments generated in accordance with the applicable provisions under § 80.275(b).

(iii) If the refiner or importer produced and imported 50% or more of its gasoline for GPA use in 2004 or 2005, no allotments can be generated in that year.

(3) <u>Allotment purchases and sales</u>. (i) Obtain contracts or other documents for all allotments transferred to another company during the year being reviewed; compute and report as a finding the number of allotments represented in these documents as being transferred away; and agree with the report to EPA.

(ii) Obtain contracts or other documents for all allotments received during the year being reviewed; compute and report as a finding the number of allotments represented in these documents as being received; and agree with the report to EPA.

(4) <u>Allotments required</u>. (i) For 2004, if the corporate pool average is greater than 120

ppm, compute and report as a finding the number of allotments required by multiplying the amount the corporate pool average is above 120 ppm times the corporate pool volume, and agree with the report to EPA.

(ii) For 2005, if the corporate pool average is greater than 90 ppm, compute and report as a finding the number of allotments required by multiplying the amount the corporate pool average is above 90 ppm times the corporate pool volume, and agree with the report to EPA.

(iii) Obtain the number of allotments used to meet standards for GPA gasoline determined in paragraph (g) of this section.

(5) <u>Allotment reconciliation</u>. (i) Compute and report as a finding the net allotments remaining at the conclusion of the year being reviewed by totaling allotments:

(A) Generated under paragraphs (i)(4) and (k)(2) of this section; plus

(B) Purchased under paragraph (k)(3) of this section; minus

(C) Sold under paragraph (k)(3) of this section; minus

(D) Used under paragraph (k)(4) of this section for demonstrating compliance with the corporate pool average.

(ii) Report as a finding any allotments generated in 2003 or 2004 that are used to meet the corporate pool standards in 2005 that were not reduced to 50% of their original value.

(iii) If the company's net allotments remaining are less than zero, report this fact as a finding.

PART 85- CONTROL OF AIR POLLUTION FROM MOBILE SOURCES

5. The authority citation for part 85 continues to read as follows:

Authority: 42 U.S.C. 7521, 7522, 7524, 7525, 7541, 7542, 7601(a).

6. Section 85.1515 is amended by:

a. redesignating the existing paragraph (c) as (c)(1),

b. adding new paragraphs (c)(2), (c)(3), (c)(4), (c)(5), (c)(6) and (c)(7), and

c. revising paragraph (d). The revisions and additions read as follows:

§85.1515 Emission standards and test procedures applicable to imported nonconforming motor vehicles and motor vehicle engines.

* * * * *

(c)(1)* * *

(2) (i)The provisions of paragraph (c)(1) of this section notwithstanding, nonconforming light-duty vehicles and light light-duty trucks (LDV/LLDTs) modified in model years 2004, 2005 or 2006 must meet the FTP exhaust emission standards of bin 9 in Tables S04-1 and S04-2 in 40 CFR 86.1811-04 and the evaporative emission standards for light-duty vehicles and light lightduty trucks specified in 40 CFR 86.1811-04(e)(5).

(ii) Nonconforming LDT3s and LDT4s (HLDTs) and medium-duty passenger vehicles(MDPVs) modified in model years 2004 through 2006 must meet the FTP exhaust emission

standards of bin 10 in Tables S04-1 and S04-2 in 40 CFR 86.1811-04 and the applicable evaporative standards specified in 40 CFR 86.1811-04(e)(5). For 2004 model year HLDTs and MDPVs where modifications commence on the first vehicle of a test group before **[INSERT**

DATE FOUR CALENDAR YEARS FROM SIGNATURE DATE] this requirement does not apply to the 2004 model year. ICIs opting to bring all of their 2004 model year HLDTs and MDPVs into compliance with the exhaust emission standards of bin 10 in Tables S04-1 and S04-2 in 40 CFR 86.1811-04, may use the optional higher NMOG values for their 2004-2006 model year LDT2s and 2004-2008 LDT4s.

(iii) Nonconforming LDT3s and LDT4s (HLDTs) and medium-duty passenger vehicles (MDPVs) modified in model years 2007 and 2008 must meet the FTP exhaust emission standards of bin 8 in Tables S04-1 and S04-2 in 40 CFR 86.1811-04 and the applicable evaporative standards specified in 40 CFR 86.1811-04(e)(5).

(iv) Nonconforming LDV/LLDTs modified in model years 2007 and later and nonconfoming HLDTs and MDPVs modified in model years 2009 and later must meet the FTP exhaust emission standards of bin 5 in Tables S04-1 and S04-2 of 40 CFR 86.1811-04, and the evaporative standards specified in 40 CFR 86.1811(e)(1) through (e)(4).

(v) ICIs are exempt from the Tier 2 and the interim non-Tier 2 phase-in intermediate percentage requirements for exhaust, evaporative and refueling emissions described in 40 CFR 86.1811-04.

(3)(i) As an option to the requirements of paragraph (c)(2) of this section, independent commercial importers may elect to meet lower bins in Tables S04-1 and S04-2 of 40 CFR

86.1811-04 than specified in paragraph (c)(2) of this section and bank or sell credits as permitted in 40 CFR 86.1860-04 and 40 CFR 86.1861-04. An ICI may not meet higher bins in Tables S04-1 and S04-2 of 40 CFR 86.1811-04 than specified in paragraph (c)(2) of this section unless it demonstrates to the Administrator at the time of certification that it has obtained appropriate and sufficient NOx credits from another manufacturer, or has generated them in a previous model year or in the current model year and not transferred them to another manufacturer or used them to address other vehicles as permitted in 40 CFR 86.1860-04 and 40 CFR 86.1861-04.

(ii) Where an ICI desires to obtain a certificate of conformity using a bin higher than specified in paragraph (c)(2) of this section, but does not have sufficient credits to cover vehicles produced under such certificate, the Administrator may issue such certificate if the ICI has also obtained a certificate of conformity for vehicles certified using a bin lower than that required under paragraph (c)(2) of this section. The ICI may then produce vehicles to the higher bin only to the extent that it has generated sufficient credits from vehicles certified to the lower bin during the same model year.

(4) [reserved]

(5) Except for the situation where an ICI desires to bank, sell or use NOx credits as described in paragraph (c)(3) of this section, the requirements of 40 CFR 86.1811-04 related to fleet average NOx standards and requirements to comply with such standards do not apply to vehicles modified under this subpart.

(6) ICIs using bins higher than those specified in paragraph (c)(2) of this section must monitor their production so that they do not produce more vehicles certified to the standards of such bins than their available credits can cover. ICIs must not have a credit deficit at the end of a model year and are not permitted to use the deficit carryforward provisions provided in 40 CFR 86.1860-04(e).

(7) The Administrator may condition the certificates of conformity issued to ICIs as necessary to ensure that vehicles subject to paragraph (c) of this section comply with the appropriate average NOx standard for each model year.

(d) Except as provided in paragraph (c) of this section, ICI's must not participate in emission-related programs for emissions averaging, banking and trading, or nonconformance penalties.

PART 86 – CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

7. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

 In § 86.1 the table in paragraph (b)(4) is amended by revising the entry for "California Regulatory Requirements Applicable to the National Low Emission Vehicle Program, October 1996", and by adding an entry in alphabetical order to read as follows:

§86.1 Reference materials.

* * * * *

(4)* * *

(b)* * *

Document No. and name	40 CFR part 86 reference
* * * *	2.* * * * *
	86.1803-01;
California Regulatory Requirements Applicable to the "LEV II"	86.1806-01; 86.1810-01;
Program, including:	86.1811-04; 86.1844-01.
1. "LEV II" and "CAP 2000" Amendments to the California	
Exhaust and Evaporative Emission Standards and Test	
Procedures for Passenger Cars, Light-duty Trucks, and	
Medium-duty Vehicles, and to the Evaporative Emission	
Requirements for Heavy-duty Vehicles: Final Statement of	
Reasons. September 1999.	
2. California Air Resources Board, LEV II and CAP 2000	
Amendments. Final Regulation Order. Adopted 8/5/99; Filed	
with the Secretary of State 10/28/99.	
3. California Exhaust Emission Standards and Test	
Procedures for 2003 and Subsequent Model Zero-Emission	
Vehicles and 2001 and Subsequent Model Hybrid Electric	
Vehicles, in the Passenger Car, Light-duty Truck and Medium-	
duty Vehicle Classes. August 5, 1999.	
4. California Exhaust Emission Standards and Test	
Procedures for 2001 and Subsequent Model Passenger Cars,	

Subpart A– General Provisions for Emission Regulations for 1977 and Later Model Year New Light-Duty Vehicles, Light-Duty Trucks and Heavy-Duty Engines, and for 1985 and Later Model Year New Gasoline Fueled, Natural Gas-Fueled, Liquefied Petroleum Gas-Fueled and Methanol-Fueled Heavy-Duty Vehicles.

9. Section 86.004-11 is modified by the addition of paragraph (e) to read as follows:

§86.004-11 Emission standards for 2004 and later model year diesel heavy-duty engines and vehicles.

* * * * *

(e) The standards described in this section do not apply to diesel fueled medium-duty passenger vehicles (MDPVs) that are subject to regulation under subpart S of this part, except as specified in subpart S. The standards described in this section also do not apply to diesel engines used in such MDPVs, except as specified in the regulations in subpart S. The term "medium-duty passenger vehicle" is defined in § 86.1803 of this part.

10. Section 86.099-10 is modified by the addition of paragraph (e) to read as follows:

§86.099-10 Emission standards for 1999 and later model year Otto-cycle heavy-duty

engines and vehicles.

* * * * *

(e) The standards described in this section do not apply to Otto-cycle medium-duty passenger vehicles (MDPVs) that are subject to regulation under subpart S of this part, except as specified in subpart S. The standards described in this section also do not apply to Otto-cycle engines used in such MDPVs, except as specified in subpart S. The term "medium-duty passenger vehicle" is defined in § 86.1803 of this part.

Subpart B – Emission Regulations for 1977 and Later Model Year New Light-duty Vehicles, New Light-duty Trucks and New Medium-Duty Passenger Vehicles; Test Procedures

11. Section 86.113-04 is added to read as follows:

§86.113-04 Fuel Specifications.

This section includes text that specifies requirements that differ from §86.113-94. Where a paragraph in § 86.113-94 is identical and applicable to this section, this will be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.113-94."

(a) <u>Gasoline fuel.</u> (1) Gasoline having the following specifications will be used by the Administrator in exhaust and evaporative emission testing of petroleum-fueled Otto-cycle

vehicles, except that the Administrator will not use gasoline having a sulfur specification higher than 0.0045 weight percent. Gasoline having the following specification or substantially equivalent specifications approved by the Administrator, must be used by the manufacturer in exhaust and evaporative testing except that octane specifications do not apply:

Item	ASTM test	Value
	method No.	
Octane, Research, Min.	D2699	93
Sensitivity, Min.		7.5
Lead (organic), maximum:	D3237	0.050 (0.013)
g/U.S. gal. (g/liter)		
Distillation Range:	D86	
IBP ¹ :deg. F (deg. C)		75-95 (23.9-35)
10 pct. point: deg.F (deg.C)		120-135 (48.9-57.2)
50 pct. point: deg.F. (deg.C)		200-230 (93.3-110)
90 pct. point: deg.F (deg.C)		300-325 (148.9-162.8)
EP, max: deg.F (deg.C)		415 (212.8)
Sulfur, weight pct.	D1266	0.0015-0.008
Phosphorous, max. g/U.S. gal (g/liter)	D3231	0.005 (0.0013)
RVP ^{2,3}	D3231	8.7-9.2 (60.0-63.4)

Hydrocarbon composition:	D1319	
Olefins, max. pct.		10
Aromatics, max, pct.		35
Saturates		Remainder

¹ For testing at altitudes above 1,219 m (4000 feet), the specified range is 75-105 deg. F

(23.9-40.6 deg. C).

 2 For testing which is unrelated to evaporative emission control, the specified range is 8.0-9.2 psi (55.2-63.4 kPa).

 3 For testing at altitudes above 1,219 m (4000 feet), the specified range is 7.6-8.0 psi (52-55 kPa).

(2) For light-duty vehicles, light-duty trucks and medium-duty passenger vehicles certified for 50 state sale, and for Tier 2 and interim non-Tier 2 vehicles whose certification is carried over from the NLEV program or carried across from the California LEV I program, "California Phase 2" gasoline having the specifications listed in the table in this section may be used in exhaust emission testing as an option to the specifications in paragraph (a)(1) of this section. If a manufacturer elects to utilize this option, the manufacturer must conduct exhaust emission testing with gasoline having the specifications listed in the table in this paragraph (a)(2) and in the case of interim non-Tier 2 LDV/Ts and interim non-Tier 2 MDPVs whose certification is carried over from the NLEV program or carried across from California LEV I program certification the Administrator must also conduct exhaust emission testing with gasoline having the specifications listed in the table in this paragraph (a)(2). However, the Administrator may use or require the use of test fuel meeting the specifications in paragraph (a)(1) of this section for certification confirmatory testing, selective enforcement auditing and in-use testing for all other vehicles. All fuel property test methods for this fuel are contained in Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996). These requirements are incorporated by reference (see § 86.1). The table follows:

Fuel Property	<u>Limit</u>
Octane, (R+M)/2 (min)	91
Sensitivity (min)	7.5

0-0.01
130-150
200-210
290-300
390
2.0
15-40, except that
Administrator may use and
approve for use, lower ranges
where such ranges are
consistent with current
California requirements.
0.005
6.7-7.0
4.0-6.0
22-25
0.8-1.0
12-14
10.8-11.2
See Chapter 4 of the
California Regulatory
Requirements Applicable to
the National Low Emission
Vehicle Program (October,
1996). These procedures are
incorporated by reference (see
§ 86.1).
No. 1
3.0

Oxidation Stability, minutes	1000
(min)	
Specific Gravity	No limit; report to purchaser
	required
Heat of Combustion	No limit; report to purchaser
	required
Carbon, wt%	No limit; report to purchaser
	required
Hydrogen, wt%	No limit; report to purchaser
	required

(3)(i) Unless otherwise approved by the Administrator, unleaded gasoline representative of commercial gasoline that will be generally available through retail outlets must be used in service accumulation. . For model years 2004 and later, and unless otherwise approved by the Administrator, this gasoline must have a minimum sulfur content of 15 ppm. Unless otherwise approved by the Administrator, where the vehicle is to be used for evaporative emission durability demonstration, such fuel must contain ethanol as required by §86.1824-01(a)(2)(iii). Leaded gasoline must not be used in service accumulation.

(ii) Unless otherwise approved by the Administrator, the octane rating of the gasoline used must be no higher than 1.0 Retail octane number above the lowest octane rating that meets the fuel grade the manufacturer will recommend to the ultimate purchaser for the relevant production vehicles. If the manufacturer recommends a Retail octane number rather than a fuel grade, then the octane rating of the service accumulation gasoline can be no higher than 1.0 Retail octane number above the recommended Retail octane number. The service accumulation gasoline must also have a minimum sensitivity of 7.5 octane numbers, where sensitivity is defined as the

Research octane number minus the Motor octane number.

(iii) The Reid Vapor Pressure of the gasoline used must be characteristic of the motor fuel used during the season in which the service accumulation takes place.

(4) The specification range of the gasoline to be used under paragraph (a) of this section must be reported in accordance with §§86.094-21(b)(3) and 86.1844-01.

(b) through (g) "[Reserved]. For guidance see §86.113-94."

12. Section 86.129-00 is amended by adding a new paragraph (f)(1)(ii)(C) to read as follows:
§ 86.129-00 Road load power, test weight, and inertia weight class determination.
* * * * *

- (f)* * * (1)* * *
- (ii)* * *

(C) Regardless of other requirements in this section relating to the testing of HLDTs, for Tier 2 HLDTs, the test weight basis for FTP and SFTP testing (both US06 and SC03), if applicable, is the vehicle curb weight plus 300 pounds. For MDPVs certified to standards in bin 11 in Tables S04-1 and 2 in §86.1811-04, the test weight basis must be adjusted loaded vehicle weight (ALVW) as defined in this part.

* * * * *

Subpart C- Emission Regulations for 1994 and Later Model Year Gasoline-Fueled New

Light-duty Vehicles, New Light-duty Trucks and New Medium-Duty Passenger Vehicles; Cold Temperature Test Procedures

13. Section 86.213-04 is added to read as follows:

§ 86.213-04 Fuel specifications.

Gasoline having the following specifications will be used by the Administrator except that the Administrator will not use gasoline having a sulfur specification higher than 0.0045 weight percent. Gasoline having the specifications set forth in the table in this section, or substantially equivalent specifications approved by the Administrator, may be used by the manufacturer except that the octane specification does not apply. In lieu of using gasoline having these specifications, the manufacturer may, for certification testing, use gasoline having the specifications specified in §86.113-04 provided the cold CO emissions are not decreased. Documentation showing that cold CO emissions are not decreased must be maintained by the manufacturer and must be made available to the Administrator upon request. The table listing the cold CO fuel specifications described in the text in this section follows:

Table--Cold CO Fuel Specifications

	Cold CO	low octane value or	Cold CO high octane $\1\$
Item	ASTM test	range	value or range

(RON+MON)/2, min D2699	87.8 <plus-minus>.</plus-minus>	3 92.3 <plus-minus>0.5</plus-minus>	
Sensitivity, min D2699	7.5	7.5	
Distillation range:			
IBP, deg.F D86	76-96	76-96	
10% point, deg.F D86	98-118	105-125	
50% point, deg.F D86	179-214	195-225	
90% point, deg.F D86	316-346	316-346	
EP, max, deg.F D86	413	413	
Sulfur, wt. %D3120	0.0015-0.008	0.0015-0.008	
Phosphorous, g/U.S gal, max D3231	0.005	0.005	
Lead, g/gal, max	0.01	0.01	
RVP, psi D4953	11.5 <plus-minus>.3</plus-minus>	3 11.5 <plus-minus>.3</plus-minus>	
Hydrocarbon composition D1319			
Olefins, vol. pct	12.5 <plus-minus>5.0</plus-minus>	10.0 <plus-minus>5.0</plus-minus>	
Aromatics, vol. pct	26.4 <plus-minus>4.0</plus-minus>	0 32.0 <plus-minus>4.0</plus-minus>	
Saturates	Remainder	Remainder	

\1\ Gasoline having these specifications may be used for vehicles which are designed for the use of high-octane premium fuel.

Subpart R–General Provisions for the Voluntary National Low Emission Vehicle Program

for Light-duty Vehicles and Light-duty Trucks

14. Section 86.1701-99 is amended by adding paragraph (f) to read as follows:

§86.1701-99 General applicability.

* * * * *

(f) The provisions of this subpart are not applicable to 2004 or later model year vehicles, except where specific references to provisions of this subpart are made in conjunction with provisions applicable to such vehicles.

Subpart S–General Compliance Provisions for Control of Air Pollution From New and Inuse Light-duty Vehicles and Light-duty Trucks

15. Section 86.1801-01 is amended by:

- a. revising the first sentence of paragraph (a),
- b. adding one sentence to the end of paragraph (c)(1),
- c. revising the first sentence of paragraph (e), and
- d. adding paragraphs (f), (g) and (h).

These revisions and additions read as follows:

§86.1801-01 Applicability.

(a) Except as otherwise indicated, the provisions of this subpart apply to new 2001 and

later model year Otto-cycle and diesel cycle light-duty vehicles, light-duty trucks and mediumduty passenger vehicles, including multi-fueled, alternative fueled, hybrid electric, and zero emission vehicles.* * *

* * * * *

(c)(1) * * * A 2004 or later model year heavy-duty vehicle optionally certified as a lightduty truck under this provision must comply with all provisions applicable to MDPVs including exhaust and evaporative emission standards, test procedures, on-board diagnostics, refueling standards, phase-in requirements and fleet average standards under 40 CFR Part 85 and this part.

(e) <u>National Low Emission Vehicle Program for light-duty vehicles and light light- duty</u> <u>trucks.</u> A manufacturer may elect to certify 2001-2003 model year light-duty vehicles and light light-duty trucks (LDV/LLDTs) to the provisions of the National Low Emission Vehicle Program contained in Subpart R of this part. * * *

(f) <u>"Early" Tier 2 LDVs, LDTs and MDPVs.</u> Any LDV/LLDT which is certified to Tier 2 FTP exhaust standards prior to the 2004 model year, or any HLDT or MDPV which is certified to the Tier 2 FTP exhaust standards prior to the 2008 model year, to utilize alternate phase-in schedules and/or for purposes of generating and banking Tier 2 NOx credits, must comply with all the exhaust emission requirements applicable to Tier 2 LDV/LLDTs orHLDT/ MDPVs, as applicable, under this subpart.

(g) Interim non-Tier 2 LDVs, LDTs and MDPVs. Model year 2004-2008 LDVs, LDTs

and MDPVs, that do not comply with the Tier 2 FTP exhaust emission requirements (interim non-Tier 2 LDV/LLDTs and interim non-Tier 2 HLDT/MDPVs) as permitted under the phase-in requirements of §86.1811-04(k) must comply with all applicable interim non-Tier 2 exhaust emission requirements contained in this subpart, including FTP exhaust emission requirements for all interim non-Tier 2 LDV/LLDTs and HLDT/MDPVs found at §86.1811-04(l). Additional emission bins and separate fleet average NOx emission standards and other provisions are provided for interim non-Tier 2 LDV/LLDTs, interim non-Tier 2 HLDT/MDPVs.

(h) <u>Applicablity of provisions of this subpart to LDVs, LDTs and MDPVs</u>. Numerous sections in this subpart provide requirements or procedures applicable to a "vehicle" or "vehicles". Unless otherwise specified or otherwise determined by the Administrator, the term "vehicle" or "vehicles" in those provisions apply equally to LDVs, LDTs and MDPVs.

16. Section 86.1803-01 is amended by adding the following definitions in alphabetical order to read as follows:

§86.1803-01 Definitions.

* * * * *

<u>Bin</u> or <u>emission bin</u> means a set of emission standards applicable to exhaust pollutants measured on the Federal Test Procedure (FTP). A *bin* is equivalent to a horizontal row of FTP standards in Tables S04-1 and S04-2 shown in this subpart. Manufacturers are generally free to choose the bin of standards that will apply to a certain test group of vehicles, provided that on a sales weighted average of those bins, all of their vehicles meet a specified fleet average standard for a particular pollutant.

* * * * *

<u>CalLEV II</u> or <u>California LEV II</u> refers to California's second phase of its low emission vehicle (LEV) program. This program was adopted at the hearing of the California Air Resources Board held on November 5, 1998 and became effective on November 27, 1999. * * * * *

<u>Fleet average NOx standard</u> means, for light-duty vehicles, light-duty trucks and mediumduty passenger vehicles, a NOx standard imposed over an individual manufacturer's total U.S. sales (or a fraction of total U.S. sales during phase-in years), as 'U.S. sales' is defined in this subpart, of a given model year. Manufacturers determine their compliance with such a standard by averaging, on a sales weighted basis, the individual NOx standards they choose for the fleet of light-duty vehicles, light-duty trucks and medium-duty passenger vehicles they sell of that model year.

* * * * *

Interim non-Tier 2 vehicle, interim non-Tier 2 LDV/LLDT, interim non-Tier 2

<u>HLDT/MDPV</u>, or <u>interim vehicle</u> refer to 2004 or later model year light-duty vehicles, light-duty trucks or MDPVs, or a specific combination thereof, not certified to Tier 2 FTP exhaust emission standards during the Tier 2 phase-in period. Model year 2004 HLDTs belonging to test groups

whose model year commences before [INSERT DATE FOUR YEARS AFTER SIGNATURE

OF THIS RULE] are not interim non-Tier 2 HLDTs unless their manufacturer chooses to comply with the interim requirements applicable to HLDTs for all of its 2004 model year HLDTs as permitted in this subpart. Similarly 2004 model year heavy-duty vehicles whose model year commences before [**INSERT DATE FOUR YEARS AFTER SIGNATURE OF THIS RULE**] are not interim non-Tier 2 MDPVs unless their manufacturer chooses to comply with the interim requirements applicable to MDPVs for all of its 2004 model year MDPVs as permitted in this subpart.

The terms *interim non-Tier 2 vehicle, interim non-Tier 2 LDV, interim non-Tier 2 LDT, interim non-Tier 2 HLDT, interim non-Tier 2 MDPV etc.* have the same meaning without the words "non-Tier 2".

* * * * *

<u>LDV/T</u> means light-duty vehicles and light-duty trucks collectively, without regard to category.

* * * * *

<u>Medium-duty passenger vehicle (MDPV)</u> means any heavy-duty vehicle (as defined in this subpart) with a gross vehicle weight rating (GVWR) of less than 10,000 pounds that is designed primarily for the transportation of persons. The MDPV definition does not include any vehicle which:

1. is an "incomplete truck" as defined in this subpart; or

2. has a seating capacity of more than 12 persons; or

3. is designed for more than 9 persons in seating rearward of the driver's seat; or

4. is equipped with an open cargo area (for example, a pick-up truck box or bed) of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area for purposes of this definition.

<u>Non-methane organic gases (NMOG)</u> means the sum of oxygenated and non-oxygenated hydrocarbons contained in a gas sample as measured in accordance with the California Non-Methane Organic Gas Test Procedures. These requirements are incorporated by reference (see § 86.1)

* * * * *

<u>Periodically regenerating trap oxidizer system</u> means a trap oxidizer that utilizes, during normal driving conditions, an automated regeneration mode for cleaning the trap, the operation of which can be easily detected.

* * * * *

Point of first sale means the location where the completed vehicle is first purchased. This term is synonymous with final product purchase location. The point of first sale may be a retail customer, dealer, distributor, fleet operator, broker, secondary manufacturer, or any other entity which purchases a vehicle from a manufacturer. In cases where the end user purchases the completed vehicle directly from the manufacturer, the end user is the point of first sale.

<u>Round</u>, <u>rounded</u> or <u>rounding</u> means, unless otherwise specified, that numbers will be rounded according to ASTM-E29-93a, which is incorporated by reference in this part pursuant to §86.1.

* * * * *

<u>Tier 2 HLDT/MDPV</u> means any heavy light-duty truck or medium-duty passenger vehicle, including HEVs and ZEVs, of the 2008 or later model year certified to comply with the Tier 2 FTP exhaust standards contained in §86.1811-04 including the 0.07 g/mi fleet average NOx standard. The term Tier 2 HLDT/MDPV also includes any heavy light-duty truck or medium-duty passenger vehicle, of any model year, which is certified to Tier 2 FTP exhaust standards for purposes of generating or banking early NOx credits for averaging under Tier 2 requirements, or utilizing alternate phase-in schedules, as allowed in this subpart.

<u>Tier 2 LDV/LLDT</u> means any light-duty vehicle or light light-duty truck, including HEVs and ZEVs, of the 2004 or later model year certified to comply with the Tier 2 FTP exhaust standards contained in §86.1811-04 including the 0.07 g/mi fleet average NOx standard. The term Tier 2 LDV/LLDT also includes any light-duty vehicle or light light-duty truck, of any model year, which is certified to Tier 2 FTP exhaust standards for purposes of generating or banking early NOx credits for averaging under Tier 2 requirements, or utilizing alternate phase-in schedules as allowed in this subpart. <u>Tier 2 standards</u> means those FTP exhaust emission standards <u>including the 0.07 g/mi full</u> <u>useful life fleet average NOx standard</u>, applicable to new light-duty vehicles and light light-duty trucks that begin a phase-in in the 2004 model year, and those exhaust emission standards <u>including the 0.07 g/mi full useful life fleet average NOx standard</u>, applicable to heavy light-duty trucks and medium-duty passenger vehicles that begin a phase-in in the 2008 model year. These standards are found in §86.1811-04 of this subpart.

<u>Tier 2 vehicle</u> means any vehicle certified to comply with the Tier 2 FTP exhaust standards contained in §86.1811-04 including the 0.07 g/mi fleet average NOx standard.

<u>U.S. sales</u> means, unless otherwise specified, sales in any state of the United States except for California or a state that has adopted California motor vehicle standards for that model year pursuant to section 177 of the Clean Air Act. This definition applies only to those regulatory requirements addressing Tier 2 and interim non-Tier 2 vehicles.

* * * * *

17. Section 86.1804-01 is amended by adding the following acronyms and abbreviations, in alphabetical order, to read as follows:

§86.1804-01 Acronyms and abbreviations.

* * * * *

HCHO– Formaldehyde.

* * * * *

HEV-Hybrid electric vehicle.

* * * * *

HLDT - Heavy light-duty truck. Includes only those trucks over 6000 pounds GVWR (LDT3s and LDT4s).

HLDT/MDPV– Heavy light-duty trucks and medium-duty passenger vehicles.

LDV/LLDT- Light-duty vehicles and light light-duty trucks. Includes only those trucks rated at 6000 pounds GVWR or less (LDT1s and LDT2s).

LDV/T– Light-duty vehicles and light-duty trucks. This term is used collectively to include, or to show that a provision applies to, all light-duty vehicles and all categories of light-duty trucks, i.e. LDT1, LDT2, LDT3 and LDT4.

LEV-Low Emission Vehicle.

* * * * *

MDPV- Medium-duty passenger vehicle.

* * * * *

NLEV– Refers to the National Low Emission Vehicle Program. Regulations governing this program are found at subpart R of this part.

* * * * *

NMOG- Non-methane organic gases.

* * * * *

RAF- Reactivity adjustment factor.

* * * * *

SULEV- Super Ultra Low Emission Vehicle.

* * * * *

TLEV- Transitional Low Emission Vehicle.

* * * * *

ULEV-Ultra Low Emission Vehicle.

* * * * *

ZEV-Zero Emission Vehicle.

* * * * *

18. Section 86.1805-04 is added to read as follows:

§86.1805-04 Useful life.

(a) Except as required under paragraph (b) of this section or permitted under paragraphs(d), (e) and (f) of this section, the full useful life for all LDVs, LDT1s and LDT2s is a period of use of 10 years or 120,000 miles, whichever occurs first. For all HLDTs and MDPVs, full useful life is a period of 11 years or 120,000 miles, whichever occurs first. This full useful life applies to

all exhaust, evaporative and refueling emission requirements except for standards which are specified to only be applicable at the time of certification.

(b) Manufacturers may elect to optionally certify a test group to the Tier 2 exhaust emission standards for 150,000 miles to gain additional NOx credits, as permitted in §86.1860-04(g), or to opt out of intermediate life standards as permitted in §86.1811-04(c). In such cases, useful life is a period of use of 15 years or 150,000 miles, whichever occurs first, for all exhaust, evaporative and refueling emission requirements except for cold CO standards and standards which are applicable only at the time of certification.

(c) Where intermediate useful life exhaust emission standards are applicable, such standards are applicable for five years or 50,000 miles, whichever occurs first.

(d) Where cold CO standards are applicable, the useful life requirement for compliance with the cold CO standard only, is 5 years or 50,000 miles whichever occurs first.

(e) Where LDVs, LDT1s and LDT2s of the 2003 or earlier model years are certified to Tier 2 exhaust emission standards for purposes of generating early Tier 2 NOx credits, manufacturers may certify those vehicles to full useful lives of 100,000 miles in lieu of the otherwise required 120,000 mile full useful lives, as provided under §86.1861-04(c)(4). (f) For interim non-Tier 2 LDV/LLDTs, the useful life requirement for exhaust, evaporative and refueling emissions is 10 years or 100,000 miles, whichever occurs first.

19. Section 86.1806-01 is amended by:

a. revising paragraph (a);

- b. adding paragraph (b)(8); and
- c. redesignating the text of paragraph (d) after the paragraph heading as (d)(1); and

d. adding paragraph (d)(2). The revisions and additions read as follows:

§86.1806-01 On-board diagnostics

(a) (i)Except as provided by paragraph (a)(ii) of this section, all light-duty vehicles, lightduty trucks and MDPVs must be equipped with an onboard diagnostic (OBD) system capable of monitoring, for each vehicle's useful life, all emission-related powertrain systems or components. All systems and components required to be monitored by these regulations must be evaluated periodically, but no less frequently than once per Urban Dynamometer Driving Schedule as defined in Appendix I, paragraph (a), of this part, or similar trip as approved by the Administrator.

(ii) Diesel fueled chassis-certified MDPVs and engine-certified diesel engines used in MDPVs, are subject to the requirements of this section only if the exhaust emission certification of the applicable test group is being carried across from a California configuration to which California OBD-II requirements are applicable. (b)* * *

(8) For Tier 2 and interim non-Tier 2 hybrid electric vehicles (HEVs) only. Unless added to HEVs in compliance with other requirements of this section, or unless otherwise approved by the Administrator:

(i) The manufacturer must equip each HEV with a maintenance indicator consisting of a light that must activate automatically by illuminating the first time the minimum performance level is observed for each battery system component. Possible battery system components requiring monitoring are: battery water level, temperature control, pressure control, and other parameters critical for determining battery condition.

(ii) The manufacturer must equip "off-vehicle charge capable HEVs" with a useful life indicator for the battery system consisting of a light that must illuminate the first time the battery system is unable to achieve an all-electric operating range (starting from a full state-of-charge) which is at least 75 percent of the range determined for the vehicle in the Urban Driving Schedule portion of the All-Electric Range Test (see the California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes. These requirements are incorporated by reference (see §86.1).

(iii) The manufacturer must equip each HEV with a separate odometer or other device subject to the approval of the Administrator that can accurately measure the mileage accumulation on the engines used in these vehicles. * * * * *

(d) MIL illumination. (1) * * *

(2)(i) For interim non-Tier 2 and Tier 2 LDV/LLDTs and HLDT/MDPVs, vehicles produced through the 2007 model year, upon a manufacturer's written request, EPA will consider allowing the use of an on-board diagnostic system during the certification process, that functions properly on low-sulfur gasoline, but indicates sulfur-induced passes when exposed to high sulfur gasoline.

(ii) For interim non-Tier 2 and Tier 2 LDV/LLDTs and HLDT/MDPVs, if vehicles produced through the 2007 model year exhibit illuminations of the emission control diagnostic system malfunction indicator light due to high sulfur gasoline, EPA will consider, upon a manufacturer's written request, allowing modifications to such vehicles on a case-by-case basis so as to eliminate the sulfur induced illumination.

* * * * *

20. Section 86.1807-01 is amended by revising paragraph (a)(3)(vi) to read as follows:§86.1807-01 Vehicle labeling.

(a) * * *

(3)* * *

(vi) The exhaust emission standards to which the test group is certified, and for test groups

having different in-use standards, the corresponding exhaust emission standards that the test group must meet in use. In lieu of this requirement, manufacturers may use the standardized test group name designated by EPA;

* * * * *

21. Section 86.1809-01 is amended by adding paragraph (e) to read as follows:

§86.1809-01 Prohibition of defeat devices.

* * * * *

(e) For each test group of Tier 2 LDV/LLDTs and HLDT/MDPVs and interim non-Tier 2 LDV/LLDTs and HLDT/MDPVs the manufacturer must submit, with the Part II certification application, an engineering evaluation demonstrating to the satisfaction of the Administrator that a discontinuity in emissions of non-methane organic gases, carbon monoxide, oxides of nitrogen and formaldehyde measured on the Federal Test Procedure (subpart B of this part) does not occur in the temperature range of 20 to 86 degrees F. For diesel vehicles, the engineering evaluation must also include particulate emissions.

22. Section 86.1810-01 is amended by:

a. adding two new sentences to the end of the introductory text;

b. adding one new sentence to the end of paragraph (f);

c. adding a new sentence to the end of paragraph (i)(6); and

d. adding new paragraphs (i)(13), (i)(14), (o) and (p). The revisions and additions read as follows:

§86.1810-01 General standards; increase in emissions; unsafe conditions; waivers.

* * * For Tier 2 and interim non-Tier 2 vehicles, this section also applies to hybrid electric vehicles and zero emission vehicles. Unless otherwise specified, requirements and provisions of this subpart applicable to methanol fueled vehicles are also applicable to Tier 2 and interim non-Tier 2 ethanol fueled vehicles

* * * * *

(f)* ** Interim non-Tier 2 LDV/Ts may be certified to applicable Tier 1 exhaust emission standards at high altitude as set forth in sections 86.1811-01, 86.1812-01, 86.1813-01, 86.1814-02 and 86.1815-02. Requirements to meet emission standards at high altitude are optional for interim non-Tier 2 MDPVs.

* * * * *

(i)* * *

(6)* ** For Tier 2 and interim non-Tier 2 vehicles, this provision does not apply to enrichment that occurs upon cold start, warm-up conditions and rapid-throttle motion conditions ("tip-in" or "tip-out" conditions).

* * * * *

(13) <u>A/C-on specific calibrations.</u> (i) For Tier 2 and interim non-Tier 2 vehicles, A/C-on specific calibrations (e.g. air to fuel ratio, spark timing, and exhaust gas recirculation), may be used which differ from A/C-off calibrations for given engine operating conditions (e.g., engine speed, manifold pressure, coolant temperature, air charge temperature, and any other parameters).

(ii) Such calibrations must not unnecessarily reduce the NMHC+NOx emission control effectiveness during A/C-on operation when the vehicle is operated under conditions which may reasonably be expected to be encountered during normal operation and use.

(iii) If reductions in control system NMHC+NOx effectiveness do occur as a result of such calibrations, the manufacturer must, in the Application for Certification, specify the circumstances under which such reductions do occur, and the reason for the use of such calibrations resulting in such reductions in control system effectiveness.

(iv) A/C-on specific "open-loop" or "commanded enrichment" air-fuel enrichment strategies (as defined below), which differ from A/C-off "open-loop" or "commanded enrichment" air-fuel enrichment strategies, may not be used, with the following exceptions: Cold-start and warm-up conditions, or, subject to Administrator approval, conditions requiring the protection of the vehicle, occupants, engine, or emission control hardware. Other than these exceptions, such strategies which are invoked based on manifold pressure, engine speed, throttle position, or other engine parameters must use the same engine parameter criteria for the invoking of this air-fuel enrichment strategy and the same degree of enrichment regardless of whether the A/C is on or off. "Open-loop" or "commanded" air-fuel enrichment strategy is defined as enrichment of the air to fuel ratio beyond stoichiometry for the purposes of increasing engine power output and the protection of engine or emissions control hardware. However, "closed-loop biasing," defined as small changes in the air-fuel ratio for the purposes of optimizing vehicle emissions or driveability, must not be considered an "open- loop" or "commanded" air-fuel enrichment strategy. In addition, "transient" air-fuel enrichment strategy (or "tip-in" and "tip- out" enrichment), defined as the temporary use of an air-fuel ratio rich of stoichiometry at the beginning or duration of rapid throttle motion, must not be considered an "open-loop" or "commanded" air- fuel enrichment strategy.

(14) <u>"Lean-on-cruise" calibration strategies</u>. (i) For Tier 2 and interim non-Tier 2 vehicles, the manufacturer must state in the Application for Certification whether any "lean-on-cruise" strategies are incorporated into the vehicle design. A "lean-on-cruise" air-fuel calibration strategy is defined as the use of an air-fuel ratio significantly greater than stoichiometry, during non-deceleration conditions at speeds above 40 mph. "Lean-on-cruise" air-fuel calibration strategies must not be employed during vehicle operation in normal driving conditions, including A/C usage, unless at least one of the following conditions is met:

(A) Such strategies are substantially employed during the FTP or SFTP;

(B) Such strategies are demonstrated not to significantly reduce vehicle NMHC+NOx emission control effectiveness over the operating conditions in which they are employed; or

(C) Such strategies are demonstrated to be necessary to protect the vehicle occupants, engine, or emission control hardware.

(ii) If the manufacturer proposes to use a "lean-on-cruise" calibration strategy, the manufacturer must specify the circumstances under which such a calibration would be used, and

the reason or reasons for the proposed use of such a calibration.

* * * * *

(o) Unless otherwise approved by the Administrator, manufacturers must measure NMOG emissions in accordance with the California Non-Methane Organic Gas Test Procedures. These procedures are incorporated by reference (see §86.1).

(p) For gasoline and diesel-fueled Tier 2 and interim non-Tier 2 vehicles, manufacturers may measure non-methane hydrocarbons (NMHC) in lieu of NMOG. Manufacturers must multiply NMHC measurements from gasoline vehicles by an adjustment factor of 1.04 before comparing with the NMOG standard to determine compliance with that standard. Manufacturers may use other factors to adjust NMHC results to more properly represent NMOG results. Such factors must be based upon comparative testing of NMOG and NMHC emissions and be approved in advance by the Administrator.

23. Section 86.1811-01 is amended by adding a sentence to the end of the introductory text to read as follows:

§86.1811-01 Emission standards for light-duty vehicles.

* * * This section does not apply to 2004 and later model year vehicles, except as specifically referenced by §86.1811-04.

* * * * *

24. Section 86.1811-04 is added to read as follows:

§86.1811-04 Emission standards for light-duty vehicles, light-duty trucks and medium-duty passenger vehicles.

(a) <u>Applicability.</u> (1) This section contains regulations implementing emission standards for all LDVs, LDTs and MDPVs. This section applies to 2004 and later model year LDVs, LDTs and MDPVs fueled by gasoline, diesel, methanol, ethanol, natural gas and liquefied petroleum gas fuels, except as noted. Additionally, this section contains provisions applicable to hybrid electric vehicles (HEVs) and zero emission vehicles (ZEVs). Multi-fueled vehicles must comply with all requirements established for each consumed fuel.

(2) This section also applies to LDVs, LDTs and MDPVs of model years prior to 2004, when manufacturers certify such vehicles to Tier 2 exhaust emission requirements to utilize alternate phase-in schedules, as allowed under paragraph (k)(6) of this section, and/or to earn early NOx credits for use in complying with the Tier 2 fleet average NOx standard which takes effect in the 2004 model year for LDV/LLDTs and 2008 for HLDT/MDPVs.

(3) Except where otherwise specified, this section applies instead of §§86.1811-01, 86.1812-01, 86.1813-01, 86.1814-01, 86.1814-02, 86.1815-01, and 86.1815-02.

(4) Except where otherwise specified, the provisions of this section apply equally to LDVs and all categories of LDTs, and to all MDPVs. Numerous provisions are applicable equally to HLDTs and MDPVs, as reflected by the term HLDT/MDPV. Numerous provisions apply equally

to LDVs and LLDTs as reflected by the term LDV/LLDT.

(5) The exhaust emission standards and evaporative emission standards of this section apply equally to certification and in-use LDVs, LDTs and MDPVs, unless otherwise specified.

(b) <u>Test weight.</u> (1) Except as required in paragraphs (b)(2) and (b)(4) of this section, or permitted under paragraph (b)(3) of this section, emission testing of all LDVs, LDTs and MDPVs to determine compliance with any exhaust or evaporative emission standard set forth in this Part must be on a loaded vehicle weight (LVW) basis, as that term is defined in this subpart.

(2) Interim non-Tier 2 HLDTs tested to Tier 1 SFTP standards, must be tested on an adjusted loaded vehicle weight (ALVW) basis, as that term is defined in this subpart, during the SC03 element of the SFTP.

(3) Except as required in paragraph (b)(2) and (b)(4) of this section, interim non-Tier 2 HLDT/MDPVs may be tested on an ALVW basis or an LVW basis to demonstrate compliance with any exhaust or evaporative emission standard set forth in this Part.

(4) MDPVs certified to bin 11 standards from Tables S04-1 and 2 must be tested on an ALVW basis to demonstrate compliance with any exhaust emission standard set forth in this part.

(c) <u>Tier 2 FTP exhaust emission standards.</u> Exhaust emissions from Tier 2 vehicles must not exceed the standards in Table S04-1 of this section at full useful life when tested over the Federal Test Procedure (FTP) described in subpart B of this part. Exhaust emissions from Tier 2 vehicles must not exceed the standards in Table S04-2 of this section at intermediate useful life, if applicable, when tested over the FTP.

(1) For a given test group a manufacturer desires to certify to operate only on one fuel,

the manufacturer must select a set of standards from the same bin (line or row) in Table S04-1 of this section for non-methane organic gases (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), formaldehyde (HCHO) and particulate matter (PM). The manufacturer must certify the test group to meet those standards, subject to all the applicable provisions of this subpart. The manufacturer must also certify the test group to meet the intermediate useful life standards (if any) in Table S04-2 of this section having the same EPA bin reference number as the chosen full useful life standards.

(2) For a given test group of flexible-fueled, bi-fuel or dual fuel vehicles when operated on the alcohol or gaseous fuel they are designed to use, manufacturers must select a bin of standards from Table S04-1 of this section and the corresponding bin in Table S04-2, if any. When these flexible-fueled, bi-fuel or dual fuel vehicles are certified to operate on gasoline or diesel fuel, the manufacturer may choose to comply with the next numerically higher applicable NMOG standard, if any, above the bin which contains the standards selected for certification on the gaseous or alcohol fuel.

(3) (i) For a given test group of flexible-fueled, bi-fuel or dual fuel vehicles certified to bin10 in Table S04-1, when operated on the alcohol or gaseous fuel they are designed to use, manufacturers may choose to comply with a NMOG standard of 0.230 for LDV/LLDTs or 0.280 g/mi for HLDT/MDPVs at full useful life and corresponding intermediate life standards of 0.160 g/mi and 0.195 g/mi, respectively.

(ii) For a given test group of flexible-fueled, bi-fuel or dual fuel vehicles certified to bin 8 in

Table S04-1, when operated on the alcohol or gaseous fuel they are designed to use, manufacturers may choose to comply with a NMOG standard of 0.156 g/mi for LDV/LLDTs and 0.180 for HLDT/MDPVs at full useful life and corresponding intermediate life standards of 0.125 g/mi and 0.140 g/mi, respectively.

(4) (i) For bins where intermediate life standards are applicable, a manufacturer may elect not to comply with such standards. Except as permitted in paragraph (c)(4)(iv) of this section, the manufacturer must certify such vehicles to a useful life of 15 years or 150,000 miles, whichever occurs first, for LDV/LLDTs and HLDT/MDPVs.

(ii) A manufacturer electing not to comply with intermediate life standards, as permitted in paragraph (c)(4)(i) of this section, may not generate additional NOx credits as described under \$1860-04 (g) of this part, except as permitted in paragraph (c)(4)(ii).

(iii) For bins where intermediate life standards are not applicable, or are specified to be optional by paragraph (c)(4)(iv) of this section, a manufacturer may generate additional NOx credits subject to the provisions in §1860-04 (g) of this part.

(iv) For diesel vehicles certified to bin 10, intermediate life standards are optional regardless of whether the manufacturer certifies the test group to a full useful life of 120,000 miles or 150,000 miles.

(5) In a given model year, an individual vehicle may not be included in both the Tier 2 program and an interim program.

(6) Tables S04-1 and S04-2 follow:

Table S04-1 -- Tier 2 and Interim non-Tier 2 Full Useful Life Exhaust Mass Emission

Standards

(grams per mile)

Bin#	NOx	NMOG	СО	НСНО	PM	Comments
11	0.9	0.280	7.3	0.032	0.12	a,c
10	0.6	0.156/0.230	4.2/6.4	0.018/0.027	0.08	a,b,d
9	0.3	0.090/0.180	4.2	0.018	0.06	a,b,e
8	0.20	0.125/0.156	4.2	0.018	0.02	b,f
7	0.15	0.090	4.2	0.018	0.02	
6	0.10	0.090	4.2	0.018	0.01	
5	0.07	0.090	4.2	0.018	0.01	
4	0.04	0.070	2.1	0.011	0.01	
3	0.03	0.055	2.1	0.011	0.01	
2	0.02	0.010	2.1	0.004	0.01	
1	0.00	0.000	0.0	0.000	0.00	

NOTES

a. This bin and its corresponding intermediate life bin are deleted at end of 2006 model year (end of 2008 model

year for HLDTs and MDPVs).

- b. Higher NMOG, CO and HCHO values apply for HLDTs and MDPVs only.
- c. This bin is only for MDPVs.
- d. Optional NMOG standard of 0.280 g/mi applies for qualifying LDT4s and qualifying MDPVs only.
- e. Optional NMOG standard of 0.130 g/mi applies for qualifying LDT2s only.
- f. Higher NMOG standard deleted at end of 2008 model year.

Table S04-2 - Tier 2 and Interim non-Tier 2 Intermediate Useful Life (50,000 mile)

Bin#	NOx	NMOG	СО	НСНО	PM	Comments
11	0.6	0.195	5.0	0.022		a,c,f,h
10	0.4	0.125/0.160	3.4/4.4	0.015/0.018		a,b,d,f,g,h
9	0.2	0.075/0.140	3.4	0.015	-	a,b,e,f,h
8	0.14	0.100/0.125	3.4	0.015	-	b,f,h,i
7	0.11	0.075	3.4	0.015	-	f,h
6	0.08	0.075	3.4	0.015		f,h
5	0.05	0.075	3.4	0.015		f,h

Exhaust Mass Emission Standards (grams per mile)

NOTES

a. This bin deleted at end of 2006 model year (end of 2008 model year for HLDTs and MDPVs).

b. Higher NMOG, CO and HCHO values apply for HLDTs and MDPVs only.

c. This bin is only for MDPVs.

- d. Optional NMOG standard of 0.195 g/mi applies for qualifying LDT4s and qualifying MDPVs only.
- e. Optional NMOG standard of 0.100 g/mi applies for qualifying LDT2s only.
- f. The full useful life PM standards from Table S04-1 also apply at intermediate useful life.
- g. Intermediate life standards of this bin are optional for diesels.
- h. Intermediate life standards are optional for vehicles certified to a useful life of 150,000 miles.
- i. Higher NMOG standard deleted at end of 2008 model year.

(d) <u>Fleet average NOx Standards.</u> (1)(i) For a given individual model year's sales of Tier 2 vehicles, including model years during the phase-in years of the Tier 2 standards, manufacturers must comply with a fleet average oxides of nitrogen (NOx) standard of 0.07 grams per mile. The manufacturer must calculate its fleet average NOx emission level(s) as described in §86.1860-04. Up through and including model year 2008, manufacturers must calculate separate fleet average NOx emission levels for LDV/LLDTs and for HLDT/MDPVs as described in §86.1860-04.

(ii) During a phase-in year, the manufacturer must comply with the 0.07 g/mi fleet average standard for the required phase-in percentage for that year as specified in paragraph (k)(1) of this section, or for the alternate phase-in percentage as permitted under paragraph (k)(6) of this section.

(2) <u>For Early Tier 2 LDV/LLDTs</u>. For model years prior to 2004, where the manufacturer desires to bank early Tier 2 NOx credits as permitted under §86.1861(c), the manufacturer must comply with a fleet average standard of 0.07 grams per mile for its Tier 2 LDV/LLDTs. Manufacturers must determine compliance with the NOx fleet average standard according to regulations in §86.1860-04 of this subpart.

(3) For Early Tier 2 HLDT/MDPVs. For model years prior to 2008, where the manufacturer desires to bank early Tier 2 NOx credits as permitted under §86.1861(c), the manufacturer must comply with a fleet average standard of 0.07 grams per mile for its Tier 2 HLDT/MDPVs. Manufacturers must determine compliance with the NOx fleet average standard according to regulations in §86.1860-04.

(e) <u>Evaporative emission standards.</u> Consistent with the phase-in requirements in paragraph (k) of this section, evaporative emissions from gasoline-fueled, natural gas-fueled, liquefied petroleum gas-fueled, ethanol-fueled and methanol-fueled vehicles must not exceed the standards in this paragraph. The standards apply equally to certification and in-use vehicles, except that the spitback standard applies only to newly assembled vehicles

(1) <u>Diurnal-plus-hot soak evaporative hydrocarbon standards.</u> Hydrocarbons for LDV/LLDTs, HLDTs and MDPVs must not exceed the diurnal plus hot soak standards shown in Table S04-3 for the full three diurnal test sequence and for the supplemental two diurnal test sequence. Table S04-3 follows:

Table S04-3 -- Light-duty Diurnal Plus Hot Soak Evaporative Emission Standards (grams per test)

VEHICLE CATEGORY	3 DAY DIURNAL + HOT	SUPPLEMENTAL 2 DAY
	SOAK	DIURNAL + HOT SOAK
LDV/LLDTs	0.95	1.2
HLDTs	1.2	1.5
MDPVs	1.4	1.75

(2) <u>Running loss standard.</u> Hydrocarbons for LDVs, LDTs and MDPVs measured on the running loss test must not exceed 0.05 grams per mile.

(3) <u>Refueling emission standards.</u> Refueling emissions must not exceed the following standards:

(i) For gasoline-fueled, diesel-fueled and methanol-fueled LDVs, LDTs and MDPVs: 0.20 grams hydrocarbon per gallon (0.053 grams per liter) of fuel dispensed.

(ii) For liquefied petroleum gas-fueled LDV, LDTs and MDPVs: 0.15 grams hydrocarbon per gallon (0.04 grams per liter) of fuel dispensed.

(iii) Refueling standards for HLDTs are subject to the phase-in requirements found in \$86.1810-01(k). MDPVs must also comply with the phase-in requirement in \$86.1810-01(k) and must be grouped with HLDTs to determine phase-in compliance.

(4) <u>Spitback standards.</u> For gasoline and methanol fueled LDV/Ts and MDPVs, hydrocarbons measured on the fuel dispensing spitback test must not exceed 1.0 grams hydrocarbon (carbon if methanol-fueled) per test.

(5) Evaporative emission requirements for interim vehicles. (i) LDV/Ts not certified to meet the evaporative emission standards in this paragraph (e) as permitted under the phase-in schedule of paragraph (k) of this section, must meet applicable evaporative emission standards in §§ 86.1811-01, 86.1812-01, 86.1813-01, 86.1814-02 or 86.1815-02 except that all LDV/Ts must meet the refueling emission standards in paragraph (e)(3) of this section.

(ii) MDPVs not certified to meet the evaporative emission standards in this paragraph (e) as permitted under the phase-in schedule of paragraph (k) of this section, must meet applicable evaporative emission standards for heavy-duty vehicles in §86.099-10.

(6) In cases where applicable California emission standards are as stringent or more

stringent than applicable standards specified under this paragraph (e) of §86.1811-04, the Administrator may accept data indicating compliance with California standards to demonstrate compliance for certification purposes with the standards required under this paragraph (e). The Administrator may require manufacturers to provide comparative test data to show that a vehicle meeting California standards under California test conditions and procedures will also meet the standards under this paragraph (e) when tested under test conditions and procedures in this Part 86.

(f) <u>Supplemental exhaust emission standards for LDV/Ts.</u> (1) Supplemental exhaust emission standards are applicable to gasoline and diesel-fueled LDV/Ts but are not applicable to MDPVs, alternative fueled LDV/Ts, or flexible fueled LDV/Ts when operated on a fuel other than gasoline or diesel. Except as otherwise specified in this paragraph, manufacturers must comply with 4000 mile and full useful life SFTP standards as determined in this paragraph. The 4000 mile SFTP standards must be taken from Table S04-4 and the full life SFTP standards must be calculated using the formula in paragraph (f)(2) of this section. Table S04-4 follows:

Table S04-4 – 4000 Mile SFTP Standards for Tier 2 and Interim Non-Tier 2 LDVs and LDTs.

		US06	SC03
--	--	------	------

	NMHC+NOx	СО	NMHC+NOx	СО
	(g/mi)	(g/mi)	(g/mi)	(g/mi)
LDV/LDT1	0.14	8.0	0.20	2.7
LDT2	0.25	10.5	0.27	3.5
LDT 3	0.4	10.5	0.31	3.5
LDT 4	0.6	11.8	0.44	4.0

(2)(i) Manufacturers must calculate their applicable full useful life SFTP standards for NMHC+NOx, PM and for CO, if using the weighted CO standard. If not using the weighted CO standard, manufacturers may use the full useful life standalone Tier 1 standards for US06 and SC03. To calculate the applicable full useful life weighted NMHC+NOx, PM and CO standards, manufacturers must use the following formula:

SFTP Standard = SFTP Standard₁ – [0.35 x (FTP Standard₁ -- Current FTP Standard)]

where:

SFTP Standard = Applicable full life weighted SFTP standard for NMHC+NOx, PM or CO. This standard must be rounded to two decimal places.

SFTP Standard₁ = Applicable full life Tier 1 SFTP standard for NMHC+NOx or CO from Table S04-5. For PM only, use **FTP Standard**₁ for **SFTP Standard**₁.

FTP Standard₁ = Applicable full life Tier 1 FTP standard from Table S04-6 in this section.

For the Tier 1 NMHC+NOx standard, add the applicable NMHC and NOx standards.

Current FTP Standard = Applicable full life FTP standard from Table S04-1. For the current NMHC+NOx standard, add the NMOG and NOx standards from the applicable bin.

Table S04-5 -- Tier 1 Full Useful Life SFTP Standards.

Vehicle	NMHC + NOx	CO (g/mi) ^{b,c}		
Category	(weighted g/mi) ^{a,c}	US06	SC03	Weighted
LDV/LDT1	0.91 (0.65)	11.1 (9.0)	3.7 (3.0)	4.2 (3.4)
LDT2	1.37 (1.02)	14.6 (11.6)	5.6 (3.9)	5.5 (4.4)
LDT3	1.44	16.9	6.4	6.4
LDT4	2.09	19.3	7.3	7.3

^a Weighting for NMHC+NOx and optional weighting for CO is

0.35x(FTP) + 0.28x(US06) + 0.37x(SC03)

^b CO standards are stand alone for US06 and SC03 with option for a weighted standard.

^c Intermediate life standards are shown in parentheses for diesel LDV/LLDTs opting to calculate

intermediate life SFTP standards in lieu of 4,000 mile SFTP standards as permitted under paragraph

(f)(6)of this section.

Table S04-6 Tier 1 Full Useful Life FTP Standards (g/mi).

Vehicle	NMHC ^a	NOx ^a	CO ^a	PM
Category				
LDV/LDT1	0.31 (0.25)	0.6 (0.4)	4.2 (3.4)	0.10
LDT2	0.40 (0.32)	0.97(0.7)	5.5 (4.4)	0.10
LDT3	0.46	0.98	6.4	0.10
LDT4	0.56	1.53	7.3	0.12

^a Intermediate life standards are shown in parentheses for diesel LDV/LLDTs opting to calculate intermediate life SFTP standards in lieu of 4,000 mile SFTP standards as permitted under paragraph (f)(6)of this section.

(ii) Manufacturers must determine compliance with NMHC+NOx, CO and PM weighted SFTP standards calculated in paragraph (f)(2)(i) of this section by weighting their emission results as follows:

0.35x(FTP) + 0.28x(US06) + 0.37x(SC03)

The results of this calculation must be rounded to one more decimal place than the applicable standard calculated in paragraph (2)(A) of this section and then compared with that standard.

(3) For interim non-Tier 2 gasoline, diesel and flexible-fueled LDT3s and LDT4s, manufacturers may, alternatively, meet the gasoline-fueled vehicle SFTP standards found in §§86.1814-02 and 86.1815-02, respectively.

(4) Interim non-Tier 2 gasoline, diesel and flexible-fueled LDV/LLDTs certified to bin 10FTP exhaust emission standards from Table S04-1 in this section may meet the gasoline Tier 1

SFTP requirements found at §86.1811-01(b).

(5) SFTP standards for PM are not applicable to interim non-Tier 2 LDV/Ts. For Tier 2 LDV/Ts, the 4000 mile PM standard is equal to the full life PM standard calculated under paragraph (c)(2) of this section. The requirements of this paragraph (f)(5) also apply to Tier 2 flexible fuel vehicles when operated on gasoline or diesel fuel. (See regulations at 40 CFR 86.1829-01(b)(1)(iii)(B) regarding data submittal for PM results for gasoline vehicles.)

(6)(i) In lieu of complying with 4000 mile SFTP standards described in this paragraph, diesel LDV/LLDTs through model year 2006, may comply instead with intermediate life SFTP standards derived from Tier 1 intermediate life SFTP standards for gasoline vehicles.

(ii) To calculate intermediate life SFTP standards, substitute intermediate life Tier 1 FTP and SFTP values from Tables S04-5 and S04-6, as appropriate, for the full life values in the equation in paragraph (f)(2)(i) of this section. Substitute the applicable intermediate life standards for the full life current FTP standard. If there is no applicable intermediate life standard use the full life current FTP standard.

(iii) A manufacturer of diesel LDV/LLDTs must declare which option it will use (4,000 mile or intermediate life standards) in Part I of its certification application.

(g) <u>Cold temperature exhaust emission standards</u>. These standards are applicable only to gasoline fueled LDV/Ts and MDPVs. For cold temperature exhaust emission standards, a useful life of 50,000 miles applies.

(1) For LDVs and LDT1s, the standard is 10.0 grams per mile CO.

(2) For LDT2s, LDT3s and LDT4s, and MDPVs the standard is 12.5 grams per mile CO.

(3) These standards do not apply to interim non-Tier 2 MDPVs.

(h) <u>Certification short test exhaust emission standards.</u> Certification short test emissions from all gasoline-fueled otto cycle LDV/Ts and MDPVs must not exceed the following standards:

(1) Hydrocarbons: 100 ppm as hexane, for certification and SEA testing; 220 ppm as hexane, for in-use testing.

(2) Carbon monoxide: 0.5% for certification and SEA testing; 1.2% for in-use testing.

(3) These standards do not apply to interim non-Tier 2 MDPVs.

(i) Idle CO standards and references to such standards in this subpart, do not apply to any 2004 or later model year LDV, LDT, or MDPV or to any LDV, LDT or MDPV certified to Tier 2 standards before model year 2004 for purposes of generating early NOx credits or meeting the requirements of an alternative phase-in schedule that begins prior to the 2004 model year.

(j) <u>Highway NOx exhaust emission standard.</u> The maximum projected NOx emissions measured on the federal Highway Fuel Economy Test in 40 CFR part 600, subpart B, must not be greater than 1.33 times the applicable FTP NOx standard to which the manufacturer certifies the test group. Both the projected emissions and the product of the NOx standard and 1.33 must be rounded to the nearest 0.01 g/mi before being compared. This standard is not applicable to MDPVs.

(k) <u>Phase-in of the Tier 2 FTP exhaust and evaporative requirements; small volume</u> manufacturer flexibilities. (1) Manufacturers must comply with the phase-in requirements in Tables S04-7 and S04-8 of this section for the Tier 2 FTP exhaust emission requirements specified in paragraph (c) of this section. Separate phase-in schedules are provided for LDV/LLDTs and for HLDT/MDPVs. These requirements specify the minimum percentage of the manufacturer's LDV/LLDT and HLDT/MDPV U.S. sales, by model year, that must meet the Tier 2 requirements, including the applicable fleet average standard, for their full useful lives. As the terms LDV/LLDT and HLDT/MDVP imply, LDVs and LLDTs must be grouped together to determine compliance with these phase-in requirements and HLDTs and MDPVs must also be grouped together to determine compliance with these phase-in requirements. Tables S04-7 and S04-8 follow:

MODEL YEAR	PERCENTAGE OF LDV/LLDTs THAT
	MUST MEET TIER 2 REQUIREMENTS
2004	25%
2005	50%
2006	75%
2007 and subsequent	100%

 Table S04-7 - Phase-in Percentages for LDV/LLDT Tier 2 Requirements

Table S04-8 -- Phase-in Percentages for HLDT/MDPV Tier 2 Requirements

MODEL YEAR	PERCENTAGE OF HLDT/MDPVs THAT
	MUST MEET TIER 2 REQUIREMENTS
2008	50%
2009 and subsequent	100%

(2) Manufacturers must also comply with the phase-in requirements in Tables S04- 7 and S04-8 of this section for the evaporative emission requirements contained in paragraph (e) of this section.

(3) Manufacturers may opt to use different LDV/LLDTs and HLDT/MDPVs to meet the phase-in requirements for evaporative emissions and FTP exhaust emissions, provided that the manufacturer meets the minimum applicable phase-in requirements in Table S04-7 and Table S04-8 of this section for both FTP exhaust and evaporative emissions. A LDV, LDT or MDPV counted toward compliance with any phase-in requirement for FTP exhaust or evaporative standards, must comply with all applicable Tier 2 exhaust requirements or all applicable evaporative requirements, respectively, described in this section.

(4) LDVs, LDTs and MDPVs not certified to meet the Tier 2 FTP exhaust requirements during model years 2004-2008, as allowed under this subpart, are subject to the provisions of paragraph (l) of this section.

(5) <u>Provisions for Small Volume Manufacturers</u> (i) Small volume manufacturers, as defined in this part, are exempt from the Tier 2 LDV/LLDT exhaust and evaporative emissions phase-in requirements for model years 2004, 2005 and 2006 in Table S04-7 of this section, but

must comply with the 100% requirement for the 2007 and later model years for exhaust and evaporative emissions. If not complying with Tier 2 requirements during 2004, 2005 and 2006, small volume manufacturers must comply with the requirements for interim non-Tier LDV/LLDTs.

(ii) Small volume manufacturers, as defined in this part, are exempt from the HLDT/MDPV exhaust and evaporative phase-in requirement for model year 2008 in Table S04-8 of this section but must comply with the 100% requirement for the 2009 model year. Small volume manufacturers are also exempt from the HLDT/MDPV interim fleet average NOx standard (0.20 g/mi) and its phase-in for the 2004, 2005 and 2006 model years.

(iii) Small volume manufacturers must comply with the FTP exhaust emission standardsfrom Tables S04-1 and 2 of this section for all HLDT/MDPVs of model years 2004 and later, except that 2004 model year HLDTs may comply with Tier 1 exhaust emission standards subject to the provisions of paragraph (l)(2)(vii) of this section, and 2004 model year MDPVs may comply with heavy-duty vehicle standards subject to the provisions of paragraph (l)(2)(viii). Small volume manufacturers must also comply with the 0.20 g/mi fleet average NOx standard for 2007 and 2008 model year HLDT/MDPVs; the Tier 2 0.07 g/mi fleet average NOx standard for the 2009 and later model year HLDT/MDPVs; and the evaporative emission standards in Table S04-3 of this section for the 2009 and later model years.

(6)(i) A manufacturer may elect an alternate phase-in schedule that results in 100% phasein for LDV/LLDTs by 2007. Alternate phase-in schedules must produce a sum of at least 250% when the percentages of LDV/LLDTs certified to Tier 2 requirements for each model year from 2001 through 2007 are summed. As an example, a 10/25/50/65/100 percent phase-in that began in 2003 would have a sum of 250 percent and would be acceptable. However, a 10/25/40/70/100 percent phase-in that began the same year would have a sum of 245 percent and would not be acceptable.

(ii) A manufacturer electing this option for LDV/LLDTs may calculate its compliance with the evaporative standards in paragraph (e)(1) of this section separately from its compliance with Tier 2 exhaust standards, provided that the phase-in schedules for each separately produce a sum of at least 250 percent when calculated as described in paragraph (k)(6)(i) of this section. A vehicle counted towards compliance with any phase-in requirement for the Tier 2 exhaust standards or the evaporative standards in paragraph (e)(1) of this section, must comply with all applicable Tier 2 exhaust standards or all evaporative standards, as applicable, described in this section.

(iii) In addition to the requirements of paragraph (k)(6)(i) and (ii) of this section, except as permitted in paragraph (k)(6)(vi) of this section, a manufacturer of LDV/LLDTs electing to use an alternate phase-in schedule for compliance with the Tier 2 exhaust standards or the evaporative standards in paragraph (e)(1) of this section must ensure that the sum of the percentages of vehicles from model years 2001 through 2004, meeting such exhaust or evaporative standards, as applicable, is at least 25%.

(iv) A manufacturer may elect an alternate phase-in schedule that results in 100% phase-in for HLDT/MDPVs by 2009. The requirements of paragraph (k)(6)(i) through (k)(6)(ii) of this section apply, except that for HLDT/MDPVs, the calculation described in paragraph (k)(6)(i) and (k)(6)(ii) of this section may cover model years 2001 through 2009 and must produce a sum of at

least 150%.

(v) A manufacturer electing to use any alternate phase-in schedule permitted under this section must provide in its Application for Certification for the first year in which it intends to use such a schedule, and in each succeeding year during the phase-in, the intended phase-in percentages for that model year and the remaining phase-in years along with the intended final sum of those percentages as described in this paragraph (k)(6). This information may be included with the information required under §86.1844-01(d)(13). In its year end annual reports, as required under §86.1844-01(e)(4) the manufacturer must include sufficient information so that the Administrator can verify compliance with the alternative phase-in schedule established under paragraph (k)(6) of this section.

(vi) Under an alternate phase-in schedule, the projected phase-in percentage is not binding for a given model year, provided the sums of the actual phase-in percentages that occur meet the appropriate total sums as required in paragraph (k)(6) of this section, and provided that 100% actual compliance is reached for the appropriate model year, either 2007 or 2009, as described in paragraph (k)(6) of this section.

(vii) A manufacturer unable to meet the 25% requirement in paragraph (k)(6)(iii)(A) of this section, must:

(A) Ensure that the sum of the percentages of vehicles for model years 2001 through 2004, meeting such exhaust or evaporative standards, as applicable, is at least 20%.

(B) Subtract that sum of percentages for model years 2001 through 2004 from 25%, and multiply the unrounded result by 2.

(C) Round the product from paragraph (k)(6)(vi)(B) of this section to the nearest 0.1% and add that to 50%. That sum becomes the required phase-in percentage for the 2005 model year.

(D) Comply with the phase-in percentage for the 2005 model year determined in paragraph (k)(6)(vi)(C), and

(E) Comply with a minimum phase-in percentage for the 2006 model year determined by the following equation:

minimum phase-in percentage for $2006 = [75\% - (2005_{api} - 2005_{rpi})]$

where: 2005_{rpi} = the required phase-in for the 2005 model year as determined in paragraph (k)(6)(vi)(C) of this section. and

 $2005_{api}=$ the manufacturer's actual phase-in quantity for the 2005 model year.

(7)(i) Sales percentages for the purpose of determining compliance with the phase-in of the Tier 2 requirements and the phase-in of the evaporative standards in paragraph (e)(1) of this section, must be based upon projected U.S. sales of LDV/LLDTs and HLDT/MDPVs of the applicable model year by the manufacturer to the point of first sale. Such sales percentages must be rounded to the nearest one tenth of a percent, and must not include vehicles and trucks projected to be sold to points of first sale in California or a state that has adopted California requirements for that model year as permitted under section 177 of the Act.

(ii) Alternatively, the manufacturer may petition the Administrator to allow actual volume

produced for U.S. sales to be used in lieu of projected U.S. sales for purposes of determining compliance with the phase-in percentage requirements under this section. The manufacturer must submit its petition within 30 days of the end of the model year to the Vehicle Programs and Compliance Division. For EPA to approve the use of actual volume produced for U.S. sales, the manufacturer must establish to the satisfaction of the Administrator, that actual production volume is functionally equivalent to actual sales volume of LDV/LLDTs and HLDT/MDPVs sold in states other than California and states that have adopted California standards.

(iii) Manufacturers must submit information showing compliance with all phase-in requirements of this section with its Part I application as required by §86.1844(d)(13).

- (l) FTP exhaust standards for interim non-Tier 2 vehicles.
- (1) FTP exhaust emission standards for interim non-Tier 2 LDV/LLDTs.

(i) LDV/LLDTs that are not used to meet the Tier 2 phase-in requirements including the Tier 2 fleet average NOx requirement during the Tier 2 phase-in period (model years 2004-2006) must comply with the full useful life FTP exhaust emission standards listed in Table S04-1 of this section and the corresponding intermediate useful life standards, if any, in Table S04-2 of this section. Manufacturers may choose the bin of full useful life standards to which they certify a test group of vehicles, subject to the requirements in paragraph (1)(3)(i) of this section. In a given model year, an individual vehicle may not be used to comply with both the Tier 2 fleet average NOx standard and the applicable interim fleet average NOx standard although vehicles from the same test group may be separated and the vehicles counted toward compliance with either program. (ii) The provisions of paragraph (c)(1), (2) and (3) of this section apply to flexible-

fueled, dual fuel and multi-fuel interim non-Tier 2 LDV/LLDTs.

(iii) Only manufacturers that comply with the applicable FTP standards in Tables S04-1 and 2 for all of their 2004 model year HLDTs and declare their intention to comply with the 2004 model year 25% phase-in requirement to the 0.20 g/mi interim fleet average NOx standard for HLDTs (or HLDT/MDPVs) described in paragraph (l) of this section may use the optional higher NMOG values for interim LDT2s certified to bin 9 standards that are shown in Tables S04-1 and 2. Manufacturers must declare their intention to comply with the full 2004 model year 25% phasein requirement in Part I of their HLDT or their HLDT/MDPV, as applicable, certification applications.

(iv) The provisions of paragraph (c)(4) of this section apply to interim non-Tier 2 vehicles.

(2) <u>FTP exhaust emission standards for interim non-Tier 2 HLDTs and interim non-Tier 2</u> <u>MDPVs.</u>

(i) Except as permitted under paragraph (l)(2)(vii) and (viii) of this section, HLDTs and MDPVs of model years 2004-2008 that are not used to meet the Tier 2 FTP phase-in requirements including the Tier 2 fleet average NOx requirement must comply with the full useful life FTP exhaust emission standards listed in Table S04-1 of this section and, the corresponding intermediate useful life standards, if any, in Table S04-2 of this section. Manufacturers may choose the bin of full useful life standards to which they certify a test group of vehicles, subject to the requirements in paragraph (l)(3)(ii) of this section.

(ii) Except as permitted under paragraph (l)(2)(vii) and (viii) of this section, HLDTs and MDPVs of model years 2004-2008 that are not used to meet the Tier 2 FTP phase-in

requirements including the Tier 2 fleet average NOx requirement must comply with the fleet average NOx standard described in paragraph (l)(3)(ii) of this section subject to the phase-in schedule in paragraph (l)(2)(iv) of this section, i.e. 25 percent of the HLDT and MDPVs must meet the fleet average standard of 0.20 g/mi in 2004, 50 percent in 2005, and so on.

(iii) Manufacturers may choose the bin of full useful life standards and corresponding intermediate life standards to which they certify test groups of HLDTs and MDPVs, subject to the requirements in paragraph (l)(3)(ii) of this section. Manufacturers may include HLDT/MDPVs in the interim program that are not used to meet the Tier 2 fleet average NOx standard or the phase-in percentage requirements in the Tier 2 program or to generate Tier 2 NOx credits. In a given model year, an individual vehicle may not be used to comply with both the Tier 2 fleet average NOx standard and the applicable interim fleet average NOx standard although vehicles from the same test group may be separated and the vehicles counted toward compliance with either program. (iv) <u>Phase-in schedule for interim non-Tier 2 HLDT/MDPVs</u>. Table S04-9 of this section specifies the minimum percentage of the manufacturer's interim non-Tier 2 HLDT/MDPV U.S. sales, by model year, that must comply with the fleet average NOx standard described in paragraph (l)(3)(ii) of this section. Table S04-9 follows:

 Table S04-9 -- Phase-in Percentages for Compliance with Interim non-Tier 2 Fleet Average

 NOx Standard for HLDT/MDPVs

Model Year	Percentage of non-Tier 2 HLDT/MDPVs
	that Must Meet Interim non-Tier 2 Fleet
	Average NOx Standard
2004	25%
2005	50%
2006	75%
2007 and 2008	100%

(v) (A) A manufacturer may elect an alternate phase-in schedule, beginning as early as the 2001 model year, that results in 100% compliance by 2007 with the fleet average NOx standard for interim non-Tier 2 HLDT/MDPVs described in paragraph (l)(3)(ii) of this section. The requirements of paragraph (k)(6) of this section apply to the selection of an alternate phase-in schedule.

(B) If a manufacturer elects not to bring all of its HLDT/MDPVs into compliance with the interim requirements in 2004 as permitted under paragraphs (l)(2)(vii) and (viii) of this section, it may still use an alternate phase-in schedule to attain 100% compliance with the interim fleet average NOx standard for HLDT/MDPVs, but the sum of phase-in percentages it must meet will be 225% rather than 250%. If the manufacturer commences its 2004 model year on or after

[INSERT DATE FOUR CALENDAR YEARS FROM SIGNATURE DATE] for any

HLDT/MDPVs, the manufacturer must increase the 225% by the fraction of its 2004 model year HLDT/MDPVs whose model year commenced on or after that date and which were brought into compliance with the 0.20 g/mi corporate average NOx standard as required under paragraph

(l)(2)(ix) of this section. The manufacturer must ensure that the sum of the percentages of vehicles up through model year 2005 complying with the interim fleet average NOx standard is at least 50%.

(vi) The provisions of paragraph (c)(1), (2) and (3) of this section apply to flexible-fueled, dual fuel and multi-fuel interim non-Tier 2 HLDT/MDPVs.

(vii) For 2004 model year HLDT test groups whose model year commences before [INSERT DATE FOUR CALENDAR YEARS FROM SIGNATURE DATE], the manufacturer may exempt such HLDTs from compliance with any requirements applicable to interim non-Tier 2 HLDTs, and such HLDTs must be produced in accordance with standards and

requirements in §§86.1814-02 and §§86.1815-02. Such HLDTs must also meet the refueling emission standards contained in paragraph (e)(3) of this section.

(viii) For 2004 model year heavy-duty vehicles whose model year commences before

[INSERT DATE FOUR CALENDAR YEARS FROM SIGNATURE DATE], the

manufacturer may exempt such vehicles from compliance with any requirements applicable to interim non-Tier 2 MDPVs. Exempted vehicles will not be considered MDPVs and must be produced in accordance with standards and requirements in §86.099-10. Exempted vehicles are also exempted from refueling emission standards.

(ix) For 2004 model year HLDT and MDPV test groups whose model year commences on or after **[INSERT DATE FOUR CALENDAR YEARS FROM SIGNATURE DATE]**, the manufacturer must comply with all interim non-Tier 2 requirements in this section.

(A) All such vehicles, but not more than 25% of the manufacturer's total sales of 2004

model year HLDT/MDPVs must meet the interim non-Tier 2 fleet average NOx standard as described in paragraph (l)(3)(ii) of this section.

(B) All such vehicles but not more than 40% of the manufacturer's 2004 model year HLDT/MDPVs must comply with the refueling requirements in paragraph (e)(3) of this section.

(x) Only those manufacturers that comply with the interim non-Tier 2 FTP standards for all of their 2004 model year HLDTs and declare their intention to comply with the 2004 model year 25% phase-in requirement to the fleet average interim NOx standard for HLDTs or HLDT/MDPVs of 0.20 g/mi described in paragraph (l) of this section may use the optional higher NMOG values for interim LDT4s certified to bin 10 standards that are shown in Tables S04-1 and 2. Manufacturers must declare their intention to comply with the 2004 model year 25% phase-in requirement in Part I of their HLDT certification applications.

(xi) Only those manufacturers that comply with the interim non-Tier 2 FTP standards for all of their 2004 model year MDPVs, and declare their intention to comply with the 2004 model year 25% phase-in requirement to the fleet average interim NOx standard for MDPVs or HLDT/MDPVs of 0.20 g/mi described in paragraph (l) of this section may:

(A) Use the exhaust emission standards of bin 11 in Tables S04-1 and S04-2 in this section for MDPVs through model year 2008;

(B) For diesel-fueled vehicles, certify the engines in such vehicles, through model year 2007, to provisions in this part 86 applicable to diesel-fueled heavy-duty engines of the appropriate model year. Such diesel fueled vehicles must not be included in any count or determination of compliance with the phase-in requirements applicable to interim non-Tier 2 MDPVs; and

(C) Use the optional higher NMOG values for interim LDT4s certified to bin 10 standards that are shown in Tables S04-1 and 2.

(xii) Manufacturers electing to comply with the provisions of paragraph (l)(2)(xi) of this section must declare their intention to comply with the 2004 model year 25% phase-in requirement to the fleet average interim NOx standard for MDPVs or HLDT/MDPVs of 0.20 g/mi in Part I of their MDPV certification applications.

(xiii) Where diesel-fueled heavy-duty engines are used as permitted under paragraph (l)(2)(xi)(B) of this section, such engines must be treated as a separate averaging set-- MDPV HDDEs-- under the averaging, banking and trading provisions applicable to heavy-duty diesel engines. Only NOx credits generated by engine-certified diesel engines that are used in other MDPVs can be applied to these engines. Manufacturers wishing to average, bank or trade credits for MDPV HDDEs must comply with the requirements in this paragraph and with all requirements applicable to heavy-duty engine averaging, banking and trading in this part.

(3) Fleet average NOx standards for interim non-Tier 2 LDV/Ts and MDPVs.

(i) Manufacturers must comply with a fleet average full useful life NOx standard for their interim non-Tier 2 LDV/LLDTs, on an annual basis, of 0.30 grams per mile.

(ii) Manufacturers must comply with a fleet average full useful life NOx standard for their interim non-Tier 2 HLDT/MDPVs, excluding those HLDTs and MDPVs not yet covered by the phase-in requirement described in paragraph (l)(2)(ii) of this section, on an annual basis, of 0.20

grams per mile.

(iii) Manufacturers must determine their compliance with these interim fleet average NOx standards for each model year by separately computing the sales weighted average NOx level of all interim non-Tier 2 LDV/LLDTs and all interim non-Tier 2 HLDT/MDPVs (excluding those not yet phased in as described in paragraph (l)(2)(ii) of this section), using the methodology in §86.1860.

(iv) Manufacturers may generate, bank, average, trade and use interim non-Tier 2 NOx credits based on their NOx fleet average as determined under paragraph (l)(3)(iii) of this section. Unless waived or modified by the Administrator, the provisions of §86.1861 of this part apply to the generation, banking, averaging, trading and use of credits generated by interim non-Tier 2 vehicles. NOx credits generated by interim non-Tier 2 vehicles are not subject to any discount except as required by §1861-04(e) of this subpart.

(m) <u>NMOG</u> standards for diesel, flexible fueled and dual-fueled LDV/Ts and MDPVs.

(1) For diesel fueled LDV/Ts and MDPVs, the term "NMOG" in both the Tier 2 and interim non-Tier 2 standards means non-methane hydrocarbons.

(2) Flexible-fueled and dual-fuel Tier 2 and interim non-Tier 2 vehicles must be certified to NMOG exhaust emission standards both for operation on gasoline and on any alternate fuel they are designed to use. Manufacturers may measure NMHC in lieu of NMOG when flexible-fueled and dual-fuel vehicles are operated on gasoline, subject to the requirements of §86.1810(p).

(n) Hybrid electric vehicle (HEV) and Zero Emission Vehicle (ZEV) requirements.

For FTP and SFTP exhaust emissions, and unless otherwise approved by the Administrator, manufacturers must measure emissions from all HEVs and ZEVs according to the requirements and test procedures found in the document entitled California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-duty Truck and Medium-duty Vehicle Classes. This document is incorporated by reference (see §86.1) . Requirements and procedures in this document that are relevant only to complying with the California ZEV mandate, computing partial and full ZEV allowance credits, or generating and using ZEV credits, are not relevant to the federal program and may be disregarded. Discussion in that document relevant to fleet average NMOG standards and NMOG credits may also be disregarded.

(o) NMOG measurement.

(1) Manufacturers must measure NMOG emissions in accordance with Part G of the California Non-Methane Organic Gas Test Procedures. These requirements are incorporated by reference (see §86.1).

(2) Manufacturers must not apply reactivity adjustment factors (RAFs) to NMOG measurements. See §86.1841.

(p) In-use standards.

(1) Table S04-10 of this section contains in-use emission standards applicable only to vehicles certified to the bins shown in the table. These standards apply to in-use testing performed

by the manufacturer pursuant to regulations at §§1845-01, 1845-04 and 1846-01 and to in-use testing performed by EPA. These standards do not apply to certification or Selective Enforcement Auditing.

(2) These standards apply only to LDV/LLDTs produced up through the 2008 model year, and HLDT/MDPVs produced up through the 2010 model year. These standards are subject to other limitations described in paragraph (p)(3) of this section.

(3) For the first model year and also for the next model year after that, in which a test group of vehicles is certified to a bin of standards to which it has not previously been certified, the standards in Table S04-10 of this section apply for purposes of in-use testing only. The standards apply equally to all LDV/Ts and MDPVs subject to the model year limitation in paragraph (p)(2) of this section. Table S04-10 follows:

Table S04-10 -- In-use Compliance Standards (g/mi)

Bin	Durability Period	NOx	NOx	NMOG	NMOG
Number	(miles)	In-use	Certification	In-use	Certification
6, 5	50,000	0.07	0.05	n/a	0.075, 0.04
6, 5	120,000	0.10	0.07	n/a	0.090, 0.055
4	120,000	0.06	0.04	n/a	0.070
3	120,000	0.05	0.03	0.09	0.055
2	120,000	0.03	0.02	0.02	0.010

(certification standards shown for reference purposes)

(4) For diesel vehicles certified to bin 10, separate in-use standards apply for NOx and PM emissions. These standards are determined by multiplying the applicable NOx and PM certification standards by factors of 1.2 and 1.35, respectively, and then rounding the result to one more decimal place than contained in the certification standard. The resultant standards do not apply for certification or selective enforcement auditing.

(q) <u>Hardship Provision for Small Volume Manufacturers.</u> (1) A small volume manufacturer may apply for relief from any applicable final phase-in model year contained in this section. Relief will only be available to defer required compliance with a completely new set of standards, a fleet average NOx standard, and/or evaporative emission standard for 100% of affected vehicles for one model year. Thus, a small volume manufacturer that obtains relief may:

(i) defer 100% compliance with the fleet average NOx standard for interim LDV/LLDTs(0.30 g/mi) until 2005;

(ii) defer 100% compliance with the evaporative emission standards and/or fleet average NOx standard for Tier 2 LDV/LLDTs (0.07 g/mi) until 2008;

(iii) defer 100% compliance with the requirements that interim HLDTs and MDPVs comply with applicable emission standards shown in Tables S04-1 and S04-2, until 2005;

(iv) defer 100% compliance with the fleet average NOx standard for interim HLDT/MDPVs (0.20 g/mi) until 2008; and

(v) defer 100% compliance with the the evaporative emission standards and/or fleet average NOx standard for Tier 2 HLDT/MDPVs (0.07 g/mi) until 2010.

(2) Applications for relief must be in writing and must:

(i) be submitted before the earliest date of noncompliance,

(ii) include evidence that the manufacturer will incur severe economic hardship if relief is not granted,

(iii) include evidence that the noncompliance will occur despite the best efforts of the manufacturer to comply, and

(iv) include evidence that the manufacturer has made every reasonable effort to purchase credits to address the noncompliance, where applicable.

(r) <u>NMOG Standard Adjustment for Direct Ozone Reducing Devices</u>. (1) A manufacturer may obtain NMOG credit for use in certifying to the exhaust NMOG standards listed in paragraphs (c) and for use in complying with the in-use standards of paragraph (p) of this section, where applicable. This credit effectively allows the manufacturer to increase the exhaust NMOG emission standards listed in these paragraphs by the amount of the applicable credit. For example, if the applicable NMOG credit was 0.01 g/mi, and the vehicle was being certified in Bin 5, as described in Table S04-1 of paragraph (c), exhaust NMOG emissions must be no greater than 0.10 g/mi, as opposed to the normal NMOG certification standard of 0.09 g/mi in Bin 5.

(2) The NMOG credit must be determined through a two-step process.

(i) The first step must determine the ozone reduction potential of the direct ozone reducing device, the ozone reduction potential of exhaust NMOG reductions beyond Bin 5 of the Tier 2 standards, and the ratio of the two methods of reducing ambient ozone levels. The requirements for this step are described in paragraph (r)(3) of this section.

(ii) The second step must demonstrate and certify the relevant performance characteristics of the specific ozone reducing device. The requirements for this step are described in paragraph(r)(4) of this section.

(3) The ozone reduction potential of the direct ozone reducing device, the ozone reduction potential of exhaust NMOG reductions beyond Bin 5 of the Tier 2 standards must be estimated using procedures which are approved by the Administrator in advance. At a minimum:

(i) the modeling must utilize an urban airshed model using up-to-date chemical and meteorological simulation techniques,

(ii) four local areas must be modeled: New York City, Chicago, Atlanta and Houston,

(iii) the ozone episodes to be modeled must meet the selection criteria established by EPA for State ozone SIPs,

(iv) photochemical and dispersion modeling must follow that used by EPA to project the ozone impacts of this rule, or its equivalent,

(v) emission projections must be made for calendar year 2007 and be consistent with those used by EPA in support of this final rule, or reflect updates approved by EPA,

(vi) baseline emissions (emissions prior to use of the direct ozone reducing device or the VOC emission reductions) must include the benefits of the Tier 2 emission and sulfur standards, as well as all other emission controls assumed in EPA's ozone modeling of the benefits of the Tier 2 and sulfur standards, as described in the Final Regulatory Impact Analysis to the Tier 2 and Sulfur Rule,

(vii) the ozone benefit of the direct ozone reducing device must assume a radiator area of

0.29 square meters, an air flow velocity through the radiator of 40% of vehicle speed, and an ozone reduction efficiency of 80%, or other values as approved by the Administrator,

(viii) the ozone level of the air entering the direct ozone reducing device must be assumed to be 40% less than that existing in the grid cell where the vehicle is located,

(ix) the ozone benefit of VOC emission reductions must be modeled by assuming that all Tier 2 LDVs, LDTs and MDPVs meet an exhaust NMOG standard of 0.055 g/mi or lower instead of a 0.09 g/mi NMOG standard,

(x) the ozone reducing device must be assumed to be present on all of the Tier 2 LDVs,LDTs and MDPVs modeled as meeting the more stringent NMOG standard described in paragraph(r)(3)(ix) of this section,

(xi) the relationship between changes in exhaust NMOG emission standards and in-use VOC emissions must be determined sufficiently far in the future to ensure that the change in ozone being modeled is sufficiently large to allow comparison with the impact of the ozone reducing device,

(xii) LDV, LDT and MDPV emissions must be modeled using the updated Tier 2 emission model developed by EPA as part of the Tier 2 rulemaking (available from EPA upon request) or MOBILE6, once this model is available,

(xiii) the ozone benefit of both the direct ozone reducing device must be the reduction in the peak one-hour ozone level anywhere in the modeled region on the day when ozone is at its highest,

(xiv) the NMOG credit in each local area must be the reduction in peak one hour ozone

associated with use of the direct ozone reducing device divided by the the reduction in peak one hour ozone associated with the more stringent exhaust NMOG emission standard multiplied by the reduction the exhaust NMOG standard (in g/mi) modeled in paragraph (r)(3)(ix) of this section,

(xv) the NMOG credit applicable to the generic direct ozone reducing device modeled in paragraph (vii) must be determined by arithmetically averaging the NMOG credit determined in paragraph (xiv) for each of the four local areas.

(4) The manufacturer must submit data, using procedures which have been approved by the Administrator in advance, that demonstrate the following aspects of the device being certified:

(i) the air flowrate through the device as a function of vehicle speed,

(ii) the ozone reduction efficiency of the device over the useful life of the vehicle for a range of vehicle speeds and ozone levels,

(iii) the method through which the onboard diagnostic system will detect improper performance.

(5) The NMOG credit for the specific application of this technology tested under the provisions of paragraph (r)(4) of this section is the four-area NMOG credit determined in paragraph(r)(3)(xv) of this section scaled based on the performance of the specific application tested under the provisions of paragraph (r)(4) of this section relative to those assumed in paragraph (r)(3)(vii) of this section. This scaling must assume a linear relationship between the NMOG credit and three aspects of the direct ozone reducing device: 1) radiator area, 2) average air flow through the radiator relative to vehicle speed, and 3) ozone reduction efficiency and the NMOG credit. The NMOG credit must be rounded to the nearest 0.001 g/mi. For example, if the

NMOG credit determined in paragraph (r)(3)(xv) of this section was 0.01 g/mi and the specific direct ozone reducing device being certified had an area of 0.20 square meters, an air flow velocity of 30% of vehicle speed and an ozone reducing efficiency of 70%, and the generic ozone reducing device simulated in the ozone model under paragraph (r)(3)(vii) of this section had an area of 0.29 square meters, an air flow velocity of 40% of vehicle speed and an ozone reducing efficiency of 80%, the NMOG credit applicable to the specific device being certified would be:

0.01 g/mi * (0.20/0.29) * (30%/40%) * 70%/80%) = 0.005

25. Section 86.1812-01 is amended by adding the following sentence to the end of the introductory text to read as follows:

§86.1812-01 Emission standards for light-duty trucks 1.

* * * This section does not apply to 2004 and later model year vehicles, except as specifically referenced by §86.1811-04.

* * * * *

26. Section 86.1813-01 is amended by adding the following sentence to the end of the introductory text to read as follows:

§86.1813-01 Emission standards for light-duty trucks 2.

* * * This section does not apply to 2004 and later model year vehicles, except as specifically referenced by §86.1811-04.

* * * * *

27. Section 86.1814-02 is amended by adding the following sentence to the end of the introductory text to read as follows:

§86.1814-02 Emission standards for light-duty trucks 3.

* * * This section does not apply to 2004 and later model year vehicles, except as specifically referenced by §86.1811-04.

* * * * *

28. Section 86.1814-04 is removed.

29. Section 86.1815-02 is amended by adding the following sentence to the end of the introductory text to read as follows:

§86.1815-02 Emission standards for light-duty trucks 4.

* * * This section does not apply to 2004 and later model year vehicles, except as specifically referenced by §86.1811-04.

* * * * *

30. Section 86.1815-04 is removed.

31. Section 86.1824-01 is amended by revising the first sentence of the introductory language and adding paragraphs (a)(2)(iii), (a)(2)(iv) and (a)(2)(v) to read as follows:

§86.1824-01 Durability demonstration procedures for evaporative emissions.

This section applies to gasoline-, methanol-, liquefied petroleum gas-, and natural gasfueled LDV/Ts and MDPVs. * * *

 $(a)^* * *$

(2)***

(iii) For gasoline fueled vehicles certified to meet the evaporative emission standards set forth in §86.1811-04(e)(1), any service accumulation method for evaporative emissions must employ gasoline fuel for the entire service accumulation period which contains ethanol in, at least, the highest concentration permissible in gasoline under federal law and that is commercially available in any state in the United States. Unless otherwise approved by the Administrator, the manufacturer must determine the appropriate ethanol concentration by selecting the highest legal concentration commercially available during the calendar year before the one in which the manufacturer begins its service accumulation. The manufacturer must also provide information acceptable to the Administrator to indicate that the service accumulation method is of sufficient design, duration and severity to stabilize the permeability of all non-metallic fuel and evaporative system components to the service accumulation fuel constituents.

(iv) For flexible-fueled, dual-fueled, multi-fueled, ethanol-fueled and methanol-fueled vehicles certified to meet the evaporative emission standards set forth in §86.1811-04(e)(1), any service accumulation method must employ fuel for the entire service accumulation period which the vehicle is designed to use and which the Administrator determines will have the greatest impact upon the permeability of evaporative and fuel system components. The manufacturer must also provide information acceptable to the Administrator to indicate that the service accumulation method is of sufficient design, duration and severity to stabilize the permeability of all non-metallic fuel and evaporative system components to service accumulation fuel constituents.

(v) A manufacturer may use other methods, based upon good engineering judgement, to meet the requirements of paragraphs (a)(2)(iii) and (iv), as applicable. These methods must be approved in advance by the Administrator and meet the objectives of paragraph (a)(2)(iii) and (iv), as applicable: to provide assurance that the permeability of all non-metallic fuel and evaporative system components will not lead to evaporative emission standard exceedance under sustained exposure to commercially available alcohol-containing fuels for the useful life of the vehicle.

* * * * *

32. Section 86.1827-01 is amended by adding paragraph (e) to read as follows:§86.1827-01 Test group determination.

* * * * *

(e) Unless otherwise approved by the Administrator, a manufacturer of hybrid electric vehicles must create separate test groups based on both the type of battery technology employed by the HEV and upon features most related to their exhaust emission characteristics.

33. Section 86.1829-01 is amended by adding paragraphs (b)(1)(iii)(E) and (d) to read as follows:§86.1829-01 Durability and emission testing requirements; waivers.

* * * * *

(b)(1)* * *

(iii)* * *

(E) In lieu of testing a gasoline or diesel fueled Tier 2 or interim non-Tier 2 vehicle for formaldehyde emissions when such vehicles are certified based upon NMHC emissions, a manufacturer may provide a statement in its application for certification that such vehicles comply with the applicable standards. Such a statement must be based on previous emission tests, development tests, or other appropriate information.

* * * * *

(d)(1) Beginning in the 2004 model year, the exhaust emissions must be measured from all LDV/T exhaust emission data vehicles tested in accordance with the federal Highway Fuel Economy Test (HWFET; 40 CFR part 600, subpart B). The oxides of nitrogen emissions measured during such tests must be multiplied by the oxides of nitrogen deterioration factor computed in accordance with §86.1823-01 and subsequent model year provisions, and then

rounded and compared with the applicable emission standard in §86.1811-04. All data obtained from the testing required under this paragraph (d) must be reported in accordance with the procedures for reporting other exhaust emission data required under this subpart.

(2) In the event that one or more emission data vehicles fail the applicable HWFET standard in §86.1811-04, the manufacturer may submit to the Administrator engineering data or other evidence showing that the system is capable of complying with the standard. If the Administrator finds, on the basis of an engineering evaluation, that the system can comply with the HWFET standard, he or she may accept the information supplied by the manufacturer in lieu of the test data.

(3) The provisions of paragraph (d)(1) and (d)(2) of this section do not apply to MDPVs.

34. Section 86.1837-01 is amended by designating the existing text as paragraph (a) and by adding paragraph (b) to read as follows:

§86.1837-01 Rounding of emission measurements.

* * * * *

(b) Fleet average NOx value calculations, where applicable, must be rounded before comparing with the applicable fleet average standard and calculating credits generated or needed as follows: manufacturers must round to the same number of significant figures that are contained in the quantity of vehicles in the denominator of the equation used to compute the fleet average NOx emissions, but to no less than one more decimal place than that of the applicable fleet average standard.

35. Section 86.1838-01 is amended by revising paragraphs (b)(1)(i) after the paragraph heading and subheading and paragraph (c)(2)(iii) to read as follows:

§86.1838-01 Small volume manufacturer certification procedures.

* * * * *

(b)* * *

 $(1)^{***}$

(i) The optional small-volume manufacturers certification procedures apply to LDV/Ts and MDPVs produced by manufacturers with U.S. sales, including all vehicles and engines imported under provisions of 40 CFR 85.1505 and 85.1509 (for the model year in which certification is sought) of fewer than 15,000 units (LDV/Ts, MDPVs, heavy-duty vehicles and heavy-duty engines combined).

- (c) * * *
- (2) * * *

(iii) The provisions of §86.1845-01(c)(2) and §86.1845-04(c)(2) that require one vehicle of each test group during high mileage in-use verification testing to have a minimum odometer mileage of 75 percent of the full useful life mileage for Tier 1 and NLEV LDV/Ts, or 90,000 (or 105,000) miles for Tier 2 and interim non-Tier 2 vehicles, do not apply.

* * * * *

36. Section 86.1840-01 is amended by the addition of paragraphs (c) and (d) to read as follows:§86.1840-01 Special test procedures.

* * * * *

(c) Manufacturers of vehicles equipped with periodically regenerating trap oxidizer systems must propose a procedure for testing and certifying such vehicles including SFTP testing for the review and approval of the Administrator. The manufacturer must submit its proposal before it begins any service accumulation or emission testing. The manufacturer must provide with its submittal, sufficient documentation and data for the Administrator to fully evaluate the operation of the trap oxidizer system and the proposed certification and testing procedure.

(d) The provisions of paragraphs (a) and (b) of this section also apply to MDPVs.

37. Section 86.1841-01 is amended by revising paragraph (a)(1)(iii) and adding paragraph (e) to read as follows:

§86.1841-01 Compliance with emission standards for the purpose of certification.

- (a) * * *
- (1) * * *

(iii) For the SFTP composite standard of NMHC+NOx, the measured results of NMHC and NOx must each be adjusted by their corresponding deterioration factors before the composite NMHC+NOx certification level is calculated. Where the applicable FTP exhaust hydrocarbon emission standard is an NMOG standard, the applicable NMOG deterioration factor must be used in place of the NMHC deterioration factor, unless otherwise approved by the Administrator. ***** (e) Unless otherwise approved by the Administrator, manufacturers must not use Reactivity Adjustment Factors (RAFs) in their calculation of the certification levels of any pollutant, regardless of the fuel used in the test vehicle.

38. Section 86.1844-01 is amended by adding new paragraphs (d)(15), (d)(16), (e)(6) and (i) to read as follows:

§ 86.1844-01 Information requirements: Application for certification and submittal of information upon request.

* * * * *

(d)* * *

(15) For HEVs, unless otherwise approved by the Administrator, the information required by the "California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-duty Vehicle Classes" must be supplied. These procedures are incorporated by reference (see §86.1).

(16) (i) For Tier 2 and interim non-Tier 2 vehicles beginning with the 2004 model year, a statement indicating that the manufacturer has conducted an engineering analysis of the complete exhaust system to ensure that the exhaust system has been designed:

(A) to facilitate leak-free assembly, installation and operation for the full useful life of the vehicle, and

(B) to facilitate that such repairs as might be necessary on a properly maintained and used

vehicle can be performed in such a manner as to maintain leak-free operation, using tools commonly available in a motor vehicle dealership or independent repair shop for the full useful life of the vehicle.

(ii) The analysis must cover the exhaust system and all related and attached components including the air injection system, if present, from the engine block manifold gasket surface to a point sufficiently past the last catalyst and oxygen sensor in the system to assure that leaks beyond that point will not permit air to reach the oxygen sensor or catalyst under normal operating conditions.

(iii) A "leak-free" system is one in which leakage is controlled so that it will not lead to a failure of the certification exhaust emission standards in-use.

(iv) The provisions of paragraph (d)(16)(i) and (ii) do not apply to vehicles whose certification is carried over from the NLEV program or carried across from the Cal LEV I program.

(e)* * *

(6) The NMOG/NMHC and HCHO to NMHC ratios established according to §86.1845-04.

* * * * *

(i) For exhaust emission testing for Tier 2 and interim non-Tier 2 vehicles, if approved by the Administrator in advance, manufacturers may submit exhaust emission test data generated under California test procedures to comply with any certification and in-use testing requirements under this subpart. The Administrator may require supporting information to establish that differences between California and Federal exhaust testing procedures and fuels will not produce significant differences in emission results. The Administrator may require that in-use testing be performed using Federal test fuels as specified in §86.113-04(a)(1).

39. Section 86.1845-04 is amended by:

a. revising paragraph (a),

b. revising paragraph (c)(2), and

c. adding paragraph (f). The revisions and additions read as follows:

§86.1845-04 Manufacturer in-use verification testing requirements

(a) <u>General requirements</u>. (1) A manufacturer of LDVs, LDTs and/or MDPVs must test, or cause to have tested, a specified number of LDVs, LDTs and MDPVs. Such testing must be conducted in accordance with the provisions of this section. For purposes of this section, the term vehicle includes light-duty vehicles, light-duty trucks and medium-duty vehicles.

(2) Unless otherwise approved by the Administrator, no emission measurements made under the requirements of this section may be adjusted by Reactivity Adjustment Factors (RAFs).

(3) Upon a manufacturer's written request, prior to in-use testing , that presents information to EPA regarding pre-conditioning procedures designed solely to remove the effects of high sulfur in gasoline from vehicles produced through the 2007 model year, EPA will consider allowing such procedures on a case-by-case basis. EPA's decision will apply to manufacturer in-use testing conducted under this section and to any in-use testing conducted by EPA.

* * * * *

(c)* * *

(2) Vehicle mileage:

(i) All test vehicles must have a minimum odometer mileage of 50,000 miles. At least one vehicle of each test group must have a minimum odometer mileage of 75 percent of the full useful life mileage. See §86.1838-01(c)(2) for small volume manufacturer mileage requirements; or

(ii) For engine families certified for a useful life of 150,000 miles, at least one vehicle must have a minimum odometer mileage of 105,000 miles. See 86.1838-01(c)(2) for small volume manufacturer mileage requirements.

* * * * *

(f)(1) A manufacturer may conduct in-use testing on a test group by measuring NMHC exhaust emissions rather than NMOG exhaust emissions. The measured NMHC exhaust emissions must be multiplied by the adjustment factor used for certification of the test group, or another adjustment factor acceptable to the Administrator, to determine the equivalent NMOG exhaust emission values for the test vehicle. The equivalent NMOG exhaust emission value must be used in place of the measured NMOG exhaust emission value in determining the exhaust NMOG results. The equivalent NMOG exhaust emission values must be compared to the NMOG exhaust emission standard from the emission bin to which the test group was certified.

(2) For flexible-fueled LDVs, LDTs and MDPVs certified to NMOG standards, the

manufacturer may request from the Administrator the use of a methanol (M85) or ethanol (E85) NMOG exhaust emission to gasoline NMHC exhaust emission ratio which must be established during certification for each emission data vehicle for the applicable test group. The results must be submitted to the Administrator in the Part II application for certification. After approval by the Administrator, the measured gasoline NMHC exhaust emissions must be multiplied by the M85 or E85 NMOG to gasoline NMHC ratio submitted in the application for certification for the test group to determine the equivalent NMOG exhaust emission values for the test vehicle. The equivalent NMOG exhaust emission value must be used in place of the measured NMOG exhaust emission value in determining the exhaust NMOG results. The equivalent NMOG exhaust emission values must be compared to the NMOG exhaust emission standard from the vehicle emission standard bin to which the test group was certified.

(3) If the manufacturer measures NMOG it must also measure and report HCHO emissions. As an alternative to measuring the HCHO content, if the manufacturer measures NMHC as permitted in paragraph (f)(1) of this section, the Administrator may approve, upon submission of supporting data by a manufacturer, the use of HCHO to NMHC ratios. To request the use of HCHO to NMHC ratios, the manufacturer must establish during certification testing the ratio of measured HCHO exhaust emissions to measured NMHC exhaust emissions for each emission data vehicle for the applicable test group. The results must be submitted to the Administrator with the Part II application for certification. Following approval of the application for certification, the manufacturer may conduct in-use testing on the test group by measuring NMHC exhaust emissions rather than HCHO exhaust emissions. The measured NMHC exhaust emissions must be multiplied by the HCHO to NMHC ratio submitted in the application for certification for the test group to determine the equivalent HCHO exhaust emission values for the test vehicle. The equivalent HCHO exhaust emission values must be compared to the HCHO exhaust emission standard applicable to the test group.

40. Section 86.1846-01 is amended by revising paragraph (a) to read as follows:§86.1846-01 Manufacturer In-use Confirmatory Testing Requirements.

(a) <u>General requirements</u>. (1) A manufacturer of LDVs, LDTs and/or MDPVs must test, or cause testing to be conducted, under this section when the emission levels shown by a test group sample from testing under §86.1845-01 exceeds the criteria specified in paragraph (b) of this section. The testing required under this section applies separately to each test group and at each test point (low and high mileage) that meets the specified criteria. The testing requirements apply separately for each model year starting with model year 2001.

(2) Except for vehicles certified under the NLEV provisions of subpart R of this part or unless otherwise approved by the Administrator, no emission measurements made under the requirements of this section may be adjusted by Reactivity Adjustment Factors (RAFs).

(3) For purposes of this section, the term vehicle includes light-duty vehicles, light-duty trucks and medium-duty vehicles.

(4) Upon a manufacturer's written request, prior to in-use testing, that presents

information to EPA regarding pre-conditioning procedures designed solely to remove the effects of high sulfur in gasoline from vehicles produced through the 2007 model year, EPA will consider allowing such procedures on a case-by-case basis. EPA's decision will apply to manufacturer inuse testing conducted under this section and to any in-use testing conducted by EPA.

* * * * *

41. Section 86.1848-01 is amended by adding paragraph (c)(7) to read as follows:

§86.1848-01 Certification.

* * * * *

(c)* * *

(7) For Tier 2 and interim non-Tier 2 vehicles, all certificates of conformity issued are conditional upon compliance with all provisions of §§ 86.1811-04, 86.1860-04, 86.1861-04 and 86.1862-04 both during and after model year production.

(i) Failure to meet the fleet average NOx requirements of 0.07g/mi, 0.30 g/mi or 0.20 g/mi, as applicable, will be considered to be a failure to satisfy the terms and conditions upon which the certificate(s) was (were) issued and the vehicles sold in violation of the fleet average NOx standard will not be covered by the certificate(s).

(ii) Failure to comply fully with the prohibition against selling credits that it has not generated or that are not available, as specified in §86.1861-04, will be considered to be a failure to satisfy the terms and conditions upon which the certificate(s) was (were) issued and the vehicles sold in violation of this prohibition will not be covered by the certificate(s).

(iii) Failure to comply fully with the phase-in requirements of §86.1811-04, will be considered to be a failure to satisfy the terms and conditions upon which the certificate(s) was (were) issued and the vehicles sold which do not comply with Tier 2 or interim non-Tier 2 requirements, up to the number needed to comply, will not be covered by the certificate(s).

(iv) For paragraphs (c)(7)(i) through (iii) of this section:

(A) The manufacturer must bear the burden of establishing to the satisfaction of the Administrator that the terms and conditions upon which the certificate(s) was (were) issued were satisfied.

(B) For recall and warranty purposes, vehicles not covered by a certificate of conformity will continue to be held to the standards stated or referenced in the certificate that otherwise would have applied to the vehicles.

* * * * *

42. Sections 86.1854 through 86.1859 are added and reserved.

43. Section 86.1860-04 is added to read as follows:

§86.1860-04 How to comply with the Tier 2 and interim non-Tier 2 fleet average NOx standards.

(a) The fleet average standards referred to in this section are the corporate fleet average standards for FTP exhaust NOx emissions set forth in: §86.1811-04(d) for Tier 2 LDV/Ts and MDPVs (0.07 g/mi); §86.1811-04(l)(3) for interim non-Tier 2 LDV/LLDTs (0.30 g/mi); and, §86.1811-04(l)(3) for interim non-Tier 2 HLDT/MDPVs (0.20 g/mi). Unless otherwise indicated in this section, the provisions of this section apply to all three corporate fleet average standards, except that the interim non-Tier 2 fleet average NOx standards do not apply to a manufacturer whose U.S. LDV/T and MDPV sales are 100% Tier 2 LDV/Ts and MDPVs.

(b) (1)Each manufacturer must comply with the applicable fleet average NOx standard, or standards, on a sales weighted average basis, at the end of each model year, using the procedure described in this section.

(2) During a phase-in year, the manufacturer must comply with the applicable fleet average NOx standard for the required phase-in percentage for that year as specified in paragraph (k)(1) of \$86.1811-04, or for the alternate phase-in percentage as permitted under paragraph (k)(6) of \$86.1811-04.

(c)(1)(i) Each manufacturer must separately compute the sales weighted averages of the individual NOx emission standards to which it certified all its Tier 2 vehicles, interim non-Tier 2 LDV/LLDTs, and interim non-Tier 2 HLDT/MDPVs of a given model year as described in

§86.1804(l)(2).

(ii) For model years up to and including 2008, manufacturers must compute separate NOx fleet averages for Tier 2 LDV/LLDTs and Tier 2 HLDT/MDPVs.

(2)(i) For model years up to and including 2008, if a manufacturer certifies its entire U.S. sales of Tier 2 or interim non-Tier 2 LDV/LLDTs or interim non-Tier 2 HLDT/MDPVs, to full useful life bins having NOx standards at or below the applicable fleet average NOx standard, that manufacturer may elect not to compute a fleet average NOx level for that category of vehicles. A manufacturer making such an election must not generate NOx credits for that category of vehicles for that model year.

(ii) For model years after 2008, if a manufacturer certifies its entire U.S. sales of Tier 2 vehicles to full useful life bins having NOx standards at or below 0.07 gpm, that manufacturer may elect not to compute a fleet average NOx level for its Tier 2 vehicles. A manufacturer making such an election must not generate NOx credits for that model year.

(d) The sales weighted NOx fleet averages determined pursuant to paragraph (c) of this section must be compared with the applicable fleet average standard; 0.07 g/mi for NOx for Tier 2 LDV/Ts and MDPVs, 0.30 g/mi for NOx for interim non-Tier 2 LDV/LLDTs, and 0.20 g/mi for NOx for interim non-Tier 2 HLDT/MDPVs. Each manufacturer must comply on an annual basis with the fleet average standards by:

(1) Showing that its sales weighted average NOx emissions of its LDV/LLDTs,HLDT/MDPVs or LDV/Ts, as applicable, are at or below the applicable fleet average standard; or

(2) If the sales weighted average is not at or below the applicable fleet average standard, by

obtaining and applying sufficient Tier 2 NOx credits, interim non-Tier 2 LDV/LLDT NOx credits or interim non-Tier 2 HLDT/MDPV NOx credits, as appropriate, and as permitted under §86.1861-04 of this part.

(i) Manufacturers may not use NMOG credits generated under the NLEV program in subpart R of this part to meet any Tier 2 or interim non-Tier 2 NOx fleet average standard.

(ii) Tier 2 NOx credits may not be used to meet any fleet average interim non-Tier 2 NOx standard except as permitted by \$86.1860-04(e)(1).

(iii) Interim non-Tier 2 NOx credits may not be used to meet the Tier 2 fleet average NOx standard.

(iv) Interim non-Tier 2 NOx credits from HLDT/MDPVs may not be used to meet the fleet average NOx standard for interim non-Tier 2 LDV/LLDTs, and interim non-Tier 2 credits from LDV/LLDTs may not be used to meet the fleet average NOx standard for interim non-Tier 2 HLDT/MDPVs.

(e) (1) Manufacturers that can not meet the requirements of paragraph (d) of this section, may carry forward a credit deficit for three model years, but must not carry such deficit into the fourth year. When applying credits to reduce or eliminate a deficit under the fleet average standard for interim LDV/LLDTs or interim HLDT/MDPVs, that has been carried forward into a year subsequent to its generation, a manufacturer may apply credits from Tier 2 LDV/LLDTs or Tier 2 HLDT/MDPVs, respectively, as well as from the appropriate group of interim vehicles. A manufacturer must not use interim credits to reduce or eliminate any NOx credit deficit under the Tier 2 fleet average standard. (2) A manufacturer carrying a credit deficit into the third year must generate or obtain credits to offset that deficit and apply them to the deficit at a rate of 1.2:1, (i.e. deficits carried into the third model year must be repaid with credits equal to 120 percent of the deficit).

(3) A manufacturer must not bank credits for future model years or trade credits to another manufacturer during a model year into which it has carried a deficit.

(f) <u>Computing fleet average NOx emissions.</u> (1) Manufacturers must separately compute these fleet NOx averages using the equation contained in paragraph (f)(2) of this section:

(i) Their Tier 2 LDV/LLDT and Tier 2 HLDT/MDPV fleet average NOx emissions for each model year through 2008;

(ii) Their combined Tier 2 LDV/T and MDPV fleet average NOx emissions for each model year after 2008;

(iii) Their interim non-Tier 2 LDV/LLDT fleet average NOx emissions for each model year through 2006; and

(iv) Their interim non-Tier 2 HLDT/MDPV fleet average NOx emissions for each model year through 2008.

(2) The equation for computing fleet average NOx emissions is as follows:

 \sum (N x NOx emission standard)

Total number of vehicles of the appropriate category

(e.g. all LDV/Ts and MDPVs, or interim non-Tier 2 HLDT/MDPVs, etc.) sold including HEVs and ZEVs

Where:

N = The number of vehicles sold in the applicable category that were certified for each corresponding NOx emission bin. N must be based on vehicles counted to the point of first sale.

Emission standard = The individual full useful life NOx emission standard for each bin for which the manufacturer had sales.

(3) The results of the calculation in paragraph (f)(2) must be rounded as required by \$86.1837-01.

(4) When approved in advance by the Administrator, the numerator in the equation in paragraph (f)(2) of this section may be adjusted downward by the product of the number of HEVs from each NOx emission bin times a HEV NOx contribution factor determined through mathematical estimation of the reduction in NOx emissions over the test procedure used to certify the HEVs. The reduction in NOx emissions must be determined using good engineering judgement and reflect the relation in actual full useful life NOx emissions to the full useful life NOx standards for the certification bin applicable to the vehicles. The Administrator may require that calculation of the HEV NOx contribution factor include vehicle parameters such as vehicle weight, portion of time during the test procedure that the HEV operates with zero exhaust emissions, zero emission range, NOx emissions from fuel-fired heaters and NOx emissions from electricity production and storage.

(g) Additional credits for vehicles certified to 150,000 mile useful lives.

(1) A manufacturer may certify any test group to an optional useful life of 15 years or150,000 miles, whichever occurs first.

(2) (i) For any test group certified to the optional 15 year/150,000 mile useful life, the manufacturer may generate additional NOx credits, except as prohibited in paragraph (g)(3) of this section.

(ii) The manufacturer must calculate these extra NOx credits, where permitted, by substituting an adjusted NOx standard for the applicable NOx standard from the full useful life certification bin when it calculates the applicable fleet average NOx emissions by the procedure in paragraph (f) of this section. The adjusted standard must be equal to the applicable full useful life NOx standard multiplied by 0.85 and rounded to the same number of decimal places as the applicable full useful life NOx standard.

(3) A manufacturer electing not to comply with applicable intermediate life standards as permitted under 11-04(c)(4) of this section may not generate additional credits from vehicles certified to a useful life of 15 years/150,000 miles; except that, for bins where such intermediate life standards do not exist or are specifically deemed to be optional in 11-04(c)(4), the manufacturer may generate additional NOx credits from vehicles certified to a useful life of 15 years/150,000 miles.

(h) <u>Additional credits for vehicles certified to low bins</u>. A manufacturer may obtain additional NOx credits by certifying vehicles to bins 1 and/or 2 in model years from 2001 through 2005 subject to the following requirements:

(i) When computing the fleet average Tier 2 NOx emissions using the formula in paragraph (f)(2) of this section, the manufacturer may multiply the number (N) of vehicles certified to bins 1 and 2 by the applicable multiplier shown in Table S04-11. These multipliers may not be used after model year 2005. The table follows:

Table S04-11 -- Multipliers for Additional Tier 2 NOx Credits for Bin 1 and 2

LDV/Ts.

Bin	Model Year	Multiplier
2	2001, 2002, 2003, 2004, 2005	1.5
1	2001, 2002, 2003, 2004, 2005	2.0

44. Section 86.1861-04 is added to read as follows:

§86.1861-04 How do the Tier 2 and interim non-Tier 2 NOx averaging, banking and trading programs work?

(a) <u>General provisions for Tier 2 credits and debits.</u> (1) A manufacturer whose Tier 2 fleet average NOx emissions exceeds the 0.07 g/mile standard must complete the calculation at paragraph (b) of this section to determine the size of its NOx credit deficit. A manufacturer whose Tier 2 fleet average NOx emissions is less than or equal to the 0.07 g/mile standard must complete the calculation in paragraph (b) of this section if it desires to generate NOx credits. In either case, the number of credits or debits determined in the calculation at paragraph (b) of this section must be rounded to the nearest whole number.

(2) Credits generated according to the calculation in paragraph (b)(1) of this section may be banked for future use or traded to another manufacturer.

(3) NOx credits are not subject to any discount or expiration date except as required under the deficit carryforward provisions of §1860-04(e)(2).

(4) If a manufacturer calculates that it has negative credits (debits or a credit deficit) for a given model year, it must obtain sufficient credits, as required under §1860-04(e)(2), from vehicles produced by itself or another manufacturer in a model year no later than the third model year following the model year for which it calculated the credit deficit. (*Example:* if a manufacturer calculates that it has a NOx credit deficit for the 2008 model year, it must obtain sufficient NOx credits to offset that deficit from its own production or that of other manufacturers' 2011 or earlier model year vehicles.)

(5) A small volume manufacturer that has opted not to meet all phase-in requirements as permitted under §86.1811-04(k)(5), must:

(i) demonstrate compliance or obtain appropriate credits to comply with the 0.30 g/mi. fleet average NOx standard for interim LDV/LLDTs for 100% of its LDV/LLDTs in 2004, in order to carry forward a credit deficit for later model year interim LDV/LLDTs; and

(ii) demonstrate compliance or obtain appropriate credits to comply with the 0.07 g/mi.

fleet average NOx standard for 100% of its LDV/LLDTs in 2007, in order to carry forward a credit deficit for later model year Tier 2 LDV/LLDTs; and

(iii) demonstrate compliance or obtain appropriate credits to comply with the 0.20 g/mi. fleet average interim NOx standard for 100% of its HLDT/MDPVs in 2007, in order to carry forward a credit deficit for later model year interim HLDT/MDPVs.

(6) (i)Manufacturers may not use NOx credits to comply with the NLEV requirements of subpart R of this part.

(ii) Manufacturers may not use NMOG credits generated by vehicles certified to the NLEV requirements of subpart R of this part to comply with any NOx requirements of this subpart.

(iii) Manufacturers may not use NOx credits generated by interim non-Tier 2 vehicles to comply with the fleet average NOx standard for Tier 2 vehicles.

(iv) Manufacturers may not use NOx credits generated by Tier 2 vehicles to comply with any fleet average NOx standard for interim non-Tier 2 vehicles, except as permitted under \$86.1860-04(e).

(v) Manufacturers may not use NOx credits generated by interim non-Tier 2 LDV/LLDTs to comply with the fleet average NOx standard for interim non-Tier 2 HLDT/MDPVs.

(vi) Manufacturers may not use NOx credits generated by interim non-Tier 2HLDT/MDPVs to comply with the fleet average NOx standard for interim non-Tier 2LDV/LLDTs.

(vii) Manufacturers may not use NOx credits generated by Tier 2 LDV/LLDTs to comply with the Tier 2 NOx average standard for HLDT/MDPVs before the 2009 model year.

(viii) Manufacturers may not use NOx credits generated by Tier 2 HLDT/MDPVs to comply with the Tier 2 NOx average standard for LDV/LLDTs before the 2009 model year.

(7) Manufacturers may bank Tier 2 NOx credits for later use to meet the Tier 2 fleet average NOx standard or trade them to another manufacturer. Credits are earned on the last day of the model year. Before trading or carrying over credits to the next model year, a manufacturer must apply available credits to offset any credit deficit, where the deadline to offset that credit deficit has not yet passed.

(8) There are no property rights associated with NOx credits generated under this subpart. Credits are a limited authorization to emit the designated amount of emissions. Nothing in this Part or any other provision of law should be construed to limit EPA's authority to terminate or limit this authorization through a rulemaking.

(b) <u>Calculating Tier 2 credits and debits</u>. (1) Manufacturers that achieve fleet average NOx values from the calculation in §86.1860-04(f), lower than the applicable fleet average NOx standard, may generate credits for a given model year, in units of vehicle-g/mi NOx, determined in this equation:

[(Fleet Average NOx Standard) – (Manufacturer's Fleet Average NOx Value)] X (Total number of Tier 2 Vehicles Sold, Including ZEVs and HEVs)

Where: The number of Tier 2 vehicles sold is based on the point of first sale and does not include

vehicles sold in California or a state that adopts, and has in effect for that model year, California emission requirements.

(2) Where the result of the calculation in paragraph (b)(1) of this section is a negative number, the manufacturer must generate negative NOx credits (debits).

(c) <u>Early banking</u>. (1) (i)Manufacturers may certify LDV/LLDTs to the Tier 2 FTP exhaust standards in §86.1811-04 for model years 2001-2003 in order to bank credits for use in the 2004 and later model years. Such vehicles must also meet SFTP exhaust emission standards specified in §86.1811-04.

(ii) Manufacturers may certify HLDT/MDPVs to the Tier 2 FTP exhaust standards in §86.1811-04 for model years 2001-2007 in order to bank credits for use in the 2008 and later model years. Such vehicles must also meet applicable SFTP exhaust emission standards specified in §86.1811-04.

(iii) This process is referred to as "early banking" and the resultant credits are referred to as "early credits". In order to bank early credits, a manufacturer must comply with all exhaust emission standards and requirements applicable to Tier 2 LDV/LLDTs and/or HLDT/MDPVs, as applicable, except as allowed under paragraph (c)(4) of this section.

(2) To generate early credits, a manufacturer must separately compute the sales weighted NOx average of the LDV/LLDTs and HLDT/MDPVs it certifies to the Tier 2 exhaust requirements and separately compute credits using the calculations in this section and in

§86.1860-04.

(3) Early HLDT/MDPV credits may not be applied to LDV/LLDTs before the 2009 model year. Early LDV/LLDT credits may not be applied to HLDT/MDPVs before the 2009 model year.

(4) Manufacturers may generate early Tier 2 credits from LDVs, LDT1s and LDT2s that are certified to a full useful life of 100,000 miles, provided that the credits are prorated by a multiplicative factor of 0.833 (the quotient of 100,000/120,000). Where a manufacturer has both 100,000 and 120,000 mile full useful life vehicles for which it desires to bank early credits, it must compute the credits from each group of vehicles separately and then add them together.

(5) Manufacturers may bank early credits for later use to meet the Tier 2 fleet average NOx standard or trade them to another manufacturer subject to the restriction in paragraph (c)(3) of this section.

(6) Early credits must not be used to comply with the fleet average NOx standards for interim non-Tier 2 vehicles.

(7) Nothing in this section prevents the use of the NMOG values of 2003 and earlier model year LDV/LLDTs from being used in calculations of the NMOG fleet average and subsequent NMOG credit generation, under subpart R of this part.

(d) <u>Reporting and recordkeeping for Tier 2 NOx credits including early credits</u>. Each manufacturer must comply with the reporting and recordkeeping requirements of §86.1862-04.

(e) Fleet average NOx debits. (1) Manufacturers must offset any debits for a given model

year by the fleet average NOx reporting deadline for the third model year following the model year in which the debits were generated as required in §1860.04(e)(2). Manufacturers may offset debits by generating credits or acquiring credits generated by another manufacturer.

(2)(i) Failure to meet the requirements of paragraphs (a) through (e) of this section within the required timeframe for offsetting debits will be considered to be a failure to satisfy the conditions upon which the certificate(s) was issued and the individual noncomplying vehicles not covered by the certificate must be determined according to this section.

(ii) If debits are not offset within the specified time period, the number of vehicles not meeting the fleet average NOx standards and not covered by the certificate must be calculated by dividing the total amount of debits for the model year by the fleet average NOx standard applicable for the model year in which the debits were first incurred.

(iii) EPA will determine the vehicles for which the condition on the certificate was not satisfied by designating vehicles in those test groups with the highest certification NOx emission values first and continuing until a number of vehicles equal to the calculated number of noncomplying vehicles as determined above is reached. If this calculation determines that only a portion of vehicles in a test group contribute to the debit situation, then EPA will designate actual vehicles in that test group as not covered by the certificate, starting with the last vehicle produced and counting backwards.

(3) If a manufacturer ceases production of LDV/Ts and MDPVs or is purchased by, merges with or otherwise combines with another manufacturer, the manufacturer continues to be responsible for offsetting any debits outstanding within the required time period. Any failure to offset the debits will be considered to be a violation of paragraph (e)(1) of this section and may subject the manufacturer to an enforcement action for sale of vehicles not covered by a certificate, pursuant to paragraph (e)(2) of this section.

(4) For purposes of calculating the statute of limitations, a violation of the requirements of paragraph (e)(1) of this section, a failure to satisfy the conditions upon which a certificate(s) was issued and hence a sale of vehicles not covered by the certificate, all occur upon the expiration of the deadline for offsetting debits specified in paragraph (e)(1) of this section.

(f) <u>NOx credit transfers</u>. (1) EPA may reject NOx credit transfers if the involved manufacturers fail to submit the credit transfer notification in the annual report.

(2) A manufacturer may not sell credits that are not available for sale pursuant to the provisions in paragraphs (a)(2) and (a)(7) of this section.

(3) In the event of a negative credit balance resulting from a transaction, both the buyer and seller are liable, except in cases involving fraud. EPA may void <u>ab initio</u> the certificates of conformity of all engine families participating in such a trade.

(4)(i) If a manufacturer transfers a credit that it has not generated pursuant to paragraph(b) of this section or acquired from another party, the manufacturer will be considered to havegenerated a debit in the model year that the manufacturer transferred the credit. The manufacturermust offset such debits by the deadline for the annual report for that same model year.

(ii) Failure to offset the debits within the required time period will be considered a failure to satisfy the conditions upon which the certificate(s) was issued and will be addressed pursuant to paragraph (e) of this section.

(g) Interim non-Tier 2 NOx credits and debits; Interim non-Tier 2 averaging, banking and trading. Interim non-Tier 2 NOx credits must be generated, calculated, tracked, averaged, banked, traded, accounted for and reported upon separately from Tier 2 credits. The provisions of this section applicable to Tier 2 NOx credits and debits and Tier 2 averaging banking and trading are applicable to interim non-Tier 2 LDV/LLDTs and interim non-Tier 2 HLDT/MDPVs with the following exceptions:

(1) Provisions for early banking under paragraph (c) of this section do not apply.

(2) The fleet average NOx standard used for calculating credits is 0.30 grams per mile for interim non-Tier 2 LDV/LLDTs and 0.20 g/mi for interim non-Tier 2 HLDT/MDPVs. (The interim non-Tier 2 NOx standard of 0.30 (or 0.20) g/mi replaces 0.07 in the text and calculation in this section.)

(3) Interim non-Tier 2 NOx credit deficits may be carried forward for three years subject to the requirements of §86.1860-04(e).

45. Section 86.1862-04 is added to read as follows:

§86.1862-04 Maintenance of records and submittal of information relevant to compliance with fleet average NOx standards.

(a) <u>Maintenance of records</u>. (1) The manufacturer producing any light-duty vehicles and/or light-duty trucks subject to the provisions in this subpart must establish, maintain, and retain the following information in adequately organized and indexed records for each model year:

(i) Model year;

(ii) Applicable fleet average NOx standard: 0.07g/mi for Tier 2 LDV/Ts; 0.30 g/mi for interim non-Tier 2 LDV/LLDTs; or 0.20 g/mi for interim non-Tier 2 HLDT/MDPVs;

(iii) Fleet average NOx value achieved; and

(iv) All values used in calculating the fleet average NOx value achieved.

(2) The manufacturer producing any LDV/Ts or MDPVs subject to the provisions in this subpart must establish, maintain, and retain the following information in adequately organized and indexed records for each LDV/T or MDPV subject to this subpart:

(i) Model year;

(ii) Applicable fleet average NOx standard;

(iii) EPA test group;

(iv) Assembly plant;

(v) Vehicle identification number;

(vi) NOx standard to which the LDV/T or MDPV is certified; and

(vii) Information on the point of first sale, including the purchaser, city, and state.

(3) The manufacturer must retain all records required to be maintained under this section for a period of eight years from the due date for the annual report. Records may be retained as hard copy or reduced to microfilm, ADP diskettes, and so forth, depending on the manufacturer's record retention procedure; provided, that in every case all information contained in the hard copy is retained.

(4) Nothing in this section limits the Administrator's discretion to require the manufacturer to retain additional records or submit information not specifically required by this section.

(5) Pursuant to a request made by the Administrator, the manufacturer must submit to the Administrator the information that the manufacturer is required to retain.

(6) EPA may void <u>ab initio</u> a certificate of conformity for a vehicle certified to emission standards as set forth or otherwise referenced in this subpart for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request.

(b) <u>Reporting.</u> (1) Each covered manufacturer must submit an annual report. Except as provided in paragraph (b)(2) of this section, the annual report must contain, for each applicable fleet average NOx standard, the fleet average NOx value achieved, all values required to calculate the NOx value, the number of credits generated or debits incurred, and all the values required to calculate the credits or debits. The annual report must contain the resulting balance of credits or debits.

(2) When a manufacturer calculates compliance with the fleet average NOx standard using the provisions in § 86.1860-04(c)(2), then the annual report must state that the manufacturer has elected to use such provision and must contain the fleet average NOx standard as the fleet average NOx value for that model year.

(3) For each applicable fleet average NOx standard, the annual report must also include documentation on all credit transactions the manufacturer has engaged in since those included in the last report. Information for each transaction must include:

(i) Name of credit provider;

(ii) Name of credit recipient;

(iii) Date the transfer occurred;

(iv) Quantity of credits transferred; and

(v) Model year in which the credits were earned.

(4) Unless a manufacturer reports the data required by this section in the annual production report required under § 86.1844-01(e) and subsequent model year provisions, a manufacturer must submit an annual report for each model year after production ends for all affected vehicles and trucks produced by the manufacturer subject to the provisions of this subpart and no later than May 1 of the calendar year following the given model year. Annual reports must be submitted to: Director, Vehicle Programs and Compliance Division, U.S. Environmental Protection Agency, 2000 Traverwood, Ann Arbor, Michigan 48105.

(5) Failure by a manufacturer to submit the annual report in the specified time period for all vehicles and trucks subject to the provisions in this section is a violation of section 203(a)(1) of the Clean Air Act for each subject vehicle and truck produced by that manufacturer.

(6) If EPA or the manufacturer determines that a reporting error occurred on an annual report previously submitted to EPA, the manufacturer's credit or debit calculations will be recalculated. EPA may void erroneous credits, unless transferred, and must adjust erroneous debits. In the case of transferred erroneous credits, EPA must adjust the selling manufacturer's credit or debit balance to reflect the sale of such credits and any resulting generation of debits.

(c) <u>Notice of opportunity for hearing</u>. Any voiding of the certificate under paragraph (a)(6) of this section will be made only after EPA has offered the manufacturer concerned an opportunity for a hearing conducted in accordance with § 86.614 for light-duty vehicles or § 86.1014 for

light-duty trucks and, if a manufacturer requests such a hearing, will be made only after an initial decision by the Presiding Officer.