For the reasons set out in the preamble, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 9--[AMENDED]

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 et seq., 136-136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601-2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 et seq., 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971-1975 Comp., p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g-1, 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, 300j-1, 300j-2, 300j-3, 300j-4, 300j-9, 1857 et seq., 6901-6992k, 7401-7671q, 7542, 9601-9657, 11023, 11048.

2. The table in Sec. 9.1 is amended by adding the new entries in numerical order under the indicated heading to read as follows:

Sec. 9.1 OMB approvals under the Paperwork Reduction Act.

40 CFR citation	OMB control No.			
* * * *	*			
Control of Air Pollution From New and In-Use Motor				
Vehicles and New and In-Use Motor Vehicle Engines:				
Certification and Test Procedures				
* * * *	*			

86.1705	2060-0345
86.1707	2060-0345
86.1708	2060-0345
86.1709	2060-0345
86.1710	2060-0345
86.1712	2060-0345
86.1713	2060-0345
86.1714	2060-0345
86.1717	2060-0345
86.1721	2060-0345
86.1723	2060-0345
86.1724	2060-0345
86.1725	2060-0345
86.1726	2060-0345
86.1728	2060-0345
86.1734	2060-0345
86.1735	2060-0345
86.1770	2060-0345
86.1771	2060-0345
86.1776	2060-0345
86.1777	2060-0345
86.1778	2060-0345

* * * * * *

PART 85--CONTROL OF AIR POLLUTION FROM MOTOR VEHICLES AND MOTOR VEHICLE ENGINES

3. The authority citation for part 85 continues to read as follows:

Authority: 42 U.S.C. 7521, 7522, 7524, 7525, 7541, 7542, and 7601(a).

Subpart P--[Amended]

4. Section 85.1515 is amended by revising paragraph (c) to read as follows:

§ 85.1515 Emission standards and test procedures applicable to imported nonconforming motor vehicles and motor vehicle engines.

(c) Nonconforming motor vehicles or motor vehicle engines of 1994 OP model year and later conditionally imported pursuant to § 85.1505 or § 85.1509 shall meet all of the emission standards specified in 40 CFR part 86 for the model year in which the motor vehicle or motor vehicle engine is modified. At the option of the ICI, the nonconforming motor vehicle may comply with the emissions standards in 40 CFR 86.1708-99 or 86.1709-99, as applicable to a light-duty vehicle or light light-duty truck, in lieu of the otherwise applicable emissions standards specified in 40 CFR part 86 for the model year in which the nonconforming motor vehicle is modified. The provisions of 40 CFR 86.1710-99 do not apply to imported nonconforming motor vehicles. The useful life specified in 40 CFR part 86 for the model year in which the motor vehicle or motor vehicle engine is modified is applicable where useful life is not designated in this subpart.

* * * * *

PART 86--CONTROL OF AIR POLLUTION FROM NEW AND IN-USE MOTOR
VEHICLES AND NEW AND IN-USE MOTOR VEHICLE ENGINES:
CERTIFICATION AND TEST PROCEDURES

5. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401-7671(q).

- 6. Section 86.1 is amended by revising the entry for ASTM E29-90 in the table in paragraph (b)(1) and by revising the entry to the table in paragraph (b)(4), to read as follows:
- § 86.1 Reference materials.

- (b) * * *
- (1) * * *

Document Numb	er and	name		40	CFR	part	86	reference
	*	*	*		*		*	

ASTM E29-90, Standard

Practice for Using

Significant Digits in Test

Data to Determine

Conformance with

Specifications

86.609-84; 86.609-96;

86.609-97; 86.609-98;

86.1009-84; 86.1009-96;

86.1442; 86.1708-99;

86.1710-99;

86.1728-99

(4) * * *

Document No. and name	40 CFR part 86 reference
* * *	* *
California Regulatory	86.612-97; 86.1012-97;
Requirements Applicable to	86.1702-99; 86.1708-99;
the National Low Emission	86.1709-99; 86.1717-99;
Vehicle Program, October,	86.1735-99; 86.1771-99;
1996.	86.1775-99; 86.1776-99;
	86.1777-99; Appendix XVI;
	Appendix XVII.
* * *	* *

- 7. Section 86.096-30 is amended by reserving paragraph (a)(22) and by adding paragraphs (a)(23) and (a)(24), to read as follows:
- § 86.096-30 Certification.

- (a) * * *
- (22) [Reserved]
- (23)(i) The Administrator will issue a National LEV certificate of conformity for 1999 model year vehicles or engines certified to comply with the California TLEV, LEV, or ULEV emission standards.
- (ii) This certificate of conformity shall be granted after the Administrator has received and reviewed the California Executive Order a manufacturer has received for the same vehicles or engines.
- (iii) Vehicles or engines receiving a certificate of conformity under the provisions in this paragraph can only be sold in the states included in the NTR, as defined in §

- 86.1702, and those states where the sale of Californiacertified vehicles is otherwise authorized.
- (24)(i) The Administrator will issue a National LEV certificate of conformity for 2000 model year vehicles or engines certified to comply with the California TLEV emission standards.
- (ii) This certificate of conformity shall be granted after the Administrator has received and reviewed the California Executive Order a manufacturer has received for the same vehicles or engines.
- (iii) Vehicles or engines receiving a certificate of conformity under the provisions in this paragraph can only be sold in the states included in the NTR, as defined in § 86.1702, and those states where the sale of California-certified vehicles is otherwise authorized.

- 8. Section 86.097-1 is redesignated as § 86.099-1 and amended to read as follows:
- § 86.099-1 General applicability.

Section 86.099-1 includes text that specifies requirements that differ from those specified in § 86.094-1. Where a paragraph in § 86.094-1 is identical and applicable to § 86.099-1, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-1.".

- (a) through (b) [Reserved]. For guidance see § 86.094-1.
- (c) National Low Emission Vehicle Program for

 light-duty vehicles and light light-duty trucks. A

 manufacturer may elect to certify 1999 and later model year

 light-duty vehicles and light light-duty trucks to the

 provisions of the National Low Emission Vehicle Program

 contained in subpart R of this part. Subpart R of this part

 is applicable only to those manufacturers that opt into the

 National Low Emission Vehicle Program, under the provisions

 of that subpart, and that have not exercised a valid opt-out

 from the National Low Emission Vehicle Program, which opt
 out has gone into effect under the provisions of § 86.1707.

 All provisions of this subpart are applicable to vehicles

 certified pursuant to subpart R of this part, except as

 specifically noted in subpart R of this part.

- (d) [Reserved]
- (e) through (f) [Reserved]. For guidance see § 86.094-1.

Subpart B--[Amended]

- 9. Section 86.101 is amended by revising paragraph (c) to read as follows:
- § 86.101 General applicability.

* * * * *

(c) National Low Emission Vehicle Program for

light-duty vehicles and light light-duty trucks. A

manufacturer may elect to certify 1999 and later model year

light-duty vehicles and light light-duty trucks to the

provisions of the National Low Emission Vehicle Program

contained in subpart R of this part. Subpart R of this part

is applicable only to those manufacturers that opt into the

National Low Emission Vehicle Program, under the provisions

of subpart R of this part, and that have not exercised a

valid opt-out from the National Low Emission Vehicle

Program, which opt-out has gone into effect under the provisions of § 86.1707. All provisions of this subpart are applicable to vehicles certified pursuant to subpart R of this part, except as specifically noted in subpart R of this part.

10. The table of contents to subpart R is amended to read as follows:

Subpart R--General Provisions for the Voluntary National Low Emission Vehicle Program for Light-Duty Vehicles and Light-Duty Trucks

Sec.

- 86.1701-99 General applicability.
- 86.1702-99 Definitions.
- 86.1703-99 Abbreviations.
- 86.1704-99 Section numbering; construction.
- 86.1705-99 General provisions; opt-in.
- 86.1706-99 National LEV program in effect.
- 86.1707-99 General provisions; opt-outs.
- 86.1708-99 Exhaust emission standards for 1999 and later light-duty vehicles.
- 86.1709-99 Exhaust emission standards for 1999 and later light light-duty trucks.
- 86.1710-99 Fleet average non-methane organic gas exhaust

emission standards for light-duty vehicles and light light-duty trucks.

- 86.1711-99 Limitations on sale of Tier 1 vehicles and TLEVs.
- 86.1712-99 Maintenance of records; submittal of information.
- 86.1713-99 Light-duty exhaust durability programs.
- 86.1714-99 Small-volume manufacturers certification procedures.
- 86.1715-99 [Reserved]
- 86.1716-99 Prohibition of defeat devices.
- 86.1717-99 Emission control diagnostic system for 1999 and later light-duty vehicles and light-duty trucks.
- 86.1718-99 through 86.1720-99 [Reserved]
- 86.1721-99 Application for certification.
- 86.1722-99 [Reserved]
- 86.1723-99 Required data.
- 86.1724-99 Test vehicles and engines.
- 86.1725-99 Maintenance.
- 86.1726-99 Mileage and service accumulation; emission measurements.
- 86.1727-99 [Reserved]

- 86.1728-99 Compliance with emission standards.
- 86.1729-99 through 86.1733-99 [Reserved]
- 86.1734-99 Alternative procedure for notification of additions and changes.
- 86.1735-99 Labeling.
- 86.1736-99 through 86.1769-99 [Reserved]
- 86.1770-99 All-Electric Range Test requirements.
- 86.1771-99 Fuel specifications.
- 86.1772-99 Road load power, test weight, and inertia weight class determination.
- 86.1773-99 Test sequence; general requirements.
- 86.1774-99 Vehicle preconditioning.
- 86.1775-99 Exhaust sample analysis.
- 86.1776-99 Records required.
- 86.1777-99 Calculations; exhaust emissions.
- 86.1778-99 Calculations; particulate emissions.
- 86.1779-99 General enforcement provisions.
- 86.1780-99 Prohibited acts.
- 11. Section 86.1701-97 is redesignated as § 86.1701-99 and amended by revising paragraphs (a) and (c) and by adding paragraph (d), to read as follows:

(a) The provisions of this subpart may be adopted by vehicle manufacturers pursuant to the provisions specified in § 86.1705. The provisions of this subpart are generally applicable to 1999 and later model year light-duty vehicles and light light-duty trucks to be sold in the Northeast Trading Region, and 2001 and later model year light-duty vehicles and light light-duty trucks to be sold in the United States. In cases where a provision applies only to certain vehicles based on model year, vehicle class, motor fuel, engine type, vehicle emission category, intended sales destination, or other distinguishing characteristics, such limited applicability is cited in the appropriate section or paragraph. The provisions of this subpart shall be referred to as the "National Low Emission Vehicle Program" or "National LEV" or "NLEV."

* * * * *

(c) The requirements of this subpart apply to new vehicles manufactured by covered manufacturers through model year 2003. In addition, the requirements of this subpart apply to new vehicles manufactured by covered manufacturers

for model years prior to the first model year for which a mandatory federal exhaust emissions program for light-duty vehicles and light light-duty trucks is at least as stringent as the National LEV program with respect to NMOG, NOx, and CO exhaust emissions, as determined by the Administrator, provided that such a program is promulgated no later than December 15, 2000, and is effective no later than model year 2006.

- (d) Adoption of the National LEV program does not impose gasoline or other in-use fuel requirements and is not intended to require any new federal or state regulation of fuels. Vehicles under National LEV will be able to operate on any fuels, including conventional gasoline, that, in the absence of the National LEV program, could be sold under federal or state law.
- 12. Section 86.1702-97 is redesignated as § 86.1702-99 and amended in paragraph (b) by revising the definitions for "Averaging sets," "Core Stable Standards," "Non-Core Stable Standards," "Northeast Trading Region," and "Point of first sale" and by adding new definitions in alphabetical order for "All States Trading Region," "Axle Ratio," "Covered

state," "Existing ZEV Mandate," "Ozone Transport Commission States," "Section 177 Program," and "ZEV Mandate," to read as follows:

§ 86.1702-99 Definitions.

* * * * *

(b) * * *

* * * * *

All States Trading Region (ASTR) means the region comprised of all states except the OTC States that have not opted into National LEV pursuant to the opt-in provisions at § 86.1705 or that have opted out of National LEV and whose opt-outs have become effective, as provided at § 86.1707; California; and any state outside the OTR with a Section 177 Program in effect that does not allow National LEV as a compliance alternative.

* * * * *

Averaging sets are the categories of LDVs and LDTs for which the manufacturer calculates a fleet average NMOG value. The four averaging sets for fleet average NMOG value calculation purposes are:

- (1) Class A delivered to a point of first sale in the Northeast Trading Region;
- (2) Class A delivered to a point of first sale in the All States Trading Region;
- (3) Class B delivered to a point of first sale in the Northeast Trading Region;
- (4) Class B delivered to a point of first sale in the All States Trading Region.

* * * * *

Axle ratio means the number of times the input shaft to the differential (or equivalent) turns for each turn of the drive wheels.

* * * * *

Core Stable Standards means the standards and other requirements listed in § 86.1707(d)(9)(i)(A) through (F).

* * * * *

Covered state means a state that meets the conditions specified under § 86.1705(d).

* * * * *

Existing ZEV Mandate means any state regulation or other law that imposes (or purports to impose) obligations on auto manufacturers to produce, deliver for sale, or sell

a certain number or percentage of ZEVs and that was adopted prior to [insert date of signature of rule].

* * * * *

Non-Core Stable Standards means the standards and other requirements listed in § 86.1707(d)(9)(i)(G) through (L).

* * * * *

Northeast Trading Region (NTR) means the region comprised of the states that meet the conditions specified under § 86.1705(d).

* * * * *

Ozone Transport Commission States or OTC States means the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and Virginia, and the District of Columbia.

* * * * *

Point of first sale is the location where the completed light-duty vehicle or light-duty truck is purchased, also known as the 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 comprises the point of first sale. In cases

where the end user purchases the completed vehicle directly from the manufacturer, the end user is the point of first sale.

* * * * *

Section 177 Program means state regulations or other laws, except ZEV Mandates, that apply to any of the following categories of motor vehicles: passenger cars, light-duty trucks up through 6,000 pounds GVWR, and medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900.

ZEV Mandate means any state regulation or other law that imposes (or purports to impose) obligations on auto manufacturers to produce, deliver for sale, or sell a certain number or percentage of ZEVs.

13. Section 86.1703-97 is redesignated as § 86.1703-99 and amended in paragraph (b) by adding "ASTR" and "OTC" as new abbreviations in alphabetical order, to read as follows:

§ 86.1703-99 Abbreviations.

* * * * *

(b) * * *

* * * * *

ASTR - All States Trading Region

* * * * *

OTC - Ozone Transport Commission

- 14. Section 86.1704-97 is redesignated as § 86.1704-99.
- 15. Section 86.1705-97 is redesignated as § 86.1705-99 and amended by revising the heading of the section, by revising paragraphs (a) introductory text, (a)(2), (a)(3), and (b) through (g), to read as follows:
- § 86.1705-99 General provisions; opt-in.
- (a) <u>Covered manufacturers</u>. Covered manufacturers must comply with the provisions in this subpart, and in addition, must comply with the requirements of 40 CFR parts 85 and 86. A manufacturer shall be a covered manufacturer if:

- (2) Where a manufacturer has included a condition on opt-in provided for in paragraph (c)(2) of this section, that condition has been satisfied; and
- (3) The manufacturer has not opted out, pursuant to § 86.1707, or the manufacturer has opted out but that opt-out has not become effective under § 86.1707.
- (b) Covered manufacturers must comply with the standards and requirements specified in this subpart beginning in model year 1999. A manufacturer not listed in § 86.1706(c) that opts into the program after EPA issues a finding pursuant to § 86.1706(b) that the program is in effect must comply with the standards and requirements of this subpart beginning in the model year named for the calendar year after the calendar year in which EPA receives the manufacturer's opt-in. Light-duty vehicles and light light-duty trucks sold by covered manufacturers must comply with the provisions of this subpart.
- (c) <u>Manufacturer opt-ins</u>. (1) To opt into the National LEV program, a motor vehicle manufacturer must submit a written opt-in notification to the Administrator signed by a person or entity within the corporation or business with

authority to bind the corporation or business to its election and holding the position of vice president for environmental affairs or a position of comparable or greater authority. The manufacturer shall send a copy of this notification to: Director, Vehicles Programs and Compliance Division; U.S. Environmental Protection Agency; 2565

Plymouth Road; Ann Arbor, Michigan, 48105. The notification must unambiguously and unconditionally (apart from the permissible conditions specified in paragraph (c)(2) of this section) indicate the manufacturer's agreement to opt into the program and be subject to the provisions in this subpart, and include the following language:

XX COMPANY, its subsidiaries, successors and assigns hereby opts into the voluntary National LEV program, as set forth in 40 CFR part 86, subpart R, and agrees to be legally bound by all of the standards, requirements and other provisions of the National LEV program. XX COMPANY commits not to challenge EPA's authority to establish or enforce the National LEV program, and commits not to seek to certify any vehicle except in compliance with the regulations in subpart R.

- (2) The opt-in notification may indicate that the manufacturer opts into the program subject to either or both of the following conditions:
 - (i) That the Administrator finds under § 86.1706 that

the National LEV program is in effect, to be indicated with the following language:

This opt-in is subject to the condition that the Administrator make a finding pursuant to 40 CFR 86.1706 that the National LEV program is in effect.

(ii) That certain states (limited to the OTC States) and/or motor vehicle manufacturers opt into National LEV pursuant to § 86.1705, to be indicated with the following language (language in brackets indicates that either or both formulations are acceptable):

This opt-in is subject to the condition that [each of the states of [list state names]/[and] each of the following manufacturers [list manufacturer names]] opt into National LEV pursuant to 40 CFR 86.1705.

- (3) A manufacturer shall be considered to have opted in upon the Administrator's receipt of the opt-in notification and satisfaction of the conditions set forth in paragraph (c)(2) of this section, if applicable.
- (d) <u>Covered states</u>. An OTC State shall be a covered state if:
- (1) The state has opted into National LEV pursuant to paragraph (e) of this section;

- (2) Where a state has included a condition on opt-in provided for in paragraph (e)(3)(viii) of this section, that condition has been satisfied; and
- (3) The state has not opted out, pursuant to § 86.1707, or the state has opted out but that opt-out has not become effective under § 86.1707.
- (e) OTC State opt-ins. To opt into the National LEV program, a state must submit an opt-in notification to the Administrator, with a copy to Director, Vehicle Programs and Compliance Division; U.S. Environmental Protection Agency; 2565 Plymouth Road; Ann Arbor, Michigan, 48105. The notification must contain the following or substantively identical language:
- (1)(i) An Executive Order signed by the governor of the state (or the mayor of the District of Columbia) that unambiguously and unconditionally (apart from the permissible conditions set forth in this section) indicates the state's agreement to opt into the National LEV program and includes the following language (language in brackets indicates that either formulation is acceptable):

This Executive Order [commits STATE to / opts STATE into] the National Low Emission Vehicle (National

LEV) program, in accordance with the EPA National LEV program regulations at 40 CFR part 86, subpart R.

I hereby direct HEAD OF APPROPRIATE STATE AGENCY to forward to EPA with my concurrence the [enclosed letter signed / enclosed letter and proposed regulations signed and proposed] by the HEAD OF APPROPRIATE STATE AGENCY, which [specifies / specify] the details of STATE's commitment to the National LEV program.

I hereby direct APPROPRIATE STATE AGENCY to follow the procedures prescribed by the general statutes of STATE to take the necessary steps to adopt regulations and submit a state implementation plan (SIP) revision committing STATE to National LEV in accordance with the EPA National LEV program regulations on SIP revisions at 40 CFR part 86, subpart R, and with section 110 of the Clean Air Act and its implementing regulations at 40 CFR parts 51 and 52.

- (ii) States with Existing ZEV Mandates may add language to the Executive Order submitted pursuant to this paragraph (e)(1) confirming that this opt-in will not affect the state's requirements pertaining to ZEVs.
- (2) If a state does not submit an Executive Order pursuant to paragraph (e)(1) of this section, a letter signed by the governor of the state (or the mayor of the District of Columbia) that unambiguously and unconditionally (apart from the permissible conditions set forth in this section) indicates the state's agreement to opt into the National LEV program and includes the following language (language in brackets indicates that either formulation is

acceptable):

This submittal is made in accordance with the EPA National Low Emission Vehicle (National LEV) regulations at 40 CFR part 86, subpart R to [commit STATE to / opt STATE into] the National LEV program.

[I am forwarding to EPA the [enclosed letter signed / enclosed letter and proposed regulations which were signed and proposed] by HEAD OF APPROPRIATE STATE AGENCY at my direction, and which [specifies / specify] the details of STATE's commitment to the National LEV program. / I am forwarding to EPA and concur with the [enclosed letter signed / enclosed letter and proposed regulations signed and proposed] by HEAD OF APPROPRIATE STATE AGENCY, which [specifies / specify] the details of STATE's commitment to the National LEV program.]

I [hereby direct / have directed] APPROPRIATE STATE AGENCY to follow the procedures prescribed by the general statutes of STATE to take the necessary steps to adopt regulations and submit a state implementation plan (SIP) revision committing STATE to National LEV in accordance with the EPA National LEV regulations on SIP revisions at 40 CFR part 86, subpart R, and with section 110 of the Clean Air Act and its implementing regulations at 40 CFR parts 51 and 52.

- (iv) States with Existing ZEV Mandates may add language to the letter submitted pursuant to this paragraph (e)(2) confirming that this opt-in will not affect the state's requirements pertaining to ZEVs.
- (3) A letter signed by the head of the appropriate state agency that would unconditionally (except as set forth in this section) include the following:
 - (i) States without a Section 177 Program, or with a

Section 177 Program but not an Existing ZEV Mandate, shall include the following language:

National LEV is designed as a compliance alternative for OTC State programs adopted pursuant to section 177 of the Clean Air Act that apply to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and/or medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900. For the duration of STATE's participation in National LEV, [STATE will allow manufacturers to / manufacturers may] comply with National LEV or equally stringent mandatory federal standards in lieu of compliance with any program adopted by STATE pursuant to the authority provided in section 177 of the Clean Air Act applicable to the vehicle classes specified above, including any ZEV mandates. STATE's participation in National LEV extends until model year 2006, except as provided in 40 CFR 86.1707. If, no later than December 15, 2000, the US EPA does not adopt standards at least as stringent as the National LEV standards provided in 40 CFR part 86 subpart R that apply to new motor vehicles in model year 2004, 2005 or 2006, STATE's participation in National LEV extends only until model year 2004, except as provided in 40 CFR 86.1707.

For the duration of STATE's participation in National LEV, STATE [intends to / will] forbear from adopting and implementing a ZEV mandate effective before model year 2006.

(ii) States with a Section 177 Program and an Existing ZEV Mandate, shall include the following language:

National LEV is designed as a compliance

alternative for OTC State programs adopted pursuant to section 177 of the Clean Air Act that apply to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900. With the exception of any requirements pertaining to ZEVs, for the duration of STATE's participation in National LEV, [STATE will allow manufacturers to / manufacturers may] comply with National LEV or equally stringent mandatory federal standards in lieu of compliance with any program adopted by STATE pursuant to the authority provided in section 177 of the Clean Air Act applicable to the vehicle classes specified above. STATE's participation in National LEV extends until model year 2006, except as provided in 40 CFR 86.1707. If, no later than December 15, 2000, the US EPA does not adopt standards at least as stringent as the National LEV standards provided in 40 CFR part 86 subpart R that apply to new motor vehicles in model year 2004, 2005 or 2006, STATE's participation in National LEV extends only until model year 2004, except as provided in 40 CFR 86.1707. Any existing or future requirement pertaining to ZEVs is not affected by STATE's acceptance of National LEV as a compliance alternative for other state requirements.

(iii) All states shall include the following language:

Based on EPA's determination in the preamble to the final National LEV rule [CITE], STATE believes that National LEV will achieve reductions of VOC and NOx emissions that are equivalent to or greater than the reductions that would be achieved through OTC State adoption of California Low Emission Vehicle programs in the Ozone Transport Region.

(iv) All states shall include the following language:

STATE intends National LEV to be STATE's new motor vehicle emissions control program.

(v) All states shall include the following language:

STATE recognizes that motor vehicle manufacturers are committing to National LEV with the expectation that, until model year 2006 (or, under the circumstances specified above, model year 2004), the OTC States that commit to the National LEV program will allow National LEV as a compliance alternative for state programs adopted pursuant to the authority provided in section 177 of the Clean Air Act, applying to the vehicle classes specified above (except any requirements pertaining to ZEVs in states with Existing ZEV Mandates). It is our intent to abide by this commitment. [However, the provisions of this letter will not have the force of law until STATE adopts them as state regulations. / Regulations providing for STATE's opt-in to National LEV have been approved for proposed rulemaking by APPROPRIATE STATE AGENCY on [INSERT DATE]. However, they will not have the force and effect of law until they are approved as final regulations.] Adoption of state regulations and the contents of a final state implementation plan revision will be determined through a state rulemaking process pursuant to the state requirements at [CITE to STATE law] and federal law. Also, STATE must comply with any subsequent STATE legislation that might affect this commitment.

(vi) All states shall include the following language:

If the manufacturers exit the National LEV program pursuant to the EPA National LEV regulations at 40 CFR 86.1707, STATE [acknowledges / provides in its proposed rule] that the transition from National LEV requirements to any STATE program adopted pursuant to

the authority provided in section 177 of the Clean Air Act applying to the vehicle classes specified above, including any requirements pertaining to ZEVs (except any requirements pertaining to ZEVs in states with Existing ZEV Mandates), will proceed in accordance with the EPA National LEV regulations at 40 CFR 86.1707.

(vii) All states shall include the following language:

STATE supports the legitimacy of the National LEV program and EPA's authority to promulgate the National LEV regulations.

(viii) Any state may include the following language:

[This [commitment/opt-in] / As provided in the proposed regulations, STATE's opt-in] is conditioned on all motor vehicle manufacturers (listed in EPA regulations at 40 CFR 86.1706(c)) opting into National LEV and on EPA finding that National LEV is in effect pursuant to 40 CFR 86.1706.

- (4) In lieu of statements described in paragraphs (e)(3)(i), (e)(3)(ii) and (e)(3)(vi) of this section, states may submit proposed regulations containing the provisions required under paragraphs (g)(1), (g)(2), (g)(3), and (g)(5) of this section.
- (f) A state shall be considered to have opted in upon the Administrator's receipt of the opt-in notification and satisfaction of the conditions set forth in paragraph

- (e)(3)(viii) of this section, if applicable.
- (g) Each OTC State that opts into National LEV pursuant to paragraph (e) of this section shall submit a state implementation plan (SIP) revision within one year and seventy-five days of [INSERT DATE OF SIGNATURE OF FINAL RULE] except for the District of Columbia, New Hampshire, Delaware, and Virginia, for which the deadline is 18 months and seventy-five days from [INSERT SIGNATURE DATE OF FINAL RULE]. The SIP revisions shall include the following using identical or substantively identical language:
- (1) Covered states without any Section 177 Program, or with a Section 177 Program but not an Existing ZEV Mandate, shall submit regulations containing the following language:

For the duration of STATE's participation in National LEV, manufacturers may comply with National LEV or equally stringent mandatory federal standards in lieu of compliance with any program, including any mandates for sales of zero emission vehicles (ZEVs), adopted by STATE pursuant to the authority provided in section 177 of the Clean Air Act applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and/or medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900.

STATE's participation in National LEV extends until model year 2006, except as provided in 40 CFR 86.1707. If, no later than December 15, 2000, the US

EPA does not adopt standards at least as stringent as the National LEV standards provided in 40 CFR part 86 subpart R that apply to new motor vehicles in model year 2004, 2005 or 2006, STATE's participation in National LEV extends only until model year 2004, except as provided in 40 CFR 86.1707.

(2) Covered states with a Section 177 Program and an Existing ZEV Mandate shall submit regulations containing the following language:

With the exception of any STATE requirements pertaining to zero emission vehicles (ZEVs), for the duration of STATE's participation in National LEV, manufacturers may comply with National LEV or equally stringent mandatory federal standards in lieu of compliance with any program adopted by STATE pursuant to the authority provided in section 177 of the Clean Air Act applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and/or medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900.

STATE's participation in National LEV extends until model year 2006, except as provided in 40 CFR 86.1707. If, no later than December 15, 2000, the US EPA does not adopt standards at least as stringent as the National LEV standards provided in 40 CFR part 86 subpart R that apply to new motor vehicles in model year 2004, 2005 or 2006, STATE's participation in National LEV extends only until model year 2004, except as provided in 40 CFR 86.1707.

Any existing or future STATE requirement pertaining to ZEVs is not affected by STATE's acceptance of National LEV as a compliance alternative for other state requirements.

(3) All covered states shall submit regulations containing the following language:

If a covered manufacturer, as defined at 40 CFR 86.1702, opts out of the National LEV program pursuant to the EPA National LEV regulations at 40 CFR 86.1707, the transition from National LEV requirements to any STATE section 177 program applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and/or medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900, will proceed in accordance with the EPA National LEV regulations at 40 CFR 86.1707.

(4) All covered states shall accompany the regulatory language with the following language:

STATE commits to support National LEV as an acceptable alternative to state Section 177 Programs for the duration of STATE's participation in National LEV.

STATE recognizes that its commitment to National LEV is necessary to ensure that National LEV remain in effect.

STATE is submitting this SIP revision in accordance with the applicable Clean Air Act requirements at section 110 and EPA regulations at 40 CFR Part 86 and 40 CFR Parts 51 and 52.

(5) States without Existing ZEV Mandates shall accompany the regulatory language with the following language:

For the duration of STATE's participation in National LEV, STATE [intends to / will] forbear from adopting and implementing a ZEV mandate effective prior to model year 2006. Notwithstanding the previous sentence, if, no later than December 15, 2000, the US EPA does not adopt standards at least as stringent as the National LEV standards provided in 40 CFR part 86 subpart R that apply to new motor vehicles in model year 2004, 2005 or 2006, STATE [intends to / will] forbear from adopting and implementing a ZEV mandate effective prior to model year 2004.

- 16. Section 86.1706-97 is redesignated as § 86.1706-99 and is revised to read as follows:
- § 86.1706-99 National LEV program in effect.
- (a) No later than [insert date of first business day 75 days after date of signature of final rule] EPA shall issue a finding as to whether National LEV is in effect. EPA shall base this finding on opt-in notifications from OTC States submitted pursuant to § 86.1705(e) and received by EPA [insert date of first business day 45 days after date of signature of final rule], and on opt-in notifications from manufacturers submitted pursuant to § 86.1705(c) and received by EPA [insert date of first business day 60 days after date of signature of final rule].
 - (b) EPA shall find that the National LEV program is in

effect and shall subsequently publish this determination if the following conditions have been met:

- (1) All manufacturers listed in paragraph (c) of this section have lawfully opted in pursuant to § 86.1705(c) and any conditions placed on the opt-ins allowed under § 86.1705(c)(2) have been met (apart from a condition that EPA find the National LEV program in effect);
- (2) Each OTC State that opts in has lawfully opted in pursuant to § 86.1705(e) and any conditions placed on optins by OTC States that are allowed under § 86.1705(e)(3)(viii) have been met (apart from a condition that EPA find the National LEV program in effect); and
- (3) No valid opt-out has become effective pursuant to § 86.1707.
- (c) List of manufacturers of light-duty vehicles and light-duty trucks:

American Honda Motor Company, Inc.

American Suzuki Motor Corporation

BMW of North America, Inc.

Chrysler Corporation

Fiat Auto U.S.A., Inc.

Ford Motor Company

General Motors Corporation

Hyundai Motor America

Isuzu Motors America, Inc.

Jaguar Motors Ltd.

Kia Motors America, Inc.

Land Rover North America, Inc.

Mazda (North America) Inc.

Mercedes-Benz of North America

Mitsubishi Motor Sales of America, Inc.

Nissan North America, Inc.

Porsche Cars of North America, Inc.

Rolls-Royce Motor Cars Inc.

Saab Cars USA, Inc.

Subaru of America, Inc.

Toyota Motor Sales, U.S.A., Inc.

Volkswagen of America, Inc.

Volvo North America Corporation

17. Section 86.1707-99 is added to subpart R to read as follows:

A covered manufacturer or covered state may opt out of the National LEV program only according to the provisions of this section. Vehicles certified under the National LEV program must continue to meet the standards to which they were certified, regardless of whether the manufacturer of those vehicles remains a covered manufacturer. A manufacturer that has opted out remains responsible for any debits outstanding on the effective date of opt-out, pursuant to § 86.1710(d)(3).

(a) <u>Procedures for opt-outs--manufacturers</u>. To opt out of the National LEV program, a covered manufacturer must notify the Administrator as provided in § 86.1705(c)(1), except that the notification shall specify the condition and final action allowing opt-out, indicate the manufacturer's intent to opt out of the program and no longer be subject to the provisions in this subpart, and specify an effective date for the opt-out. The effective date shall be specified in terms of the first model year for which the opt-out shall be effective, but shall be no earlier than the applicable date indicated in paragraphs (d) through (j) of this

section. For an opt-out pursuant to paragraph (d) of this section, the manufacturer shall specify the revision triggering the opt-out and shall also provide evidence that the triggering revision does not harmonize the standard or requirement with a comparable California standard or requirement, if applicable, or that the triggering revision has increased the stringency of the revised standard or requirement, if applicable. The notification shall include the following language:

XX COMPANY, its subsidiaries, successors and assigns hereby opt out of the voluntary National LEV program, as set forth in 40 CFR part 86, subpart R.

(b) Procedures for opt-outs--OTC states. To opt out of the National LEV program, a covered state must notify the Administrator through a written statement from the head of the appropriate state agency. A copy of the notification shall be sent to the Director, Vehicle Programs and Compliance Division; U.S. Environmental Protection Agency; 2565 Plymouth Road; Ann Arbor, Michigan, 48105. The notification shall specify the final action allowing opt-out, indicate the state's intent to opt out of the program and no longer be subject to the provisions in this

subpart, and specify an effective date for the opt-out. The effective date shall be specified in terms of the first model year for which the opt-out shall be effective, but shall be no earlier than the applicable date indicated in paragraphs (d) through (k) of this section. The notification shall include the following language:

STATE hereby opts out of the voluntary National LEV program, as set forth in 40 CFR part 86, subpart R.

- (c) <u>Procedures for opt-outs--EPA notification</u>. Upon receipt of an opt-out notification under this section, EPA shall promptly notify the covered states and covered manufacturers of the opt-out. Publication in the Federal Register of notice of receipt of the opt-out notification is sufficient but not necessary to meet EPA's obligation to notify covered states and covered manufacturers.
- (d) Conditions allowing manufacturer opt-outs--change to Stable Standards. A covered manufacturer may opt out if EPA promulgates a final rule or takes other final agency action making a revision not specified in paragraph (d)(9)(iii) of this section to a standard or requirement listed in paragraph (d)(9)(i) of this section and the

covered manufacturer objects to the revision.

- (1) A covered manufacturer may opt out within 180 calendar days of the EPA action allowing opt-out under this paragraph (d). A valid opt-out based on a revision to a Core Stable Standard shall be effective no earlier than the model year named for the calendar year following the calendar year in which EPA receives the manufacturer's opt-out notification. A valid opt-out based on a revision to a Non-Core Stable Standard may become effective no earlier than the first model year to which that revision applies.
- (i) Only a covered manufacturer that objects to a revision may opt out if EPA adopts that revision, except that if such a manufacturer opts out, other manufacturers that did not object to the revision may also opt out pursuant to paragraph (j) of this section. An objection shall be sufficient for this purpose only if it was filed during the public comment period on the proposed revision and the objection states that the proposed revision is sufficiently significant to allow opt-out under this paragraph (d).
 - (ii) [Reserved]
 - (2) Within sixty days of receipt of an opt-out

notification under this paragraph (d), EPA shall determine whether the opt-out is valid by determining whether the alleged condition allowing opt-out has occurred and whether the opt-out complies with the requirements under paragraphs (a) and (d) of this section. An EPA determination regarding the validity of an opt-out is not a rule, but is a nationally applicable final agency action subject to judicial review pursuant to section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)).

- (3) A manufacturer that has submitted an opt-out notification to EPA under this paragraph (d) remains a covered manufacturer until the opt-out has come into effect under paragraph (d)(1) of this section and EPA or a reviewing court determines that the opt-out is valid.
- (4) In the event that a manufacturer petitions for judicial review of an EPA determination that an opt-out is invalid, the manufacturer remains a covered manufacturer until final judicial resolution of the petition. Pending resolution of the petition, and starting with the model year for which the opt-out would have come into effect under paragraph (d)(1) of this section if EPA had determined the opt-out was valid, the manufacturer may certify vehicles to

any standards in this part applicable to vehicles certified in that model year and sell such vehicles without regard to the limitations contained in § 86.1711. However, if the opt-out is finally determined to be invalid, the manufacturer will be liable for any failure to comply with §§ 86.1710 through 86.1712.

(5) Upon the effective date of a manufacturer's opt-out under this paragraph (d), that manufacturer shall be subject to all requirements (except ZEV Mandates) that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.) and any state standards and other requirements (except ZEV Mandates) in effect pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507). For any state Section 177 Program that allowed National LEV as a compliance alternative and was adopted at least two years before the effective date of a manufacturer's opt-out, a manufacturer waives its right under section 177 of the Clean Air Act to two years of lead time to the extent that the effective date of its opt-out provides for less than two years of lead time and to the extent such a waiver is

necessary. With respect to ZEV Mandates, the manufacturer will not be deemed to have waived its two-year lead time under section 177 of the Clean Air Act. A manufacturer shall not be subject to any ZEV Mandates (except Existing ZEV Mandates) in OTC States until the model year (as defined in part 85, subpart X) that commences two years after the date of EPA's receipt of the manufacturer's opt-out notice.

- (6) If a covered manufacturer opts out under this paragraph (d), any covered state that is not a violating state under paragraph (e), (f), (g) or (h) of this section may opt out within 90 calendar days of the date of either an EPA finding that the opt-out is valid, or a judicial ruling that a disputed opt-out is valid. The state's opt-out notification shall specify an effective date for the state's opt-out no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt out is not effective for model years (as defined in part 85, subpart X) that commence prior to this effective date.
- (7) In a state that opts out pursuant to paragraph(d)(6) of this section, obligations under National LEV shallbe unaffected for covered manufacturers until the effective

date of the state's opt-out. Upon the effective date of the state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards are not in effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

- (8) In a state that has not opted out, obligations under National LEV shall be unaffected for covered manufacturers.
- (9)(i) The following are the emissions standards and requirements that, if revised, may provide covered manufacturers the opportunity to opt out pursuant to paragraph (d)(1) of this section:
- (A) The tailpipe emissions standards for NMOG, NOx, CO, HCHO, and PM specified in § 86.1708(b) and (c) and § 86.1709(b) and (c);
- (B) Fleet average NMOG standards and averaging, banking and trading provisions specified in § 86.1710;

- (C) Provisions regarding limitations on sale of Tier 1 vehicles and TLEVs contained in § 86.1711;
- (D) The compliance test procedure (Federal Test Procedure) as specified in subparts A and B of this part, as used for determining compliance with the exhaust emission standards specified in § 86.1708(b) and (c) and § 86.1709(b) and (c);
- (E) The compliance test fuel, as specified in §
 86.1771;
- (F) The definition of low volume manufacturer specified in § 86.1702;
- (G) The on-board diagnostic system requirements specified in § 86.1717;
- (H) The light-duty vehicle refueling emissions standards and provisions specified in § 86.099-8(d), and the light-duty truck refueling emissions standards and provisions specified in § 86.001-9(d);
- (I) The cold temperature carbon monoxide standards and provisions for light-duty vehicles specified in § 86.099-8(k), and for light light-duty trucks specified in § 86.099-9(k);
 - (J) The evaporative emissions standards and provisions

for light-duty vehicles specified in § 86.099-8(b), and the evaporative emissions standards and provisions for light light-duty trucks specified in § 86.099-9(b);

- (K) The reactivity adjustment factors and procedures specified in § 86.1777(d);
- (L) The Supplemental Federal Test Procedure, standards and phase-in schedules specified in §§ 86.1708(e), 86.1709(e), 86.127(f) and (g), 86.129(e) and (f), 86.130(e), 86.131(f), 86.132(n) and (o), 86.158, 86.159, 86.160, 86.161, 86.162, 86.163, 86.164, and Appendix I to this part, paragraphs (g) and (h).
- (ii) The standards and requirements listed in
 paragraphs (d)(9)(i)(A) through (d)(9)(i)(F) of this section
 are the "Core Stable Standards"; the standards and
 requirements listed in paragraphs (d)(9)(i)(G) through
 (d)(9)(i)(L) of this section are the "Non-Core Stable
 Standards."
- (iii) The following types of revisions to the Stable Standards listed in paragraph (d)(9)(i) of this section do not provide covered manufacturers the right to opt out of the National LEV program:
 - (A) Revisions to which covered manufacturers do not

object;

- (B) Revisions to a Non-Core Stable Standard that do not increase the overall stringency of the standard or requirement;
- (C) Revisions to a Non-Core Stable Standard that harmonize the standard or requirement with the comparable California standard or requirement for the same model year (even if the harmonization increases the stringency of the standard or requirement), provided that, if the relevant California factor is raised to 1.0 or higher, EPA can only raise to 1.0 any of the reactivity adjustment factors specified in 86.1777 applicable to gasoline meeting the specifications of 86.1771(a)(1); and
- (D) Revisions to cold temperature carbon monoxide standards and provisions for light-duty vehicles (as specified in § 86.099-8(k)) and for light light-duty trucks (as specified in § 86.099-9(k)) that are effective after model year 2000.
- (10) Promulgation by EPA of mandatory tailpipe standards and other related requirements effective model year 2004 or later does not provide an opportunity to opt out of the National LEV program.

- (e) Conditions allowing manufacturer opt-outs--state Section 177 Program that does not allow National LEV as a compliance alternative. A covered manufacturer may opt out of National LEV if a covered state takes final action such that it has in its regulations or state law a state Section 177 Program and/or a ZEV Mandate (except in a state with an Existing ZEV Mandate), that does not allow National LEV as a compliance alternative for the duration of the state's commitment to the National LEV program. The state's commitment to National LEV extends until model year 2006. If, no later than December 15, 2000, EPA has not adopted standards at least as stringent as the National LEV standards provided in 40 CFR part 86, subpart R that apply to new motor vehicles in model year 2004, 2005 or 2006, the state's commitment to National LEV only extends until model year 2004. A manufacturer could opt out based on this condition even if the state regulations or law are contrary to an approved SIP revision committing the state to National LEV pursuant to § 86.1705(g). For purposes of this paragraph (e), such a state shall be called the "violating state."
- (1) A covered manufacturer may opt out any time after the violating state takes such final action, provided that

the violating state has not withdrawn or otherwise nullified the relevant final action prior to EPA's receipt of the optout notification. An opt-out under this paragraph (e) shall be effective no earlier than the model year named for the calendar year following the calendar year in which EPA receives the manufacturer's opt-out notification.

(2) As of the model year named for the calendar year following the calendar year of the violating state's final action, the violating state shall no longer be included in the applicable trading region for purposes of calculating covered manufacturers' compliance with the fleet average NMOG standards under § 86.1710, and § 86.1711 shall no longer apply to vehicles sold in the violating state. Beginning in that model year and until the violating state's requirements become effective pursuant to sections 110(1) and 177 of the Clean Air Act or until the date specified in the following sentence, whichever is earlier, the National LEV program allows covered manufacturers to certify and produce for sale vehicles meeting the exhaust emission standards of § 86.096-8(a)(1)(i) and subsequent model year provisions or § 86.097-9(a)(1)(i) and subsequent model year provisions in the violating state. If the violating state

withdraws or otherwise nullifies the relevant violating final action, vehicles sold in that state shall count towards the covered manufacturers' fleet NMOG standards under § 86.1710 and be subject to § 86.1711 as of the model year named for the second calendar year following the calendar year in which the violating state took the final action nullifying or withdrawing the final violating action, or as of the model year named for the fourth calendar year following the calendar year in which the violating state took the violating final action, whichever is later. The two-year lead time required by section 177 of the Clean Air Act for the state Section 177 Program or ZEV Mandate shall run from the date of the violating final action. Notwithstanding an earlier effective date of a manufacturer's opt-out under this paragraph (e), the manufacturer's opt-out is not effective in the violating state until the two-year lead time for the violating state's program has passed (which shall run from the date of the violating final action). For model years for which vehicles sold in the violating state do not count towards the National LEV NMOG average, in calculating emissions reductions from new motor vehicles creditable for state

implementation plan requirements, the violating state's emissions reductions shall be based on the emission standards of §§ 86.096 - 8(a)(l)(i), 86.097-9(a)(l)(i) and subsequent model year provisions, and shall not be based on the National LEV standards, provided that vehicles sold in the violating state are certified to Tier 1 levels when sold in that state.

(3) Upon the effective date of a manufacturer's opt-out under this paragraph (e) in any covered state that is not a violating state under this paragraph (e), that manufacturer shall be subject to all requirements (except ZEV Mandates) that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act and any state standards and other requirements (except ZEV Mandates) in effect pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507). For any state Section 177 Program that allowed National LEV as a compliance alternative and was adopted by a non-violating state at least two years before the effective date of a manufacturer's opt-out, a manufacturer waives its right under section 177 of the Clean Air Act to two years of lead

time to the extent that the effective date of its opt-out provides for less than two years of lead time and to the extent such a waiver is necessary. With respect to ZEV Mandates, the manufacturer will not be deemed to have waived its two-year lead time under section 177 of the Clean Air Act. A manufacturer shall not be subject to any ZEV Mandates (except Existing ZEV Mandates) in OTC States until the model year (as defined in part 85, subpart X) that commences two years after the date of EPA's receipt of the manufacturer's opt-out notice.

- (4) If a covered manufacturer opts out under this paragraph (e), any covered state that is not a violating state under paragraph (e), (f), (g) or (h) of this section may opt out within 90 calendar days of EPA's receipt of the manufacturer's opt-out notification. The state's opt-out notification shall specify an effective date for the state's opt-out no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt-out is not effective for model years (as defined in part 85, subpart X), that commence prior to this effective date.
 - (5) In a non-violating state that opts out pursuant to

paragraph (e)(4) of this section, obligations under National LEV shall be unaffected for covered manufacturers until the effective date of the non-violating state's opt-out. Upon the effective date of the state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards are not in effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

- (6) In a non-violating state that has not opted out, obligations under National LEV shall be unaffected for covered manufacturers.
- (f) Conditions allowing manufacturer opt-outs--failure

 to submit SIP revision. A covered manufacturer may opt out

 of National LEV if a covered state fails to submit a

 National LEV SIP revision on the date specified in §

 86.1705(g). For purposes of this paragraph (f), such a state shall be called the "violating state."
 - (1) A covered manufacturer may opt out any time after

the violating state misses the deadline for its National LEV SIP revision, provided that EPA has not received a National LEV SIP revision from the violating state prior to EPA's receipt of the manufacturer's opt-out notification. If a manufacturer opts out within 180 calendar days from the deadline for the state to submit its National LEV SIP revision, the opt-out must be conditioned on the state not submitting a National LEV SIP revision within 180 calendar days from the deadline for such SIP revision. If the state submits such a SIP revision within the 180-day period, any manufacturer opt-outs under this paragraph (f) would be invalidated and would not come into effect. An opt-out under this paragraph (f) shall be effective no earlier than model year 2000 (or model year 2001 if the violating state is the District of Columbia, New Hampshire, Delaware, or Virginia) or the model year named for the calendar year following the calendar year in which EPA receives the opt-out notification, whichever is later.

(2) For a manufacturer that opts out under this paragraph (f), as of model year 2000 (or model year 2001 if the violating state is the District of Columbia, New Hampshire, Delaware, or Virginia) or the model year named

for the calendar year following the calendar year in which EPA receives the opt-out notification, whichever is later, the violating state shall no longer be included in the applicable trading region for purposes of calculating that manufacturer's compliance with the fleet average NMOG standards under § 86.1710 and the manufacturer does not have to comply with § 86.1711 for vehicles sold in the violating state. Beginning in that model year and until the manufacturer's opt-out becomes effective, the National LEV program allows a manufacturer that has opted out under this paragraph (f) to certify and produce for sale vehicles meeting the exhaust emission standards of § 86.096-8(a)(1)(i) and subsequent model year provisions or § 86.097-9(a)(1)(i) and subsequent model year provisions in the violating state. For model years in which vehicles sold in the violating state do not count towards the National LEV NMOG average, in calculating emission reductions from new motor vehicles creditable for state implementation plan requirements, the violating state's emissions reductions shall be based on the emissions standards of §§ 86.096-8(a)(1)(i), 86.097-9(a)(1)(i), and subsequent model year provisions, and shall not be based on the National LEV

standards, provided that vehicles sold in the violating state are certified to Tier 1 levels when sold in that state. National LEV obligations in the violating state remain unchanged for those manufacturers that do not opt out based on this condition.

(3) Upon the effective date of a manufacturer's opt-out under this paragraph (f), in any covered state that is not a violating state under this paragraph (f), that manufacturer shall be subject to all requirements (except ZEV Mandates) that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act and any state standards and other requirements (except ZEV Mandates) in effect pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507). For any state Section 177 Program that allowed National LEV as a compliance alternative and was adopted by a non-violating state at least two years before the effective date of a manufacturer's opt-out, a manufacturer waives its right under section 177 of the Clean Air Act to two years of lead time to the extent that the effective date of its opt-out provides for less than two years of lead time and to the

extent such a waiver is necessary. With respect to ZEV Mandates, the manufacturer will not be deemed to have waived its two-year lead time under section 177 of the Clean Air Act. A manufacturer shall not be subject to any ZEV Mandates (except Existing ZEV Mandates) in OTC States until the model year (as defined in part 85, subpart X) that commences two years after the date of EPA's receipt of the manufacturer's opt-out notice.

- (4) If a covered manufacturer opts out under this paragraph (f), any covered state that is not a violating state under paragraph (e), (f), (g) or (h) of this section may opt out within 90 calendar days of EPA's receipt of the manufacturer's opt-out notification. The state's opt-out notification shall specify an effective date for the state's opt-out no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt-out is not effective for model years (as defined in part 85, subpart X), that commence prior to this effective date.
- (5) In a non-violating state that opts out pursuant to paragraph (f)(4) of this section, obligations under National LEV shall be unaffected for covered manufacturers until the

effective date of the non-violating state's opt-out. Upon the effective date of the state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards are not in effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seg.).

- (6) In a non-violating state that has not opted out, obligations under National LEV shall be unaffected for covered manufacturers.
 - (g) Conditions allowing manufacturer

opt-outs--inadequate National LEV SIP submission. A covered manufacturer may opt out of National LEV if EPA disapproves a covered state's National LEV SIP submission or finds that it fails to meet the requirements for a National LEV SIP revision set forth in § 86.1705(g) or if EPA has not taken final action regarding such a SIP submission and more than one year has passed since such SIP submission was submitted to EPA. For purposes of this paragraph (g), such a state

shall be called the "violating state."

- (1) A covered manufacturer may opt out any time after EPA has disapproved a state's National LEV SIP submission or found that it does not meet the requirements of § 86.1705(g), provided that EPA has not subsequently approved a revised National LEV SIP revision from that state and found that the SIP revision meets the requirements of § 86.1705(q). A covered manufacturer may also opt out any time after one year EPA's receipt of a state's National LEV SIP submission, provided that EPA has not approved the revision or has not found that the SIP revision meets the requirements of § 86.1705(g). An opt-out under this condition shall be effective no earlier than the model year named for the calendar year following the calendar year in which the EPA receives the manufacturer's opt-out notification.
- (2) For a manufacturer that opts out under this paragraph (g), as of the model year named for the calendar year following the calendar year in which EPA receives the opt-out notification, the violating state shall no longer be included in the applicable trading region for purposes of calculating that manufacturer's compliance with the fleet

average NMOG standards under § 86.1710 and the manufacturer does not have to comply with § 86.1711 for vehicles sold in the violating state. Beginning in that model year and until the manufacturer's opt-out becomes effective, the National LEV program allows a manufacturer that has opted out under this paragraph (g) to certify and produce for sale vehicles meeting the exhaust emission standards of § 86.096-8(a)(1)(i) and subsequent model year provisions or § 86.097-9(a)(1)(i) and subsequent model year provisions in the violating state. For model years in which vehicles sold in the violating state do not count towards the National LEV NMOG average, in calculating emission reductions from new motor vehicles creditable for state implementation plan requirements, the violating state's emissions reductions shall be based on the emissions standards of §§ 86.096-8(a)(1)(i), 86.097-9(a)(1)(i), and subsequent model year provisions, and shall not be based on the National LEV standards, provided that vehicles sold in the violating state are certified to Tier 1 levels when sold in that state. National LEV obligations in the violating state remain unchanged for those manufacturers that do not opt out based on this condition.

(3) Upon the effective date of a manufacturer's opt-out under this paragraph (g), in any covered state that is not a violating state under this paragraph (g), that manufacturer shall be subject to all requirements (except ZEV Mandates) that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act and any state standards and other requirements (except ZEV Mandates) in effect pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507). For any state Section 177 Program that allowed National LEV as a compliance alternative and was adopted by a non-violating state at least two years before the effective date of a manufacturer's opt-out, a manufacturer waives its right under section 177 of the Clean Air Act to two years of lead time to the extent that the effective date of its opt-out provides for less than two years of lead time and to the extent such a waiver is necessary. With respect to ZEV Mandates, the manufacturer will not be deemed to have waived its two-year lead time under section 177 of the Clean Air Act. A manufacturer shall not be subject to any ZEV Mandates (except Existing ZEV Mandates) in OTC States until the model

year (as defined in part 85, subpart X) that commences two years after the date of EPA's receipt of the manufacturer's opt-out notice.

- (4) If a covered manufacturer opts out under this paragraph (g), any covered state that is not a violating state under paragraph (e), (f), (g) or (h) of this section may opt out within 90 calendar days of EPA's receipt of the manufacturer's opt-out notification. The state's opt-out notification shall specify an effective date for the state's opt-out that is no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt-out is not effective for model years (as defined in part 85, subpart X that commence prior to this effective date.
- (5) In a non-violating state that opts out pursuant to paragraph (g)(4) of this section, obligations under National LEV shall be unaffected for covered manufacturers until the effective date of the non-violating state's opt-out. Upon the effective date of the state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards are not in

effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

- (6) In a non-violating state that has not opted out, obligations under National LEV shall be unaffected for covered manufacturers.
- (h) Conditions allowing manufacturer opt-outs--adoption of a ZEV Mandate. A covered manufacturer to which a ZEV Mandate might apply may opt out of National LEV if a covered state without an Existing ZEV Mandate takes final action such that it has in its regulations or state law a ZEV Mandate that allows National LEV as a compliance alternative that would be effective during the state's commitment to National LEV. For purposes of this paragraph (h), such a state shall be called the "violating state."
- (1) A covered manufacturer may opt out any time after the violating state takes the final action, provided that the violating state has not withdrawn or otherwise nullified the relevant final action prior to EPA's receipt of the optout notification. An opt-out under this opt-out condition

shall be effective no earlier than the model year named for the calendar year following the calendar year in which EPA receives the manufacturer's opt-out notification.

(2) For a manufacturer that opts out under this paragraph (h), as of the model year named for the calendar year following the calendar year in which EPA receives the opt-out notification, the violating state shall no longer be included in the applicable trading region for purposes of calculating that manufacturer's compliance with the fleet average NMOG standards under § 86.1710 and the manufacturer does not have to comply with § 86.1711 for vehicles sold in the violating state. Beginning in that model year and until the manufacturer's opt-out becomes effective, the National LEV program allows a manufacturer that has opted out under this paragraph (h) to certify and produce for sale vehicles meeting the exhaust emission standards of § 86.096-8(a)(1)(i) and subsequent model year provisions or § 86.097-9(a)(1)(i) and subsequent model year provisions in the violating state. For model years in which vehicles sold in the violating state do not count towards the National LEV NMOG average, in calculating emission reductions from new motor vehicles creditable for state implementation plan

requirements, the violating state's emissions reductions shall be based on the emissions standards of §§ 86.096-8(a)(1)(i), 86.097-9(a)(1)(i), and subsequent model year provisions, and shall not be based on the National LEV standards, provided that vehicles sold in the violating state are certified to Tier 1 levels when sold in that state. National LEV obligations in the violating state remain unchanged for those manufacturers that do not opt out based on this condition.

(3) Upon the effective date of a manufacturer's opt-out under this paragraph (h), in any covered state that is not a violating state under this paragraph (h), that manufacturer shall be subject to all requirements (except ZEV Mandates) that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act and any state standards and other requirements (except ZEV Mandates) in effect pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507). For any state Section 177 Program that allowed National LEV as a compliance alternative and was adopted by a non-violating state at least two years before the effective date of a

manufacturer's opt-out, a manufacturer waives its right under section 177 of the Clean Air Act to two years of lead time to the extent that the effective date of its opt-out provides for less than two years of lead time and to the extent such a waiver is necessary. With respect to ZEV Mandates, the manufacturer will not be deemed to have waived its two-year lead time under section 177 of the Clean Air Act. A manufacturer shall not be subject to any ZEV Mandates (except Existing ZEV Mandates) in OTC States until the model year (as defined in part 85, subpart X) that commences two years after the date of EPA's receipt of the manufacturer's opt-out notice.

(4) If a covered manufacturer opts out under this paragraph (h), any covered state that is not a violating state under paragraph (e), (f), (g) or (h) of this section may opt out within 90 calendar days of EPA's receipt of the manufacturer's opt-out notification. The state's opt-out notification shall specify an effective date for the state's opt-out that is no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt-out is not effective for model years (as defined in part 85, subpart X) that commence

prior to this effective date.

- (5) In a non-violating state that opts out pursuant to paragraph (h)(4) of this section, obligations under National LEV shall be unaffected for covered manufacturers until the effective date of the non-violating state's opt-out. Upon the effective date of the state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards are not in effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.).
- (6) In a non-violating state that has not opted out, obligations under National LEV shall be unaffected for covered manufacturers.
- (i) Conditions allowing manufacturer opt-outs--EPA

 failure to consider in-use fuel issues. A covered

 manufacturer may opt out of National LEV if EPA does not

 meet its obligations related to fuel sulfur effects, as

 those obligations are set forth in paragraph (i)(7) of this

section.

- (1) A manufacturer may request in writing that EPA consider taking a specific action with regard to a fuel sulfur effect described in paragraph (i)(7) of this section. The request must identify the alleged fuel sulfur related problem, demonstrate that the problem exists and is caused by in-use fuel sulfur levels, ask EPA to consider taking a specific action, and demonstrate the emissions impact of the requested change. Within 60 calendar days of EPA's receipt of the manufacturer's request, EPA must consider the manufacturer's request and respond to it in writing, stating the Agency's decision and explaining the basis for the decision. The date of EPA's response is the date the response is signed.
- (2) If EPA fails to respond to a manufacturer's request within the time provided, the covered manufacturer that submitted the request may opt out within 180 calendar days of the deadline for the EPA response. (If such a manufacturer opts out, other manufacturers that did not submit requests may also opt out pursuant to paragraph (j) of this section.) An opt-out notification under this paragraph (i) is not valid if received by EPA after EPA

responds to the request, even if EPA responds after the expiration of the 60-day EPA deadline. An opt-out under this paragraph (i) shall be effective no earlier than the model year named for the calendar year following the calendar year in which EPA receives the manufacturer's opt-out notification.

(3) Upon the effective date of a manufacturer's opt-out under this paragraph (i), the manufacturer shall be subject to all requirements (except ZEV Mandates) that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.) and any state standards and other requirements (except ZEV Mandates) in effect pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507). For any state Section 177 Program that allowed National LEV as a compliance alternative and was adopted at least two years before the effective date of a manufacturer's opt-out, a manufacturer waives its right under section 177 of the Clean Air Act to two years of lead time to the extent that the effective date of its opt-out provides for less than two years of lead time and to the extent such a waiver is

necessary. With respect to ZEV Mandates, the manufacturer will not be deemed to have waived its two-year lead time under section 177 of the Clean Air Act. A manufacturer shall not be subject to any ZEV Mandates (except Existing ZEV Mandates) in OTC States until the model year (as defined in part 85, subpart X) that commences two years after the date of EPA's receipt of the manufacturer's opt-out notice.

- (4) If a covered manufacturer opts out under this paragraph (i), any covered state that is not a violating state under paragraph (e), (f), (g) or (h) of this section may opt out within 90 calendar days of EPA's receipt of the manufacturer's opt-out notification. The state's opt-out notification shall specify an effective date for the state's opt-out that is no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt out is not effective for model years (as defined in part 85, subpart X), that commence prior to this effective date.
- (5) In a state that opts out pursuant to paragraph
 (i)(4) of this section, obligations under National LEV shall
 be unaffected for covered manufacturers until the effective
 date of the state's opt-out. Upon the effective date of the

state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards are not in effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

- (6) In a state that has not opted out, obligations under National LEV shall be unaffected for covered manufacturers.
- (7) Following are the actions that a manufacturer may request EPA to consider under paragraph (i)(1) of this section:
- (i) During the certification process and upon a manufacturer's written request, EPA will consider allowing the use of an on-board diagnostic system (as required by § 86.1717), that functions properly on low sulfur gasoline, but indicates sulfur-induced passes when exposed to high sulfur gasoline.
 - (ii) Upon a manufacturer's written request, if vehicles

exhibit illuminations of the emission control diagnostic system malfunction indicator light (as defined in § 86.094-17(c)) due to high sulfur gasoline, EPA will consider allowing modifications to such vehicles on a case-by-case basis so as to eliminate the sulfur-induced illumination.

- (iii) 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 from currently available gasoline, EPA will consider allowing such procedures on a case-by-case basis.
- (j) <u>Conditions allowing manufacturer opt-outs--OTC</u>

 <u>State or manufacturer opts out</u>. A covered manufacturer may opt out of National LEV if a covered state or another covered manufacturer opts out of the National LEV program pursuant to this section.
- (1) If a covered manufacturer's opt-out under this paragraph (j) is based on a covered state's or covered manufacturer's opt-out under paragraph (e), (f), (g), (h), (i), (j) or (k) of this section, the manufacturer may opt out within 90 calendar days of EPA's receipt of the underlying state's or manufacturer's opt-out notification.

If a manufacturer's opt-out under this paragraph (j) is based on a manufacturer's opt-out under paragraph (d) of this section, the manufacturer may only opt out within 90 calendar days of the date of either an EPA finding or a judicial ruling that the opt-out under paragraph (d) of this section is valid. An opt-out under this paragraph (j) shall be effective no earlier than the model year named for the calendar year following the calendar year in which the EPA receives the manufacturer's opt-out notification.

(2) Upon the effective date of a manufacturer's opt-out under this paragraph (j), in any covered state that manufacturer shall be subject to all requirements (except ZEV Mandates) that would apply to a manufacturer that had not opted into National LEV, including all applicable standards and other requirements promulgated under title II of the Clean Air Act and any state standards and other requirements (except ZEV Mandates) in effect pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507). For any state Section 177 Program that allowed National LEV as a compliance alternative and was adopted at least two years before the effective date of a manufacturer's opt-out, a manufacturer waives its right under section 177 of the Clean

Air Act to two years of lead time to the extent that the effective date of its opt-out provides for less than two years of lead time and to the extent such a waiver is necessary. With respect to ZEV Mandates, the manufacturer will not be deemed to have waived its two-year lead time under section 177 of the Clean Air Act. A manufacturer shall not be subject to any ZEV Mandates (except Existing ZEV Mandates) in OTC States until the model year (as defined in part 85, subpart X) that commences two years after the date of EPA's receipt of the manufacturer's opt-out notice.

- (3) If a covered manufacturer opts out under this paragraph (j), any covered state that is not a violating state under paragraph (e), (f), (g) or (h) of this section may opt out within 90 calendar days of EPA's receipt of the manufacturer's opt-out notification. The state's opt-out notification shall specify an effective date for the state's opt-out no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt-out is not effective for model years (as defined in part 85, subpart X), that commence prior to this effective date.
 - (4) In a state that opts out pursuant to paragraph

- (j)(3) of this section, obligations under National LEV shall be unaffected for covered manufacturers until the effective date of the state's opt-out. Upon the effective date of the state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards are not in effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act (42 U.S.C. 7521 et seq.).
- (5) In a state that has not opted out, obligations under National LEV remain unaffected for covered manufacturers.
- (k) Conditions allowing OTC State opt-outs--EPA finding of inequivalency. Any covered state may opt out of National LEV if EPA determines that National LEV would not produce (or is not producing) emissions reductions at least equivalent to the OTC State Section 177 Programs.
- (1) At any time during National LEV, a covered state may request in writing that EPA reevaluate its initial

equivalency determination (of [insert date of signature of final rule]) that National LEV would produce emissions reductions at least equivalent to the OTC State Section 177 Programs that would be operative in the absence of National LEV. Within 180 calendar days of receipt of the state's request, EPA must take final agency action to determine whether the determination that National LEV will produce at least equivalent emission reductions to OTC State Section 177 Program is still valid. These EPA determinations are not rules, but are nationally applicable final agency actions subject to judicial review pursuant to section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)). In reevaluating its equivalency determination, EPA shall use the same Mobile emission factor model and the same inputs and assumptions (including vehicle miles traveled, MOBILE5a model inputs, inspection and maintenance programs, reformulated gasoline, and permanent migration effects) as used in the initial determination, with the following exceptions:

(i) In modeling the emission reductions from National LEV, EPA shall use any revised federal new motor vehicle standard or other requirement in place of the standard or other requirement as it existed when EPA made its initial

determination; and, to the extent that the modeling reflects EPA's implementation of federal new motor vehicle standards or other requirements, EPA shall take any changes in such implementation into account.

- (ii) In modeling the emissions reductions that would be achieved through the OTC State Section 177 Programs that would apply in the absence of National LEV, EPA shall take into account all Section 177 Programs adopted by OTC States (including programs that allow National LEV as a compliance alternative) that had been adopted subsequent to EPA's initial equivalency determination. In accounting for the emissions effect of OTC State Section 177 Programs, EPA shall continue to assume that all OTC State Section 177 Programs have the same substantive requirements used in EPA's initial equivalency determination and shall not model any effects of state regulation of medium-duty vehicles (as defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900).
- (2) A covered state may opt out of National LEV within 90 calendar days of a final EPA determination pursuant to paragraph (k)(1) of this section that National LEV would not produce (or is not producing) emissions reductions at least

equivalent to OTC State Section 177 Programs. The state's opt-out notification shall specify an effective date for the state's opt-out that is no earlier than two calendar years after the date of EPA's receipt of the state's opt-out notification and shall provide that the opt-out is not effective for model years (as defined in part 85, subpart X), that commence prior to this effective date.

- (3) If a covered state opts out based on this condition, a covered manufacturer may opt out of National LEV pursuant to paragraph (j) of this section.
- (4) In a state that opts out pursuant to paragraph (k)(1) of this section, obligations under National LEV shall be unaffected for covered manufacturers until the effective date of that state's opt-out. Upon the effective date of the state's opt-out, in that state covered manufacturers shall comply with any state standards and other requirements in effect pursuant to section 177 of the Clean Air Act or, if such state standards and other requirements are not in effect, with all requirements that would apply to a manufacturer that had not opted into the National LEV program, including all applicable standards and other requirements promulgated under title II of the Clean Air Act

(42 U.S.C. 7521 et seq.).

18. Section 86.1708-97 is redesignated as § 86.1708-99 and amended by revising the section heading, by redesignating Tables R97-1 through R97-7 as Tables R99-1 through R99-7, by revising the references "R97-1", "R97-2", "R97-3", "R97-4", "R97-5", "R97-6", and "R97-7" to read "R99-1", "R99-2", "R99-3", "R99-4", "R99- 5", "R99-6", and "R99-7", respectively, wherever they appear in the section, by revising paragraphs (b)(1), (b)(1)(iii)(B), and (c), and by adding paragraph (e) to read as follows:

§ 86.1708-99 Exhaust emission standards for 1999 and later light-duty vehicles.

* * * * *

(b)(1) <u>Standards</u>. (i) Exhaust emissions from 1999 and later model year light-duty vehicles classified as TLEVs, LEVs, and ULEVs shall not exceed the standards in Tables R99-1 and R99-2 in rows designated with the applicable vehicle emission category. These standards shall apply equally to certification and in-use vehicles, except as

provided in paragraph (c) of this section. The tables
follow:

Table R99-1 -- Intermediate useful life (50,000 mile) standards (g/mi) for light-duty vehicles classified as TLEVs, LEVs, and ULEVs

Vehicle	NMOG	CO	NOx	НСНО
Emission				
Category				
TLEV	0.125	3.4	0.4	0.015
LEV	0.075	3.4	0.2	0.015
ULEV	0.040	1.7	0.2	0.008

Table R99-2 -- Full useful life (100,000 mile) standards (g/mi) for light-duty vehicles classified as TLEVs, LEVs, and ULEVs

Vehicle	NMOG	CO	NOx	НСНО	PM
Emission					(diesels
Category					only)

TLEV	0.156	4.2	0.6	0.018	0.08
LEV	0.090	4.2	0.3	0.018	0.08
ULEV	0.055	2.1	0.3	0.011	0.04

- (b) * * *
- (1) * * *
- (iii) * * *
- (B) The applicable NMOG emission standards for flexible-fuel and dual-fuel light-duty vehicles when certifying the vehicle for operation on gasoline shall be the NMOG standards in Tables R99-3 and R99-4 in the rows designated with the applicable vehicle emission category, as follows:

Table R99-3 -- Intermediate Useful Life (50,000 mile) NMOG Standards (g/mi) for Flexible-Fuel and Dual-Fuel light-duty Vehicles Classified as TLEVs, LEVs, and ULEVs

Vehicle	NMOG
Emission	
Category	

TLEV	0.25
LEV	0.125
ULEV	0.075

Table R99-4 -- Full Useful Life (100,000 mile) NMOG

Standards (g/mi) for Flexible-Fuel and Dual-Fuel light-duty

Vehicles Classified as TLEVs, LEVs, and ULEVs

Vehicle	NMOG
Emission	
Category	
TLEV	0.31
LEV	0.156
ULEV	0.090

* * * * *

(c) <u>In-use emission standards</u>. (1) 1999 model year light-duty vehicles certified as LEVs and 1999 through 2002 model year light-duty vehicles certified as ULEVs shall meet the applicable intermediate and full useful life in-use standards in paragraph (c)(2) of this section, according to the following provisions:

(i) [Reserved]

- (ii) The applicable in-use emission standards for vehicle emission categories and model years not shown in Tables R99-5 and R99-6 shall be the intermediate and full useful life standards in paragraph (b) of this section.
- (2) Light-duty vehicles, including flexible-fuel and dual-fuel light-duty vehicles when operated on gasoline and on an available fuel other than gasoline, shall meet all intermediate and full useful life in-use standards for the applicable vehicle emission category and model year in Tables R99-5 and R99-6, as follows:

Table R99-5 -- Intermediate Useful Life (50,000 mile) In-Use Standards (g/mi) for light-duty Vehicles

Vehicle	Model	NMOG	CO	NOx	НСНО
Emission	Year				
Category					
LEV	1999	0.100	3.4	0.3	0.015
ULEV	1999-2000	0.055	2.1	0.3	0.012
	2001-2002	0.055	2.1	0.3	0.008

Table R99-6 -- Full Useful Life (100,000 mile) In-Use Standards (g/mi) for light-duty Vehicles

Vehicle	Model	NMOG	CO	NOx	нсно
Emission	Year				
Category					
LEV	1999	0.125	4.2	0.4	0.018
ULEV	1999-2002	0.075	3.4	0.4	0.008

* * * * *

- (e) SFTP Standards. Exhaust emissions from 2001 and later model year light-duty vehicles shall meet the additional SFTP standards in this paragraph (e) according to the implementation schedules in this paragraph (e). The standards set forth in this paragraph (e) refer to exhaust emissions emitted over the Supplemental Federal Test Procedure (SFTP) as set forth in subpart B of this part and collected and calculated in accordance with those procedures.
- (1) <u>Tier 1 vehicles and TLEVs</u>. The SFTP exhaust emission levels from new 2001 and subsequent model year light-duty vehicles certified to the exhaust emission

standards in § 86.099-8(a)(1)(i) and subsequent model year provisions and light-duty vehicles certified as TLEVs shall not exceed the standards in Table R99-7.1, according to the implementation schedule in this paragraph (e)(1).

Table R99-7.1 -- SFTP Exhaust Emission Standards (g/mi) for Tier 1 Vehicles and TLEVs

Useful	Fuel Type	NMHC +	CO		
Life		NOX composite	A/C test	US06 test	Composite
					option
Intermedi	Gasoline	0.65	3.0	9.0	3.4
ate	Diesel	1.48	NA	9.0	3.4
Full	Gasoline	0.91	3.7	11.1	4.2
	Diesel	2.07	NA	11.1	4.2

(i) Phase-in requirements--2001 to 2003 model years. For the purposes of this paragraph (e)(1)(i) only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of the following types of vehicles sold in California: light-duty vehicles certified to the exhaust emission standards in § 86.099-8(a)(1)(i) and subsequent model year provisions, and

light light-duty trucks certified to the exhaust emission standards in § 86.099-9(a)(1)(i) and subsequent model year provisions, and light-duty vehicles and light light-duty trucks certified as TLEVs. As an option, a manufacturer may elect to have its total light-duty vehicle and light light-duty truck fleet defined, for the purposes of this paragraph (e)(1)(i) only, as the total projected number of the manufacturer's light-duty vehicles and light light-duty trucks, other than zero emission vehicles, certified and sold in California.

(A) Manufacturers of light-duty vehicles and light light-duty trucks, except low volume manufacturers, shall certify a minimum percentage of their light-duty vehicle and light light-duty truck fleet according to the following phase-in schedule:

Model Year	Percentage
2001	25
2002	50
2003	85

- (B) [Reserved]
- (ii) Phase-in requirements--2004 and later model years.

For the purposes of this paragraph (e)(1)(ii) only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of the following types of vehicles sold in the United States: light-duty vehicles certified to the exhaust emission standards in § 86.099-8(a)(1)(i) and subsequent model year provisions, and light light-duty trucks certified to the exhaust emission standards in § 86.099-9(a)(1)(i) and subsequent model year provisions, and light-duty vehicles and light light-duty trucks certified as TLEVs. As an option, a manufacturer may elect to have its total light-duty vehicle and light light-duty truck fleet defined, for the purposes of this paragraph (e)(1)(ii) only, as the total projected number of the manufacturer's light-duty vehicles and light light-duty trucks, other than zero emission vehicles, certified and sold in the United States.

- (A) In 2004 and subsequent model years, manufacturers of light-duty vehicles and light light-duty trucks, including low volume manufacturers, shall certify 100 percent of their light-duty vehicle and light light-duty truck fleet to the standards in this paragraph (e)(1).
 - (B) [Reserved]

- (iii) Phase-in requirements--vehicles sold outside

 California. Light-duty vehicles and light light-duty trucks sold outside California shall be certified to the applicable emission standards in this paragraph (e) if a vehicle has been certifed to the emission standards in this paragraph

 (e) for sale in California and is identical in the following respects:
 - (A) Vehicle manufacturer;
 - (B) Vehicle make and model;
- (C) Cylinder block configuration (L-6, V-8, and so forth);
 - (D) Displacement;
 - (E) Combustion cycle;
 - (F) Transmission class; and
 - (G) Axle ratio.
- (2) LEVs and ULEVs. The SFTP standards in this paragraph (e)(2) represent the maximum SFTP exhaust emissions at 4,000 miles +/- 250 miles or at the mileage determined by the manufacturer for emission data vehicles in accordance with § 86.1726. The SFTP exhaust emission levels from new 2001 and subsequent model year light-duty vehicle LEVs and ULEVs shall not exceed the standards in the

following table, according to the implementation schedule in this paragraph (e)(2)(i).

Table R99-7.2 -- SFTP Exhaust Emission Standards (g/mi) for LEVs and ULEVs

US06 Test		A/C Test		
NMHC + NOX	CO	NMHC + NOX	CO	
0.14	8.0	0.20	2.7	

- (i) Phase-in requirements--2001 to 2003 model years.

 For the purposes of this paragraph (e)(2)(i) only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of light-duty vehicles and light light-duty trucks certified as LEVs and ULEVs sold in California.
- (A) Manufacturers of light-duty vehicles and light light-duty trucks, except low volume manufacturers, shall certify to the standards in this paragraph (e)(2) a minimum percentage of their light-duty vehicle and light light-duty truck fleet according to the following phase-in schedule:

Model Year	Percentage
2001	25
2002	50
2003	85

(B) Manufacturers may use an "Alternative or Equivalent Phase-in Schedule" to comply with the phase-in requirements. An "Alternative Phase-in" is one that achieves at least equivalent emission reductions by the end of the last model year of the scheduled phase-in. Model-year emission reductions shall be calculated by multiplying the percent of vehicles (based on the manufacturer's projected California sales volume of the applicable vehicle fleet) meeting the new requirements per model year by the number of model years implemented prior to and including the last model year of the scheduled phase-in. The "cumulative total" is the summation of the model-year emission reductions (e.g., a four model-year 25/50/85/100 percent phase-in schedule would be calculated as: (25%*4 years) + (50%*3 years) + (85%*2)years) + (100%*1 year) = 520). Any alternative phase-in that results in an equal or larger cumulative total than the required cumulative total by the end of the last model year of the scheduled phase-in shall be considered acceptable by

the Administrator under the following conditions: All vehicles subject to the phase-in shall comply with the respective requirements in the last model year of the required phase-in schedule; and if a manufacturer uses the optional phase-in percentage determination in paragraph (e)(1)(i) of this section, the cumulative total of model-year emission reductions as determined only for light-duty vehicles and light light-duty trucks certified to this paragraph (e)(2) must also be equal to or larger than the required cumulative total by end of the 2004 model year. Manufacturers shall be allowed to include vehicles introduced before the first model year of the scheduled phase-in (e.g., in the previous example, 10 percent introduced one year before the scheduled phase-in begins would be calculated as: (10%*5 years) and added to the cumulative total).

(ii) <u>Phase-in requirements--2004 and later model years</u>. For the purposes of this paragraph (e)(2)(ii) only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of light-duty vehicles and light light-duty trucks certified as LEVs and ULEVs sold in the United States.

- (A) In 2004 and subsequent model years, manufacturers of light-duty vehicles and light light-duty trucks, including low volume manufacturers, shall certify 100 percent of their light-duty vehicle and light light-duty truck fleet to the standards in this paragraph (e)(2).
- (iii) Phase-in requirements--vehicles sold outside

 California. Light-duty vehicles and light light-duty trucks sold outside California shall be certified to the applicable emission standards in this paragraph (e) if a vehicle has been certified to the emission standards in this paragraph

 (e) for sale in California and is identical in the following respects:
 - (A) Vehicle manufacturer;
 - (B) Vehicle make and model;
- (C) Cylinder block configuration (L-6, V-8, and so
 forth);
 - (D) Displacement;
 - (E) Combustion cycle;
 - (F) Transmission class; and
 - (G) Axle ratio.
- (3) A/C-on specific calibrations. 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). 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. If reductions in control system NMHC+NOx effectiveness do occur as a result of such calibrations, the manufacturer shall, 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. 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 shall 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, shall 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, shall not be considered an "open-loop" or "commanded" air- fuel enrichment strategy.

(4) "Lean-on-cruise" calibration strategies. (i) In the Application for Certification, the manufacturer shall state 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 shall 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;
- (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 shall specify the circumstances under which such a calibration would be used, and the reason or reasons for the proposed use of such a calibration.

- (iii) The provisions of this paragraph (e)(4) shall not apply to vehicles powered by "lean-burn" engines or diesel-cycle engines. A "lean-burn" engine is defined as an Otto-cycle engine designed to run at an air-fuel ratio significantly greater than stoichiometry during the large majority of its operation.
- (5) Applicability to alternative fuel vehicles. These SFTP standards do not apply to vehicles certified on fuels other than gasoline and diesel fuel, but the standards do apply to the gasoline and diesel fuel operation of flexible-fuel vehicles and dual-fuel vehicles.
- (6) <u>Single-roll electric dynamometer requirement</u>. For all vehicles certified to the SFTP standards, a single-roll electric dynamometer or a dynamometer which produces equivalent results, as set forth in § 86.108, must be used for all types of emission testing to determine compliance with the associated emission standards.
- 19. Section 86.1709-97 is redesignated as § 86.1709-99 and amended by revising the section heading, by redesignating Tables R97-8 through R97-14 as Tables R99-8 through R99-14, by revising the references "R97-8", "R97-9",

"R97-10", "R97-11", "R97-12", "R97-13", and "R97-14" to read
"R99-8", "R99-9", "R99-10", "R99-11", "R99-12", "R99-13",
and "R99-14", respectively, wherever they appear in the
section, by revising paragraphs (b)(1), (b)(1)(iii)(B), and
(c), and by adding paragraph (e) to read as follows:

§ 86.1709-99 Exhaust emission standards for 1999 and later light light-duty trucks.

* * * * *

(b)(1) Standards. (i) Exhaust emissions from 1999 and later model year light light-duty trucks classified as TLEVs, LEVs, and ULEVs shall not exceed the standards in Tables R99-8 and R99-9 in rows designated with the applicable vehicle emission category and loaded vehicle weight. These standards shall apply equally to certification and in-use vehicles, except as provided in paragraph (c) of this section. The tables follow:

Table R99-8 -- Intermediate Useful Life (50,000 mile)

Standards (g/mi) for light light-duty Trucks Classified as

TLEVs, LEVs, and ULEVs

Loaded	Vehicle	NMOG	СО	NOX	нсно
Vehicle	Emission				
Weight	Category				
0-3750	TLEV	0.125	3.4	0.4	0.015
	LEV	0.075	3.4	0.2	0.015
	ULEV	0.040	1.7	0.2	0.008
3751-5750	TLEV	0.160	4.4	0.7	0.018
	LEV	0.100	4.4	0.4	0.018
	ULEV	0.050	2.2	0.4	0.009

Table R99-9 -- Full Useful Life (100,000 mile) Standards (g/mi) for light light-duty Trucks Classified as TLEVs, LEVs, and ULEVs

Loaded	Vehicle	NMOG	CO	NOX	НСНО	PM
Vehicle	Emission					(di-
Weight	Category					esels
						only)
0-3750	TLEV	0.156	4.2	0.6	0.018	0.08
	LEV	0.090	4.2	0.3	0.018	0.08
	ULEV	0.055	2.1	0.3	0.011	0.04

3751-	TLEV	0.200	5.5	0.9	0.023	0.10
5750	LEV	0.130	5.5	0.5	0.023	0.10
	ULEV	0.070	2.8	0.5	0.013	0.05

* * * * *

- (b) * * *
- (1) * * *
- (iii) * * *
- (B) The applicable NMOG emission standards for flexible-fuel and dual-fuel light light-duty trucks when certifying the vehicle for operation on gasoline shall be the NMOG standards in Tables R99-10 and R99-11 in the rows designated with the applicable vehicle emission category and loaded vehicle weight, as follows:

Table R99-10 -- Intermediate Useful Life (50,000 mile) NMOG Standards (g/mi) for Flexible-Fuel and Dual-Fuel light light-duty Trucks Classified as TLEVs, LEVs, and ULEVs

Loaded	Vehicle	NMOG
Vehicle	Emission	
Weight	Category	

0-3750	TLEV	0.25
	LEV	0.125
	ULEV	0.075
3751-5750	TLEV	0.32
	LEV	0.160
	ULEV	0.100

Table R99-11 -- Full Useful Life (100,000 mile) NMOG Standards (g/mi) for Flexible-Fuel and Dual-Fuel light light-duty Trucks Classified as TLEVs, LEVs, and ULEVs

Loaded	Vehicle	NMOG
Vehicle	Emission	
Weight	Category	
0-3750	TLEV	0.31
	LEV	0.156
	ULEV	0.090
3751-5750	TLEV	0.40
	LEV	0.200
	ULEV	0.130

* * * * *

(c) <u>In-use emission standards</u>. (1) 1999 model year light light-duty trucks certified as LEVs and 1999 through 2001 model year light light-duty trucks certified as ULEVs shall meet the applicable intermediate and full useful life in-use standards in paragraph (c)(2) of this section, according to the following provisions:

(i) [Reserved]

- (ii) The applicable in-use emission standards for vehicle emission categories and model years not shown in Tables R99-12 and R99-13 shall be the intermediate and full useful life standards in paragraph (b) of this section.
- (2) Light light-duty trucks, including flexible-fuel and dual-fuel light light-duty trucks when operated on gasoline and on an available fuel other than gasoline, shall meet all intermediate and full useful life in-use standards for the applicable vehicle emission category, loaded vehicle weight, and model year in Tables R99-12 and R99-13, as follows:

Table R99-12 -- Intermediate Useful Life (50,000 mile) In-

Use Standards (g/mi) for light light-duty Trucks

Loaded	<u>Vehicle</u>	Model	NMOG	<u>CO</u>	NOx	<u>НСНО</u>
<u>Vehicle</u>	Emission	<u>Year</u>				
<u>Weight</u>	Category					
0-3750	LEV	1999	0.100	3.4	0.3	0.015
	ULEV	1999-	0.055	2.1	0.3	0.008
		2002				
3751-5750	LEV	1999	0.130	4.4	0.5	0.018
	ULEV	1999-	0.070	2.8	0.5	0.009
		2002				

Table R99-13 -- Full Useful Life (100,000 mile) In-Use Standards (g/mi) for light light-duty Trucks

Loaded	<u>Vehicle</u>	Model	NMOG	<u>CO</u>	NOx	<u>НСНО</u>
<u>Vehicle</u>	<u>Emission</u>	<u>Year</u>				
<u>Weight</u>	<u>Category</u>					
0-3750	LEV	1999	0.125	4.2	0.4	0.018
	ULEV	1999-	0.075	3.4	0.4	0.011
		2002				
3751-5750	LEV	1999	0.160	5.5	0.7	0.023
	ULEV	1999-	0.100	4.4	0.7	0.013
		2002				

* * * * *

(e) SFTP Standards. Exhaust emissions from 2001 and later model year light light-duty trucks shall meet the additional SFTP standards in this paragraph (e) according to the implementation schedules in this paragraph (e). The standards set forth in this paragraph (e) refer to exhaust emissions emitted over the Supplemental Federal Test Procedure (SFTP) as set forth in subpart B of this part and collected and calculated in accordance with those

procedures.

(1) <u>Tier 1 vehicles and TLEVs</u>. The SFTP exhaust emission levels from new 2001 and subsequent model year light light-duty trucks certified to the exhaust emission standards in § 86.099-9(a)(1)(i) and subsequent model year provisions and light light-duty trucks certified as TLEVs shall not exceed the standards in Table R99-14.1, according to the implementation schedule in this paragraph (e)(1).

Table R99-14.1 -- SFTP Exhaust Emission Standards (g/mi) for Tier 1 Vehicles and TLEVs

Useful	Fuel	LVW	NMHC +		CO	
Life	Туре	(lbs)	NOX			
			composi	A/C test	US06	Composi
			te		test	te
						option
Intermedi	Gasoli	0-3750	0.65	3.0	9.0	3.4
ate	ne	3751-	1.02	3.9	11.6	4.4
		5750				
	Diesel	0-3750	1.48	NA	9.0	3.4
		3751-	NA	NA	NA	NA
		5750				

Full	Gasoli	0-3750	0.91	3.7	11.1	4.2
	ne	3751-	1.37	4.9	14.6	5.5
		5750				
	Diesel	0-3750	2.07	NA	11.1	4.2
		3751-	NA	NA	NA	NA
		5750				

(i) Phase-in requirements--2001 to 2003 model years. For the purposes of paragraph (e)(1)(i) of this section only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of the following types of vehicles sold in Calfornia: light-duty vehicles certified to the exhaust emission standards in § 86.099-8(a)(1)(i) and subsequent model year provisions, and light light-duty trucks certified to the exhaust emission standards in § 86.099-9(a)(1)(i) and subsequent model year provisions, and light-duty vehicles and light light-duty trucks certified as TLEVs. As an option, a manufacturer may elect to have its total light-duty vehicle and light light-duty truck fleet defined, for the purposes of this paragraph (e)(1)(i) only, as the total projected number of the manufacturer's light-duty vehicles and light light-duty trucks, other than zero

emission vehicles, certified and sold in California.

(A) Manufacturers of light-duty vehicles and light light-duty trucks, except low volume manufacturers, shall certify a minimum percentage of their light-duty vehicle and light light-duty truck fleet according to the following phase-in schedule:

Model Year	Percentage
2001	25
2002	50
2003	85

(B) [Reserved]

(ii) Phase-in requirements--2004 and later model years. For the purposes of paragraph (e)(1)(ii) of this section only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of the following types of vehicles sold in the United States: light-duty vehicles certified to the exhaust emission standards in § 86.099-8(a)(1)(i) and subsequent model year provisions, light light-duty trucks certified to the exhaust emission standards in § 86.099-9(a)(1)(i) and subsequent model year provisions, and

light-duty vehicles and light light-duty trucks certified as TLEVs. As an option, a manufacturer may elect to have its total light-duty vehicle and light light-duty truck fleet defined, for the purposes of this paragraph (e)(1)(ii) only, as the total projected number of the manufacturer's light-duty vehicles and light light-duty trucks, other than zero emission vehicles, certified and sold in the United States.

- (A) In 2004 and subsequent model years, manufacturers of light-duty vehicles and light light-duty trucks, including low volume manufacturers, shall certify 100 percent of their light-duty vehicle and light light-duty truck fleet to the standards in this paragraph (e)(1).
 - (B) [Reserved]
- (iii) Phase-in requirements--vehicles sold outside

 California. Light-duty vehicles and light light-duty trucks sold outside California shall be certified to the applicable emission standards in this paragraph (e) if a vehicle has been certifed to the emission standards in this paragraph

 (e) for sale in California and is identical in the following respects:
 - (A) Vehicle manufacturer;

- (B) Vehicle make and model;
- (C) Cylinder block configuration (L-6, V-8, and so forth);
 - (D) Displacement;
 - (E) Combustion cycle;
 - (F) Transmission class; and
 - (G) Axle ratio.
- (2) <u>LEVs and ULEVs</u>. The SFTP standards in this paragraph (e)(2) represent the maximum SFTP exhaust emissions at 4,000 miles +/- 250 miles or at the mileage determined by the manufacturer for emission data vehicles in accordance with § 86.1726. The SFTP exhaust emission levels from new 2001 and subsequent model year light light-duty truck LEVs and ULEVs shall not exceed the standards in the following table, according to the implementation schedule in this paragraph (e)(2).

Table R99-14.2 -- SFTP Exhaust Emission Standards (g/mi) for LEVs and ULEVs

US06 Test		A/C Test	
NMHC + NOX	CO	NMHC + NOX	CO

0.05	10 Г	0 07	2 [
0.25	10.5	0.27	3.5

- (i) Phase-in requirements--2001 to 2003 model years.

 For the purposes of this paragraph (e)(2)(i) only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of light-duty vehicles and light light-duty trucks certified as LEVs and ULEVs sold in California.
- (A) Manufacturers of light-duty vehicles and light light-duty trucks, except low volume manufacturers, shall certify to the standards in this paragraph (e)(2) a minimum percentage of their light-duty vehicle and light light-duty truck fleet according to the following phase-in schedule:

Model Year	Percentage
2001	25
2002	50
2003	85

(B) Manufacturers may use an "Alternative or Equivalent Phase-in Schedule" to comply with the phase-in requirements.

An "Alternative Phase-in" is one that achieves at least equivalent emission reductions by the end of the last model

year of the scheduled phase-in. Model-year emission reductions shall be calculated by multiplying the percent of vehicles (based on the manufacturer's projected California sales volume of the applicable vehicle fleet) meeting the new requirements per model year by the number of model years implemented prior to and including the last model year of the scheduled phase-in. The "cumulative total" is the summation of the model-year emission reductions (e.g., a four model-year 25/50/85/100 percent phase-in schedule would be calculated as: (25%*4 years) + (50%*3 years) + (85%*2 years) + (100%*1 year) = 520). Any alternative phase-in that results in an equal or larger cumulative total than the required cumulative total by the end of the last model year of the scheduled phase-in shall be considered acceptable by the Administrator under the following conditions: All vehicles subject to the phase-in shall comply with the respective requirements in the last model year of the required phase-in schedule; and if a manufacturer uses the optional phase-in percentage determination in paragraph (e)(1)(i) of this section, the cumulative total of model-year emission reductions as determined only for light-duty vehicles and light light-duty trucks certified to

this paragraph (e)(2) must also be equal to or larger than the required cumulative total by the end of the 2004 model year. Manufacturers shall be allowed to include vehicles introduced before the first model year of the scheduled phase-in (e.g., in the previous example, 10 percent introduced one year before the scheduled phase-in begins would be calculated as: (10%*5 years) and added to the cumulative total).

- (ii) <u>Phase-in requirements--2004 and later model years</u>. For the purposes of this paragraph (e)(2)(ii) only, each manufacturer's light-duty vehicle and light light-duty truck fleet shall be defined as the total projected number of light-duty vehicles and light light-duty trucks certified as LEVs and ULEVs sold in the United States.
- (A) In 2004 and subsequent model years, manufacturers of light-duty vehicles and light light-duty trucks, including low volume manufacturers, shall certify 100 percent of their light-duty vehicle and light light-duty truck fleet to the standards in this paragraph (e)(2).
 - (B) [Reserved]
- (iii) <u>Phase-in requirements--vehicles sold outside</u>

 <u>California</u>. Light-duty vehicles and light light-duty trucks

sold outside California shall be certified to the applicable emission standards in this paragraph (e) if a vehicle has been certifed to the emission standards in this paragraph (e) for sale in California and is identical in the following respects:

- (A) Vehicle manufacturer;
- (B) Vehicle make and model;
- (C) Cylinder block configuration (L-6, V-8, and so forth);
 - (D) Displacement;
 - (E) Combustion cycle;
 - (F) Transmission class; and
 - (G) Axle ratio.
- (3) A/C-on specific calibrations. 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). 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. If reductions in control system NMHC+NOx effectiveness do occur as a result of such calibrations, the manufacturer shall, 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. 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 shall 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, shall 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, shall not be considered an "open-loop" or "commanded" air- fuel enrichment strategy.

(4) "Lean-on-cruise" calibration strategies. (i) In the Application for Certification, the manufacturer shall state 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 shall 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;
- (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 shall specify the circumstances under which such a calibration would be used, and the reason or reasons for the proposed use of such a calibration.
- (iii) The provisions of this paragraph (e)(4) shall not apply to vehicles powered by "lean-burn" engines or diesel-cycle engines. A "lean-burn" engine is defined as an Otto-cycle engine designed to run at an air-fuel ratio significantly greater than stoichiometry during the large majority of its operation.
 - (5) Applicability to alternative fuel vehicles. These

SFTP standards do not apply to vehicles certified on fuels other than gasoline and diesel fuel, but the standards do apply to the gasoline and diesel fuel operation of flexible-fuel vehicles and dual-fuel vehicles.

- (6) Single-roll electric dynamometer requirement. For all vehicles certified to the SFTP standards, a single-roll electric dynamometer or a dynamometer which produces equivalent results, as set forth in § 86.108, must be used for all types of emission testing to determine compliance with the associated emission standards.
- 20. Section 86.1710-97 is redesignated as § 86.1710-99 and amended by redesignating Tables R97-15 and R97-16 as

 Tables R99-15 and R99-16, by revising the references "R9715" and "R97-16" to read "R99-15" and "R99-16",

 respectively, wherever they appear in the section, by adding introductory text to paragraph (a), by revising paragraphs

 (a)(1), (a)(3)(i), (a)(3)(iii)(A) and (B), (a)(4)(i),

 (a)(4)(iii)(A) and (B), (a)(5)(ii), (b)(4), (c)(1) and (2),

 (c)(6) through (c)(8), (d), (e)(2), and (e)(4)(ii), and by adding paragraphs (c)(9) and (10), to read as follows:

§ 86.1710-99 Fleet average non-methane organic gas exhaust emission standards for light-duty vehicles and light light-duty trucks.

(a) Fleet average NMOG standards and compliance. (1)

Each manufacturer shall certify light-duty vehicles or light light-duty trucks to meet the exhaust emission standards in this subpart for TLEVs, LEVs, ULEVs, or ZEVs, or the exhaust emission standards of § 86.096-8(a)(1)(i) and subsequent model year provisions or § 86.097-9(a)(1)(i) and subsequent model year provisions, such that, using the applicable intermediate useful life standards, the manufacturer's fleet average NMOG values for light-duty vehicles and light light-duty trucks sold in the applicable region according to the specifications of Tables R99-15 and R99-16 are less than or equal to the standards in Tables R99-15 and R99-16 in the rows designated with the applicable vehicle type, loaded vehicle weight, and model year, as follows:

Table R99-15 -- Fleet average non-methane organic gas standards (g/mi) for light-duty vehicles and light light-duty trucks sold in the Northeast Trading Region

Vehicle Type	Loaded	Model Year	Fleet
	Vehicle		Average
	Weight		NMOG
light-duty	All	1999	0.148
vehicles		2000	0.095
and			
light light-duty	0-3750		
trucks			
light light-duty	3751-5750	1999	0.190
trucks		2000	0.124

Table R99-16 -- Fleet average non-methane organic gas standards (g/mi) for light-duty vehicles and light light-duty trucks sold in the All States Trading Region

Vehicle Type	Loaded	Model Year	Fleet
	Vehicle		Average
	Weight		NMOG

light-duty	All	2001 and	0.075
vehicles		later	
and			
light light-duty	0-3750		
trucks			
light light-duty	3751-5750	2001 and	0.100
trucks		later	

* * * * *

(3)(i) Each manufacturer's applicable fleet average NMOG value for all light light-duty trucks from 0-3750 lbs loaded vehicle weight and light-duty vehicles sold in the applicable region according to Tables R99-15 and R99-16 shall be calculated in units of g/mi NMOG according to the following equation, where the term "Sold" means sold in the applicable region according to Tables R99-15 and R99-16, and the term "Vehicles" means light light-duty trucks from 0-3750 lbs loaded vehicle weight and light-duty vehicles: (((No. of Vehicles Certified to the Federal Tier 1 Exhaust Emission Standards and Sold)x(0.25))+((No. of TLEVs Sold

excluding HEVs)x (0.125)) +((No. of LEVs Sold excluding HEVs)x(0.75))+((No. of ULEVs Sold excluding HEVs)x(0.040))+(HEV contribution factor))/(Total No. of Vehicles Sold, including ZEVs and HEVs).

- (A) For model years 1997 through 2000, "Vehicles" in the preceding equation shall include California-certified vehicles, including vehicles certified to California Tier 1 standards.
- (B) For model years 2001 and later, "vehicles" in the preceding equation shall not include California-certified vehicles unless they are also certified under the National LEV program.

- (iii)(A) For any model year in which a manufacturer certifies its entire fleet of light-duty vehicles and light light-duty trucks from 0-3750 lbs LVW to intermediate useful life NMOG emission standards specified in §§ 86.1708 and 86.1709 that are less than or equal to the applicable fleet average NMOG standard specified in Tables R99-15 and R99-16, the manufacturer may elect not to calculate a fleet average NMOG value for such vehicles for that model year.
 - (B) The fleet average NMOG value for a manufacturer

electing under paragraph (a)(3)(iii)(A) of this section not to calculate a fleet average NMOG value shall be deemed to be the applicable fleet average NMOG standard specified in Table R99-15 or R99-16 for the applicable model year.

- (4)(i) Each manufacturer's applicable fleet average NMOG value for all light light-duty trucks from 3751-5750 lbs loaded vehicle weight sold in the applicable region according to Tables R99-15 and R99-16 shall be calculated in units of g/mi NMOG according to the following equation, where the term "Sold" means sold in the applicable region according to Tables R97-15 and R97-16, and the term "Vehicles" means light light-duty trucks from 3751-5750 lbs loaded vehicle weight: (((No. of Vehicles Certified to the Federal Tier 1 Exhaust Emission Standards and Sold(x(0.32))+((No. of TLEVs Sold excluding))HEVs)x(0.160))+((No. of LEVs Sold excluding))HEVs)x(0.100))+(No. of ULEVs Sold excluding)HEVs)x(0.050))+(HEV Contribution factor))/(Total No. of Vehicles Sold, including ZEVs and HEVs).
- (A) For model years 1997 through 2000, "Vehicles" in the preceeding equation shall include California-certified

vehicles, including vehicles certified to California Tier 1 standards.

(B) For model years 2001 and later, "Vehicles" in the preceding equation shall not include California-certified vehicles unless they are also certified under the National LEV program.

* * * * *

- (iii)(A) For any model year in which a manufacturer certifies its entire fleet of light light-duty trucks from 3751-5750 lbs LVW to intermediate useful life NMOG emission standards specified in § 86.1709 that are less than or equal to the applicable fleet average NMOG requirements specified in Tables R99-15 and R99-16, the manufacturer may elect not to calculate a fleet average NMOG value for such vehicles for that model year.
- (B) The fleet average NMOG value for a manufacturer electing under paragraph (a)(4)(iii)(A) of this section not to calculate a fleet average NMOG value shall be deemed to be the applicable fleet average NMOG standard specified in Table R99-15 or R99-16 for the applicable model year.

* * * * *

(5) * * *

(ii) Adequate information includes the number of vehicles purchased, vehicle makes and models, and the associated engine families. A copy of the letter should be sent to: Director, Vehicle Programs and Compliance Division, U.S. Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, Michigan, 48105.

- (b) * * *
- (4) For each applicable region and model year, a manufacturer's available credits or level of debits shall be the sum of credits or debits derived from the respective class A and class B averaging sets for that region and model year. Paragraph (d)(2)(ii)(C) of this section contains a special provision for manufacturers that end model year 2000 with a debit balance in the NTR.
 - (C) * * *
- (1) Only credits generated in the NTR may be used to offset NMOG debits incurred in the NTR. Manufacturers may use in the ASTR credits generated in the NTR.
- (2) Only after credits are earned may they be used, traded, or carried over to another model year. Before trading or carrying over credits to the next model year, a

manufacturer must apply available credits to offset any of its debits from the same region, where the deadline to offset such debits has not yet passed.

- (6) Prior to model year 2001, low volume manufacturers may earn credits in the NTR to transfer to other motor vehicle manufacturers for use in the NTR or the ASTR, or to bank for their own use in the ASTR. Such credits will be calculated as set forth in paragraphs (a) and (b) of this section, except that the applicable fleet average NMOG standard shall be 0.25 g/mi NMOG for the averaging set for light light-duty trucks from 0-3750 lbs LVW and light-duty vehicles or 0.32 g/mi NMOG for the averaging set for light light-duty trucks from 3751-5750 lbs LVW. Credits shall be discounted in accordance with the provisions in paragraph (c)(4) of this section.
- (7) Prior to model year 2001, manufacturers may earn credits in the ASTR states that are not in the NTR and may bank those credits for use in the ASTR. Such credits will be calculated as set forth in paragraphs (a) and (b) of this section, except that the applicable fleet average NMOG standard shall be 0.25 g/mi NMOG for the averaging set for

light light-duty trucks from 0-3750 lbs LVW and light-duty vehicles or 0.32 g/mi NMOG for the averaging set for light light-duty trucks from 3751-5750 lbs LVW, and "sold" shall mean sold in the ASTR states that are not in the NTR.

- (i) Emission credits earned in the ASTR states outside the NTR prior to model year 2001 shall be treated as generated in model year 2001.
- (ii) In the 2001 model year, a one-time discount rate of 10 percent shall be applied to all credits earned under the provisions of this paragraph (c)(7).
- (iii) These credits shall be discounted in accordance with the provisions in paragraph (c)(4) of this section.
- (8) Manufacturers may earn and bank credits in the NTR for model years 1997 and 1998. In states without a Section 177 Program effective in model year 1997 or 1998, such credits will be calculated as set forth in paragraphs (a) and (b) of this section, except that the applicable fleet average NMOG standard shall be 0.200 g/mi NMOG for the averaging set for light light-duty trucks from 0-3750 lbs LVW and light-duty vehicles or 0.256 g/mi NMOG for the averaging set for light light-duty trucks from 3751-5750 lbs LVW. In states that opt into National LEV and have a Section

- 177 Program effective in model year 1997 or 1998, such credits will equal the unused credits earned in those states.
- (i) Emissions credits earned in the NTR prior to the 1999 model year shall be treated as generated in the 1999 model year.
- (ii) In the 1999 model year, a one-time discount rate of 10 percent shall be applied to all credits earned under the provisions of this paragraph (c)(8).
- (iii) These credits shall be discounted in accordance with the provisions in paragraph (c)(4) of this section.
- (9) There are no property rights associated with credits generated under the provisions of this section.

 Credits are a limited authorization to emit the designated amount of emissions. Nothing in the regulations or any other provision of law should be construed to limit EPA's authority to terminate or limit this authorization through a rulemaking. If EPA were to terminate or limit the authorization to emit associated with emissions credits generated under the provisions of this section, this paragraph (c)(9) would have no effect on manufacturers' ability to opt out of the National LEV program pursuant to §

86.1707.

- (d) Fleet average NMOG debits. (1) Manufacturers shall offset any debits for a given model year by the fleet average NMOG reporting deadline for the model year following the model year in which the debits were generated.

 Manufacturers may offset debits by generating credits or acquiring credits generated by another manufacturer. Only credits generated in the NTR may be used to offset NMOG debits generated in the NTR.
- (2) The provisions of this paragraph (d)(2) apply only when a manufacturer has a debit balance in the NTR at the end of model year 2000. Manufacturers shall offset any debits incurred in the NTR for model year 2000 by the fleet average NMOG reporting deadline for model year 2001.
- (i) A manufacturer may offset debits generated in the NTR in model year 2000 either by generating credits in the NTR in model year 2001 or by applying NTR credits acquired under the provisions of this section.
- (ii) If a manufacturer has a debit balance in the NTR at the end of model year 2000, then such manufacturer shall be required to calculate fleet average NMOG values for both the NTR and the ASTR for model year 2001.

- (A) The NTR values shall be calculated according to paragraphs (a) and (b) of this section, with the fleet average NMOG standards equal to the standards for model year 2001 in the ASTR.
- (B) If such a manufacturer has a credit balance in the NTR for model year 2001, before trading or carrying over credits to the next model year, the manufacturer must apply available NTR credits to offset its debits in the NTR.
- (C) Notwithstanding paragraph (b)(4) of this section, for the ASTR and model year 2001, such a manufacturer's available credits or level of debits shall be the sum of credits or debits derived from the respective class A and class B averaging sets for the ASTR and model year 2001, minus any credits used pursuant to paragraph (d)(2)(ii)(B).
- (iii) To transfer a credit as an NTR credit earned in model year 2001, a manufacturer must have credits generated in the NTR based on separate fleet average NMOG values calculated for the NTR in model year 2001. In addition, the number of model year 2001 NTR credits available for a manufacturer to transfer cannot exceed the manufacturer's available number of model year 2001 ASTR credits. Any transferred model year 2001 NTR credits shall be deducted

from the manufacturer's available model year 2001 ASTR credits.

- (3)(i) Failure to meet the requirements of paragraphs

 (a) through (d) 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 shall 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 NMOG standards and not covered by the certificate shall be calculated by dividing the total amount of debits for the model year by the fleet average NMOG standard applicable for the model year and averaging set in which the debits were first incurred. If both averaging sets are in debit, any applicable credits will first be allocated between the averaging sets according to the manufacturer's expressed preferences. Then, the number of vehicles not covered by the certificate shall be calculated using the revised debit values.
 - (iii) EPA will determine the vehicles for which the

condition on the certificate was not satisfied by designating vehicles in those engine families with the highest certification NMOG 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 an engine family contribute to the debit situation, then EPA will designate actual vehicles in that engine family as not covered by the certificate, starting with the last vehicle produced and counting backwards.

- (4) If a manufacturer opts out of the National LEV program pursuant to § 86.1707, the manufacturer continues to be responsible for offsetting any debits outstanding on the effective date of the opt-out within the required time period. Any failure to offset the debits will be considered to be a violation of paragraph (d)(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 (d)(2) of this section.
- (5) For purposes of calculating tolling of the statute of limitations, a violation of the requirements of paragraph

(d)(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 (d)(1) of this section.

* * * * *

- (e) * * *
- (2) A manufacturer may not sell credits that are not available for sale pursuant to the provisions in paragraphs (c)(2) or (d)(2) of this section.

* * * * *

- (4) * * *
- (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 (d)(3) of this section.

- 21. Section 86.1711-97 is redesignated as § 1711-99 and amended by reserving paragraph (b).
- § 86.1711-99 Limitations on sale of Tier 1 vehicles and

TLEVs.

- (a) In the 2001 and subsequent model years, manufacturers may sell Tier 1 vehicles and TLEVs in the NTR only if vehicles with the same engine families are certified and offered for sale in California in the same model year, except as provided under § 86.1705(e)(4).
 - (b) [Reserved]
- 22. Section 86.1712-97 is redesignated as § 1712-99 and amended by revising paragraphs (a)(2)(iii), (b)(1), and (b)(3)(vi), to read as follows:
- § 86.1712-99 Maintenance of records; submittal of information.
 - (a) * * *
 - (2) * * *
- (iii) EPA engine family, or if applicable for model year 1999 or 2000, the California engine family;

* * * * *

(b) * * *

(1) Each covered manufacturer shall submit an annual report. Except as provided in paragraph (b)(2) of this section, the annual report shall contain, for each averaging set, the fleet average NMOG value achieved, all values required to calculate the NMOG value, the number of credits generated or debits incurred, and all the values required to calculate the credits or debits. For each applicable region (NTR and ASTR), the annual report shall contain the resulting balance of credits or debits.

- (3) * * *
- (vi) Region (NTR or ASTR) to which the credits belong.
 * * * * *
 - 23. Section 86.1713-97 is redesignated as § 1713-99.
 - 24. Section 86.1714-97 is redesignated as § 1714-99.
- 25. Section 86.1716-97 is redesignated as § 1716-99 and amended by reserving paragraph (b), to read as follows:
- § 86.1716-99 Prohibition of defeat devices.

- (a) The provisions of § 86.094-16 and subsequent model year provisions apply to this subpart.
 - (b) [Reserved]
- 26. Section 86.1717-97 is redesignated as § 1717-99 and amended by revising the section heading, to read as follows:
- § 86.1717-99 Emission control diagnostic system for 1999 and later light-duty vehicles and light-duty trucks.
 - 27. Section 86.1721-97 is redesignated as § 1721-99.
- 28. Section 86.1723-97 is redesignated as § 1723-99 and is revised to read as follows:
- § 86.1723-99 Required data.

The provisions of § 86.096-23 and subsequent model year provisions apply to this subpart, with the following exceptions and additions:

(a) The provisions of § 86.096-23(c)(1) and subsequent

model year provisions apply to this subpart, with the following addition:

(1) For all TLEVs, LEVs, and ULEVs certifying on a fuel other than conventional gasoline, manufacturers shall multiply the NMOG exhaust certification level for each emission-data vehicle by the appropriate reactivity adjustment factor listed in § 86.1777(d)(2)(i) or established by the Administrator pursuant to Appendix XVII of this part to demonstrate compliance with the applicable NMOG emission standard. For all TLEVs, LEVs, and ULEVs certifying on natural gas, manufacturers shall multiply the NMOG exhaust certification level for each emission-data vehicle by the appropriate reactivity adjustment factor listed in § 86.1777(d)(2)(i) or established by the Administrator pursuant to Appendix XVII of this part and add that value to the product of the methane exhaust certification level for each emission-data vehicle and the appropriate methane reactivity adjustment factor listed in § 86.1777(d)(2)(ii) or established by the Administrator pursuant to Appendix XVII of this part to demonstrate compliance with the applicable NMOG emission standard. Manufacturers requesting to certify to existing standards

utilizing an adjustment factor unique to its vehicle/fuel system must follow the data requirements described in Appendix XVII of this part. A separate formaldehyde exhaust certification level shall also be provided for demonstrating compliance with emission standards for formaldehyde.

- (2) [Reserved]
- (b) The provisions of § 86.096-23(1) introductory text and subsequent model year provisions do not apply to this subpart. The following shall instead apply to this subpart:
- (1) Additionally, manufacturers certifying vehicles shall submit for each model year 2001 through 2004 light-duty vehicle and light light-duty truck engine family, the information listed in § 86.096-23(1)(1) and (2). If applicable, manufacturers shall also submit "Alternative or Equivalent Phase-in Schedules" before or during calendar year 2001 for light-duty vehicles and light light-duty trucks.
 - (2) [Reserved]
- (c) In addition to the provisions of § 86.096-23 and subsequent model year provisions, the following requirements shall apply to this subpart:
 - (1) For each engine family certified to TLEV, LEV, or

ULEV standards, manufacturers shall submit with the certification application, an engineering evaluation demonstrating 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 deg F. For diesel vehicles, the engineering evaluation shall also include particulate emissions.

(2) [Reserved]

29. Section 86.1724-97 is redesignated as § 1724-99 and amended by revising paragraphs (b) introductory text and (b)(2), to read as follows:

§ 86.1724-99 Test vehicles and engines.

* * * * *

(b) The provisions of § 86.0096-24(b) and subsequent model year provisions apply to this subpart with the following additions:

- (2) For vehicles certified to the SFTP exhaust emission standards, if air conditioning is projected to be available on any vehicles within the engine family, the selection of engine codes will be limited selections which have air conditioning available and would require that any vehicle selected under this section has air conditioning installed and operational.
- 30. Section 86.1725-97 is redesignated as § 1725-99 and amended by adding paragraph (d), to read as follows:

§ 86.1725-99 Maintenance.

* * * * *

(d) When air conditioning SFTP exhaust emission tests are required, the manufacturer must document that the vehicle's air conditioning system is operating properly and that system parameters are within operating design specifications prior to testing. Required air conditioning system maintenance is performed as unscheduled maintenance that does not require the Administrator's approval.

31. Section 86.1726-97 is redesignated as § 1726-99 and amended by revising paragraph (c)(1), to read as follows:

§ 86.1726-99 Mileage and service accumulation; emission measurements.

* * * * *

(C) * * *

(1) For vehicles certified to the SFTP exhaust emission standards, complete exhaust emission tests will include both the FTP and the SFTP tests. The Administrator will accept the manufacturer's determination of the mileage at which the engine-system combination is stabilized for emission data testing if (prior to testing) a manufacturer determines that the interval chosen yields emissions performance that is stable and representative of design intent. Sufficient mileage should be accumulated to reduce the possible effects of any emissions variability that is the result of insufficient vehicle operation. Of primary importance in making this determination is the behavior of the catalyst, EGR valve, trap oxidizer or any other part of the ECS which may have non-linear aging characteristics. In the

alternative, the manufacturer may elect to accumulate 4,000 mile +/- 250 mile on each test vehicle within an engine family without making a determination.

* * * * *

- 32. Section 86.1728-97 is redesignated as § 1728-99.
- 33. Section 86.1734-97 is redesignated as § 1734-99.
- 34. Section 86.1735-97 is redesignated as § 1735-99.
- 35. Section 86.1770-97 is redesignated as § 1770-99 and amended by revising paragraph (a)(2), to read as follows:
- § 86.1770-99 All-Electric Range Test requirements.

- (a) * * *
- (2) <u>Driving schedule</u>.
- (i) <u>Determination of All-Electric Range--Highway</u>. At the end of the cold soak period, the vehicle shall be placed, either driven or pushed, onto a dynamometer and

operated through an Urban Dynamometer Driving Schedule, found in 40 CFR part 86, Appendix I, until the vehicle is no longer able to maintain within 5 miles per hour of the speed requirements or within 2 seconds of the time requirements of the driving schedule. For hybrid electric vehicles, this determination shall be performed without the use of the auxiliary power unit.

(ii) <u>Determination of All-Electric Range--Urban</u>. At the end of the cold soak period, the vehicle shall be placed, either driven or pushed, onto a dynamometer and operated through a Highway Fuel Economy Driving Schedule, found in 40 CFR part 600, Appendix I, until the vehicle is no longer able to maintain within 5 miles per hour of the speed requirements or within 2 seconds of the time requirements of the driving schedule. For hybrid electric vehicles, this determination shall be performed without the use of the auxiliary power unit.

- 36. Section 86.1771-97 is redesignated as § 1771-99.
- 37. Section 86.1772-97 is redesignated as § 1772-99 and

amended by revising the section heading, to read as follows:

86.1772-99 Road load power, test weight, and inertia weight class determination.

* * * * *

38. Section 86.1773-97 is redesignated as § 1773-99 and amended by adding paragraph (d), to read as follows:

§ 86.1773-99 Test sequence; general requirements.

* * * * *

(d) A manufacturer has the option of simulating air conditioning operation during testing at other ambient test conditions provided it can demonstrate that the vehicle tailpipe exhaust emissions are representative of the emissions that would result from the SC03 cycle test procedure and the ambient conditions of paragraph 86.161-00. The Administrator has approved two optional air conditioning test simulation procedures, AC1 and AC2, for the 2001 to 2003 model years only. If a manufacturer desires to conduct an alternative SC03 test simulation other than AC1 and AC2,

or the AC1 and AC2 simulations for the 2004 and subsequent model years, the simulation test procedure must be approved in advance by the Administrator.

- 39. Section 86.1774-97 is redesignated as § 1774-99.
- 40. Section 86.1775-97 is redesignated as § 1775-99.
- 41. Section 86.1776-97 is redesignated as § 1776-99.
- 42. Section 86.1777-97 is redesignated as § 1777-99.
- 43. Section 86.1778-97 is redesignated as § 1778-99.
- 44. Section 86.1779-97 is redesignated as § 1779-99.
- 45. Section 86.1780-97 is redesignated as § 1780-99.
- 46. Appendix XVIII to part 86 is revised by redesignating the latter of the two paragraphs currently designated as (b)(3) as paragraph (b)(4).