

Summary and Analysis of Comments

**National Low Emission Vehicle Program**

Control of Air Pollution From New Motor Vehicle Engines: Voluntary Standards for Light-Duty  
Vehicles and Light-Duty Trucks  
(60 FR 53734; October 10, 1995)

May 1, 1997

U.S. Environmental Protection Agency  
Office of Air and Radiation  
Office of Mobile Sources

## TABLE OF CONTENTS

### List of Commenters

#### I. Introduction

#### II. Provisions of National LEV Program

##### A. Program Structure

1. Opt-in to National LEV and In Effect Finding
  - a. Opt-In Commitments
  - b. Opt-In Conditions
  - c. Opt-In Timing
  - d. Opt-in Signatories
  - e. Manufacturers to Opt In
  - f. In Effect Finding
2. Opt-Out From National LEV Program
  - a. Opting Out
  - b. Opt-Out Timing
  - c. Occurrence of Opt-out Conditions
  - d. Opt-Out Effective Date
  - e. Programs in Effect as a Result of Opt-Out
  - f. Conditions Allowing Opt-Out: Changes to Stable Standards
    - (i) Stable Standards
    - (ii) Defeat Device and Durability Provisions
    - (iii) Composition of "Core" Stable Standards
    - (iv) Notice to Manufacturers of Expected Rulemaking
    - (v) [Placeholder OBD Discussion][**May need to modify**]
3. Duration of Program

##### B. Emission Standards and NMOG Curve

1. Tailpipe Emission Standards
  - a. Flexible-Fuel Vehicles and Dual-Fuel Vehicles Certification
  - b. Compliance with Federal THC Standards
  - c. Medium-Duty Vehicle Standards
2. Fleet Average NMOG Credit Program
  - a. Structure of Credit Program
  - b. Credits in the 37 States
  - c. Reporting Requirements
  - d. Enforcement of Trading Program
  - e. Exclusion of Government ATV Purchases

- 3. Limits on Sale of Tier 1 Vehicles and TLEVs
  - 4. Fuel Provisions and Reactivity Adjustment Factors
    - a. Reactivity Adjustment Factors
    - b. Certification Fuel Provisions
    - c. In-Use Fuel Provisions
    - d. Alternative Fuel Provisions
  - 5. On-Board Diagnostics
  - 6. Hybrid Electric Vehicles
- C. Low Volume and Small Volume Manufacturers
  - D. Certification Procedures
    - 1. Harmonization of Certification Program
    - 2. Carry-Over & Carry-Across Issues
    - 3. Test Vehicle Selection for CARB 50°F Requirement
    - 4. Harmonization of Evaporative Test Procedure
    - 5. Certification Fees
  - E. Legal Authority
- III. National LEV Will Produce Creditable Emissions Reductions
- A. Equivalence of Emissions Reductions
    - 1. Migration
    - 2. ULEVs, ZEVs and ATVs
    - 3. Tier 2 Standards
    - 4. Deterioration
    - 5. NMOG Fleet Average Equivalence
    - 6. Model Year Start of Program
    - 7. Other Equivalence Issues
  - B. Equivalence Over Time
  - C. Enforceability of Emissions Reductions
    - 1. Enforceability of Requirements Against Manufacturers in the National LEV Program
    - 2. Stability of National LEV Program
    - 3. OTC State Adoption of CAL LEV Backstops
- IV. Advanced Technology Vehicle Component
- V. Public Process and Participation

- VI. States' Rights - Operation of Section 177 of the Clean Air Act
- VII. SIP Credits and Related Issues
  - A. SIP Credits
  - B. Other SIP-Related Issues
- VIII. Federal Compliance Requirements
  - A. Void Ab Initio
  - B. EPA In-Use Compliance Program
  - C. Extra Pre-Conditioning for In-use Testing
  - D. Use of California Assembly-Line Test Procedures Data for 50-State Engine Families in EPA Compliance Action
- IX. Unfunded Mandate Requirements
- X. Impact on Clean Fuel Fleet Programs
- XI. Costs and Benefits
  - A. National LEV Program Costs
  - B. National LEV Program Cost-Effectiveness

## LIST OF COMMENTERS

The commenters listed below submitted written comments or provided oral testimony to the Agency following publication of the Notice of Proposed Rulemaking (NPRM) in October, 1995. For comments numbered 1-102, the number indicates the number of the comment document in the IV-D category of the National LEV public docket. Commenters that presented oral testimony at the public hearing are also listed below; these are listed as F1 through F21, indicating their position in the transcript of the public hearing, which is available in the public docket section IV-F. Additional commenters submitted comment following the close of the official comment period; these are listed below with the letter "G" preceding a number, meaning that these are filed in the IV-G category of the public docket (late comments).

No.	Commenter
1	R. R. Rose, Executive Director, Fuel Cells 2000
2	W. H. Butterbaugh, CAE, Director, Regulatory Affairs, National Propane Gas Association
3	D. C. Soule, Executive Director, Metropolitan Area Planning Council, Boston, Massachusetts
4	Senator W. A. Lord, Senate Chair, Rep. R. A. Gould, House Chair, & Rep. P. F. Jacques, Majority Leader, Standing Committee on Natural Resources, State of Maine
5	J. R. Milkey, Assistant Attorney General, Director - Land Use & Env. Projects Government Bureau, The Commonwealth of Massachusetts
6	S. Cox-Wagoner, Executive Director, Rocky Mountain Oil & Gas Association, Denver, Colorado
7	W. H. Butterbaugh, CAE, Director, Regulatory Affairs, National Propane Gas Association, Arlington, Virginia
8	J. M. Hogarth, Pristine Transportation Corporation, Boston, Massachusetts
9	M. C. Trunzo, CEO, Empire State Petroleum Association, Albany, New York
10	M. W. Millspaw, Private Citizen
11	N. J. Bush, President, Natural Gas Supply Association, Washington, DC
12	G. R. Kissinger, Managing Director, Public Affairs, AAA Mid-Atlantic, Philadelphia, Pennsylvania

13	D. K. Mount, P. E., Director, Air Pollution Control Program, Div. of Environmental Engineering, North Dakota Department of Health, Bismarck, ND
14	J. D. Corman, Majority Chairman, & J. D. Stout, Minority Chairman, Transportation Committee, The Senate of Pennsylvania, Harrisburg, PA
15	B. B. Keeney, Sr., Executive Vice President, Virginia Gasoline Marketers Council, Richmond, VA
16	C. W. Ashworth, President, Virginia Farm Bureau Federation, Richmond, VA
17	G. M. Scott, Counsel, Society of Independent Gasoline Marketers of America, Collier, Shannon, Rill & Scott, Attorneys at Law, Washington, DC
18	R. Littlefield, Executive Vice President, Service Station Dealers of America and Allied Trades, Lanham, MD
19	B. M. Harney, Manager, Policy and Federal Legislation and Regulations, Mobil Corporation, Fairfax, VA
20	C. W. Smith, Office of the Secretary of Energy, State of Oklahoma
21	J. M. Tomaino, President, Independent Oil Marketers Association of New England, Newport, RI
22	D. I. Greenhaus, Director, Environment, Health and Safety, National Automobile Dealers Association, McLean, VA
23	K. M. Kiley, President & CEO, Massachusetts Motor Transportation Association, Inc., Burlington, MA
24	P. J. Miller, Ph.D., W. Alton Jones Foundation, Charlottesville, VA
25	J. C. Pruitt, Vice President, Federal Government Affairs, Corporation Communications, Texaco, Washington, DC
26	C. DiBattista, Chief, Bureau Of Air Management, Department of Environmental Protection, State of Connecticut
27	L. Stansfield, Program Consultant for Environmental Affairs, American Lung Association of New Jersey
28	P. W. Schmidt, Department of Environmental Quality, Commonwealth of Virginia, Richmond, VA
29	J. B. Allen, Senior Counsel, Environmental Group Legal Department, Conoco Inc., Houston, TX

30	R. D. Randolph, Director, Department of Natural Resources, State of Missouri, Jefferson City, MO
31	S. F. Harper, Director, Corporate Studies, Amoco Petroleum Products, Chicago, IL
32	C. S. Isenberg, Executive Vice President, Independent Connecticut Petroleum Association, West Hartford, CT
33	R. Bontz, Vice President, Maryland Highway Users Federation, Baltimore, MD
34	Rep. R. A. Gould, Maine House of Representatives, Greenville, ME
35	M. E. Leister, Fuels Technology Coordinator, Marathon Oil Company, Findlay, OH
36	D. Freihofer, V.P. Operations, Johnson & Dix Petroleum Fuel Corp., Lebanon, NH
37	P. M. Iwanowicz, Program Associate, Environmental Advocates, Albany, NY
38	T. V. Miller, Jr., President, State House, State of Maryland, Annapolis, MD
39	K. Cortright, Manager, Issues Management, Brooklyn Union, Brooklyn, NY
40	W. T. Flis, Exxon Company, U.S.A., Environmental & Safety Department, Houston, TX
41	D. Kelly, Director, Railroad Commission of Texas, Austin, TX
42	American Automotive Leasing Association
43	M. Zaw-Mon, Director, Air & Radiation Management Administration, Maryland Department of the Environment, Baltimore, MD
44	G. A. Esper, Director, Vehicle Environment Department, American Automobile Manufacturers Association, Washington, DC
45	W. F. O'Keefe, Executive Vice President, American Petroleum Institute, Washington, DC
46	S. Wright, Director, Strategic Planning and Business Development, BP Oil Company, Cleveland, OH
47	R. V. Watkins, Chair, Air Quality Committee, Environmental Management Commission, North Carolina, Department of Environment, Health and Natural Resources
48	W. Chisum, Chairman, Committee on Environmental Regulation, Texas House of Representatives
49	J. Mendelson, III, Legal Director, International Center for Technology Assessment

50	G. J. Dana, Vice President and Technical Director, Association of International Automobile Manufacturers, Inc., Arlington, VA
51	M. Baly, III, President and Chief Executive Officer, & N. U. Etkin, Director, Government Affairs, American Gas Association
52	D. F. Straetz, Executive Director, New York Gas Group, New York, NY
53	J. Steve, Washington Representative, Union of Concerned Scientists, Washington, DC
54	D.S. Swayze, Duane, Morris, & Heckscher, Wilmington, DE
55	G. V. Voinovich, Governor, State of Ohio, Columbus, OH
56	D. K. Mount, Air Pollution Control Program, North Dakota Department of Health, Bismarck, ND
57	U. R. Sternfels, President, National Petroleum Refiners Association, Washington, DC
58	D. L. Swanson, Senior Vice President Energy & Environmental Activities, Edison Electric Institute, Washington, DC
59	J. J. O'Connell, Secretary, Department of Health and Environment, State of Kansas, Topeka, KS
60	J. E. Plumhoff, III, Director of Government Affairs, Virginia Agribusiness Council, Richmond, VA
61	L. Haynes, Commissioner, Department of General Services, State of Tennessee, Nashville, TN
62	Pennsylvania House Transportation Committee, House of Representatives, Commonwealth of Pennsylvania, Harrisburg, PA
63	R. P. Thompson, President, New York Mercantile Exchange, New York, NY
64	Auto International Association, Automotive Parts & Accessories Association, Automotive Service Association, Automotive Parts Rebuilders Association, Automotive Service Industry Association, Automotive Warehouse Distributors Association, Motor & Equipment Manufacturers Association, Speciality Equipment Market Association
65	G. E. Godley, Counsel, Independent Refiners Coalition, Bracewell & Patterson, L. L. P., Washington, DC



66	E. O. Sullivan, Commissioner, Department of Environmental Protection, State of Maine
67	C. W. Ensign, Vice President, Government Relations, Sinclair Oil Corporation
68	E. Degesero, Associate Director, Fuel Merchants Association of New Jersey, Springfield, NJ
69	B. Hartsock, Deputy Director, Office of Policy and Regulatory Development, Texas Natural Resource Conservation Commission, Austin, TX
70	J. W. Kaufman, Director, Laws & Regulations Refining Division, Phillips 66 Company, Bartlesville, OK
71	D. Johnson, E Ventures, Inc., Washington, DC
72	W. J. Beckert, Senior Vice President, Operations, CITGO Petroleum Corporation, Tulsa, OK
73	Clean Air Council, Philadelphia, PA
74	A. W. Hadder, Manager, Environmental Policy and Compliance, Virginia Power
75	C. R. Taylor, Jr., Speaker of the House, Maryland House of Delegates, Annapolis, MD
76	M. D. Martinez, Policy Associate, National Conference of State Legislatures, Washington, DC
77	B. S. Carhart, Executive Director, Ozone Transport Commission, Washington, DC
78	J. R. Undeland, Manager, Public & Government Relations, American Automobile Association, Fairfax, VA
79	T. R. E. Keeney, Director, Department of Environmental Management, State of Rhode Island and Providence Plantations, Providence, RI
80	W. Hanna, Chair, Metropolitan Washington Air Quality Committee, Metropolitan Washington Council of Governments, Washington, DC
81	D. Sterman, Deputy Commissioner, New York State Department of Environmental Conservation, Albany, NY
82	Health & Environmental Citizen Organizations, Washington, DC
83	F. Du Melle, Deputy Managing Director, American Lung Association, Washington, DC

84	R. R. Gasaway, Kirkland & Ellis, Washington, DC Comments of General Motors Corporation
85	R. Nelson, Director of Environment, Maryland Chamber of Commerce,
86	M. R. Fuentes, Executive Director, Maine Better Transportation Association
87	D. B. Shallcross, Deputy General Counsel, Department of Environmental Protection, Commonwealth of Massachusetts, Boston, MA
88	M. A. Gade, Director, Environmental Protection Agency, State of Illinois, Springfield, IL
89	N. Anderson, Director of Research, American Lung Association of Maine, Augusta, ME
90	B. Quillen-McMullen, Secretary, Delaware Highway User's Federation, Dover, DE
91	A. Clar, MPO, Director, Houston-Galveston Area Council, Houston, TX
92	M. Branam, Manager, United Parcel Service
93	R. C. Shinn, Jr., Commissioner, Department of Environmental Protection, State of New Jersey
94	R. L. Russman, Chairman, NCLS Environment Committee, Chairman, New Hampshire State Senate Environment Committee, the State Senate of New Hampshire
95	B. I. Bertelsen, Executive Director, Manufacturers of Emission Controls Association
96	D. L. Osborne, Executive Director, South Dakota Petroleum Marketers Association
97	R. Irvin, Mid-Atlantic Petroleum Distributors' Association
98	M. Gelber, Commissioner, New York City Department of Environmental Protection
99	W. F. Ross, Chairman, South Carolina Highway Users Conference
100	L. W. Locke, Representative, North Carolina General Assembly
101	J.H. Weatherly, Representative, House of Representatives, North Carolina General Assembly
102	O. H. Johnson, Co-Chairman, Legislative Clean Air Policy Committee, Senator, State of New York
F1	Trudy Coxe, Secretary of Environmental Affairs, Commonwealth of Massachusetts
F2	Shawn King, Commonwealth of Virginia

F3	Harris McDowell, Chairman, State Senate Energy and Transit Committee, State Senator, Delaware
F4	James Rue, Deputy Secretary for Air, Recycling, and Radiation Protection, Pennsylvania Department of Environmental Protection
F5	Tim Keeney, Chair, Ozone Transport Commission, Director, Rhode Island Department of Environmental Management
F6	William O'Keefe, Executive Vice President, American Petroleum Institute
F7	Robert Campbell, Chairman and C.E.O., Sun Company, representing the National Petroleum Refiners Association
F8	David Cohen, 11th District, Massachusetts House of Representatives
F9	Jayne Mardock, National Coordinator, Clean Air Network
F10	Jamie Steve, Clean Air Network
F11	Paul Billings, Assistant Director of Government Relations, American Lung Association
F12	Robert Sargent, Legislative Director, Massachusetts Public Interest Research Group
F13	Douglas Greenhaus, Director of Environment, Health, and Safety, National Automobile Dealers Association
F14	Robert Beck, Vice President for Environmental Affairs, Edison Electric Institute
F15	Joseph Mendelson, Legal Director, International Center for Technology Assessment
F16	Don Straetz, Executive Director, New York Gas Group
F17	Patrick O'Connor, National Association of Fleet Administrators
F18	Paul Smith, American Automotive Leasing Association
F19	Greg Dana, Association of International Automobile Manufacturers
F20	Jerry Esper, American Automobile Manufacturers Association
F21	Mark Cahill, Boston Edison Company
G1	B. Gold, Atty., Barbara Gold, Baltimore, MD, for Maryland Bus Association
G2	M. S. Kelley, VP, Environment, Safety, and Public Affairs, Total Petroleum, Inc., Denver, CO

G3	J. M. Seif, Secretary, Commonwealth of Pennsylvania, Department of Environmental Protection, Harrisburg, PA
G4	C. W. Ensign, VP of Government Relations, Sinclair Oil Corp., Salt Lake City, UT
G5	D. Reicher, Acting Assistant Secretary for Policy, U.S. Department of Energy
G6	R.R. Gasaway, Kirkland & Ellis, Washington, DC (further comments of General Motors Corporation)
G7	Comments of Kevin Green, Brimfield, Massachusetts, regarding Regulatory Impact Analysis: National Low-Emission Vehicle Program (10/03/95 Draft)
G8	Comments on the Analysis of Cost and Benefits of a National Low Emission Vehicle Program. Author: John Calcagni
G9	To Carol M. Browner from Arent Fox.
G10	State of New Mexico Environment Department, Mark E. Weidler, Secretary, letter to Carol Browner + copies of Northeast state comments
G11	Letter to Carol M. Browner from Deputy Prime Minister of Canada and a return letter to the Prime Minister from Margo Oge dated 2-16-95.
G12	Letter to Margo Oge, Office of Mobile Sources, from Marc L. Fleischaker, Arent Fox Kintner Plotkin & Kahn.
G13	Letter to Carol M. Browner, EPA, from Carlos I. Pesquera, President, Northeast Association of State Transportation Officials.
G14	Letter to Mary Nichols, Office of Air and Radiation, from Bruce S. Carhart, Ozone Transport Commission, Gregory J. Dana, Association of International Automobile Manufacturers, and Richard L. Klimisch, American Automobile Manufacturers Association.
G15	Letter to Andy Brooks, EPA, from Steve Albu, State of California, Air Resources Board.
G16	Letter to Mary Nichols, EPA Office of Air and Radiation, from Robert C. Shinn, Jr., Ozone Transport Commission.
G17	Letter to Carol M. Browner, EPA, James M. Strock, California EPA, and John D. Dunlap, California Air Resources Board, from Marc L. Fleischaker, Arent Fox, and John Russell Deane, III, Esq., Trainum, Snowdon & Deane.

G18	Letter to Mary Nichols, EPA Office of Air and Radiation, from Bruce S. Carhart, Ozone Transport Commission, Gregory J. Dana, Association of International Automobile Manufacturers, and Richard L. Klimisch, American Automobile Manufacturers Association.
G19	Letter from Gerald Esper, AAMA and Gregory Dana, AIAM to Robert Cross, CARB.
G20	Letter from Robert Cross, CARB to Gerald Esper, AAMA and Gregory Dana, AIAM.
G21	Letter from Robert Shinn, OTC, to Mary Nichols, EPA.
G22	Letter from Bruce Carhart, OTC, to Mary Nichols, EPA.
G23	Letter from Andrew Card, AAMA and Phillip Hutchinson, AIAM to Carol Browner, EPA.
G24	Letter from Robert Shinn, OTC, to Ronald Boltz, Chrysler (cc: Mary Nichols).
G25	Letter from Environmental Commissioners and Secretaries, New England States, to Carol Browner, EPA.

## **I. Introduction**

On October 10, 1995, the Environmental Protection Agency (EPA) published a Notice of Proposed Rulemaking (NPRM) that proposed a detailed framework for the National Low Emission Vehicle program (60 FR 52734). Over 100 organizations and individuals submitted written comment following publication of the Agency's NPRM, and 20 presented oral testimony at a public hearing held on November 1, 1995 in Washington, DC. Commenters represented a wide spectrum of stakeholder interests, including local and state governments, auto manufacturers, oil and gas producers and marketers, environmental organizations, public utilities, and others, and commenters presented a wide range of opinions. The sections that follow summarize and address the comments that the Agency received regarding this rulemaking. For the reader's convenience the discussion of each issue is accompanied by a summary of the proposal. However, these are summaries only, and are not intended to be fully descriptive. Complete descriptions of the proposal are found in the NPRM. This Response to Comments document should be regarded as a companion to the Final Rule as published in the Federal Register, and should be read in conjunction with the Final Rule.

## **II. Provisions of National LEV Program.**

### **A. Program Structure.**

#### **1. Opt-in to National LEV and In Effect Finding**

##### **Proposal**

EPA proposed that a motor vehicle manufacturer would opt into the program by submitting a written notification that unambiguously and unconditionally states that the manufacturer is opting into the program, subject only to the condition that EPA subsequently find the program to be in effect by a certain date for purposes of satisfying the SIP call issued in the OTC LEV decision. The notification would also state that the manufacturer would not challenge EPA's authority to establish and enforce the National LEV program. The proposed regulations specified language that manufacturers would have to include in the statement. The statement would have to be signed by a person or entity within the corporation with authority to bind the corporation to its choice, and EPA requested comment on who would have such authority. The opt-in would become binding upon EPA's receipt of the statement, except that if the Administrator failed to sign a finding that the program is in effect within 60 days of signature of this final National LEV rule, manufacturers could withdraw conditional opt-ins. The "in effect" finding would not require further rulemaking if all auto manufacturers with sales in the United States opted in.

EPA requested comment on whether it should establish time limits for EPA to determine whether National LEV is in effect for purposes of satisfying the OTC LEV SIP call. The

proposed regulations would have required EPA to make a finding on whether the National LEV program is in effect within 60 days of signature of the final National LEV regulations. The criteria for making this finding were that all manufacturers listed in the regulations (those manufacturers that have received a certificate of conformity for a light-duty engine family for the 1995 model year) had submitted opt-in notifications in accordance with the requirements specified in the regulations.

EPA also requested comment on whether it should establish a time limit for manufacturers to opt in. While EPA did not propose an absolute deadline, the proposed regulations would have committed the Agency to consider opt-in notifications received within 45 days of signature of the final rule. EPA also requested comment on the following issues: Should the National LEV regulations require manufacturers to opt in within a certain number of days after signature of the final rule, and if so, how many days? Should the date be triggered by publication or signature of the final rule? Should a specific date be set? In addition, EPA requested comment on whether manufacturers should be able to make their opt-ins conditional upon any other factors, such as a condition that OTC States have made certain commitments regarding adoption or retention of CAA section 177 programs by a given date.

#### a.. Opt-In Commitments

#### Comments

On the topic of future challenges to EPA's authority to establish and enforce the National LEV program, one commenter (84) stated that EPA should not ask manufacturers to renounce litigation in their opt-in notifications. This commenter argued that EPA makes no parallel request that States forgo litigation over National LEV. However, one commenter (22) noted that it would be reasonable to expect signatories to the MOU not to challenge the National LEV program in court.

#### Response

EPA is requiring that an opt-in notification state that the manufacturer will not challenge EPA's authority to establish and enforce the National LEV program. Parties that choose to opt into and thereby bring into being a voluntary program should agree that they will not challenge the program later. Such a challenge would be especially inappropriate in the context of an enforcement action brought by EPA due to a party's failure to comply with the program requirements. The regulations specify language renouncing such legal challenges, which manufacturers would have to include in the opt-in statement. In part, this requirement provides for an explicit recognition in the opt-in statement that under section 307(b), parties will have 60 days after the date of publication in the Federal Register to challenge any of the provisions of this rule. After this date, challenges to this rule are foreclosed, including any challenges raised in the context of an enforcement action. This final rule does not address the mechanism for and substance of OTC State commitments to the National LEV program. EPA will take comment on issues relating to OTC State commitments in a subsequent Supplemental Notice of Proposed Rulemaking (SNPRM). These may include the issue

of whether the OTC States should similarly renounce legal challenges to the National LEV program as part of their commitment to the program.

#### b. Opt-In Conditions

##### Comments

EPA received several comments favoring conditional opt-in to National LEV. One commenter (84) specified that manufacturers' opt-ins must be conditioned upon acceptance of state commitments. Another commenter (44) stated that conditional opt-in would be necessary for manufacturers if the ZEV mandate and state commitment issues remain unresolved. Due to concerns about a level playing field across the industry, one commenter (84) argued that prior to making opt-in commitments, manufacturers need explicit assurances that other manufacturers and the OTC States are prepared to fulfill their own obligations under the program. The commenter suggested that this could best be achieved through a manufacturer's right to add appropriate conditions to its opt-in statement. For example, manufacturers could condition their opt-ins on the participation of other manufacturers and participation by all OTC States in binding agreements to forgo the OTC LEV Program.

Conversely, several commenters (53, 82, 83, 87) asserted that the motor vehicle manufacturers should not be permitted to opt in conditionally. They stated that negotiations would likely be prolonged and thus conditional opt-ins would introduce delay in program implementation. Another commenter (87) argued that EPA should clearly state that any attempt by a manufacturer to specially condition its participation in the National LEV program (other than those conditions specified in the proposed rule) would result in the Agency failing to make the necessary "in effect" finding.

##### Response

As proposed and as discussed in the preamble to the final rule, the only permissible condition on opt-ins is that EPA make a finding that the National LEV program is in effect. Prior to making such a finding, EPA must have promulgated a further final rule on the substance of and mechanisms for the OTC States' commitments to the National LEV program. In addition, EPA must find that all the listed manufacturers have opted into National LEV. Thus, allowing a manufacturer to condition its opt-in upon EPA making a finding that National LEV is in effect addresses the manufacturers' concern about opting in before they know that all other manufacturers have opted in. In the subsequent SNPRM on OTC State commitments, EPA will address the issue of whether manufacturers should be able to condition opt-ins on state actions in making or keeping certain commitments to the National LEV program. At this time the nature of the OTC State commitments is not yet sufficiently developed for EPA to address conditional opt-ins on that basis in this rule.

#### c. Opt-In Timing



## Comments

EPA received varying comments on establishing a time limit for manufacturers to opt into National LEV. One commenter (98) favoring a short opt-in period suggested that manufacturers should have 30 days from publication of the final rule. Similarly, other commenters (53, 83) asserted that each automaker should opt into National LEV within 30 days after signature of the final rule or by December 31, 1995, whichever comes first.

Three commenters favored variations on an opt-in deadline of 45 days from publication of final rulemaking. One commenter (87) supported 45 days at the most, while another commenter (77) would accept a modest increase beyond 45 days. A third commenter (50) agreed that 45 days is appropriate if the manufacturer representative is U.S.-based and a group signing is not required, otherwise, it stated, a 60 day opt-in time period is necessary.

Several other commenters (44, 84) suggested a longer time period for opt-in of 120 days from signature. They stated that a 120 day opt-in period is needed to accommodate the time required to obtain corporate approval. Further, they added, it provides an extra 60 days after the close of the period for legal challenge, which would be the minimum amount of time manufacturers would need to assess any challenges to the rule. One commenter (84) added that state implementing action should be performed within the same time period allowed for manufacturer opt-ins.

## Response

Today's final rule does not set a time limit for opt-ins because the auto manufacturers and the OTC States have not yet reached final agreement on National LEV. EPA is not taking a final position on this regulatory provision at this time. Instead, the time limit for opt-ins is an open issue that EPA intends to address in the SNPRM on OTC State commitments to National LEV.

### d. Opt-in Signatories

## Comments

Commenters differed on the appropriate person or entity within the corporation to sign the opt-in notification. One commenter (84) identified the Environmental VP (or similar executive) as the appropriate designated opt-in signatory for automakers. However, other commenters (81, 82) asserted that the appropriate signatory is the CEO. One commenter (82) stated that the CEO should have the legal authority to bind the corporation to the terms of the MOU. Another commenter (81) argued that although other levels could possibly commit the corporation to the National LEV program, commitment from the CEO provides greater stability for the program.

In addition, another commenter (50) asserted that the signature of a corporate parent should be adequate for opt-in of manufacturers owned by the same corporate parent, as long as it is clear that the signature binds all parts of the corporate entity that may receive certificates.

#### Response

EPA has determined that the opt-in statement must be signed by a vice president for environmental affairs or a person holding at least comparable authority within the corporation, provided that the person has authority to bind the corporation legally. In addition to binding the corporation legally, this will also represent a public commitment of the corporation to the National LEV program, and the significance of this commitment would not be substantially enhanced by requiring signature by the CEO. EPA is concerned that requiring signature by the CEO might unnecessarily delay opt-ins.

EPA agrees that signature of a corporate parent should be adequate for opt-in of manufacturers owned by the same corporate parent, as long as it is clear that the signature binds all parts of the corporate entity that may receive certificates.

#### e. Manufacturers to Opt In

#### Comments

With regard to imports of nonconforming vehicles, a commenter (50) agreed with the proposal that independent commercial importers (ICIs) need not opt into National LEV, but noted that several ICIs were included on EPA's list of manufacturers to opt in.

#### Response

EPA has revised the list of manufacturers to opt in, ensuring that no ICIs are listed.

#### f. In Effect Finding

#### Comments

A state (81) commented that the time for EPA to make an "in effect" finding should be as short as possible but no more than 45 days. Two manufacturers associations (44, 50) commented that making the "in effect" finding within a reasonable time period after completion of the final rule is necessary to provide assurance to all parties. One commenter (44) stated that 15 days should be sufficient, but keyed this timing to the close of the opt-in period rather than to completion of the final rule. Another (50) stated that such a time limit should be based on publication, rather than signature, of the final rule. Another (3) stated that the rule needs to be in effect by December 31, 1995.

An auto manufacturer (84) agreed with EPA that a finding could be made without additional rulemaking since such a determination could be readily and objectively made. A state (28) commented, however, that EPA's proposed role in the process is too broad and that an objective third party should make the "in effect" determination to provide accountability and objectivity.

Two commenters (81, 87) agreed with the proposal that the criteria for the "in effect" finding must require that all listed manufacturers have agreed to participate.

### Response

See the preamble for a general discussion of this topic. The final rule does not specify a time period within which EPA must make a finding as to whether National LEV is in effect. At this time, EPA is not taking a final position on this regulatory provision. Instead, the time period within which EPA must make an in effect finding is an open issue that EPA intends to raise in a supplemental notice of proposed rulemaking and resolve in a subsequent supplemental final rule.

A finding that National LEV is in effect will make the National LEV motor vehicle requirements applicable to all manufacturers that have opted into the program subject to the condition that EPA finds the program is in effect. Because the in effect finding will trigger the applicability of federal pollution control requirements promulgated under CAA authority, it is appropriate that the federal Agency authorized to promulgate the requirements should make the finding. Congress has delegated to EPA the authority to promulgate the National LEV requirements, and limitations on further delegation would prevent EPA from deferring to any third party, however objective, on decisions as to whether the program is in effect, whether it remains in effect, and when it ends. Even if it were legally possible to delegate this decision to a third party, EPA believes it would be unwise to do so given the logistical, process and other problems use of a third party would raise.

In addition, EPA does not believe that use of a third party to make a determination of whether National LEV is in effect would add accountability or objectivity to the process. Under the criteria that EPA has established in the final rule, the criteria is so easily verified and purely objective that the finding is virtually self-executing. EPA has only to verify that the same manufacturers listed in the rule have submitted letters including the required language and signed by the specified company officials. Given the almost ministerial nature of EPA's findings, the Agency sees no benefit in having a third party make the in-effect finding.

The criteria specified in this rulemaking only provide for EPA to find the program in effect if all manufacturers properly opt in. EPA's understanding is that all manufacturers will opt into National LEV, therefore EPA has made no provisions in this rule for other scenarios.

## **2. Opt-Out From National LEV Program**

## a. Opting Out

### Proposal

Once manufacturers have voluntarily chosen to opt into the program, EPA proposed that they could opt out of the program only under a few specified circumstances, or "offramps." These offramps were limited to: (1) EPA modification of certain specified standards or requirements over the manufacturers' objection; or (2) an OTC State's failure to meet or keep its commitment regarding adoption or retention of a state motor vehicle program under section 177.

### Comments

Several commenters (49, 83) oppose allowing any opt-outs or allowing any opt-outs absent OTC LEV as a backstop adopted by every OTC State and enforceable the next model year. Their rationale is that if there is the possibility of opt-outs without immediately enforceable backstops, emissions reductions equivalency cannot be assured.

### Response

The recent court decision overturning the OTC LEV SIP call has removed emissions reductions equivalency of National LEV and OTC LEV as a legal requirement for National LEV. Nevertheless, in deciding whether to commit to National LEV, it will be important to the OTC States to have information about both the relative quantity of emissions reductions from National LEV relative to those that could be achieved through OTC state-by-state adoption of CAL LEV programs, and whether National LEV is an enforceable, stable program. Thus, EPA has considered these factors in promulgating the National LEV program, as described below and in the preamble to the final rule.

Given the structure of the agreement underlying National LEV, EPA believes that barring all opt-outs would be inequitable and incompatible with the voluntary nature of the program. National LEV is a voluntary program based on an agreement between the OTC States and the manufacturers. One fundamental element of this agreement will be that the manufacturers will comply with National LEV in exchange for the OTC States not imposing CAL LEV programs. Should the OTC States not fulfill their side of the bargain, it would be inequitable to hold the manufacturers to their commitments.

Another key element of the agreement is the Stable Standards, through which EPA is giving the manufacturers a period of increased certainty regarding their compliance obligations under a specified set of standards and requirements. In particular, the Core Stable Standards are those standards and requirements that the manufacturers are voluntarily agreeing to comply with and that are more stringent than EPA could mandate prior to MY2004, as well as related requirements. It would be similarly inequitable for EPA to retain the ability to change these standards from what the manufacturers had volunteered to meet without allowing the

manufacturers the opportunity to opt out of the program. In addition, EPA has provided manufacturers some degree of certainty regarding the level of stringency of the specified Non-Core Stable Standards for the purposes of the National LEV program. For the manufacturers to be able to rely on the stability of the Non-Core Stable Standards, they must have some recourse if EPA nevertheless changes those standards, and the recourse here is the ability to opt out of the National LEV program.

While certain limited offramps are necessary, EPA believes that the offramps in the final rule will not destabilize the program or make it so unlikely to achieve the projected emissions reductions that EPA could not grant states SIP credits for emissions reductions generated by National LEV. No regulatory program provides absolute certainty that it will achieve its goals, and the possibility of an offramp presents some small risk that the National LEV program will terminate prematurely. However, EPA believes that providing an opportunity for manufacturers to opt out upon EPA making certain specified changes to the designated Stable Standards will not threaten the stability and enforceability of the National LEV program.

EPA believes it is very unlikely that the Agency would change a Stable Standard in a manner that would provide an offramp. Most of the Core Stable Standards, such as the tailpipe standards, are requirements that EPA does not have authority to impose now on the manufacturers absent a voluntary program; consequently, EPA lacks the authority to make these requirements more stringent without the manufacturers' consent. While EPA has authority to mandate a few of the Core Stable Standards, such as the on-cycle FTP, National LEV is structured to reduce the incentive for EPA to change either these requirements or any of the Non-Core Stable Standards. EPA is unlikely to change a Non-Core Stable Standard in a way that would provide an off-ramp because the emission reductions from a feasible increase in the stringency of any of the Non-Core Stable Standards are extremely unlikely to be greater than the emissions reductions from the National LEV program. Also, EPA would have the opportunity to withdraw any change to a Stable Standard before the effective date of the opt-out, and thereby prevent an opt-out from ever becoming effective. In addition, for opt-outs based on changes to the Non-Core Stable Standards, an opt-out would not become effective until manufacturers would actually have to comply with the changed standard. This gives EPA the ability to protect the enforceability of National LEV and its expected emissions reductions by deferring the effective date of any changes to the Non-Core Stable Standards until Tier 2 standards are in effect or until MY2007, whichever is earlier. Because EPA is sufficiently confident that this offramp will not destabilize the National LEV program and because the OTC LEV SIP call no longer requires each OTC State to adopt a CAL LEV program, EPA does not agree that the offramp necessitates immediately enforceable backstops in place in every OTC State. See the preamble to the final rule at sections IV.A.2.a.(2) and V.B., the preamble to the proposal at sections IV.A.2.a.(1) and IV.A.2.b., and section III.C.3. below for further discussion of this topic.

EPA has not yet evaluated how allowing opt-outs based on an OTC State violation of a commitment regarding a section 177 program could affect the stability of National LEV. However, EPA expects that given adequate OTC State commitments to the National LEV

program, the existence of this opt-out condition should not destabilize the program. EPA believes that once both OTC States and manufacturers have adequately committed to the program, there will be strong practical as well as legal disincentives to any OTC State violating a commitment so as to allow manufacturers to opt out of National LEV. EPA will take comment on these issues in the context of an upcoming supplemental notice of proposed rulemaking concerning the specifics of the OTC States' commitments.

### Comments

One commenter (57) asserted that all individual states should be given the opportunity to opt out of National LEV.

### Response

It is unclear whether the commenter means that states should have the ability not to require National LEV, which is the case, since National LEV is a federal program, or that states should be able to require manufacturers to produce Tier 1 vehicles rather than NLEVs, for which the Clean Air Act provides no authority. EPA believes that an approach allowing individual states to reject National LEV (except to exercise section 177 rights) would be impracticable, costly, counter-productive to the goal of achieving clean air nationwide, and inconsistent with the CAA. See the preamble to the final rule at section IV.A.2.e and section II.E of this document for further discussion.

### b. Opt-Out Timing

### Proposal

EPA proposed that a manufacturer would opt out of the program following the same notification procedure used to opt in, additionally specifying the condition allowing opt-out. EPA proposed that manufacturers would have to decide whether to exercise their option to opt out within 60 days of the occurrence of the condition triggering opt-out. EPA requested comment on whether to specify a time limit for manufacturers to exercise an opt-out option and, if so, what the length of time should be.

### Comments

In response to EPA's request for comment on the time that should be allowed for manufacturers to exercise an opt-out option, several commenters (44, 84) stated that EPA should not set any time limit. One commenter (84) declared that a 60-day time limit on manufacturers' ability to exercise opt-out rights would add instability to National LEV. For instance, the commenter posited, a manufacturer might decide to opt out just to protect against the possibility of excessive future compliance costs.

However, other commenters (50, 81), including one commenter representing auto manufacturers, agreed with EPA's proposal to provide a 60 day time limit for manufacturers to notify EPA of their decision to opt-out.

### Response

See the preamble to the final rule. Section IV.A.2, for a general explanation and additional response to comments on this topic. Allowing an unlimited time for opt-out would mean that if any offramp occurred, even if no manufacturer opted out of the program immediately, a manufacturer could use that offramp as the basis for an opt-out at any time in the future. One consequence of this would be to increase the opportunity for opt-outs motivated by factors other than the triggering condition. Such a potential expansion of the opt-out option would undermine program stability and would reduce the OTC States' ability to rely on the continuation of National LEV. Instead, it would encourage the OTC States to take steps to protect against the program's dissolution, such as adoption of backstop programs, which manufacturers have indicated they regard as another destabilizing influence. EPA believes that the slight possibility that a manufacturer might be more inclined to opt out quickly if it had only one opportunity does not outweigh the stability concerns raised by an unlimited opt-out opportunity. In addition, where the offramp would be an EPA change to a Stable Standard, in deciding whether to finalize the proposed change, EPA would need to weigh a manufacturer's objection to the change and declaration that it is sufficient to trigger an opt-out. Because EPA needs to know whether manufacturers intend to opt out, even before making the change, an unlimited time period for opt-out would be unacceptable.<sup>1</sup>

While EPA does not believe an unlimited time to opt out is appropriate, in the final rule EPA is increasing the amount of time manufacturers will have to exercise an opt-out option to 180 days. Manufacturers have argued that 60 days will not give them adequate time to design, build and test vehicles to meet the revised Stable Standard. However, manufacturers will know generally what EPA is considering regarding any revisions far in advance of the time that the Agency actually promulgates the revision. Manufacturers will receive such information from EPA's proposed rule and generally even before that time, given that EPA works closely with the manufacturers in developing requirements and evaluating their technical implications. Thus, EPA believes that manufacturers will be able to evaluate the implications of likely changes well in advance of EPA's final adoption of such changes. Also, the longer the time period manufacturers have to take an offramp, the greater the uncertainty introduced into the program by any revision that might provide an offramp. Balancing these factors, today's rule provides

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<sup>1</sup>As discussed in the preamble, section IV.A.2.c., if a manufacturer opts out based on a change to a Stable Standard, EPA would have a limited opportunity to withdraw the change, thereby preventing the opt-out from taking effect. If a proposed change will trigger an opt-out, however, it is far more efficient for EPA to know this in advance and save Agency and manufacturer resources by deciding not to make the change in the first place.

manufacturers 180 days to opt out, with an additional 30 days for other manufacturers to opt out if a manufacturer has opted out within the initial opt-out period.

### c. Occurrence of Opt-out Conditions

#### Proposal

EPA proposed that an opt-out would not become effective if, within 60 days of receipt of the opt-out statement, the Administrator were to find that the condition cited by the manufacturer had not actually occurred.

#### Comments

One commenter (81) agreed with EPA's proposal that the opt-out would not be effective if, within 60 days of receipt of the opt-out statement, EPA were to find that the opt-out triggering condition did not occur. Furthermore, according to this commenter, EPA should be required to make an affirmative determination, within 60 days of receipt of the opt-out statement, as to whether an opt-out condition occurred.

Other commenters (44, 84) opposed EPA's proposal and stated that manufacturers alone should determine if an opt-out condition has occurred. One (44) added that if a court were subsequently to find the determination wrong, EPA could initiate enforcement action. However, the commenter asserted, if manufacturers were kept in the program until they had successfully challenged EPA's determination in the courts, this would effectively remove the opt-out option for manufacturers due to the probable length of time for legal action. Another commenter (84) suggested that the parties should agree to use the courts to determine validity, coupled with an EPA concession that it will waive claims to deference in interpreting the MOU or National LEV regulations. In addition, the commenter suggested that the agreement should stipulate venue in the U.S. District Court for the district in which the manufacturer's principal place of business is located. The commenter also stated that the agreement should include a requirement that challenges to opt-out decisions be brought within the same time period as the manufacturers were given to opt in.

#### Response

See the preamble to the final rule at section IV.A.2.b for a detailed discussion of EPA's determination regarding the validity of an opt-out and judicial resolution of any disputed opt-outs. Under the approach taken in the final rule, within 60 days of receipt of an opt-out notification, EPA must determine whether the alleged basis for the opt-out has occurred and whether the opt-out is valid. Such a determination is a final agency action of national applicability. Section 307(b) of the Act limits review of such action to the U.S. Court of Appeals for the DC Circuit and EPA cannot stipulate venue elsewhere. EPA agrees with the commenter that there should be an enforceable deadline for the Agency to make a determination as to the



validity of an opt-out. If the Agency fails to act, the advantages discussed in the preamble of providing for an EPA determination of the validity of an opt-out are lost. A deadline for EPA action is necessary to ensure that the Agency does, in fact, act promptly.

EPA intends to publish any determination regarding the validity of an opt-out in the Federal Register. Under section 307(b), this would trigger a 60-day period from the date of publication for filing a petition for review. EPA has no authority to provide a different time period for legal challenges to an opt-out determination. Nor is it necessary for the National LEV regulations to address the time period for bringing challenges directly against a manufacturer that opts out. If EPA were to determine that an opt-out was valid, the manufacturer would be in compliance with the regulations and any challenges should be to EPA's determination rather than to the manufacturer's action. If EPA does not make that determination, the CAA and other statutes will govern the ability to bring and the process for judicial challenges directly against a manufacturer that has opted out.

#### d. Opt-Out Effective Date

##### Proposal

The proposal specified that unless EPA were to find that the opt-out condition had not occurred, the effective date of an opt-out would depend on the condition authorizing the opt-out. The effective date of the opt-out would determine when the manufacturer would no longer have to comply with the National LEV program and instead would become subject to any other applicable federal or state requirements. EPA stated that it would consider three major factors in determining when opt-outs should become effective. The first factor is the burden that different effective dates place on manufacturers, in terms of complying with emissions standards. A second factor is the effect of different opt-out dates on emissions reductions. Third, EPA would consider the extent to which different effective dates add program stability by providing disincentives for EPA or the OTC States to trigger an offramp. EPA requested comment on a range of alternative approaches to establishing the effective date of opt-outs that are allowed by an EPA change to a Stable Standard or an OTC State's failure to keep its commitment regarding a section 177 program.

##### Comments

Several commenters (44, 84) stated that the effective date of any opt-out should be immediate once a condition that triggers the opt-out clause occurs. One commenter (44) reasoned that such a provision keeps pressure on the OTC States not to trigger an offramp by providing a serious penalty for their failure to fulfill their commitments. The other commenter (84) analogized National LEV to a contract and noted that breach of a contract by one side immediately excuses performance by the other.

Supporting one of EPA's proposed alternative approaches to establishing the effective date of opt-outs, one commenter (42) stated that opt-outs should be effective for the first model year three years after the calendar year in which the OTC State or EPA acted to trigger an offramp, or the first model year to which the changed regulations applied, whichever is sooner.

Another commenter (58) asserted that no opt-out should be considered effective until a backstop program is in effect in every state that takes credit for National LEV reductions.

### Response

See the preamble to the final rule, section IV.A.2.c, for discussion of the effective date of opt-outs. As explained in the preamble, in certain situations making opt-outs effective sooner than three years after the calendar year in which an OTC State or EPA acted will enhance the stability of National LEV by providing a greater disincentive for either the state or EPA to take that action. See the discussion in sections II.A.2.a. and III.C.3. of this document for a response to the comment that opt-outs should not be effective until backstops are in place.

#### e. Programs in Effect as a Result of Opt-Out

### Proposal

EPA proposed that if a manufacturer were to opt out of the National LEV program, when that opt-out became effective the manufacturer would become subject to all standards that would apply if National LEV did not exist. The federal Tier 1 tailpipe emissions and related standards would apply, as would any state standards promulgated under section 177, regardless of whether those standards allowed the alternative of compliance with National LEV.

### Comments

One commenter (81) stated that EPA should determine in the regulations what program will be in effect if an offramp occurs and stated that for OTC States that have adopted OTC LEV, such programs should begin immediately. Several commenters (3, 81) objected to the lack of a mechanism to ensure that manufacturers comply with State regulations upon opt-out. Other commenters (37, 82) stated that if National LEV were breached, auto manufacturers must waive the two year lead-time requirement in order to avoid a break in delivery of cleaner cars. Commenters (37, 81, 83) also oppose return to Tier 1 standards in any OTC States unless all OTC States are in attainment. One commenter (81) noted that a return to Tier 1 standards upon an opt-out would violate the OTC LEV SIP call.

### Response

If a manufacturer were to opt out of the National LEV program, when that opt-out became effective the manufacturer would become subject to all standards that would apply if

National LEV did not exist. The federal Tier 1 tailpipe emissions and related standards would apply, as would any applicable state standards promulgated under section 177. There is no need to reiterate these freestanding legal requirements in the National LEV regulations, nor would such reiteration supplement the state's authority to impose and enforce requirements for new motor vehicles pursuant to section 177. EPA is deferring to the supplemental notice of proposed rulemaking any discussion of how the section 177 requirement for two years of leadtime might apply in the context of National LEV. Given the recent court decision overturning the requirement to adopt OTC LEV, potential violations of the OTC LEV SIP call are irrelevant.

### Comments

Several commenters (81, 87) stated that National LEV should terminate automatically upon any manufacturer's opt-out. One (81) commented that states with backstops cannot wait for EPA to determine through rulemaking that National LEV is no longer in effect, which could result in significant delays in implementation of backstops. Rather, the commenter asserted, states must be able to apply OTC LEV requirements in accordance with the terms of the draft MOU. This commenter added that there is no room for discretion in the determination as to whether the program is in effect and that the states have no ability to continue National LEV for some manufacturers while applying OTC LEV to others. However, another commenter (88) opposed a provision that would allow EPA to find that National LEV was no longer in effect if a small number of manufacturers opted out based on an OTC State's failure to implement a commitment.

### Response

In light of the court decision overturning the requirement to adopt OTC LEV, EPA will need to address in the SNPRM the issue of whether National LEV would terminate automatically if a manufacturer opted out. The termination of National LEV no longer needs to be tied to production of emissions reductions equivalent to those produced under OTC LEV, but rather will relate to termination of state commitments and manufacturer obligations.

### f. Conditions Allowing Opt-Out: Changes to Stable Standards

### Proposal

EPA proposed that certain specified standards and other requirements be classified as "Stable Standards." With certain exceptions, any changes to the Stable Standards applicable to vehicles produced for model years covered by the National LEV rule would allow the auto manufacturers to opt out of the National LEV program. The types of changes to the Stable Standards that would not allow a manufacturer to opt out are changes that would harmonize comparable federal and California standards, changes that do not make a standard more stringent, and changes made without vehicle manufacturers' objections.

The Agency outlined two categories of Stable Standards in the NPRM: (1) those core standards, procedures, and requirements of the National LEV program that manufacturers would not have to meet but for their voluntary commitment to comply with that program, and (2) certain additional standards and requirements where the technical indicators or the timing of candidate revisions make it unlikely EPA would act under its discretionary authority to increase program stringency. EPA proposed that the first category of Stable Standards include the following core elements: [1] the TLEV, LEV, ULEV and ZEV tailpipe emission standards (i.e., the "LEV standards"); [2] use of the Federal Test Procedure (FTP), including California phase II gasoline, for determining compliance with the LEV standards; [3] the NMOG fleet average standards; [4] banking and trading provisions used to meet the NMOG average or the five percent cap on sales of TLEVs and Tier 1 vehicles in the OTR from MY2001 on; and [5] requirements for on-board diagnostics systems that meet California's OBD phase II requirements. In addition to these core Stable Standards, EPA proposed a second category of Stable Standards consisting of the following elements of the federal motor vehicle emission control program: [1] any "off-cycle" emission standards, associated test procedures and implementation schedules promulgated by EPA under section 206(h) of the Clean Air Act; [2] the existing federal program for control of on-board refueling vapor recovery (ORVR), including the test procedures, test fuel, standards, and implementation schedules; [3] the existing cold temperature carbon monoxide (Cold CO) program effective through MY2000, including the Cold CO test procedure, test fuel, and standards; and [4] the existing federal evaporative emissions control program, including the emissions standards, test procedures, and implementation schedules.

(i) *Stable Standards*

Comments

EPA received comments on the proposed set of stable standards expressing concern that the Agency would be abdicating its regulatory authority by allowing auto manufacturers the opportunity to opt out of the National LEV program if EPA were to modify any of the proposed stable standards. Commenters noted that EPA might be faced with a situation in the future where it would be appropriate and desirable to increase the stringency of certain motor vehicle emission standards. In such a situation, the Agency would be constrained by the National LEV offramp provision, and would have to consider the possibility of manufacturer opt-outs from National LEV before revising any of the proposed stable standards. One commenter disagreed with EPA's suggestion in the NPRM that the Agency be able to make any changes to the Stable Standards in the first year or two following adoption of a regulatory requirement. EPA also received comments supporting the proposed set of stable standards.

Some commenters suggested that EPA include defeat device and durability regulations as stable standards under the National LEV program. These commenters stated that the auto manufacturers should have the opportunity to opt out of National LEV if EPA revises the defeat device and durability provisions, because different federal and California regulations in these areas will increase the burden of compliance with both programs. The comments also stated that

EPA's proposed exclusion of defeat device and durability provisions from the set of stable standards is arbitrary because several proposed stable standards are also aimed at ensuring that vehicles comply with emissions requirements over their full useful life.

Commenters also requested that EPA clarify that any changes to the National LEV tailpipe emissions standards or NMOG curve, including changes to harmonize with California, would allow the manufacturers an opportunity to opt out of the National LEV program. These commenters noted that the auto manufacturers would be volunteering to meet these more stringent standards, and, since EPA lacks authority under the Clean Air Act to impose these standards without a voluntary agreement, the Agency should provide assurance that these standards will not be changed for the duration of the National LEV program without allowing the manufacturers an opportunity to opt out.

EPA also received comments requesting that the Agency be required to provide notice to the auto manufacturers (separate from an NPRM) of rulemakings which may implicate the offramp provision. These commenters suggested including a provision in the National LEV program requiring EPA to provide notice of such regulatory proceedings to the person who signs the opt-in statement for each manufacturer.

### Response

EPA believes it is appropriate to adopt the designation of standards as Stable Standards largely as proposed for the National LEV program, with some modifications discussed below, to support the goal of program stability. The Stable Standards and the related offramp provisions strike an appropriate balance between the minimal risk that EPA will revise a Stable Standard in a way that does not fall within one of the specified exceptions, and the need for clarity and certainty regarding the obligations of manufacturers who have entered into the voluntary National LEV program. The Agency cannot, and is not, giving up its mandatory or discretionary authority to modify any of the Stable Standards, but is merely allowing the auto manufacturers an opportunity to opt out of the National LEV program if EPA decides to make certain changes to such standards. The discussion below, together with that in the NPRM, provides a standard-by-standard analysis of each Stable Standard and EPA's justification for including each as a Stable Standard.

EPA is adopting the proposed structure of Core and Non-Core Stable Standards, with some adjustments to the placement of certain elements in each category, both to further the goal of harmonizing the federal and California motor vehicle emissions control programs and to provide manufacturers additional incentive to opt into the more stringent, voluntary National LEV standards. The Core Stable Standards include those standards and requirements that are more stringent than what EPA could impose under the Clean Air Act at this time. These are the LEV exhaust standards (for TLEVs, LEVs, ULEVs, and ZEVs) and the NMOG fleet average standard. In addition, EPA is also including in the Core Stable Standards those requirements that are inextricably linked to these voluntary standards.

The LEV standards are clearly more stringent than those EPA itself could impose under the Act without manufacturer acceptance. EPA believes it is appropriate to include as Stable Standards the test procedure and test fuel specifications used to measure compliance with the LEV standards, because revisions to the manner in which vehicles are tested for certification and compliance may affect the ability of manufacturers to meet the underlying standard. Because manufacturers are volunteering to certify vehicles to more stringent underlying standards than EPA could mandate at this time, it is reasonable and appropriate to provide some certainty regarding the manner in which the cleaner vehicles will be tested, to provide manufacturers assurance that changes to test procedure and test fuel specifications will **not** result in a program that is more difficult to meet than that which they volunteered to meet.

The NMOG fleet average standard adopted today is also more stringent than the overall fleet NMOG level EPA could require under the Act. EPA believes it is appropriate to include the averaging, banking, and trading provisions and the low volume manufacturer phase-in in the Core Stable Standards because these provisions are inherent in determining compliance with the NMOG fleet average. The fleet average standard is set at a level that manufacturers may meet through the use of banking and trading -- changes to the banking and trading provisions could affect the effective stringency of the fleet average standard. Therefore, because manufacturers are volunteering to meet the NMOG fleet average standard, it is reasonable and appropriate to provide certainty regarding the provisions that manufacturers expect to use to achieve compliance with the voluntary standard.

In addition, EPA is including the limitations on sale of Tier 1 vehicles and TLEVs in the Core Stable Standards. Starting in MY2001, the industry-wide number of Tier 1 vehicles and TLEVs sold in the NTR in a given model year is capped at five percent of the total number of new NLEVs sold in that model year in the NTR. Also, manufacturers may sell Tier 1 vehicles and TLEVs in the NTR after MY2000 only if the same engine families are certified and offered for sale in California in the same model year as Tier 1 vehicles and TLEVs. These provisions are similarly more stringent than what EPA could require under the Act for those model years. If EPA were to tighten the five percent cap to reduce further the number of Tier 1 vehicles and TLEVs sold in the NTR, manufacturers that had opted into the program would be subject to more stringent limitations than EPA could unilaterally impose or than the manufacturers had volunteered to meet. Therefore, it is similarly reasonable and appropriate to provide the manufacturers certainty regarding the limitations on sale of Tier 1 vehicles and TLEVs.

EPA is also including the low volume manufacturer definition and phase-in schedule in the Core Stable Standards. Manufacturers who qualify as low volume under the definition adopted today will not be required to comply with the fleet average NMOG standard until MY2001. These manufacturers are volunteering to meet this standard, which is more stringent than what EPA could require under the Act for that model year. It would be unreasonable to expect such manufacturers to opt into a program with a particular understanding of when the requirements of that program will apply to them, if the applicable date or the criteria for qualifying as a low volume manufacturer could be changed at any time. If EPA limits the scope

of the definition of low volume manufacturer for National LEV, or accelerates the phase-in schedule, manufacturers who opted into the program expecting to qualify as low volume manufacturers would be subject to requirements on a schedule they did not volunteer to meet. Therefore, to protect the reasonable expectations of low volume manufacturers, and to provide them additional incentive to opt into the National LEV program, EPA is including the low volume manufacturer provisions in the Core Stable Standards.

The Non-Core Stable Standards includes those federal standards and requirements that EPA has determined are unlikely to be revised in the time frame of the National LEV program, except in certain specific cases. Unlike the voluntary LEV standards and NMOG fleet average standard, EPA has authority to impose the Non-Core Stable Standards. Moreover, the Non-Core Stable Standards are not inextricably linked to the LEV standards or the NMOG fleet average standard. Therefore, EPA has retained the flexibility it expects to use during the time frame of the National LEV program to modify the Non-Core Stable Standards, while providing manufacturers with some degree of certainty regarding the level of stringency of these standards for purposes of the National LEV program.

EPA designated certain standards and requirements as Non-Core Stable Standards after conducting a thorough evaluation of each standard to determine whether the Agency is likely to make changes in the time frame of the National LEV program. This evaluation is described below, and in the NPRM. EPA concluded that changes to the Non-Core Stable Standards for the model years covered by National LEV are likely to be technical amendments that do not affect stringency, changes to harmonize with comparable California requirements, or changes to which manufacturers would not object.

EPA is designating the on-board diagnostics (OBD) requirements as Non-Core Stable Standards. The National LEV final rule requires OBD systems that meet California's OBD phase II requirements (except for California's anti-tampering provisions). The OBD requirements arguably could be in the set of Core Stable Standards because they can be more stringent than current federal requirements in the key areas of catalyst deterioration, engine misfire, and evaporative emission system leak detection. However, EPA believes it is important that, without triggering an offramp, EPA have the ability to change the OBD requirements for NLEV vehicles to harmonize with the California requirements for the same model year. With this ability to harmonize NLEV and CAL LEV OBD requirements, it is unlikely that EPA would need to make additional changes to the OBD requirements.

EPA is designating the off-cycle FTP standards and test procedures (Supplemental Federal Test Procedure or SFTP) as Non-Core Stable Standards. EPA promulgated the off-cycle FTP standards and SFTP in a final rule signed on August 15, 1996. (61 FR 54852 (October 22, 1996)). Off-cycle emissions standards for vehicles certified to the LEV standards under National LEV will initially be based on a level of stringency equivalent to the federal Tier 1 standard, because the Agency did not have an adequate basis to take comment in the NPRM on off-cycle requirements at a level of stringency equivalent to the LEV standards. As discussed more

thoroughly in the preamble to the final rule, section IV.B.5.a, EPA intends to take further comment in the SNPRM on what off-cycle standards and phase-in should apply to all vehicle types in the National LEV program.

EPA is aware that CARB is currently exploring FTP off-cycle standards and requirements at a LEV-equivalent stringency level. If CARB adopts such standards, EPA will assess the cost-benefit implications of adopting similar standards for the National LEV program, and will make a determination at that time whether it is appropriate to harmonize federal off-cycle standards and requirements for National LEV with California. For this reason, it is necessary for EPA to retain the flexibility to revise the off-cycle FTP, once it is adopted, to harmonize with California (if appropriate). In addition, EPA expects that it will need to make technical adjustments to the off-cycle FTP after adoption and initial implementation, based on the Agency's experience in adopting other new requirements for motor vehicles. Therefore, EPA intends to designate the off-cycle FTP standards and test procedures as Non-Core Stable Standards, allowing the Agency to make technical amendments that do not affect stringency and changes to harmonize with California, without triggering a manufacturer offramp.

EPA is including the federal cold CO requirement in the Non-Core Stable Standards through MY2001. EPA has a statutory obligation to revisit the cold CO standard under section 202(j) of the Clean Air Act, and to make changes, if necessary, effective with MY2001. Given the stringency of current standards, progress in reducing ambient CO levels, and the leadtime required to promulgate new rules, EPA does not believe it will be necessary to revisit the cold CO standard prior to the statutorily mandated time. Because of the section 202(j) requirement, EPA is exempting changes made pursuant to this provision of the Act from triggering a manufacturer offramp from National LEV. Therefore, if EPA determines that it is necessary to revise the cold CO standard to make it more stringent beginning in MY2001 or later, such revision would not provide manufacturers an opportunity to opt out of the National LEV program. Without such an exemption for changes pursuant to section 202(j), the requirement that EPA revisit the cold CO standard and the likelihood that EPA will revise it in the time frame of National LEV would jeopardize the stability of the National LEV program.

EPA is including the federal evaporative emissions requirement in the Non-Core Stable Standards. At the time this rule was proposed, EPA was undertaking a study of the relative stringency of the federal and California evaporative emissions test procedure, and specifically of the stringency difference between federal and California fuel RVP and temperature specifications for evaporative emissions testing. Pending the results of that study, EPA proposed to modify the federal evaporative test procedure to adopt California fuel and temperature specifications, to further the goal of harmonizing the federal and California motor vehicle programs.

Since the time of the National LEV proposal, considerable activity has occurred in the area of the evaporative emissions requirement. First, EPA and CARB have conducted tests to determine the relative stringency of the federal and CARB evaporative emissions test procedures. EPA's test data demonstrates that the federal specifications for temperature and fuel RVP in the



evaporative emissions test procedure are, in combination, more stringent than the comparable CARB specifications. EPA understands that CARB agrees the EPA test data support a conclusion that the federal test procedure is more stringent than the CARB test procedure. Moreover, CARB has indicated to EPA that, if its own test results are consistent with EPA's, it will change its evaporative emissions test procedure to adopt EPA's specifications for temperature and fuel RVP.

In addition to evaluating the relative stringency of the federal and CARB test procedures, EPA and CARB are currently considering a proposal made by the auto manufacturers to revise and streamline the evaporative emissions test procedure. Discussions among EPA, CARB, and manufacturers' staff are currently ongoing. It is not clear at this time whether EPA or CARB will revise their test procedures according to the manufacturers' recommendations. Given that the manufacturers have suggested these revisions, EPA does not believe that any such revisions would trigger an off-ramp.

EPA is including the onboard refueling vapor recovery (ORVR) requirement in the Non-Core Stable Standards. The current ORVR requirement is phased-in beginning in MY1998, with full phase-in for LDVs and LDTs completed in MY2003. Therefore, technical in-use information from vehicles equipped with ORVR controls is unlikely to be available before the end of the National LEV program. The National LEV rule's opt out provisions allow EPA to make changes to the Non-Core Stable Standards, including ORVR, effective in MY2007. Therefore, in light of the timing of relevant data availability, and the lead time required for adopting and imposing a new requirement, EPA is confident that inclusion of the ORVR requirement in the Non-Core Stable Standards will not impose a practical constraint on EPA rulemaking. EPA is not aware of any significant technical shortcomings or unregulated refueling emissions that would render more stringent ORVR requirements necessary in the time frame of the National LEV program, and received no comments on the issue.

This evaluation of each Non-Core Stable Standard demonstrates that it is reasonable and appropriate for EPA to provide some degree of stability regarding the federal motor vehicle emissions control program, in exchange for manufacturers volunteering to meet more stringent exhaust emissions standards than EPA could require at this time. In addition, EPA has determined that it is reasonable to allow manufacturers to opt out of the National LEV program if EPA revises the LEV standards or the fleet average NMOG standard, since those standards constitute the heart of the manufacturers' voluntary agreement. Manufacturers would likely have insufficient incentive to opt into the National LEV program if EPA could revise the more stringent, voluntary standards in a manner that the manufacturers did not anticipate when they signed up to the program. Since EPA does not have authority to impose these more stringent, voluntary standards without manufacturer approval, allowing manufacturers an offramp for changes to these standards does not unduly restrict EPA's rulemaking authority under the Clean Air Act.

For these reasons, EPA believes that it is not abdicating its regulatory authority by designating the listed standards as Stable Standards in the National LEV program. As described more fully above and in the NPRM, EPA evaluated each Stable Standard adopted today to determine whether the Agency is likely to make changes to any of these standards in the time frame of the National LEV program that would trigger a manufacturer offramp. EPA concluded that changes to the proposed Non-Core Stable Standards applicable to the model years of the National LEV program are likely to be technical amendments that do not affect stringency, revisions to harmonize with comparable California requirements, or changes where the auto manufacturers agree with EPA's determination that such a change is appropriate.

To account for changes to the Stable Standards EPA expects to make in the time frame of the National LEV program, the Agency carved out exceptions to allow such changes without triggering an opportunity for the auto manufacturers to opt out of National LEV. An additional exception is included for changes to the cold CO standard under EPA's statutory obligation to revisit this standard and to make changes, if necessary, effective in MY 2001 or later. These exceptions are essential to ensure that the National LEV program will remain in effect and will be enforceable for its expected lifetime. Without such exceptions, the likelihood that EPA will take action that triggers an offramp is too high to find the National LEV program sufficiently stable. Based on its standard-by-standard analysis of each element in the Stable Standards, EPA concluded that it is not necessary to provide an exemption to the offramp provision for changes to a regulatory requirement in the first few years after such requirement is adopted. EPA expects that any changes to the Non-Core Stable Standards in that time frame are likely to be technical amendments that do not affect stringency, or changes that ease the burden of compliance, to which manufacturers would not object. For the Core Stable Standards, EPA believes it is appropriate to provide assurance to the manufacturers that the Agency will not modify such standards to make them more stringent as part of the exchange for manufacturers volunteering to meet those standards.

The Stable Standards, and the related opt-out provision, do not preclude EPA from exercising its discretionary authority under the Clean Air Act to revise these standards at any time in the future. As described above, EPA evaluated the Non-Core Stable Standards and has carved out exemptions from the offramp provision for changes the Agency anticipates making to such standards in the time frame of the National LEV program. In the event that EPA considers a revision to a Non-Core Stable Standard outside one of these exemptions while the National LEV program is in effect, the Agency will factor in the possibility that manufacturers may opt out of the voluntary National LEV program if such revision is adopted. If the revision being considered would achieve significant emissions reductions beyond those achieved by the voluntary National LEV tailpipe standards and NMOG average, EPA may decide to go forward with such revision in spite of the risk that manufacturers will opt out of National LEV. Conversely, if the revision being considered would not achieve emissions reductions comparable to those achieved by the voluntary standards, it is reasonable and appropriate for EPA to determine that the benefits of continuing the National LEV program outweigh the benefits of such revision. Therefore, although EPA is likely to consider the effects of revisions to the Non-

Core Stable Standards on the National LEV program, the designation of certain standards as Non-Core Stable Standards for purposes of the National LEV program does not preclude EPA from revising those standards pursuant to the Agency's authority under the Clean Air Act.

(ii) *Defeat Device and Durability Provisions*

Response

EPA disagrees with commenters who requested that defeat device and durability provisions be included in the set of Stable Standards for the reasons given in the final rule preamble and the NPRM. 60 FR 52744 (col. 3).

(iii) *Composition of "Core" Stable Standards*

Response

See discussion in preamble to final rule and in section II.A.2.f.(i) above.

(iv) *Notice to Manufacturers of Expected Rulemaking*

Response

EPA does not believe it is necessary or appropriate for the Agency to provide separate, individual notice to each auto manufacturer regarding all regulatory proceedings that may trigger an opt-out opportunity. While EPA agrees that it is important that manufacturers are aware of any rulemakings that might provide an offramp, the Agency does not believe that any particular process or requirement beyond the current rulemaking process is necessary here. EPA works closely with manufacturers on virtually every major rulemaking or minor technical adjustment in the motor vehicle program requirements. EPA provides formal notice of all rulemakings in the Federal Register, and manufacturers closely monitor the regulatory process. EPA is confident that these current informal and formal procedures to notify manufacturers of new motor vehicle regulations will continue to ensure that manufacturers have actual notice of any rulemaking that could potentially implicate an opt out trigger.

**3. Duration of Program**

Proposal

As proposed, the National LEV program standards would remain in place at least through MY2003 and possibly through MY2006. The proposal specified that if, by December 15, 2000, EPA has signed a final rule establishing new, mandatory tailpipe standards at least as stringent as the National LEV standards that become effective in MY2004, MY2005 or MY2006, then National LEV would remain in effect until those new standards became effective. If EPA did not

issue regulations meeting those conditions, then National LEV would end with MY2003. In that event, manufacturers would be required to meet federal Tier 1 standards starting in MY2004 in any state where they were not required to meet California or OTC LEV standards. EPA also requested comment on an alternative program duration that would extend the National LEV program until the first model year in which manufacturers must meet new, mandatory federal tailpipe standards at least as stringent as National LEV.

### Comments

Two commenters (84, 44) expressed support for regulatory language that would be consistent with the MOU provisions on program duration. Another (84) also stated no objection to continuing the National LEV program in the absence of Tier 2 regulations providing that the OTC States agree to such a change. Commenter 44 also commented that the National LEV standards should be found to satisfy the requirements for Tier 2 standards if Tier 2 is found to be necessary under the CAAA of 1990.

One commenter (77) gave support to the language in the proposed regulations regarding program duration. According to the commenter, the proposed language provides an incentive for EPA to take timely action on establishing a new tailpipe standard that is at least as stringent as the National LEV program that becomes effective as early as MY2004. The commenter noted that the other option under consideration does not provide such an incentive. Other commenters (53, 58, 88) expressed support for the option that would maintain the National LEV program until the first model year of equivalent or more stringent standards. One (53) noted that the proposal allowing National LEV to end in 2003 if EPA did not promulgate Tier 2 standards is insufficient because there would be insufficient incentive to force future emissions reductions. Another (88) noted that allowing National LEV to end prior to promulgation of equivalent mandatory standards would hinder state efforts to reduce ozone pollution. One commenter (5) stated that the proposal allowing National LEV to end in 2004 provides no assurance that any emissions benefits will occur after 2003. Any possible benefits would depend on whether EPA promulgates the Federal Tier 2 standards by December 15, 2000, which is outside of the states' control.

Two commenters (37, 83) stressed that under no conditions should any of the OTC States return to Tier 1 standards unless all the OTC States have demonstrated attainment of the NAAQS. One commenter (81) stated that the proposed termination date provides an incentive for EPA to act within the dates required by the CAA to promulgate Tier 2 standards. It stated that the best means of achieving stability is through promulgation of Tier 2 standards, and that EPA should seek promulgation of Tier 2 standards as soon as provided for in the CAAA of 1990.

### Response

EPA is promulgating regulations that will allow the National LEV program to continue until the EPA promulgates mandatory national regulations that are at least equivalent in

stringency (on a fleetwide basis) to the National LEV program. If EPA promulgates such regulations, then the National LEV program will end in the first model year in which the mandatory regulations are at least equivalent in stringency on a fleetwide basis to the National LEV program. For EPA's rationale and response to comments regarding this change from the proposal, see the preamble to the final rule, section IV.A.3.

Regarding comments (44, 84) that the regulations regarding this issue should be consistent with the final MOU provisions, EPA agrees that the final MOU should include language consistent with the decision promulgated in this final rule. EPA believes that, for the reasons given above, the signatories to the MOU should agree with EPA's determination that the National LEV program should continue until more stringent national mandatory standards are implemented.

## **B. Emission Standards and NMOG Curve**

### **1. Tailpipe Emission Standards**

#### Proposal

As proposed, the National LEV emission standards are closely patterned after the CAL LEV emission standards. The standards would apply to light-duty vehicles (LDVs) and light light-duty trucks (LLDTs). Under the provisions of the proposed program, manufacturers would have to certify all LDVs and LLDTs to one of five "vehicle emission categories," each of which has a unique set of emission standards. These categories are the current federal Tier 1 standards and the California sets of emission standards for TLEVs, LEVs, ULEVs, and ZEVs.

In addition to the California emission standards, EPA proposed that TLEVs, LEVs, and ULEVs certified under the National LEV program be required to comply with the federal Tier 1 standards for total hydrocarbon (THC) and particulate matter (PM) standards. The Clean Air Act requires that all LDVs and LLDTs meet these standards beginning in MY1996. California emission standards do not include a THC standard or a 50,000-mile standard for PM, and the California 100,000-mile PM standard applies only to diesel vehicles, whereas the federal Tier 1 PM standards apply to all vehicles.

#### a. Flexible-Fuel Vehicles and Dual-Fuel Vehicles Certification

#### Comments

Several commenters raised various issues concerning the proposed National LEV emissions standards. Two (40, 39) objected to the proposed provisions regarding the applicable certification standards for flexible-fuel and dual-fuel vehicles. Flexible-fuel and dual-fuel vehicles are required to meet the NMOG standard applicable to the vehicle emission category to which the vehicle is certified when tested on an alternative fuel, but when tested on gasoline the

applicable NMOG standard is that which applies to the next highest (less stringent) vehicle emission category. One commenter (40) believes this is inconsistent with the "reasonable further progress" requirements of title I of the CAAA of 1990, and another (39) believes that this requirement constrains the utilization and benefits of cleaner burning alternative fuels because of necessary adjustments of the system to burn less-clean gasoline, hence diminishing the benefits of an emissions reduction program.

#### Response

The National LEV program adopts California's approach to certification of flexible-fuel and dual-fuel vehicles. The two-tier system of NMOG standards for such vehicles was developed by California to allow manufacturers of these vehicles to optimize the emission control system for the alternative fuel rather than for conventional gasoline, thus promoting rather than constraining the use of alternative fuels. EPA adopted California's flexible-fuel and dual-fuel vehicle provisions for the Clean Fuel Vehicle program pursuant to section 243 of the CAA.

Commenter 40 did not provide support for the assertion that the two-tier system is inconsistent with the "reasonable further progress" requirements of the CAAA of 1990. The Agency investigated this issue and did not find any inconsistency between the proposed two-tier NMOG standards and the "reasonable further progress" requirements.

#### b. Compliance with Federal THC Standards

#### Comments

One commenter (44) requested that EPA clarify that vehicles in the National LEV program be allowed to use California fuels for demonstrating compliance with the applicable federal THC standard. The commenter argued that requiring compliance on federal fuel "would add substantial workload and complexity to the process" and suggested that the overall greater stringency of the California standards should justify allowing the use of fuel meeting California's specifications.

#### Response

The Agency believes that there is a mechanism already in place in the federal regulations that will allow manufacturers to avoid expending considerable additional resources demonstrating compliance with the THC standard. In its final rulemaking implementing the Tier 1 standards (56 FR 25724), the Agency determined that in most cases the new NMHC standards would control vehicle emission system design for conventionally fueled current technology vehicles, rather than the THC standard (carried over from pre-Tier 1 standards). The current Tier 1 regulations allow manufacturers to demonstrate compliance with the federal THC standard through submitting engineering analyses or test data. These regulations allow submission of

THC emissions data to be waived if the manufacturer can "demonstrate (on the basis of previous emission tests, development tests, or other information) that the engine will conform with [the] applicable emission standard[]" (40 CFR 86.098-23(c)). This waiver provision allows the applicability of test data and engineering evaluations across a broad range of engine families. The manufacturer is required to reapply for the waiver for each new certificate. These provisions are available to vehicles in the National LEV program, and the Agency expects manufacturers to use these provisions to avoid additional testing with the federal fuels.

### c. Medium-Duty Vehicle Standards

#### Comments

EPA received a comment (69) requesting that the Agency adopt standards for vehicles between 6000 and 8500 lbs gross vehicle weight rating (GVWR) in the National LEV program. The commenter stated that National LEV standards for such vehicles would make it easier for fleet operators to comply with the purchase requirements of state Clean Fuel Fleet Programs by making LEVs (or cleaner vehicles) in this weight category more widely available.

#### Response

EPA did not propose and cannot now adopt National LEV standards for such vehicles. EPA notes that clean-fuel vehicle standards for this category of vehicles were adopted in September, 1994, allowing manufacturers to obtain federal certificates for TLEVs, LEVs, ULEVs, and ZEVs in the weight range of 6000-8500 lbs GVWR (see 40 CFR Part 88, Subparts A, B, and C).

## **2. Fleet Average NMOG Credit Program**

#### Proposal

EPA proposed to allow manufacturers to use a market-based approach to meeting the fleet average NMOG requirements for LDVs and LLDTs through averaging, banking, and trading NMOG credits and debits. Fleet average NMOG credits and debits would be calculated in the same manner as under the California regulations. Credits and debits would be calculated in units of g/mi as the difference between the fleet average NMOG standard and the fleet average NMOG value achieved by the manufacturer, multiplied by the total number of vehicles the manufacturer produced in a given model year and delivered for sale in the applicable regions, including ZEVs and HEVs. A manufacturer would generate credits in a given year if its fleet average NMOG value was lower than the fleet average NMOG requirement for that model year. Debits would be incurred when a manufacturer achieved a fleet average NMOG value above the NMOG value required for that model year. A manufacturer's balance for the model year would equal the sum of the credits earned and debits incurred.

EPA also proposed to include geographic limits on both calculation of fleet average NMOG values and offset of debits with credits. Prior to MY2001, the fleet average NMOG standard would apply only to vehicles produced and delivered for sale within the OTR. To ensure that the voluntary program continues to produce emissions reductions comparable to those that would be achieved by OTC state-by-state adoption of CAL LEV programs, from MY2001 on, credit and debit averaging would be conducted in two separate regions: the OTR and the remaining 37 States, excluding both California and the OTR. The NMOG average, credits, and debits for a regional fleet would be based on vehicles produced and delivered for sale in each region, and each regional fleet average would have to meet the applicable NMOG standard independently. Refer to the October 10, 1995, NPRM (60 FR 52734) for a complete discussion of the proposed credit program.

a. Structure of Fleet Average NMOG Credit Program

Comments

The fleet average NMOG trading program proposal generated a number of comments. Some parties (44, 81, 84) stated that the National LEV credit program should be the same one used in California's LEV program. Another commenter (28) felt that EPA's proposal should not be based on California's program because it was too complex.

The way credits are treated under the National LEV program was a topic for comment. One commenter (83) stated that credits used in subsequent model years should be deeply discounted and all credits should expire within three years. Another (28) proposed that credits should not expire after one year, but should be able to be banked.

Commenters (28, 74) approved of EPA's proposal to include the entire Commonwealth of Virginia in the OTR trading region, as opposed to including only the portion of the state included in the Consolidated Metropolitan Statistical Area that includes the District of Columbia. One commenter, the Commonwealth of Virginia, specified that this would be the only purpose for which it would agree to include the entire state in the OTR.

Several commenters (58, 74) supported expanding the proposed trading program to make it national in coverage as well as to provide for inter-sector trading. A commenter (74) stated that an intersector trading program could be linked with EPA's Open Market Trading program. Another commenter (71) stated that in determining compliance with the fleet average NMOG standards, the National LEV program should allow manufacturers to earn credits for advanced technologies that allow motor vehicles to reduce the amount of ground-level ozone.

Response

The fleet average NMOG trading program, like most other aspects of the National LEV program, was designed to be as similar to the applicable CAL LEV provisions as practical. The



National LEV program grew out of discussions concerning the adoption of the CAL LEV program by the OTC States, and the automakers and the OTC States have agreed that National LEV should mirror CAL LEV to the greatest extent possible. EPA believes that the CAL LEV NMOG trading program is a good model for the National LEV program. Thus, the basic structure of the averaging, banking, and trading portion of the National LEV program follows California requirements. However, due to differences in federal and state enforcement authorities and the necessity for different trading areas and fleet average NMOG requirements, some of the National LEV averaging, banking, and trading provisions must differ from California's.

Specifically, in committing to accept National LEV, the OTC States would forgo state-by-state adoption of CAL LEV programs. While equivalence of emissions reductions under National LEV and OTC LEV is no longer a legal requirement for the National LEV program, the OTC States must still be satisfied that National LEV will produce an acceptable quantity of emissions reductions, compared to the quantity of reductions that the OTC States could achieve through state-by-state adoption of CAL LEV programs. To assure a given quantity of emissions reductions in the OTR under National LEV, manufacturers must show that they are achieving compliance with the fleet average NMOG standards based on the vehicles sold in the OTR. Thus, even after MY2000 it is necessary to keep the OTC States as a separate trading region with its own fleet average NMOG standards (designated the Northeast Trading Region or NTR), rather than allowing nationwide trading.

Another difference from the CAL LEV program stems from the two-step implementation of National LEV, which begins in the OTR in MY1997<sup>2</sup>, and expands nationwide (except California) starting in MY2001. National LEV contains provisions designed to encourage early introduction of cleaner vehicles in the 37 States and addresses the potential problem of windfall credits, which should not be an issue under California's program.

In addition, EPA must rely on federal enforcement authority to implement National LEV as a federal program. Some of the enforcement mechanisms, such as conditioning certificates (discussed in more detail below) and penalties, differ from the California program to make them compatible with the specific enforcement provisions of the CAA and EPA's general enforcement practices, where appropriate. Working with the affected parties, EPA has tried to make the burden associated with the averaging, banking, and trading regulations as minimal as possible. The ways in which National LEV does differ from CAL LEV impose little or no additional burden on manufacturers in terms of having to comply with two different regulatory trading programs. See the preamble to the final rule, section IV.B.3, for further discussion of the National LEV and CAL LEV program specifics.

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<sup>2</sup>Throughout this final rulemaking, EPA is using MY1997 as a placeholder for the start date of National LEV. MY1997 is the start date in the MOUs initialled by the auto manufacturers and the OTC States. However, EPA believes that MY1997 is an unrealistic start date given the court decision vacating EPA's OTC LEV decision and given the likely timing of final agreement on National LEV. In the upcoming SNPRM, EPA will take comment on the appropriate start date for National LEV.

Credits generated under the National LEV averaging, banking and trading regulations are discounted to zero over a period of three model years. These are the same discounting rates applied in the CAL LEV program. EPA believes that these rates provide an appropriate incentive for manufacturers to generate and use credits in a timely manner. As EPA explained in the NPRM, discounting helps to ensure that credits given for possibly less effective earlier technology are not used years later to displace superior technology. Discounting also helps to prevent excessive accumulation of credits. Yet, gradual discounting over time still allows credits to be banked for future use prior to expiration, providing manufacturers valuable compliance flexibility. The Agency believes that this credit discounting approach helps ensure that real reductions are achieved in a cost-effective manner.

As proposed, EPA is including the entire Commonwealth of Virginia in the NTR for purposes of assessing compliance with the fleet average NMOG standard and the other provisions of National LEV. The Agency notes there was no opposition to this proposal. Justification for this action is set out in the preamble to the proposed rule. EPA confirms Virginia's understanding that inclusion in the NTR solely for purposes of compliance with the National LEV requirements does not affect Virginia's other OTC obligations.

Nothing in the National LEV program precludes intersector trading. However, no specific provisions regarding this item are included in the program at this time since it is unclear how the National LEV program would fit into future trading programs that have not yet been developed.

EPA believes it is premature at this time to attempt to evaluate how to address the emissions reductions that might be achieved by ozone-reducing technologies. The current state of development of these technologies does not yet allow quantification of such reductions.

#### b. Credits in the 37 States

##### Proposal

EPA proposed to allow manufacturers to earn and bank credits in the 37 States region prior to MY2001 for later use in the 37 States. EPA also proposed to allow low volume manufacturers to earn credits in the OTR prior to MY2001 for transfer to other manufacturers for use in the OTR.

EPA requested comments on the issue of whether allowing manufacturers to generate credits in the 37 States prior to MY2001 would lead to the generation of windfall credits. Windfall credits are credits that are generated without achieving additional emissions reductions because the manufacturer would have made the same production choices even in the absence of available credits.

##### Comments

The question of whether to allow manufacturers to generate credits in the 37 States before National LEV applies in that area in MY2001 generated comments both for and against EPA's proposal. Two commenters (37, 82) based their opposition to early reduction credits on their belief that LEV-certified vehicles driving in the 37 States will degrade more quickly than those in the OTR, due to the lack of available cleaner reformulated gasoline and enhanced vehicle inspection and maintenance programs. On the other hand, another commenter (44) stated that EPA should allow generation of credits in the 37 States prior to MY2001 because this would provide manufacturers incentives for early emission reductions and additional flexibility. This commenter also asserted that EPA should treat any credits earned in the 37 States prior to MY2001 as if earned in MY2001 for credit discounting purposes because this would be consistent with California requirements.

Commenters were split on the issue of the potential of the National LEV program to create opportunities for windfall credits. One commenter (3) stated that EPA should carefully tailor the National LEV program in order not to create windfall emission credits for the early sale of vehicles. Conversely, another commenter (84) called EPA's idea of windfall credits "inefficient, unfair, and unworkable" and said there is no such thing as windfall credits. This commenter also stated that EPA will never be able to determine the "but-for world where credits did not exist" that would be necessary to identify windfalls and that any manufacturer complying early should be rewarded.

### Response

After reviewing the comments received, EPA believes that manufacturers should be allowed to generate credits in the 37 States prior to MY2001 and that these credits should generally be treated for discounting purposes as if they were generated in MY2001, except as discussed below. The availability of early reduction credits should provide manufacturers an incentive to introduce cleaner National LEV-certified vehicles into this region before the required introduction date. Additionally, allowing credits for early introduction of NLEVs in the 37 States is consistent with the CAL LEV program's treatment of early introduction of CAL LEV vehicles by manufacturers. However, EPA will apply a one-time discount of ten percent to all early reduction credits earned in the 37 States to ensure that the environmental benefits of National LEV are maintained, in light of the potential for windfall credits. For a manufacturer to receive credits it will have to demonstrate that its fleet average NMOG values are below the applicable requirements, and hence such a manufacturer will be required to follow the National LEV reporting requirements. See the discussion in the preamble of the final rule for a detailed explanation of EPA's rationale for its approach to early reduction credits.

EPA does not agree with the view that providing credit for early introduction of NLEVs in the 37 States before MY2001 is not appropriate due to the lack of enhanced I/M and cleaner reformulated gasoline in that area. The proper comparison for early introductions in the 37 States is not to vehicles being operated in the OTR but to vehicles that would be operated in the 37

States after MY2001 because these are the vehicles for which early reduction credits would substitute. While the lack of enhanced I/M or cleaner gasoline might make vehicles deteriorate faster in the 37 States, any such faster deterioration would continue to apply to vehicles sold after MY2001. Thus, early NLEVs in the 37 States should generally produce equivalent emissions to later NLEVs in the 37 States, and credits for such early vehicles could be properly applied to offset emissions from later vehicles.

The proposed regulations concerning the ability of low volume manufacturers to earn credits in the NTR prior to MY2001 stated that such credits could only be transferred to other manufacturers for use in the NTR. EPA is modifying these regulations to allow low volume manufacturers to earn, bank, and transfer these credits as they wish, although still only for use in the NTR. This change makes credit treatment between all manufacturers in the NTR consistent at all times. It also provides low volume manufacturers an additional incentive to introduce cleaner NLEVs in the NTR before they are required to in MY2001. These credits will be discounted according to the generally applicable annual discount rates established in 40 CFR § 86.1710-97(c).

#### c. Reporting Requirements

##### Comments

A commenter (84) stated that vehicle tracking requirements in the National LEV program should not differ from those found in the Tier 1 program. Specifically, the commenter suggested that EPA's proposal to require manufacturers to track vehicles to the point of first retail sale should be changed to require tracking to the point of first sale. The commenter noted that manufacturers do not sell vehicles to the ultimate purchaser. This commenter also asked EPA to add regulatory language that would allow manufacturers to petition the Agency to allow use of actual U.S. production values in lieu of actual U.S. sales in making compliance calculations.

The commenter also suggested that EPA provide alternatives to the reporting and tracking requirements if certain conditions are met. It stated that a manufacturer that chooses to produce 100 percent LEVs in MY2001 or later model years in the entire 49-state area, and that is already in compliance in the OTR, should not be required to produce separate volume counts for the two trading regions for the purpose of submitting separate fleet average NMOG compliance reports.

##### Response

EPA has revised the regulations to require vehicle tracking to the point of first sale. EPA did not intend to require manufacturers to track vehicles to the point of first retail sale since the Agency recognizes both the additional burden this would entail and the fact that it would represent a change from the requirements under the Tier 1 program. EPA does not expect any

practical difference in manufacturer compliance levels or emissions reductions from this change. The preamble to the final rule discusses this issue further in section IV.B.2.b..

Production data cannot be used to show compliance with the fleet average NMOG standards due to the requirements for separate sales calculations for the NTR and the 37 States. However, EPA has included provisions that allow a manufacturer to reduce its reporting burden if its production fleet is comprised only of vehicles certified to emissions levels at or below the applicable fleet average NMOG standards. In this case, a manufacturer need not report compliance data for the two separate trading regions because it can simply show that every vehicle in its fleet is certified at or below the fleet average NMOG standards, and thus the averaging sets for the two regions must necessarily comply with the fleet average NMOG standards. See the preamble to the final rule section IV.B.2.d for a more detailed discussion of these reduced reporting requirements.

#### d. Enforcement of Trading Program

##### Comments

EPA received comment on its various proposals for enforcement of the banking and trading program. Some commenters (44, 84) strongly stated that failure to satisfy the fleet average NMOG requirement should only trigger appropriate monetary penalties and should not include a requirement to offset any emissions shortfall. They asserted that California only provides for monetary penalties in this case. Another commenter (50) stated that EPA should retain some enforcement discretion and be able to assess any applicable good faith efforts of a manufacturer to meet requirements before EPA imposes penalties. However, one commenter (83) asserted that any penalties imposed for failure to meet the NMOG fleet average should not remove the obligation on the manufacturers to compensate for the lost emissions reductions.

One commenter (84) opposed EPA's proposal to impose multi-party liability for credit transactions. It stated that EPA does not need to police such transactions because EPA would have sufficient remedies against those using faulty credits, California does not provide for similar liability, and the proposed approach would discourage trading. The commenter suggested that instead, EPA should only impose liability on the user of faulty credits, not the provider.

##### Response

Under the final rule, debits will not continue to roll over automatically until a manufacturer makes them up. Instead, EPA will assess whether a manufacturer met the fleet average NMOG requirement for each model year, based on whether the manufacturer offset its debits for that model year by the deadline. Where a manufacturer has failed to make up debits on time, the manufacturer has violated a condition of its certificate. EPA will identify which vehicles were not covered by the certificate, and the manufacturer will be subject to penalties for sales of nonconforming vehicles, as provided by the CAA. However, there will continue to be

strong incentives for manufacturers to make up debits, in addition to being subject to monetary penalties. See the preamble to the final rule section IV.B.3 for further discussion of why EPA believes this approach is appropriate for the National LEV program.

In response to the comment requesting EPA to assess manufacturers' good faith compliance efforts in imposing penalties, EPA notes that "action taken to remedy the violation" is one of the statutory penalty factors listed in section 205 of the Act. EPA is directed to take these factors into account in determining the ultimate penalty to be assessed. The preamble to the final rule, section IV.B.3.c, discusses these issues in more detail.

EPA agrees that it is not necessary to impose multi-party liability for credit transactions under the National LEV program and has modified the final rule accordingly. EPA will treat traded credits as presumptively valid and will hold the party reporting a shortfall liable for such shortfall. Thus, the credit generator would be liable for any shortfall resulting from a transfer of improperly generated or unavailable credits. For the reasons discussed in the preamble to the final rule section IV.B.3.c, EPA prefers this approach over the commenter's suggestion to apply liability to the user of invalid credits. In instances of fraud, EPA retains authority to pursue either party. See the preamble to the final rule, section IV.B.3.c, for additional detail.

#### e. Exclusion of Government ATV Purchases

##### Comments

Commenters both supported and opposed including government purchases of vehicles under EPAct in a manufacturer's fleet average NMOG calculations. Some commenters (44, 58, 84, G5) believe that federal government purchases for EPAct purposes should be included in a manufacturer's fleet NMOG average calculations. Two commenters (58, G5) argued that excluding EPAct purchases from the fleet average NMOG calculations could provide a disincentive for advanced technology vehicles, while one (G5) added that all EPAct vehicles should be treated the same with regard to inclusion in the fleet average NMOG calculation. Other commenters (3, 69) believe such purchases should be excluded from fleet average NMOG calculations to maximize the air quality benefit of acquiring alternative fueled vehicles over conventional fueled vehicles. One of these commenters (69) also stated that the National LEV program should be expanded to prohibit manufacturers from counting vehicles sent to the 37 States pursuant to EPAct in their fleet average NMOG determinations.

One commenter (88) stated that local governments should not incur additional reporting requirements for vehicles bought pursuant to EPAct because inclusion of these vehicles in the fleet average NMOG calculations would not result in a sufficient loss of benefits to justify imposing a burden on local governments.

##### Response

EPA's proposal to exclude certain vehicles purchased pursuant to EPAct arose out of a request by the OTC States to exclude from the fleet average NMOG calculations vehicles purchased by state governments in the OTR to meet EPAct requirements. The OTC States also requested exclusion of federal government EPAct purchases destined for use in the OTR. The OTC States intended this requirement to promote the sale of advanced technology and alternative fuel vehicles. Since the proposal, the OTC States and the manufacturers have refined their approach to this requirement. Rather than excluding only government purchases of vehicles specifically under EPAct, both initialled MOUs exclude government purchases of ATVs, which they define to include both alternative fueled vehicles and low emitting conventionally fueled vehicles.<sup>3</sup> EPA agrees that this refined approach better serves the OTC States' purpose in pursuing this provision and has incorporated this approach in the final rule.

With regard to the scope of the requirement to exclude government purchases of these vehicles, EPA's proposal was never meant to include local governments and the final regulations do not include these entities. Furthermore, after reviewing the issue of whether federal government ATV purchases should also be excluded from manufacturers' NMOG fleet average calculations, EPA has determined that it would not be feasible for the federal government to track and report ATV purchases to the various manufacturers. The current process used to purchase these vehicles through the General Services Administration does not lend itself to breakdown of sales by state or even region. Additionally, unlike the case for state vehicles, the actual area in which federal vehicles are used often may not correspond to the place where the vehicle was purchased. Thus, it would be difficult to determine whether the federal government used the ATVs in the NTR.

EPA believes that ATV purchases in the 37 States also should not be excluded from NMOG fleet average calculations. Only one of the 37 States indicated an interest in excluding EPAct purchases from the fleet average NMOG calculations. This does not indicate sufficient interest in this option to justify the administrative burden it would entail.

### **3. Limits on Sale of Tier 1 Vehicles and TLEVs**

#### Proposal

The NPRM included a limit on the number of Tier 1 vehicles and TLEVs produced and offered for sale in the OTR. Specifically, beginning in MY2001, manufacturers would be able to offer Tier 1 vehicles or TLEVs for sale in the OTR only if the same engine families are certified and offered for sale in California in the same model year. Additionally, the number of these vehicles would be limited on an industry-wide basis to five percent of the total number of new

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<sup>3</sup>Under the ATV component, ATVs are defined as: (1) a dual fuel, bi-fuel, or dedicated alternatively fueled vehicle certified as TLEV or more stringent when operated on the alternative fuel; (2) classified as a ULEV or ILEV (irrespective of whether conventional or alternatively fueled; or (3) a dedicated or hybrid electric vehicle.

motor vehicles produced and offered for sale under the National LEV program in that model year in the OTR (“five percent cap”).

### Comments

Commenters (44, 84) stated that the approach for the five percent cap should be simple, fair and not burdensome. One commenter (44) supported a program that would measure compliance for the industry as a whole each year and would impose penalties and more stringent reporting requirements for the first model year following the year in which the industry as a whole exceeded the five percent cap. The commenter did not support "an elaborate banking and trading credit scheme." Rather, the commenter suggested, if the industry as a whole exceeded the cap, each manufacturer that sold more than five percent of its total fleet in the OTR as Tier 1 vehicles or TLEVs should be penalized, subject to its ability to offset the average in the preceding or following model year. Another commenter (84) stated that EPA should enforce the five percent cap through a credit/debit trading system, similar to that used for the NMOG average, and should take no enforcement action in a year that the industry-wide average was met. One commenter (50) strongly supported exempting low volume manufacturers from the five percent cap. This commenter stated that low volume manufacturers would have a more difficult time complying with percentage requirements, given their limited production lines, and that the exemption would have virtually no effect on air quality. One commenter (71) recommended that the five percent cap limitations on sales of Tier 1 vehicles and TLEVs should be broadened to remove limitations on sales of these vehicles where their NO<sub>x</sub> emissions are offset by the use of ozone reducing technologies.

One commenter (3) opposed the five percent cap on the grounds that it would limit ULEVs and ZEVs to five percent of vehicles sold, but stated that the cap should provide for a total phase-out of Tier 1 vehicles and TLEVs. Another commenter (83) opposed allowing five percent of vehicles sold to be Tier 1 vehicles or TLEVs unless their NO<sub>x</sub> emissions were offset by ZEVs. Finally, one commenter (66) suggested that EPA should ensure that a five percent cap results in NO<sub>x</sub> emissions equivalent to those that would flow from OTC LEV by comparing actual NO<sub>x</sub> emissions under National LEV with a five percent cap in place, to projected emissions under OTC LEV.

### Response

See the preamble section IV.B.4 for a general discussion of the five percent cap. EPA does not believe that, as a practical matter, the five percent cap will limit sales of ULEVs and ZEVs as suggested. The five percent cap is intended to prevent a situation where sales of much higher numbers of Tier 1 vehicles and TLEVs than reasonably anticipated might produce higher NO<sub>x</sub> emissions than would otherwise occur. The motor vehicle industry has expressed confidence that the five percent cap represents an upper bound on anticipated sales of these vehicles and will not be exceeded on an industry-wide basis. It is unlikely that the five percent cap will serve as an actual restraint on sales of Tier 1 vehicles and TLEVs or that manufacturers



will sell any fewer ULEVs or ZEVs as a result. In addition, manufacturers will have other incentives to sell more ULEVs and ZEVs than required to offset sales of Tier 1 vehicles and TLEVs. Manufacturers can use sales of cleaner vehicles to generate credits for banking or trading.

EPA believes it is premature at this time to attempt to evaluate how to address the emissions reductions achieved by ozone reducing technologies. The current state of development of these technologies does not yet allow quantification of such reductions. When the technology is further developed, EPA would be better able to assess how the emissions reductions achieved could be credited in motor vehicle emissions control programs.

EPA does not believe it is necessary to attempt to verify NOx equivalency under National LEV with OTC state-by-state adoption of CAL LEV by comparing actual NOx emissions under National LEV with a five percent cap in place to projected emissions under OTC state-by-state adoption of CAL LEV. EPA also does not agree with the suggestions to ban all sales of Tier 1 vehicles or TLEVs or to require all such vehicles' NOx emissions to be offset by ZEVs. First, given the court decision overturning the OTC LEV SIP call, equivalency of emissions reductions under National LEV and OTC LEV is no longer a legal requirement for National LEV. Second, prior to program implementation, EPA can only evaluate projected, rather than actual, emissions. Third, actual emissions under National LEV with the five percent cap should be no higher than under the worst case analysis that EPA has already performed, which assumes that five percent of the new light duty vehicles and light light duty trucks sold in the OTR under National LEV are Tier 1 vehicles or TLEVs. As discussed in the preamble, the results of EPA's analysis do not change the conclusion that National LEV with a five percent cap would produce a quantity of emissions reductions equivalent to those that would have been produced by OTC LEV if both programs were implemented as designed. Thus, there is no need to ban or penalize sales of Tier 1 vehicles or TLEVs to achieve essentially the same environmental benefits under the two programs. Moreover, allowing manufacturers to comply by meeting a fleet average NMOG standard has been a fundamental element of both CAL LEV programs and National LEV, as negotiated by the OTC States and auto manufacturers. The fleet average approach is designed to produce a given level of emissions reductions in the most cost-effective manner. This element of the agreement would be eviscerated by either a ban on sales of Tier 1 vehicles and TLEVs in the OTR after MY2001 or a requirement that such vehicles be offset by sales of any particular category of vehicles.

#### **4. Fuel Provisions and Reactivity Adjustment Factors**

##### **a. Reactivity Adjustment Factors**

###### **Proposal**

The proposed National LEV program adopted California's approach of using Reactivity Adjustment Factors (RAFs) to adjust vehicle certification and in-use emission test results to

reflect differences in the impact on ozone formation between an alternative-fueled vehicle and a vehicle fueled with conventional gasoline. The reasons for using RAFs for alternative-fueled vehicles are described fully in the NPRM. California has already developed RAFs for some fuel types and has a process in place for the development of RAFs for fuels that do not yet have them. Additionally, California allows manufacturers to use this process to develop their own engine family-specific RAFs and RAFs for fuel types for which California has not yet developed them. EPA proposed to use the RAFs already adopted by California for alternative-fueled vehicles certifying to the proposed voluntary standards, and to accept the use of new RAFs that California develops for other fuels, as California develops and adopts them. EPA also proposed to allow manufacturers certifying to the proposed voluntary standards to develop their own RAFs, subject to Agency approval, using the California-defined process for RAF development.

### Comments

EPA received comments both supporting and opposing the proposed adoption of California's RAFs, as well as specific comments on how RAFs should be applied to vehicles in the National LEV program. Commenter 41 stated "strong support" for the use of RAFs, citing their own research on the reactivity of emissions from propane-powered vehicles and the opinion that propane vehicles should be adequately "credited" for the inherent reduced reactivity. Several commenters (45, 40, 35) opposed the use of RAFs for the National LEV program. One (45) commented that the process by which RAFs are developed is fundamentally flawed. They commented that the use of a single RAF to represent various fuel-vehicle combinations is inappropriate and simplistic, potentially allowing RAFs that would lead to formation of more ozone than would be created using a mass emissions approach. They also commented that calculation of RAFs is sensitive to the VOC/NO<sub>x</sub> ratio in the atmosphere, which varies by location. Thus, in their view, RAFs developed for California are not appropriate for the rest of the nation. Finally, a commenter (45) commented that the use of RAFs is currently the subject of litigation in California, and consequently should not be included in the National LEV rule.

A commenter (44) commented that the proposed wording in 40 CFR 86.1708-97(d)(3) and 40 CFR 86.1709-97(d)(3) would preclude the use of RAFs for vehicles certified exclusively on California Phase 2 gasoline, which they claimed is inconsistent with California's regulations and other proposed National LEV regulatory text. They suggested that EPA revise the regulatory language for these two paragraphs to allow the appropriate RAF to be applied to emissions results obtained from testing on California Phase 2 gasoline.

### Response

EPA believes that the adoption of California's RAFs for emission compliance testing of vehicles under the National LEV program is justified on several grounds. However, due to current scientific uncertainty regarding the accuracy and appropriateness of using reactivity adjustments to account for the ozone forming potential of fuels, EPA has placed the RAFs in the Non-Core Stable Standards, thereby allowing harmonization with California when CARB makes

revisions to the RAF procedure based on updated scientific information. Moreover, EPA notes that the appropriateness of using RAFs in other mobile source programs remains uncertain and needs further evaluation.

Because of the voluntary nature of the National LEV program, the Agency has more flexibility and discretion in determining how the voluntary standards are to be met than it can reasonably exercise with the current "Tier 1" statutory standards. The Agency's primary focus is to ensure that the mandatory federal standards continue to be met. In the case of implementing National LEV, the Agency has judged that adopting the California structure of motor vehicle emission standards for National LEV, including the use of RAFs, has several advantages that are important for the eventual success of the program. The advantages include harmonizing the National LEV and California programs, maintaining national standards for vehicle certification and testing, maintaining emission reduction equivalency in the OTR, and providing some encouragement of vehicle technologies for alternative fuels.

A primary purpose of National LEV is to provide to the OTR and the rest of the nation benefits from vehicles that are less polluting than vehicles certified to the current federal emission standards. TLEVS, LEVs, and ULEVs certified to the NMOG standards of the voluntary National LEV program will be cleaner than vehicles certified to the current federal emission standards and will easily comply with the Tier 1 NMHC standard, whether or not the California RAF methodology is used. These cars will also be marketed nationally several years before the Agency can impose mandatory standards of equivalent stringency.

Harmonization with California is another primary goal of National LEV. Without the significant level of synchronicity between the federal and California programs that would be achieved by National LEV, the program would likely not go forward. Such harmonization allows the auto manufacturers to eliminate duplication of vehicle development and testing that would be required by two sets of emission standards. Without the ability to reduce their burden in this manner the auto manufacturers may not have sufficient incentive to sign up to National LEV. Additionally, Congress has recognized in several instances the desirability of maintaining consistency with California. In promulgating section 177 of the CAA, Congress specifically prohibited states other than California from adopting emissions standards more stringent than the federal standards. States outside California may adopt the California program, but under the statute they can not create their own program. Since the use of RAFs is an integral part of CARB's vehicle certification process, states adopting California's emissions standards under section 177 would necessarily be allowing the application of RAFs in their state. Thus, in adopting CAL LEV programs, the OTC States would be required to use California's reactivity adjustment methodology. Furthermore, the Clean Fuel Vehicle (CFV) provisions in the Act require EPA to adjust the level of NMOG emissions from alternative fuel vehicles (i.e., vehicles using a non-gasoline fuel) certifying to the federal CFV standards on the basis of the reactivity of the emissions from such vehicles compared to the reactivity of the emissions from gasoline vehicles. See CAA sec. 241(3). Again recognizing the importance of harmonization, Congress directed EPA to modify the methods for making reactivity adjustments for alternative-fuel clean

fuel vehicles, as well as the definitions of NMOG and base gasoline, to conform with the CARB provisions, as long as CARB's provisions are, in the aggregate, at least as protective as the definitions in CAA sec. 241. See CAA sec. 241(4). In the CFV rulemaking, EPA determined that the RAFs adopted by California at that time do meet this criteria.

While there are strong reasons to apply the California RAFs under National LEV, the Agency has recently expressed some concerns regarding the use of reactivity adjustments in its fuel programs, and has rejected their use in those programs for various legal and policy reasons. See 59 FR 7719 (February 16, 1994). In addition, the Agency has asked the National Academy of Sciences (NAS) to further evaluate the currently available data to determine the scientific merit of evaluating fuels on the basis of ozone forming potential. As part of that evaluation, EPA has asked NAS to respond to a number of questions regarding the scientific supportability and national applicability of California's reactivity adjustments and other means of representing ozone forming potential. The NAS study, once complete, should address many of the issues raised by the commenters. The litigation of RAFs in California mentioned by the commenter has been concluded, and as a result, CARB has agreed to establish a panel of experts to perform a similar study of reactivity adjustments. The CARB RAFs were based on the best scientific information at the time, but CARB recognized a need for continuing investigation and the possibility that new information could cause existing RAFs to change. Because of this, CARB established its RAFs such that they apply only through the 2000 model year, with an intent to revisit the state of the science and modify the RAFs if necessary.

Given this current scientific uncertainty surrounding RAFs, EPA has placed the RAFs in the Non-Core Stable Standards. This will allow EPA to harmonize the National LEV RAFs with California when CARB makes revisions to the RAF procedure based on updated scientific information. However, because of the potential impact of RAFs on the stringency of the NMOG emissions standard and the desirability of establishing a stable program for auto manufacturers to opt into, EPA believes that it is appropriate to cap modifications to the California Phase 2 RFG RAF at 1.0; any changes to National LEV that set a RAF for California Phase 2 RFG above 1.0 would allow manufacturers to opt out of National LEV even if such changes were consistent with updated California RAFs. This limitation on EPA's changes to the California Phase 2 RFG RAF provides assurance to the manufacturers that the stringency of the National LEV program will not change dramatically for gasoline-powered vehicles, which are the vast majority of vehicle types likely to be covered by the program. EPA selected a cap of 1.0 because it limits the maximum increase in stringency (without triggering an off-ramp) resulting from a change in RAFs for California Phase 2 RFG to the numerical emission standards, as established without applying a RAF. If California sets a RAF greater than 1.0 for Phase 2 RFG, EPA could amend the National LEV regulations to provide for a RAF of 1.0 (without triggering an off-ramp).

The commenter is correct that the Agency's proposed regulatory language would have precluded the use of RAFs for vehicles certified on California Phase 2 reformulated gasoline. The Agency found that this was an unintended inconsistency with the California provisions as

they were incorporated into the National LEV regulations, and has revised the language in this final rule to be consistent with the California provisions.

#### b. Certification Fuel Provisions

##### Proposal

The Agency proposed to allow manufacturers the option to show compliance with emission standards for TLEVs, LEVs and ULEVs using California Phase II gasoline. California allows the use of Phase II gasoline on emission data vehicles for official emission testing and, as a result, the OTC States would be accepting certifications using Phase II gasoline under OTC LEV. EPA requested comment on this issue in the October NPRM.

##### Comments

Many of the comments regarding certification fuel were raised in the context of a general concern regarding possible new requirements for in-use fuels. EPA's responses to this concern are discussed below in section II.B.4.c. Some commenters raised more specific concerns regarding certification fuel provisions. One commenter (29) stated that the use of California RFG II as the test fuel for National LEVs is likely to raise legal challenges because the National LEV program may not deliver the emission reductions calculated by EPA using the fuels currently available in the OTR and the rest of the nation. Another commenter (17) opposed the use of California RFG II for certification of vehicles in the National LEV program. On the basis of sulfur levels, they comment, California RFG is not typical of the fuel used by the rest of the nation, and is thus inappropriate for use as the baseline fuel for determining compliance with the National LEV program. Commenter 57 agreed with this conclusion, stating that requiring California Phase II gasoline to demonstrate compliance with National LEV standards is unsupported by the record and that it would be arbitrary and capricious to conclude that California Phase II gasoline is an appropriate test fuel. They argue that the National LEV program must not be adopted until further testing lends greater understanding to the effects of non-California gasoline on emissions and emissions control systems. Another commenter (39) also raised objections to using California RFG II as the certification fuel, claiming that this provision diminishes the benefits of the National LEV program relative to the OTC LEV program because the gasoline on which the vehicle is certified to the low emission standards will not be available nationally. A commenter (40) asked EPA to retain the use of conventional gasoline as a suitable fuel for certification purposes as included in the current California regulations.

EPA also received comments supporting the use of California Phase II gasoline for certifying vehicles to the National LEV standards (50). This commenter states that this approach furthers the goal of the National LEV program of selling California-certified low-emission vehicles first in the OTR and then nationwide. This commenter claims that because these vehicles will be designed for and tested for compliance according to the California fuel

specifications, they must be tested similarly under the National LEV program. They add that for the same reasons it is equally important that California Phase II fuel be used for any in-use compliance or SEA testing of National LEV program vehicles conducted by EPA.

### Response

The Agency believes that use of California Phase II fuel for vehicle certification and in-use testing is an essential aspect of the National LEV rulemaking. As described more fully in the NPRM, this approach will provide worthwhile reductions in the cost to manufacturers of demonstrating compliance with emission standards. It is important to note that the National LEV program does not differ from the CAL LEV programs adopted outside California in terms of the relationship between certification fuel and in-use fuel. Under CAL LEV programs adopted outside California, vehicles certified in California on California Phase II RFG would be sold outside California and would operate on commercially available federal fuel. National LEV certification and in-use fuel provisions have no impact on the relative emissions reductions in the OTR under National LEV because the same situation would exist under OTC States' CAL LEV programs. Consequently, the Agency does not agree that the National LEV program benefits are somehow diminished relative to OTC States' CAL LEV programs because of the National LEV certification fuel provisions. EPA acknowledges that California Phase II RFG is not typical of the fuel used outside California, but the Agency does not agree that this fuel is therefore automatically inappropriate for certifying California vehicles for use in the OTR or the rest of the nation.

EPA realized that two possible approaches existed that would satisfy the intent of the National LEV program to make the vehicle hardware developed by manufacturers to meet the strict California emission standards available nationally. Each of these approaches recognized the impact of fuel on emission standards, but accounted for the impact in different ways. The Agency could have specified that vehicles be certified using federal certification fuel, but in that case an adjustment to the emission standards would be necessary to preserve the stringency of the test, thus precluding the possibility that hardware changes would be necessary relative to the California program. Such an approach would have involved significant testing costs, the reduction of which is an important objective of the National LEV program. Alternatively, EPA could specify that the California certification fuel be used in conjunction with the California emission standards. The Agency ultimately chose the latter approach because of the test burden impacts of the former, but specifically recognized that the differences in the in-use fuel between California and the rest of the country (including the OTR) will result in differences in in-use emissions. This difference has been taken into account in the Agency's modeling of emission reductions under OTC LEV and National LEV. The issues raised by commenters (29, 39) regarding EPA's estimation of emission reductions expected under National LEV are discussed more fully in section III.A.

EPA clarifies in the final rule that conventional gasoline may be used for certification under the National LEV program. In the preamble to the proposal, EPA stated that the Agency

would "allow manufacturers the option [of using California Phase II fuel]" (emphasis added) (60 FR 52734, October 10, 1995). EPA proposed to adopt the California certification fuel specification regulations which provide that, for all 1995 and later model year vehicles, "gasoline having the specifications listed below [CA FRG II] may be used [for testing] as an option to the specifications referred to in subparagraph (a)(1)." Paragraph (a)(1) references the existing federal fuel specifications in 40 CFR section 86.113. Therefore, EPA is adopting the proposed regulations without modifications, which will allow manufacturers the option of certifying National LEVs on fuel meeting the federal specifications.

### c. In-Use Fuel Provisions

#### Proposal

Although EPA proposed the use of California Phase II gasoline as the test fuel for certification in the NPRM, the Agency did not propose any regulatory changes governing the fuel that is actually used in vehicles, nor did the Agency suggest that states adopt new fuel requirements. In the NPRM, EPA reiterated a set of three principles agreed upon by representatives of the auto industry, the oil industry, and the OTC States. These principles are:

1) Adoption of the National LEV program does not impose unique gasoline requirements on any State. Gasoline specified for use by any State will have the same effect on the National LEV program as on the OTC LEV program.

2) Testing is needed to evaluate the effects of non-California gasoline on emissions control systems.

3) If testing results show a significant effect, EPA will conduct a multi-party process to resolve the issue without adversely affecting SIP credits or actual emission reductions when compared to OTC LEV using fuels available in the OTR or imposing obligations on manufacturers different from the obligations they would have had under OTC LEV.

#### Comments

The Agency received numerous comments regarding the issue of in-use fuel specifications. The comments on this issue came from about a half-dozen types of organizations, including national organizations representing petroleum refiners, specific petroleum companies, national and state-level petroleum marketing and production associations, state environmental, energy, or health departments, members of state legislatures, and several highway users and transportation associations.

Many of these commenters expressed concern that EPA would promulgate the National LEV rule only to subsequently disclose that National LEV is viable only with the implementation of new national fuel requirements. These commenters expressed concern about a lack of clarity

in the National LEV proposal regarding in-use fuels, particularly in the future, and asked EPA to explicitly and unequivocally state in the final regulatory text that the National LEV program would not result in any new fuel requirements and that National LEV must meet emission requirements using currently available fuels (including conventional gasoline and federal reformulated gasoline). Many of these commenters expressed support for the National LEV program on the condition that this issue be resolved in the final rule.

The trade organizations representing refiners expressed concern over the additional burden their members would face if new national fuel specifications were promulgated. They also commented that since the auto industry is volunteering the National LEV program, it then behooves the auto industry to bear the full burden of making the voluntary program work.

The comments from the oil refining companies echoed those above, arguing that new federal fuel specifications would be unjustified, unwarranted, and cost ineffective. This group of commenters stated that without an EPA statement that the National LEV program would not lead to future fuel requirements, the uncertainty falling on their industry is unacceptable. A commenter (40) requested that EPA place fuel standards consistent with those currently in the marketplace into the defined list of "Stable Standards."

Comments from the various marketing associations also reflected a desire for EPA to guarantee that the National LEV program does not and will not require new fuels. A commenter (17) also expressed a concern that any new fuel requirements, if promulgated against their wishes, would interfere with the existing federal RFG program. They also urged EPA to publish a Supplemental Notice of Proposed Rulemaking outlining the exact changes in gasoline it anticipates will be necessary to meet the National LEV emissions standards.

Comments from state government agencies and legislatures were generally in favor of EPA stating concretely that their states would not face new fuel requirements. Commenter 28 suggests that if it is determined that through research and other scientifically sound processes that a fuel standard change is necessary, those parties directly affected and involved in a change should work together to determine the change and how it should be implemented. One commenter (79) expressed support for the three principles regarding fuel outlined in the NPRM (and repeated above). Another (77) continued to maintain in their comments that National LEV, like OTC LEV, is a vehicle technology program not a fuels program.

A state (30) expressed no support for a program that precludes the possibility of a future fuel control rulemaking. They expressed concern about the impact of the currently available and possibly dirty fuels in some of their areas on the emissions expected from the proposed National LEV program.

Without taking a specific position on what the in-use fuel specification should be, a commenter (63) requested clarity regarding the in-use fuels issue. They ask EPA to tell the public and industry whether the Agency intends to explore changes to fuel requirements as part



of the rule. If EPA does find changes to be necessary, then that commenter asks the Agency to give adequate notice and transition time to the industry and the public.

The transportation associations and highway users associations (12, 18, 16, 60) all expressed support for the National LEV program if EPA included language in the final rule insuring that no new fuel will result and that NLEVs must operate on current commercially available fuels.

Several commenters raised other issues regarding in-use fuels. One (31) suggested that, if the Agency were to consider new fuel requirements in the future, a full notice-and-comment rulemaking should take place reevaluating the National LEV program. Three commenters (25, 51, 70) raised the issue of allowing states to opt out if the National LEV program ultimately leads to new fuel requirements.

### Response

The Agency's approach to certification and in-use fuels for the National LEV program remains essentially the same as was presented in the NPRM. In that Notice, EPA proposed that National LEV program vehicles be certified using fuel meeting California's specifications, but did not propose any changes to in-use fuels or add any requirements for states to adopt any new fuels requirements. The final rule is consistent with this approach -- no changes to in-use fuels are required. Although the Agency is not willing to preclude future fuel rulemakings in general, it has incorporated language in these final regulations that indicates that this rulemaking action does not impose any in-use fuel requirements and that vehicles certified to the National LEV program will be operable on fuels otherwise required by state or federal regulations. See 40 CFR 86.1705-97. The Agency believes that these additions speak to the majority of the comments raised regarding in-use fuels. See the preamble to the final rule, section IV.B.7, for further discussion of this issue.

The Agency does not believe that it is necessary to include provisions for a full notice-and-comment reevaluation of the National LEV program if new in-use fuel requirements are considered in the future. As stated above, the imposition of such fuel requirements is not intended to result from this rulemaking. Furthermore, such fuel requirements would, in and of themselves, require a full notice-and-comment rulemaking process, and to the extent that such a rulemaking has potential impacts on the National LEV program it would be appropriate to evaluate those impacts in the context of that rulemaking process. The same applies to the comments regarding allowing states to opt out if new fuel requirements are adopted by the Agency, in that the impact of any new fuel requirements on states participating in the National LEV program would be evaluated in a separate notice-and-comment rulemaking process. State "opt-outs" from National LEV also pose the problems discussed in the preamble to the final rule in section IV.A.2.e and this document in section II.E. The Agency therefore does not believe that there is a need to include provisions for state opt-outs in this rulemaking.

#### d. Alternative Fuel Provisions

##### Proposal

EPA proposed to adopt California's fuel specifications for alternative fuels for the National LEV program. In some cases California has certification fuel specifications for alternative fuels where there is no comparable federal specification. In the cases where there are both federal and California specifications for a given alternative fuel, fuels meeting the California specifications also comply with the federal specifications. Thus, the adoption of California's certification specifications for alternative fuels does not create a conflict with any current federal requirements. Moreover, in all such cases, the California specifications are more stringent. EPA requested comment on retaining federal alternative fuel specifications (when they exist) rather than adopting California's specifications.

##### Comments

Several commenters raised issues regarding the proposed alternative fuel provisions. Two commenters (44, 50) supported EPA's adoption of California's alternative fuel specifications for the National LEV program, and agreed that this approach would reduce the burden on industry by having only one regulatory "scheme" to follow and would further the goal of harmonizing California and federal requirements. One (44) also recommended that EPA adopt California's specifications for commercial CNG and LPG and their proposed specifications for M85 and E85 commercial fuels.

Two commenters (7, 41) expressed concern that the various references and citations in the proposal were inconsistent and unclear. These commenters requested clarification of whether the proposed specification for liquefied petroleum gas (LPG or propane) "would apply only to emission test fuel, or whether the same specification would be required for mileage accumulation tests and ultimately to in-use." One commenter (7) notes that the California fuel specifications that EPA proposed to incorporate by reference are unclear (section 9.a of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as amended September 22, 1993). As an example, they note that section 9a.(12)(f)(1) of the California regulations are unclear as to "which grade of fuel is to be used for service accumulation testing..." In addition, section 9.a(13)(g)(1) of the California regulations, which cross-reference Title 13 of the California Code, contains additional ambiguity which causes them concern over whether EPA intends to apply the test fuel specifications to in-use fuel. Additionally, the commenter stated that adopting California specifications for in-use alternative fuels would be inconsistent with current EPA regulation of CNG- and LPG-fueled vehicles.

##### Response

Much of the confusion over this issue seems to result from a lack of clarity in the California regulations, rather than the EPA proposal. Because the provisions in section 9.a(12)(f) of the California regulations deal only with MY1988 through MY1993, they do not apply to the National LEV program. The issue of ambiguity noted by one commenter (7) in section 9.a(13)(g)(1) (which deals with 1994 and later model years) of the California regulations should be addressed to California regulators, not the EPA. However, it should be noted that section 9.a(13)(g)(1) specifies only fuel to be used for mileage accumulation and emission testing. It does not include any specifications for in-use fuels.

In the National LEV program, EPA intends to harmonize to the extent possible the federal certification requirements for alternatively fueled vehicles, as well as for conventionally fueled vehicles, with California's requirements. Alternative fuel vehicles produced under National LEV will be certified under the applicable California provisions (including the test fuel specified by California), yet could be distributed nationwide with a federal certificate. However, the National LEV program does not include California's in-use specifications for alternative or conventional fuels. As stated above in the discussion regarding in-use fuels in general, the Agency believes that the National LEV program does not require any changes to in-use fuels, and that vehicles certified to the National LEV program should be operable on currently available fuels. These statements apply equally to alternative and conventional fuels. Therefore, the Agency is not adopting any specifications for commercial alternative fuels.

## **5. On-Board Diagnostics**

### Proposal

As proposed, vehicles certified to the National LEV standards would be required to be equipped with on-board diagnostics systems that meet California's second phase OBD requirements (OBD II). The National LEV proposal would not require that vehicles comply with the tampering protection requirements of the California OBD II regulations. In addition, the National LEV proposal specifically excluded the anti-tampering provisions of the California OBD II requirements. Therefore, National LEV will carry no requirement that vehicles comply with the tampering protection provisions of the California OBD II regulations.

### Comments

The Agency received a significant number of comments regarding the interaction of OBD II systems and commercially available gasoline outside of California. One commenter (44) expressed concern on behalf of their member companies that some of the properties of fuel outside California, particularly the higher sulfur content, will cause inappropriate illumination of the malfunction indicator light (MIL), resulting in consumer dissatisfaction and adverse public reaction. They stated that the adverse impact of higher sulfur levels on emissions has been well documented. A commenter (22) also raised this concern and asked that EPA resolve the issue in the National LEV final rule. Another (69) likewise expressed concern regarding the effects of

federal fuels on the OBD system and other emission control components. Two of these commenters (44, 22) suggested adjustments to the OBD II and I/M emissions cut points to alleviate this problem, and one (44) anticipated that such adjustments would be justified by the results of a cooperative research program involving auto and oil companies investigating this issue. Another two (45, 46) expressed support for this cooperative approach, and agreed with EPA that changes affecting OBD for the National LEV program would not be precluded under the final National LEV rule. One commenter (45) stated further that manufacturers should not be allowed to opt out of National LEV as a result of changes to OBD II if such changes or changes to catalyst systems are found to be a more cost-effective solution to possible fuel problems. Another commenter (69) asked EPA and manufacturers to factor the results of this research into the design of NLEVs before introducing these vehicles to the states outside the OTR.

Several other commenters, particularly those representing the oil refining industry, commented that if research reveals that use of commercially available gasoline on National LEV OBD II systems will cause false illumination of MILs, OBD II cut point adjustments are an appropriate solution to the issue described above, rather than a modification of federal fuel specifications (57, 65, 25, 19). One (25) indicated that a cut point adjustment could be implemented without an increase in emissions.

A commenter (77) stated that any action that EPA takes to resolve this issue "must not affect either the SIP credits that the program will provide or the actual in-use emission reductions anticipated from the program." This position was reiterated by another commenter (87), who also stated that fuel sulfur effects are not a problem. The commenter also stated that adjusted cut points will decrease emissions benefits and may allow manufacturers to build less durable vehicles. A commenter (83) commented that "[n]o changes should be made to onboard diagnostics systems, such as raising cut-points, in response to any issue including any questions on fuel" and that "OBD should not be changed in any way that increases emissions." The commenter also suggested that the public would not receive the full benefit of OBD systems if OBD II thresholds were changed.

The Agency also received a jointly-submitted comment from several associations representing the independent "aftermarket" industry which engages in parts manufacturing, rebuilding of parts, installation and service (64, G9, G12). The comment opposes the use of California OBD II, rather than federal OBD, in the National LEV program. The commenters expressed concern that the anti-tampering provisions contained in OBD II would circumvent the national policy to preserve competition within the vehicle service and repair industry. Therefore, the commenters asserted that OBD II should not be allowed on a national level.

The commenters asserted that even if EPA were not to include the OBD II anti-tampering requirements with the National LEV regulations, EPA would, nevertheless, be in violation of CAA sections 202(m)(4) and 202(m)(5), should a vehicle be certified nationally that contained OBD II mandated anti-tampering measures. The commenters stated that devices or measures which restrict access to the OBD or require access codes or devices which are only available

through the original engine manufacturer (OEM) are in violation of section 202(m)(4). The commenters expressed concern that EPA will not meet its affirmative obligation not to certify such vehicles. The commenters also expressed concern that California has not specified what information and access will be available to allow service and repair. The commenters noted that the federal Service Information Availability (SIA) rule addresses what information and access shall be available, but the commenters claim that the federal SIA rule will be replaced by a deficient California OBD II rule which does not address the service information issue.

In addition to the commenters' opposition to the use of OBD II within the National LEV context, they also opposed the use of OBD II as part of any OTC LEV program. The commenter states that CAA section 177 does not subvert the statutory directive of 202(m).

### Response

In support of the Agency's rulemaking on the OTC-LEV petition of 1994, EPA staff concluded that, "...any sulfur effect on the catalyst and/or the (OBD) catalyst monitor is such that it cannot be distinguished from normal variability within the emission control and OBD system and, therefore, is not, in and of itself, going to cause OBD monitors to flag good catalysts as malfunctioning. The Agency believes this conclusion to be a sound conclusion regardless of fuel sulfur level." (See Response to Comments Document in support of the OTC-LEV petition, volume 3, p.24.)

This conclusion went on to say, "The potential exists for OBD flagging of some high mileage catalysts. Such catalysts, perhaps having experienced some performance loss for reasons other than sulfur exposure, could be pushed over the OBD catalyst monitor malfunction threshold due to the additional effect of sulfur on the catalyst. This could result in OBD flagging and subsequent replacement of high mileage catalysts somewhat sooner than they perhaps may have been replaced had they not been exposed to higher sulfur fuels. However, the Agency believes it is too early to assess how sulfur will impact future vehicles, or the extent of any future sulfur effects on catalysts and OBD catalyst monitoring systems. With future advances in OBD technology and catalyst technology, the Agency believes that any sulfur effects observed in future vehicles should be less than that experienced by today's vehicles." (See id.)

While the Agency still considers these conclusions valid, see EPA's White Paper on OBD & Sulfur (Docket No. IV-B-06), the comments indicate that there remains concern over the effects of fuel sulfur on OBD catalyst monitors. Additionally, the Agency has learned that the apparent direction being taken by manufacturers to comply with the LEV standards and the OBD II catalyst monitoring provisions may be different than previously thought. This difference relates to potential design changes to the catalyst system that some manufacturers may implement in order to meet the LEV emission standards. These design changes could simultaneously result in OBD monitors that may be more susceptible to the effects of sulfur than previously anticipated by the Agency.

Because the Agency wants the benefits of OBD systems to be fully realized, every effort will be made to maintain the long term potential of these systems. For that reason, the Agency is participating in a series of meetings initiated by members of both the auto and oil industries to discuss issues and concerns surrounding the issue of sulfur impacts on OBD and I/M. As part of this process, the Auto/Oil group is working on a joint test program to further study the impacts of fuel sulfur on catalysts and OBD catalyst monitors. The initial test program has been completed. However, more testing is planned to review the effect of sulfur in fuel on advanced technology (including LEV) emission control systems. Therefore, how the joint test program data may impact the outcome of this issue is not yet known. Additionally, during the course of this process, EPA staffers have made every effort to keep all interested parties fully informed. Throughout this process, EPA's position has been that it is open to new information, but unwilling to compromise where air quality may be affected.

EPA stated in its White Paper that it did not believe it was appropriate to provide any sort of cutpoint relief at this time. Auto manufacturers and other parties are providing comments on EPA's discussion on sulfur effects on OBD systems and EPA has not yet had sufficient time to analyze adequately whether this information provides the evidence necessary to show that fuel sulfur unavoidably causes MIL illumination. Until such time as this analysis is completed, and EPA receives any other information necessary to reevaluate this issue, EPA does not believe it is appropriate to revise the OBD requirements. While EPA remains open to new information, and will consider any requests for OBD and/or I/M cutpoint relief, such requests must carry with them no negative impact on the expected benefits of the National LEV program. The issue of whether OBD cutpoints can be revised without affecting emissions remains an open question. If further analysis shows that fuel sulfur will cause MIL illumination and that cutpoint relief will not affect emissions, then EPA will review at a later date whether cutpoint revisions are appropriate. EPA will be taking comment in the upcoming SNPRM on including an offramp in the National LEV program which could be triggered if National LEV requirements cause excessive false emission light failures or false I/M failures.

Regarding the potential for opt outs, manufacturers may only opt out if EPA changes its regulations regarding OBD systems in a manner not consistent with California and if manufacturers do not approve such a change. Given that any changes to EPA's OBD regulations resulting from this study would be at the behest of manufacturers, EPA does not believe that any opt-out could be triggered by such changes.

Regarding comments from aftermarket parts manufacturers, as stated in the NPRM (60 FR 52735, 52755) the voluntary standards that the Agency proposed and is adopting today do not include the tampering protection requirements of California's OBD II regulations. Regarding the commenters' statement that, even if EPA does not include California's anti-tampering provisions in its regulations, vehicles certified nationally that contain such measures would violate section 202(m), this issue has been addressed in another forum. In a separate action, the Agency considered the issue of whether a vehicle certified to all of California's OBD II requirements, including compliance with the tampering protection provisions of OBD II, is in violation of

section 202(m)(4) or (5). (See California State Motor Vehicle Pollution Control Standards, Notice Regarding Waiver of Federal Preemption, 61 FR 53371 (October 11, 1996)). In that decision, EPA addressed the issue of whether California's OBD II tampering requirements violate sections 202(m)(4) or 202(m)(5). Because the Agency is not requiring that a National LEV program vehicle meet California's tampering protection requirements, it is appropriate that the Agency address the tampering issue within the OBD II waiver decision, not this rulemaking. In any case, such issues are not ripe for decision in this forum, because EPA is not taking any action today that changes manufacturers' ability to include anti-tampering measures in their vehicles.

In order, however, to ensure that no vehicle certified under the National LEV program violates section 202(m)(4) or (5) of the Act, EPA has added language to the final regulations specifying that all vehicles certified under the National LEV program must meet the requirements of section 202(m)(4) and (5) of the Act. Thus, any vehicle attempting to certify under the National LEV program will not be permitted to do so if it contains elements that violate section 202(m)(4) or (5).

Regarding the commenter's assertion that EPA's Service Information Availability (SIA) regulation (40 CFR 86.094-38) will be circumvented by this rulemaking, thus circumventing the national policy to preserve competition in vehicle service and repair, the National LEV regulations do not circumvent EPA's SIA regulations. Such SIA regulations apply fully to all vehicles certified under the National LEV program.

Regarding the commenter's statement that EPA should not allow states outside California to adopt California regulations, including OBD II, under section 177, states have full authority under section 177 to promulgate California emission standards and other procedures. Two states have had such regulations in effect for several years and four more have recently adopted such regulations. Absent National LEV, more states are expected to enact California standards. EPA has only an indirect role in this state process, and can only prevent states from enacting particular California regulations through denial of a waiver to California itself. California received a waiver for its OBD II system in a separate proceeding, as noted above.

EPA notes that section 177 provides stringent guidelines for states that wish to implement California's emissions control standards. State standards must be identical to California standards, states may not cause the creation of a "third vehicle", and states may not limit the manufacture or sale of a motor vehicle that has been certified as meeting California's standards. Thus, states are somewhat constrained by section 177 to accept California's OBD II requirements, including the anti-tampering requirements. On the other hand, the National LEV program that EPA is approving today specifically excludes the anti-tampering requirements from its regulations, thus providing manufacturers with the ability not to include such provisions in their vehicles. It also contains specific language stating that all vehicles certified under this program must meet the requirements of section 202(m)(4) and (5) of the Act. Thus, the National LEV program actually provides considerably more protection for the commenters than would the state LEV programs that the National LEV program would replace.

## 6. Hybrid Electric Vehicles

### Proposal

As proposed, the National LEV standards would adopt California's approach to regulating emissions from HEVs. HEVs are powered by batteries, but also use a small combustion engine for additional range. The emissions from HEVs range from none, when running off the battery, to levels similar to TLEVs, when using the combustion engine. For certification, HEVs would be tested with the engine operating at worst case conditions over the standard test cycle. An HEV would have to meet the emission standards for one of the vehicle categories, TLEV, LEV, or ULEV, based on emissions from its combustion engine. This ensures that in the worst case situation, HEVs will not exceed minimum emission control requirements. However, some HEVs would have to demonstrate compliance with different, somewhat less stringent, useful life standards for certification, depending upon the type of HEV being certified. In addition, using the methodology used by California, an HEV's contribution to the manufacturer's NMOG fleet average would be calculated to account for the emissions benefits of its battery-powered operations.

The Agency also proposed in the NPRM to adopt California's definitions of the following terms: electric vehicle, hybrid electric vehicle, series hybrid electric vehicle, and parallel hybrid electric vehicle.

### Comments

A commenter (1) stated that the definitions proposed in the NPRM for electric vehicle, parallel hybrid electric vehicle, and series hybrid electric vehicle are unnecessarily narrow and could adversely affect the U.S. fuel cell industry. The proposed definition of electric vehicle, they commented, is more properly the definition of a "battery electric vehicle," and that an electric vehicle should be defined simply as "a vehicle that relies on an electric motor for propulsion." Specifically, they commented that the proposed definitions inappropriately exclude any engine systems that utilize non-combustion engine on-board recharging systems, such as fuel cells, and requested that EPA change the definitions to conform with those in the Energy Policy Act of 1992.

### Response

EPA intends to define HEVs, ZEVs, and other Advanced Technology Vehicles (ATVs) in the same manner as California for the purposes of the National LEV program. EPA believes it is appropriate to adopt California's specifications and definitions for ZEVs and HEVs to further the goal of harmonizing federal and California motor vehicle emissions control programs. The California Air Resources Board (CARB) staff has acknowledged the need to amend the current regulations as they pertain to ZEVs and HEVs given the rapid advancement of technology in the last five years, and is consequently preparing to revise and update their program to deal with



these types of vehicles more appropriately. CARB staff has expressed a desire to encourage the development of advanced technologies such as fuel cells, a philosophy likely to be evident in providing additional incentives for ZEVs, HEVs and other ATVs. Although the timing of CARB's final actions is not certain, EPA will evaluate subsequent CARB regulatory actions and will make changes to the National LEV regulations to incorporate CARB's finalized actions as appropriate.

### **C. Low Volume and Small Volume Manufacturers**

#### Proposal

The CAL LEV program has some special provisions for manufacturers of smaller quantities of vehicles, such as a relaxed phase-in schedule for compliance with the fleet average NMOG standards. California provides this flexibility to each manufacturer with sales in California of no more than 3000 passenger cars, light-duty trucks, and medium duty vehicles per model year, based on the average annual sales over the last three model years. EPA likewise has special provisions which provide relief to "small volume" manufacturers from emission-data and durability showings and reduce the amount of information required to be submitted. However, the EPA definition of "small volume" is calculated on the basis of national sales. EPA was concerned that a manufacturer that qualified as "small volume" in California - and thus received the benefit of a relaxed NMOG phase-in in California - might not meet the existing federal definition of "small volume" and thus might have to comply with the entire NMOG phase-in schedule under the National LEV program. It would be inappropriate to require California "small volume" manufacturers to sell LEVs sooner nationwide than would be required in California or under OTC States' CAL LEV programs. Therefore, the Agency proposed to define "low volume manufacturer" for the National LEV program in a manner consistent with California, but taking into account national sales in addition to California sales. This new definition would be used for purposes of determining the NMOG fleet average applicable to certain manufacturers.

EPA requested comment on the appropriate level for a national annual sales limit to apply to the definition of low volume manufacturer, to ensure that manufacturers would have no incentive to decrease sales in California in an attempt to qualify as a low volume manufacturer for National LEV. EPA proposed a national sales limit of 40,000 vehicles per year, and requested comment on suggested levels in the range of 25,000 to 40,000 vehicles per year.

#### Comments

EPA received several comments regarding the proposed treatment of manufacturers with small sales volumes. A commenter (3) suggested that an appropriate national sales limit for the new federal definition for "low volume" manufacturer would be 25,000 or lower, based on California's definition and their share of nationwide sales. Another commenter representing import automobile companies (50) recommended that EPA adopt a national sales limit of 40,000

for manufacturers that qualify as California "small volume" manufacturers. They commented that this figure has been a subject of the ongoing negotiations between the OTC States and the auto industry, and that selecting a different figure could unduly burden a manufacturer and jeopardizes that commenter's agreement on the National LEV program. They also supported EPA's proposal, consistent with California, to allow federal "low volume" manufacturers to delay meeting the NMOG curve until MY2001.

#### Response

The Agency is adopting a national sales cap on the definition of low volume manufacturer that provides significant flexibility and does not result in an undue burden on manufacturers. The Agency recognizes the concerns raised by the use of California vehicle sales as the basis for determining the applicable fleet average NMOG standard for small manufacturers. However, the Agency believes that a national sales limit must be selected such that it does not unduly impact manufacturers who have already made vehicle distribution decisions that place them near the national limit. The Agency is concerned about post-National LEV attempts to "game" the definition at issue, not about manufacturers' current distribution decisions. Therefore, the Agency is adopting a national sales limit of 40,000 for the federal "low volume" definition.

### **D. Certification Procedures**

#### Proposal

In addition to the elements of the National LEV program that are more stringent than those EPA could impose under the Clean Air Act, the Agency proposed that the balance of the Federal motor vehicle emissions control program (including other standards and requirements, and certification and compliance provisions) would apply to vehicles produced and sold by manufacturers opting into the National LEV program. To reduce duplicative testing burdens on the vehicle manufacturers, EPA committed to harmonize certain elements of the federal motor vehicle regulations with comparable California regulations.

#### **1. Harmonization of Certification Program**

#### Comments

The majority of the comments in this area came from two commenters (44, 84) who supported complete harmonization of EPA and California certification requirements and procedures to produce "one certification procedure such that one set of data can be submitted to both CARB and EPA for certification purposes." One commenter (84) expressed support for the comments from the other (44), and asked EPA to commit to maintaining certification requirements that minimize the additional burden to manufacturers for the duration of the National LEV program. One commenter (44) acknowledged that EPA must retain elements of the federal program required by the Clean Air Act that California does not have (such as the total

hydrocarbon and particulate standards and high altitude requirements), but stressed the cost and burden reductions that will result from overall harmonization. That commenter is concerned that other areas of the certification program are left "open for EPA to deviate from California in the future." For example, the commenter does not believe there is a need for EPA to maintain separate durability and defeat device requirements, as proposed. It argues that EPA should incorporate California provisions in these areas, because California "has just as much incentive to maintain requirements that adequately address these areas." With some qualifications, the commenter provides a list of sections in the proposed regulations which they support as proposed. They also state that "federal regulations and procedures not explicitly adopted or superseded by the National LEV program should still apply," such as 40 CFR 86.080-12 (alternative certification procedures) and 86.096-24(e) (small volume engine family procedures).

Both commenters (44, 84) comment that EPA should incorporate in the final National LEV regulations numerous certification and test procedure changes that California adopted at a Board hearing on September 22, 1995. One (44) also asks EPA to incorporate the most current California OBD II regulations into the National LEV final rule.

#### Response

The Agency disagrees with the comment that the NPRM stated EPA's intent to maintain separate durability and defeat device requirements. In fact, the Agency is seeking to achieve harmonization with California in these areas, and the NPRM only stated the Agency's intent to maintain these program elements outside of the Stable Standards, an issue addressed elsewhere in this document. Moreover, EPA has already done much to harmonize these elements with California. For example, the NPRM proposed to adopt the California provisions regarding emissions control defeat devices for the National LEV program, and EPA is promulgating these defeat device provisions unchanged in this final rule.

As explained in the preamble to the final rule, the Agency has incorporated provisions from California's regulations into the National LEV regulations by two methods -- by the incorporating by reference (IBR) method and by directly incorporating text from California's regulations. EPA has incorporated in this National LEV final rule the most current California OBD II regulations.

In August of 1995, CARB proposed a number of revisions to many elements of their LEV program, including an extension of the intermediate in-use standards through MY1999 for LEVs and through MY2002 for ULEVs, the addition of full useful life standards for these extended model years, the extension of RAFs to additional model years and additional fuels, revisions to NMOG test procedures, revisions to labeling requirements, and many other revisions of a detailed and technical nature. At a public hearing on September 22, 1995, the proposed revisions were adopted by the Board, and modified regulatory text was made available in late October for a 15-day public review period. Additional modified text was released by CARB in February and April of 1996, and each release was accompanied by a 15-day period for public review and

comment. The Executive Officer of CARB adopted the final amendments in an Executive Order issued after consideration of the comments that were submitted. The final amendments were submitted to the California Office of Administrative Law on August 9, 1996, and were given final approval on September 23, 1996. Review by the Office of Administrative Law tends to focus on legal issues such as authority and does not typically entail changes to the regulatory text, so CARB released the final regulatory text dated June 24, 1996. Today's final rule incorporates several changes finalized in the June 24, 1996, regulatory text, including the revisions to the in-use standards, the revisions to RAFs, and other provisions as necessary and appropriate to further harmonization of the two programs.

## **2. Carry-Over & Carry-Across Issues**

### Comments

EPA received one comment (44) on provisions regarding carry-over or carry-across of emission test results. Specifically, the commenter suggests that manufacturers should be allowed to carry-over or carry-across enhanced evaporative emission test results generated using the federal test procedure requirements or the California test procedure requirements. This would allow for use of alternate evaporative emission test sequences while providing test workload relief and protection for future carryover. They note that the federal requirements in 40 CFR 86.096-24 adequately address this issue and should apply to the National LEV program. They also add that California regulations refer to use of alternate but comparable evaporative emission procedures for generation of deterioration factors. Also to facilitate carry-over and workload reduction, the commenter requests that the current EPA criteria for picking test fleets be an available option for the National LEV program.

### Response

As explained in the preamble to the final rule and below, NLEVs will be required to demonstrate compliance with the federal evaporative emissions test procedure and standards. The commenter's comments were also made prior to the decision by the Agency to require the federal evaporative procedures, rather than the California procedures as in the proposal. A consequence of this decision is that the Agency is not likely to accept evaporative emissions certification test results using the California test fuel and temperature for certification of federal vehicles. In other words, evaporative emission certification data from vehicles certified for sale in California using the California evaporative procedures would not be eligible for carry-over to National LEV. However, the carry-over and carry-across provisions in 40 CFR 86.096-24 will be applicable to the National LEV program, and requests from manufacturers to carry over or carry across emission data will continue to be evaluated on a case-by-case basis. In particular, the Agency will consider requests from manufacturers wishing to carry-over deterioration factors developed using the California test procedures.

The current EPA criteria for picking test fleets is not an option in National LEV. One of the primary goals of National LEV is to align the California and federal certification procedures so that auto manufacturers can test one set of vehicles to a single set of standards and submit the same set of data to CARB and EPA. Given that the reduction in burden associated with such an alignment would not be possible with divergent fleet selection criteria, EPA chose to adopt California's selection criteria for the National LEV program. As in the above case, EPA would be willing, under the appropriate regulatory provisions, to entertain requests for carry-over on a case-by-case basis. Since vehicles certified to the National LEV program will also be certified for sale in California, EPA does not envision a situation where it would be beneficial to include the federal fleet selection criteria as an option.

### **3. Test Vehicle Selection for CARB 50° F Requirement**

#### Comments

Two commenters (44, 84) asked EPA to clarify that EPA would not be allowed to select three test vehicles in addition to the three selected by California for the 50°F testing mandated by California because of the limited facilities and resources available for this type of testing. One (84) suggested that EPA could either abide by the California vehicle choices or join with California in selecting three vehicles.

#### Response

The Agency clarifies, as suggested by the commenters, that EPA will either abide by the vehicles selected by California for their 50°F testing or will work with California to select appropriate vehicles. The EPA does not have a test procedure comparable to the California 50°F test that applies to the current federal motor vehicle emission control program, and does not see a need to unnecessarily increase the test fleet for a test procedure mandated by California but not required by the EPA except under National LEV.

### **4. Harmonization of Evaporative Test Procedure**

#### Comments

A commenter (44) restated the auto industry's desire to reduce compliance burdens by having a single evaporative test procedure and test fuel that would satisfy California and EPA requirements, and stressed that if testing determines that the current federal test fuel and temperature requirements are more stringent than California's, EPA and California should work together to ensure a common test procedure/test fuel combination.

#### Response

The Agency believes that federal and California evaporative emissions standards and test procedures will be completely harmonized. Except for the test fuel and temperature, the federal and California evaporative emissions test procedures were harmonized by a direct final rule published on August 23, 1995 (60 FR 43880). At the time the NPRM was published the Agency was awaiting data from a test program, initiated by EPA and CARB and supported by the auto manufacturers, investigating the relative stringency of the federal and California requirements. The Agency stated in the NPRM that if these investigations lead to a finding that one procedure is significantly more stringent, manufacturers may be able to use that procedure to satisfy both agencies' testing requirements, if both agencies find the procedure acceptable.

The investigative test program is now complete, and the data has been placed in the public docket for this rulemaking. Based on the data now available, the Agency has concluded that the federal specifications for test fuel and temperature result in a significantly more stringent evaporative test than the California specifications. Therefore, the regulations as proposed in the October NPRM have been modified in this final rule to specify the federal evaporative emissions test procedure, including federal specifications for test fuel and temperature. EPA understands that CARB intends to propose a regulatory change in its evaporative testing requirements that would specify the federal test fuel and temperature. The timing of new CARB regulations is uncertain, but current provisions in their regulations should allow them in the interim to accept data obtained using the more stringent federal test procedure.

## **5. Certification Fees**

### Comments

Two commenters (7, 41) raised concerns regarding certification fees. Specifically, they suggest the effort towards harmonization of federal and California requirements should justify payment of a single certification fee, rather than payment of certification fees to California and to the EPA. They also argue that the current fee structure has the potential to place alternative fuel equipment manufacturers at a competitive disadvantage and that the current hardship provisions in the certification fee regulations do not appear to offer adequate relief for manufacturers with small production volumes.

### Response

Regarding the issue of certification fees, the Agency does not believe that it is appropriate to assess a single fee rather than the two currently assessed by California and the Agency. The fees assessed by the EPA for motor vehicle compliance and certification are authorized by section 217 of the CAA. They are designed to recover those costs incurred by EPA in administering EPA's Motor Vehicle and Engine Compliance Program (MVECP), including vehicle and engine emissions certification, selective enforcement audits, certification compliance audits and investigations, in-use compliance monitoring, fuel economy labeling, and CAFE calculations. Section 217 authorizes EPA to collect fees for certification of new vehicles under

section 206(a), compliance monitoring and testing under section 206(b), and in-use testing under section 207(c). EPA is promulgating the National LEV emissions standards under its CAA section 202 authority and NLEVs will be subject to sections 206 and 207. Therefore, section 217 applies to certification and compliance testing of NLEVs. EPA will continue to administer and implement these federal certification and fuel economy compliance programs for vehicles in the National LEV program, and will continue to process certification applications, determine conformance or non-conformance, issue certificates, and conduct all other associated activities for such vehicles. Efforts at ensuring in-use compliance through selective enforcement audits and recall testing will also continue, as will the administration of fuel economy labelling requirements and CAFE calculations. All of these activities will incur costs that Congress authorized EPA to recoup pursuant to section 217 of the CAA. Therefore, it is necessary and appropriate for the Agency to collect fees for these services.

In addition, EPA would provide notice and comment before making any revisions to the fees program. EPA did not propose any such revisions in the NPRM for this rule. However, there are several factors that may prompt a reevaluation of the fee program in the future. For example, there are discussions underway between EPA, CARB, and other stakeholders that may result in changes to the vehicle emission certification program that could reduce the burden on vehicle manufacturers. To the extent that such changes actually affect the work EPA does to provide those services, appropriate changes to the fees program could follow by separate rulemaking.

Regarding the "hardship" provisions of the fees program, the Agency believes that those provisions offer adequate relief for manufacturers with limited production volumes. The Agency took comment on the proposed hardship provisions when developing the fees program and subsequently finalized a fee structure that the Agency concluded would provide adequate relief for those manufacturers with limited production volumes. As in the case above, EPA did not propose any revisions to the fees regulations in the National LEV NPRM, and it is therefore beyond the scope of the National LEV final rulemaking to change the fee hardship provisions. EPA would provide notice and opportunity for public comment prior to adopting any such changes.

## **E. Legal Authority**

### Comments

Some commenters (5, 53, 57, 65, 87) claimed that the legality of the National LEV program was uncertain. Two commenters (25, 64) claimed EPA does not have authority for the program. Two commenters (57, 64) claimed that the general grant of power in section 301 could not trump the specific limitations in section 202. Two commenters (53, 64) claimed that EPA's basic argument for its authority to promulgate National LEV was that EPA is not precluded from doing so, and that this argument is questionable. Three commenters (57, 64, 65) stated that Congress did not distinguish between "voluntary" and "mandatory" modifications of standards.

Some commenters worried about the program's connection to OTC LEV, which they claim has serious legal questions (54, 57, 84). Some commenters (5, 25, 57) argue that because the National LEV regulations would constrain a manufacturer from opting out, once it has chosen to opt in, the program is not truly voluntary for auto manufacturers. Others (57, 64, 65) claimed that the National LEV standards are not voluntary because they would affect parties that would not be volunteering (e.g. manufacturers of aftermarket parts or consumers in the 37 states outside the OTC). On the other hand, some commenters agreed that EPA had authority to promulgate a voluntary National LEV program (26, 66, 79).

### Response

EPA continues to believe that the National LEV program is authorized by the Act. EPA disagrees with comments that its legal arguments are based on the absence of language precluding the National LEV program. On the contrary, section 202(a) of the Act expressly allows -- in fact, it requires -- EPA to promulgate emission standards for motor vehicles. The language of section 202(a) does not require that such standards be mandatory; nor does section 202(a) preclude the use of opt-in or opt-out provisions. Thus, EPA does not rely on the absence of language precluding the National LEV program; EPA is relying on the specific language of section 202(a) that provides EPA with authority to promulgate standards, including the National LEV standards.

Section 301(a) of the Act also provides authority for this action. Section 301(a) allows the Administrator to "prescribe such regulations as are necessary to carry out his functions" under the Act. As discussed in the proposal, the National LEV program furthers the basic pollution reduction goals of the Act in a cost-effective manner through a voluntary alternative program. Also, as one commenter (26) notes, a primary function of the Act is attainment of the NAAQS. This program will help the states in the OTR and throughout the nation to meet the ozone NAAQS, which has been exceeded in numerous areas throughout the nation.

In addition, section 202(b)(1)(C) merely establishes Congress' narrow intent that the mandatory standards for NMHC, NO<sub>x</sub>, CO and PM in section 202(g) not be modified. The National LEV program does not modify the Tier 1 standards because the program merely creates another set of voluntary standards, authorized under section 202(a), that manufacturers are permitted, but not required, to accept. Thus, comments that section 202(b)(1)(C) does not distinguish between voluntary and mandatory standards are inapposite. Section 202(b)(1)(C) does not on its face bar voluntary standards but merely prohibits standards that modify the Tier 1 standards. In remanding EPA's OTC LEV decision, the U.S. Court of Appeals for the D.C. Circuit appeared to distinguish the National LEV program from forbidden mandatory programs. The court noted that "[t]he [National LEV] program is voluntary because section 202 of the Clean Air Act forbids EPA from itself modifying motor vehicle emission standards before the model year 2004." *Virginia v. EPA*, No. 95-1163, D.C. Cir. (March 1, 1997), slip op. at 10 n.4. Since the National LEV standards do not at all modify the mandatory Tier 1 standards, which would remain fully effective, they are not prohibited by section 202(b)(1)(C).



For the same reason, section 202(b)(1)(C) does not prevent EPA from promulgating these regulations under section 301(a). EPA's broad authority to promulgate regulations under section 301(a) is limited under section 202(b)(1)(C) only to the extent EPA attempts to modify its Tier 1 standards under section 301(a). As the National LEV program does not modify Tier 1 standards, it is not prohibited by section 202(b)(1)(C), whether EPA uses its authority in section 202(a) or its authority under section 301(a).

Regarding OTC LEV, though the National LEV program is historically tied to OTC LEV, the legality of National LEV is not connected to the legality, or lack thereof, of the OTC LEV program. Moreover, decisions in both the 1st and 2nd Circuits show that the state CAL LEV programs currently in place are authorized by CAA section 177.

Regarding comments that the NLEV program is not “truly voluntary,” the fact that manufacturers are constrained from leaving the program once they have opted in does not change the fact that no manufacturer will be subject to the NLEV program unless that manufacturer voluntarily petitions to enter the program. A manufacturer that opts into National LEV is voluntarily accepting the conditions placed on its participation in an alternative program, which include obligations extending into the future such as limitations on exiting the program.

Finally, regarding comments that parties other than manufacturers are affected by the National LEV program, EPA's authority to require automobiles to meet emissions requirements under section 202(a) is directed towards automobile manufacturers and section 202(b)(1)(C) was designed to protect such manufacturers. Though other parties may be indirectly affected by regulations promulgated under section 202, only manufacturers are directed to act in a certain manner by these regulation. States have the ability to require CAL LEV programs. Moreover, manufacturers are, of course, always permitted to build vehicles cleaner than the mandatory standards. The effect of the National LEV program on other parties is no different than the effect on such parties if a manufacturer decided, in the absence of this program, to build vehicles to more stringent standards. The decision as to what emissions level a vehicle will meet is the choice of the manufacturer. Thus, regardless of whether every party potentially indirectly affected by the National LEV regulations volunteers for the program, there is simply no legal bar to allowing the manufacturers to volunteer. See the preamble to the final rule section IV.A.2.e. for further discussion.

While National LEV's effects on parties other than the manufacturers do not undermine the legal basis for the program, EPA has, of course, carefully considered these effects in the development of the National LEV regulations. EPA is adopting the National LEV program on the condition that it does not require a change in federal fuel regulations. As discussed elsewhere in this document, the National LEV program is a vehicle-specific program.

Regarding comments directed at the effect of this program on consumers in the 37 non-OTC States, as discussed in the Public Participation portion of this documents, a national emissions program creates significant benefits to consumers throughout the nation. Numerous

states throughout the nation contain areas that are not in attainment for ozone. Reductions in other pollutants also help areas throughout the nation regardless of their ozone status.

Moreover, even if manufacturers wished to sell NLEVs only in areas of the country in ozone nonattainment, the practicalities of the marketplace make this impossible. The cost of producing vehicles to meet several different emission standards, or the cost of sending different vehicles to different areas interspersed throughout the country (ozone nonattainment areas are not concentrated in one area of the country, but exist throughout the various regions of the United States) make it highly unlikely that any manufacturer would attempt to direct NLEVs only to those states containing nonattainment areas. For this reason, even if a state wished to "opt-out" of the National LEV program, it is unlikely that the state would receive vehicles different from NLEVs. The costs of building such vehicles and controlling their distribution could actually push costs in such "opt-out states" higher than they would otherwise be.

In addition, such an "opt-out" could cause considerable burdens on interstate commerce and, because of the inherent mobility of motor vehicles, could reduce considerably the emissions reductions that would otherwise be expected in areas of nonattainment, because vehicles bought in opt-out states could be used in other states.

Congress, in fact, recognized that a central national program for control of emissions from automobiles is the best way to manage emissions from new motor vehicles. This is why Congress, in section 209 of the Act, preempted states from promulgating their own emission reduction programs for new motor vehicles. The only exception is for California, which has special environmental concerns, and other states with SIPs. Moreover these other states may only use the federal auto emissions program or standards identical to California's standards. Manufacturers have stated, in fact, that even this limited ability of individual states to "piggyback" on California's regulations can cause the problems discussed above. Thus, the federal National LEV program appears to be consistent with the intent of Congress to encourage consistent vehicle regulations throughout the United States.

### **III. National LEV Will Produce Creditable Emissions Reductions**

#### **Proposal**

In the OTC LEV decision, EPA required states to cure the SIP inadequacy by either adopting OTC LEV or a "short-fall" SIP. However, EPA provided that the SIP inadequacy would be deemed cured if EPA were to determine through rule-making that a national LEV-equivalent new motor vehicle emission control program were an acceptable alternative for OTC LEV, and EPA were to find it in effect. In the NPRM, EPA proposed to find that National LEV is an acceptable LEV-equivalent program.

EPA proposed two key criteria for approval as an acceptable LEV-equivalent program. One criterion was that the VOC and NO<sub>x</sub> emissions reductions within the OTR produced by National LEV must be equivalent to or greater than the emissions reductions produced by OTC LEV. The other was that the alternative program must be enforceable. EPA proposed to determine that the National LEV program will result in emissions reductions in the Northeast OTR that are equivalent to or better than the emissions reductions that would be achieved by state-by-state adoption of the California LEV program (including Zero Emissions Vehicle (ZEV) mandates), based on EPA's own modeling of the two programs.

EPA also proposed to find that National LEV meets the criterion that it provide enforceable emissions reductions. This finding had two parts. First, EPA proposed to find that National LEV is fully enforceable against those manufacturers that have bound themselves to comply with the program. Second, EPA proposed to find that National LEV is stable and will remain in effect for the intended duration of the program because the circumstances allowing the program to terminate prematurely are limited and unlikely to occur.

#### **A. Emissions Reductions from National LEV**

#### **Comments**

Multiple commenters addressed the issue of equivalence in emission reductions between the OTC LEV and the proposed National LEV programs. Several commenters (49, 74, 87) stated that EPA had not adequately made the equivalence determination or that the many variables introduce too much uncertainty to be able to draw a conclusion regarding equivalence, while one commenter (19) stated support for EPA's equivalence finding. One commenter (49) stated that EPA's equivalence analysis should have been peer reviewed.

Many other commenters questioned various modeling assumptions used to demonstrate equivalence between OTC LEV and National LEV programs, but stopped short of concluding that the equivalence finding was inadequate. Comments on and responses to specific assumptions are detailed in the following subsections.

## Response

In light of the OTC LEV court decision, there is no longer any federal legal requirement for the emissions reductions from National LEV to be equivalent to those from OTC LEV. Also, EPA's evaluation of the emissions reductions that would be produced by National LEV and OTC LEV was based on assumptions regarding the start dates of the two programs that are no longer accurate. Today's rule uses MY1997 as a placeholder for the start date of the program. However, given the court decision vacating EPA's OTC LEV decision and given the likely timing of final agreement on National LEV, EPA believes that MY1997 is not a realistic start date and will take comment in the SNPRM on the appropriate start date. The modelling for OTC LEV assumed that OTC LEV would be in place in each OTC state for MY1999; given the number of OTC States that have not yet adopted CAL LEV programs and the section 177 requirement for two years of lead time, this assumption is also no longer accurate. Nevertheless, a comparison between the emissions reductions that would be achieved by National LEV as designed and the emissions reductions that would be achieved through adoption of CAL LEV by each OTC State within the timeframe specified in the OTC LEV SIP call, still provides useful information on the comparability of the two programs, and this information is important for OTC States deciding whether to commit to National LEV in lieu of adopting state CAL LEV programs. Thus, in the discussion below, EPA explains its evaluation of the comments on the modelling, the Agency's continued belief that the modelling assumptions are valid and appropriate, and its conclusion that National LEV as designed (i.e., to start in MY1997) would produce emissions reductions equivalent to or greater than reductions from OTC state-by-state adoption of CAL LEV within the timing contemplated by the SIP call (i.e., to start in MY1999). Because much of the discussion below addresses EPA's modelling of National LEV and OTC LEV as designed, and because OTC LEV is simply shorthand for adoption of CAL LEV by each OTC state within the timeframe specified in the OTC LEV SIP call, the discussion below continues in places to reference the equivalence of National LEV and OTC LEV, even though such equivalence is no longer a legal prerequisite for National LEV.

EPA's equivalency determination, and the entire RIA, has been peer reviewed. The peer review comments have been included in the docket for this rulemaking (A-94-26, IV-G-7, and IV-G-8) and EPA's responses are included in the RIA for the final rule.

### **1. Migration**

#### Comments

Multiple commenters (3, 5, 49, 52, 58, 74, 83, 87) had concerns with the assumptions EPA made regarding vehicle migration. They questioned or disagreed with EPA assumptions that OTC LEV states will benefit from a National LEV program due to migration of LEVs (rather than Tier 1 vehicles) into the OTR. One commenter (58) asked whether EPA has identified any basis to substantiate the migration analysis.

Some (3, 5, 49, 52, 58, 87) commented that migration rates into the OTR are overstated, for multiple reasons. Specifically, one (3) noted that most of the OTR states have been losing population to other areas of the country. This commenter added that intra-regional (within New England) relocations are more prevalent than inter-regional relocations, thereby further reducing the migration benefits, given that the more stringent OTC LEV standards would be in place in 2001. Another commenter (49) stated that, because the analysis uses human population migration based on IRS personal tax exemption data as a surrogate for vehicle migration, it assumes incorrectly that for every tax return exemption there is car ownership and for every person that moves a vehicle will also move. One commenter (87) stated that equating vehicle migration with human or driver license migration discounts the effect of captive fleets. That commenter also asserted that EPA analysis of temporary migration was flawed due to an overestimate of mileage within the OTR and an underestimate of I/M effects on migrating vehicles. Finally, the commenter noted that vehicle migration has never been considered by EPA in the past.

Other commenters (3, 5, 49, 87) questioned whether the model properly considered that LEVs are already being sold in states that border the OTR and that this practice is likely to increase. Further, some (5, 87) noted that most manufacturers have historically moved toward 50-state certifications. They stated that this, coupled with the likelihood that other states will adopt California standards, means that there would likely be decreased production of Tier 1 vehicles for sale in the rest of the country even without National LEV.

### Response

EPA believes that the migration analysis was based on the best information readily available at the time it was completed. During the FACA process, EPA conducted further analyses to determine the sensitivity of the equivalence determination to many different assumptions, both favorable and unfavorable to the National LEV program. None of these changed the equivalence determination. Since the migration analysis was first presented in September 1994, no one has presented any data that would undermine the migration assumptions.

EPA agrees that most OTR States do, indeed, have negative net migration rates. However, this merely means that more people are moving out than are moving in. People are still moving into these states, and EPA expects that (in the absence of National LEV) they will bring their Tier 1 vehicles with them. In-migration rates are indeed very low (less than 1% annually), but Tier 1 vehicles have substantially higher in-use emissions than LEVs, so that a few Tier 1 vehicles per year accumulating over several years can have a large effect on the inventory.

EPA agrees that intra-regional relocations are more prevalent than inter-regional relocations, but the frequency of intra-regional relocations is irrelevant to the equivalency finding because EPA's analysis only considers inter-regional relocations. Migration of vehicles between states with identical emissions standards has no effect on the average emissions of the vehicle

fleets in those states. EPA's analysis estimates the only component of migration that does affect the fleet average emissions, which is the migration of vehicles between states with different vehicle emission standards. In the context of National LEV, this component comprises only inter-regional relocations.

The analysis does not assume that for every person who moves, a vehicle will also move. The analysis actually relies on the assumption that the rate of migration (not the actual number of migrants) is the same for people and vehicles. While it is true that fleets were not separately accounted for in the RIA, EPA estimates that for passenger cars, fleets account for only about 7% of the total motor vehicle registrations. As a result, they would have a very small effect on the overall migration rate.

While EPA conducted an analysis of temporary migration, the Agency did not rely on this analysis in the RIA. Therefore, any criticisms of the temporary migration analysis are irrelevant to the equivalency finding.

Regarding the assertion that EPA has not considered migration in the past, the only state where vehicle migration would historically have had a negative impact on the emissions inventory has been California, which included 49-state certified vehicles in its emission factor database used to create the EMFAC emissions factor model. By approving California SIPs based on EMFAC, EPA has acknowledged the potential effect of vehicle migration on an emissions inventory. In the rest of the country, vehicle migration has never been an issue because vehicle standards have been uniform up until now. Under National LEV, there will be different standards in the OTR than in the 37 states prior to model year 2001, so it is appropriate for EPA to consider the effects of vehicles certified to more or less stringent standards migrating into the OTR.

It seems reasonable to assume that, in the absence of National LEV, most sales of California-certified vehicles outside the OTR will occur only in areas where there is significant cross-border sales traffic. Given the geography of the OTR, most of these sales would be in a limited band through central Virginia, West Virginia, and eastern Ohio. EPA has no data with which to predict the amount of sales of California-certified vehicles in this area, but it is difficult to believe that they would have any more than a minor impact on the composition of the migrant fleet.

Manufacturers have moved toward 50-state certification in the past primarily because California and Federal standards were not significantly different. However, the much larger differences between Tier 1 and LEV standards, including the very low deterioration rates expected of LEVs, will reduce the incentives for manufacturers to certify many 50-state vehicles. Moreover, even assuming that there are some 50-state certified vehicles under National LEV before 2001, it is impossible for EPA to predict the number. Similarly, while some states outside of the OTR may adopt and implement CAL LEV programs while National LEV is in effect, it is

impossible for EPA to predict whether and which states will do so. Thus, EPA believes that it is reasonable to exclude such uncertain and speculative effects from the equivalency analysis.

This analysis is not inconsistent with EPA's decision to apply a 10% discount rate to early reduction credits generated in the 37 States before MY2001. Use of a discount rate reflects EPA's concern about the possibility of windfall credits due to 50-state certifications. However, in deciding to set a discount rate and in choosing the number, EPA erred on the side of protecting the environment from any possibility of windfall credits, rather than attempting the extremely difficult task of accurate quantification of expected windfall credits. In addition, it is reasonable to expect that there would be a somewhat higher likelihood of 50-state certifications under National LEV than under OTC state-by-state adoption of CAL LEV programs, absent early reduction credits. While a 50-state certification would allow manufacturers to sell the same vehicle in any state under either approach, under National LEV, manufacturers are likely to certify a great many 50-state vehicle families beginning in MY2001. Therefore, under National LEV, in certifying a 50-state vehicle before MY2001, a portion of the costs may be costs the manufacturer would incur anyway, but not until MY2001. Under OTC state-by-state adoption of CAL LEV programs, however, the manufacturer would never have to incur such costs. Given somewhat stronger incentives for 50-state certification under National LEV than under OTC LEV programs, it is more appropriate to take the possibility of such certifications into account in addressing windfall credits than in the equivalency analysis. Finally, 10% of all clean vehicles introduced early in the 37 States will probably be a very small, as well as highly speculative, number. Not only would it be inappropriate to try to use that number in the equivalency analysis, it also would be unlikely to have any effect on the determination that National LEV will produce at least the equivalent level of emissions reductions as OTC state-by-state adoption of CAL LEV in the OTR.

## **2. ULEVs, ZEVs and ATVs**

### Comments

Several commenters asserted that OTC LEV is a better program than National LEV because OTC LEV will force development of cleaner technology (3, 24, 53, 82, 89, 98). Two commenters (3, 53) stated that National LEV sets too lax a standard and thus would provide only extremely incremental improvements to conventional internal combustion engine technologies. Another commenter (98) stated that National LEV would jeopardize investments to date in alternative fueled vehicles and infrastructure by setting standards that can be met without using alternative fuels. Another commenter (39) agreed, and added that by undermining future alternative fuel vehicle product offerings, National LEV will increase dependence on foreign oil in New York and the entire U.S.

Several commenters (49, 58, 87) questioned the accuracy of EPA modeling with respect to ULEVs, ZEVs and ATVs, stating that EPA underestimated their benefits under OTC LEV in several respects. One commenter (49) asserted that EPA has failed to consider the "technology

forcing aspects" of OTC LEV on states outside the OTR. Specifically, the commenter stated that the ZEV technology brought to market in the OTR will have spill over effects into markets in the non-OTR states because once such technology is available, it is likely that purchasers in the non-OTR states will also seek to purchase ZEVs. As a consequence, the commenter claimed, EPA's migration analysis is skewed toward National LEV because it fails to analyze a critical result of OTC LEV.

Another commenter (87) asserted that the emissions benefits of ULEVs and ATVs under OTC LEV are not fully reflected in the analysis. The commenter stated that although these vehicles have lower off-cycle emissions than other vehicles, MOBILE5a underestimates off cycle emissions and so cannot account for these extra benefits.

This commenter also stated that, by assuming all ULEVs are gasoline-powered, the analysis underestimates the benefits of alternatively-fueled ULEVs and, thus, fails to account for a possibly substantial benefit of OTC LEV. The commenter states that, assuming manufacturers would have to sell between 15-37% of their fleets as ULEVs under OTC LEV and only 25% of ULEVs sold operated on CNG, OTC LEV would have substantial benefits beyond what EPA modeled because CNG vehicles have essentially zero evaporative emissions.

Two commenters (39, 52) stated that the proposal to allow flexible/dual-fuel vehicles to certify to less stringent NMOG standards when operated on gasoline diminishes the emissions reduction benefits of the National LEV program. Furthermore, these commenters added, vehicles that will be operating outside California can be certified to a standard whose achievement is contingent on the use of reformulated gasoline that is not available in the 49 states for which the National LEV Program is proposed. These commenters concluded that this provision compromises the already less stringent NMOG emissions fleet averages.

Another commenter (58) asked if EPA made proper assumptions about emissions from power plants when considering the benefits of ZEVs. One commenter (87) suggested that EPA underestimated the emissions benefits of ZEVs, noting that ZEVs become cleaner over time, rather than deteriorating as do other engines, because increasing controls on utilities create cleaner sources of electricity.

Another commenter (37) asked if National LEV precludes ULEVs and ZEVs, what options will states have to make up the mobile source shortfall.

### Response

As explained in the NPRM (60 FR 52734 at 52759), although EPA agrees that advancing technology is an important policy goal, EPA does not believe that it is or should be a legally-required criterion for approval of National LEV. ATVs were not a legally necessary component of a substitute for OTC LEV, and now OTC LEV itself is no longer a legal requirement.



Although advancing technology is not a legal requirement, EPA recognizes that the auto manufacturers and the OTC States had agreed on language for an “ATV component,” which would be included as an attachment to the MOU if they finalize that agreement. EPA supports the approach the OTC States and auto manufacturers had been discussing to introduce and establish ATVs in the OTR and urges the parties to complete those efforts.

The ATV component that the OTC States and auto manufacturers had included in their initialled MOUs is a unique agreement that would use an on-going, cooperative relationship to ensure that advanced technology, including alternative fueled vehicles, will take hold in the OTR. The ATV component would ensure that under National LEV the OTC States, manufacturers and others will direct efforts specifically at developing the market for alternative fuel vehicles, including infrastructure development, vehicle technology improvements, and incentive programs. See n. 55 in the preamble to the final rule for further discussion.

It is important to recognize that OTC State adopted of CAL LEV programs would not contain a separate requirement for alternative fuel vehicles. Moreover, although the CAL LEV NMOG fleet average is sufficiently low to force manufacturers to produce ULEVs, there is no reason to believe that forcing ULEVs will result in alternative fuel vehicles. Gasoline powered vehicles can achieve ULEV standards, and manufacturers have indicated that they would produce gasoline powered ULEVs under OTC State adopted CAL LEV programs. Consequently, it is not clear to what degree OTC state-by-state adoption of CAL LEV programs would necessarily force development of alternative fueled vehicles or to what extent, if any, it would be preferable to National LEV in this regard.

The ULEV requirement in OTC State CAL LEV programs (and a ZEV requirement in any states that chose to adopt one), may indeed help encourage technological advances in vehicles. However, it is impossible to predict what impact these advances would have on the rest of the motor vehicle fleet and on the emissions inventory. It is also impossible to predict how different these effects would be under OTC state-by-state adoption of CAL LEV programs rather than under a National LEV program subject to EPA requirements, with agreements between CARB and the manufacturers on ZEVs in California, particularly if there is an agreement between the OTC States and manufacturers on ATVs in the OTR. Any estimate of the differences between these effects for OTC state-by-state adoption of CAL LEV programs and National LEV programs would be extremely speculative. Therefore, EPA does not believe that it would be appropriate or possible to try include any such effects in the equivalency modeling.

It is even more speculative to try to assess differences in ZEV requirements under the two approaches and any consequent effects on migration. EPA has uniformly taken the position that the decision on whether to adopt a ZEV mandate must be left to the individual state under either National LEV or OTC LEV. OTC LEV did not require states to adopt a ZEV mandate, and it is difficult to predict what actions states will take in response to changes in the California ZEV mandate. Of the six OTC states that have adopted CAL LEV programs, only three have adopted regulations including ZEV mandates, and the auto manufacturers have filed court challenges to

New York's and Massachusetts' ZEV mandates. Thus, the future requirements for ZEVs in the OTR are not certain under either approach. Substantial further uncertainty is introduced by attempting to estimate the extent of consumer demand for ZEVs outside the OTR as a result of projected ZEV requirements in OTR states under OTC state-by-state adoption of CAL LEV programs to the extent permitted by section 177, and to estimate the extent to which such demand would replace, rather than supplement, demand for vehicles that are not ZEVs. Moreover, to the extent that technology forcing through ZEV mandates will have spill-over effects on states outside the OTR, it is reasonable to expect that California's ZEV program will continue to be the driving force nationwide, which should produce the same effects under either OTC state-by-state adoption of CAL LEV programs or National LEV. Finally, given the availability of early reduction credits outside the OTR prior to MY2001, manufacturers have an additional incentive to supply cleaner vehicles to the 37 States under National LEV that is absent under OTC state-by-state adoption of CAL LEV programs. Consequently, EPA does not agree that any potential differences in ZEV introductions outside the OTR under the two approaches would be sufficient to skew the migration analysis either for or against National LEV, or that there is any way to quantify such speculative effects.

EPA does not agree with the comment that it has underestimated the off-cycle emissions benefits of ULEVs under OTC LEV. Once EPA's supplemental FTP emissions rule goes into effect, it will significantly lower the off-cycle emissions of all vehicles. EPA agrees with the commenter that even after the supplemental FTP emissions rule goes into effect, it is reasonable to expect that ULEVs will have lower off-cycle emissions than LEVs. However, the off-cycle emissions from Tier 1 vehicles will also be higher than the off-cycle emissions of LEVs. As a result, under OTC LEV the migration of Tier 1 vehicles into the OTR would increase off-cycle emissions. Based on current knowledge of off-cycle emissions, EPA believes that the effect of off-cycle emissions from Tier 1 vehicles migrating into the OTR would match or even outweigh the reduction in off-cycle emissions achieved by ULEVs in the OTR. Thus, for purposes of the equivalency analysis, EPA believes that the Agency has adequately accounted for the off-cycle emissions benefits of ULEVs under OTC LEV.

As discussed above, given that there is no separate requirement for alternatively fueled ULEVs under OTC State adopted CAL LEV programs and that ULEV standards are achievable using gasoline powered vehicles, there is no reason to believe that a significant number of ULEVs will run on alternative fuels. During the FACA process, EPA conducted a sensitivity analysis assuming that 20% of the ULEV fleet (which was assumed to comprise 15% of 2003 and later model years in states with a ZEV mandate and 37% of 2003 and later model years in states without a ZEV mandate) was alternatively fueled (and had no evaporative emissions) and concluded that this had no effect on the equivalence determination. EPA assumed that alternatively-fueled ULEVs would have exhaust emissions approximating the level to which they are certified. While EPA estimated a slightly lower percentage of alternative fueled ULEVs than the commenter, EPA believes that (a) 20% is a realistic and likely even generous number, given that the manufacturers have indicated they will build largely gasoline fueled ULEVs; and (b) even if 25% is the more accurate estimate, an additional 5% would not affect equivalency.

For exhaust emissions, there is no reason to expect that alternatively-fueled ULEVs would have exhaust emissions significantly below the standard to which they are certified. First, EPA has seen no data indicating that this is likely to occur. Second, if manufacturers find that alternative fueled vehicles are emitting significantly below the certification standard, they will have an incentive to reduce costs by reducing emission controls until the vehicle emits close to the required level.

EPA recognizes that allowing flexible/dual-fuel vehicles to certify to less stringent NMOG standards when operated on gasoline may produce fewer emissions reductions than if the vehicles had to certify to the same NMOG standards on gasoline and the alternative fuel. Similarly, vehicles certified on California Phase II RFG may emit at higher levels when run on the conventional gasoline and federal RFG available outside of California. However, these potentially higher emissions would occur under either National LEV or OTC state-by-state adoption of CAL LEV programs because both approaches include the California provisions for flexible/dual-fuel vehicles and both approaches certify vehicles on California Phase II RFG. Thus, this potential for somewhat higher emissions will have no effect on the equivalency of the two approaches.

Because of the difficulty in quantifying potential changes in power plant emissions resulting from increased energy demand due to ZEV use coupled with potential emissions decreases due to future power plant controls, EPA did not include any estimate of this effect in the analysis. Any estimate of a potential increase in power plant emissions would raise OTC LEV emissions relative to National LEV emissions. Because the MOBILE5a emissions factor model used in this analysis assumes that ZEVs have no exhaust or evaporative emissions over the lifetime of the vehicles, it is impossible to discount ZEV emissions due to increasing controls on utilities.

On the concern regarding preclusion of ULEVs and ZEVs under National LEV, EPA notes that under National LEV, manufacturers may sell vehicles certified to any of the five certification categories, including ULEVs and ZEVs. While there is a cap on sale of Tier 1 vehicles and TLEVs, EPA does not expect that this cap will actually restrict manufacturers from selling vehicles that they otherwise would have sold. (See the discussion on limitation on sale of Tier 1 vehicles and TLEVs at section II.B.3.) Moreover, the equivalency determination is based on an assumption that manufacturers do not have to sell any particular mix of vehicles, but simply must meet the fleet average NMOG standard. Thus, even if manufacturers choose to sell a different mix of vehicles under National LEV than they would have sold under OTC LEV, the programs will still be equivalent and there will be no "mobile source shortfall."

### **3. Tier 2 Standards**

#### Comments

Two commenters (5, 87) questioned the assumption that Tier 2 standards will be promulgated under National LEV but not otherwise. They further commented that the modeling does not include the proposal's assumption that Tier 2 standards would supersede National LEV for MY 2004, and felt that inclusion of this assumption would reduce the benefits of National LEV relative to OTC LEV.

#### Response

It would be inappropriate for EPA to include in the modeling an assumption that Tier 2 standards will be promulgated, because any Tier 2 standards will be established through a future rulemaking according to statutory criteria. EPA cannot assume at this time that these criteria will be met and Tier 2 standards will be promulgated. The standards that would be set in any such rulemaking is also an open issue. Thus, EPA's modeling compared OTC LEV to National LEV, both in the absence of Tier 2 standards.

A replacement of National LEV by Tier 2 standards would not diminish the modeled benefits of the National LEV program. In the absence of National LEV, there is no guarantee that there would be any Tier 2 standards or that they would be as stringent as the National LEV standards. Thus, as discussed above, EPA cannot assume for modeling purposes that certain Tier 2 standards come into effect at some given time. However, the existence of National LEV ensures that standards as stringent as those under National LEV will be in place, either as mandatory Tier 2 standards, or as a continuation of the voluntary National LEV standards. In this final rule, EPA has modified the proposed duration of the program to provide that National LEV will remain in effect until the first model year that at least equally stringent mandatory federal standards apply. If EPA does not promulgate Tier 2 standards, National LEV will continue to apply. Thus, it is appropriate to credit National LEV with ongoing emissions reductions at the level produced by the National LEV standards, whether those reductions are eventually produced under Tier 2 requirements or whether they continue to be produced under National LEV requirements.

#### **4. Deterioration**

#### Comments

One commenter (87) believes that vehicles in the OTC LEV program will have lower deterioration rates than vehicles in the National LEV program because the former is administered by CARB, which is better able to ensure this result due to greater institutional and regulatory flexibility. The commenter believes that EPA is less able to revise its program to address emission performance shortfalls and that this will be exacerbated by establishing the Stable Standards. The same commenter also noted that, under EPA's April 8, 1994 LEV credit memo,<sup>4</sup>

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<sup>4</sup> Memorandum from Phil Lorang, Director, EPSD to EPA Air Directors, "Emission Reduction Credits for California Low Emission Vehicles (LEV's)", April 8, 1994. Available

the states must ensure the performance of LEVs with a SIP commitment to continually evaluate the program and to make up any shortfall that results. This commenter believes that EPA takes on this responsibility in the National LEV program, but does not make similar commitments.

Another commenter (58) asked if EPA has properly credited the fact that ZEVs have no deterioration.

### Response

EPA does not agree with the comment that the Agency has less institutional capability than CARB does to achieve projected in-use emissions standards through program revisions. Both EPA and CARB go through a careful process in making rule changes, which includes consultation with the affected industry, public hearings, and notice and comment rulemaking. EPA conducts frequent rulemakings to make needed changes in the federal motor vehicle program, which range from technical revisions to significant rules. Nor will designation of the Stable Standards reduce EPA's ability to make adjustments necessary to achieve projected emissions reductions in-use. EPA has explicitly exempted defeat device and durability provisions to ensure the enforceability of standards adopted under National LEV. These provisions apply to all substantive emissions standards. Their purpose is to detect deterioration or component durability shortcomings and to prevent devices that intentionally circumvent the intended emissions targeted by the substantive requirements. If EPA finds that National LEV vehicles are not achieving their applicable in-use emission standards due to intentional circumvention of the emissions control technology or inadequately durable components, EPA will be able to apply the defeat device and durability provisions directly and will also be able to modify these protective defeat device and durability provisions, if necessary to address a newly encountered problem in this area. In addition, EPA believes its enforcement program to be at least as effective as California's and thus does not expect any detrimental emission effects, including different deterioration rates. Also, there is a substantial amount of cooperation in enforcement of the two programs that tends to blur the distinctions between the programs. As the federal and state programs become more similar under the National LEV program, this cooperation will likely increase.

There are also some advantages to federal enforcement under National LEV. In-use enforcement mechanisms under OTC State adopted CAL LEV programs are somewhat uncertain. While some of the OTC States have signaled their intent to piggyback off the California enforcement programs, they have also signaled a desire to develop a regional testing facility as well. At least in the early stages, it appears likely that in-use enforcement of OTC State adopted CAL LEV programs would rely on California enforcement. For National LEV, EPA plans to test vehicles that are used in the OTR. However, under OTC State adopted CAL LEV programs, if enforced by California, testing would be conducted on California vehicles. In this situation,

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from EPA Air Docket A-94-11, Document Number II-A-20.

federal enforcement will be better able to catch any unique factors affecting LEV vehicles in the OTR, such as temperature or driving patterns, that could affect deterioration.

One of the key factors related to deterioration of vehicles is the quality of state inspection and maintenance programs, which are administered by the states. A more stringent program will help ensure that vehicles continue to operate at their design limits. This key factor will not be affected by federal, rather than state, in-use enforcement. Thus, even if there were any differences between the effectiveness of federal versus state enforcement, such differences would be likely to have only a marginal effect on deterioration rates, which would be more heavily affected by state inspection and maintenance programs.

EPA will apply the same policy guidance for calculating SIP credits under National LEV as it would apply under OTC State adopted CAL LEV programs. EPA has not yet evaluated how the Agency's April 8, 1994 LEV credit memo, "Emission Reduction Credits for California Low Emission Vehicles (LEV's)," would apply in the National LEV context.

The MOBILE5a emission factor model used in this analysis assumes that ZEVs have no exhaust or evaporative emissions over the lifetime of the vehicles, which is consistent with the comment that ZEVs have no deterioration.

## **5. NMOG Fleet Average Equivalence**

### Comments

One commenter (3) argued that the proposed NMOG fleet average standards are too lax because they are less stringent than what would apply absent National LEV. The commenter illustrated this by exhibiting a side-by-side comparison of the National LEV fleet average NMOG standard and the Massachusetts fleet average NMOG standard. The commenter further argued that adoption of the National LEV fleet averages would set back emissions reductions in both Massachusetts and New York, and that those states would have to seek offsetting measures from non-mobile source areas.

Another commenter (52) questioned whether the emissions reductions from National LEV could be maintained, given the leveling off of emissions standards at the LEV standard for MY2001, the uncertainty of program duration beyond MY2003, and forecasts of increasing vehicle mileage, at least for New York. Similarly, another commenter (58) urged continued reduction in the fleet average NMOG standard to address future increases in mobile source emissions.

One commenter (98) requested clarification of the National LEV and OTC LEV equivalency finding for SIP credit purposes. This commenter requested that EPA revise Table 6 in the NPRM to provide data on relative weekday highway emissions for cars in the OTR in tons/day for the period 1997-2004 under each program.

## Response

EPA's analysis of the equivalency between National LEV as designed and OTC LEV if adopted by each OTC State by the date contemplated in the OTC LEV SIP call takes into account the differences between the fleet average NMOG standards under the two programs. The analysis concludes that the programs nevertheless will produce equivalent levels of emissions reductions in the OTR due to the earlier start date and emissions benefits from cleaner vehicles migrating into the OTR under National LEV. See the discussion of equivalency in section V.A. of the preamble to the final rule, section V.A.2.a. of the preamble to the NPRM and the RIA for the final rule.

EPA's analysis takes into account the expected growth in vehicle miles traveled. Using accepted methodologies, EPA projected area-specific growth rates based on the Bureau of Economic Analysis growth projections. EPA then applied these growth rates to estimate increases in VMT under each program. For both OTC LEV and National LEV, EPA multiplied the VMT projected using those growth estimates by the emissions factors for each program for particular calendar years. Incorporating these results into the larger analysis, EPA concluded that the programs produce essentially equivalent emissions reductions. Taking reasonable projected increases in VMT into account, the equivalency analysis demonstrates that the additional reduction in fleet average NMOG standard associated with the OTC LEV program is not enough to outweigh the negative impact of the migration of Tier 1 vehicles into the OTR. Thus, for purposes of determining equivalency with OTC LEV, National LEV will produce equivalent emissions reductions without further reductions in the fleet average NMOG standard after MY2001. The duration of program provisions in this rule address the issue of vehicle standards after MY2003. See the preamble to the final rule section IV.A.3 and section II.A.3. of this document for further discussion.

EPA's modeling results are used to show the emissions reductions expected from the OTC LEV and National LEV programs as designed, as well as to determine that National LEV is at least equivalent to the OTC LEV program. To receive SIP credits, states will have to submit modeling showing how the program affects their specific inventories. EPA elected to show data for 2005 and 2007 because these are attainment dates for severe ozone areas, such as the New York City, Philadelphia, and Baltimore areas. Emission estimates for 2015 represented a reasonable time horizon for the long-term benefits of LEV programs. Showing data for years before 2005 was determined not necessary in this case since the OTC LEV program would not start until MY1999 and the full effect of motor vehicle controls are not immediately apparent given the time required for fleet turnover.

### **6. Model Year Start of Program**

## Comments

Several commenters (58, 74, 81) noted that failure to start the National LEV program in MY1997 may well compromise its emissions equivalence. Others (22, 42, 44, 50) commented that it is already too late to start the National LEV program in MY1997 due to manufacturers' need for leadtime. One commenter (58) suggested that EPA redo the emissions modeling based on a MY1998 start to determine if equivalence with OTC LEV can still be achieved.

Commenters also requested EPA to elaborate on the specifics of an "equivalent or better" National LEV program if it were to begin with MY1998 rather than MY1997. One (44) suggested that the National LEV program should accept California certified vehicles certified to standards lower than federal standards for MY1997 vehicles. Another (50) asked EPA to give credit under National LEV for any California certified MY1997 vehicles that manufacturers were able to introduce in the OTR.

### Response

See the preamble to the final rule, section III.D.2, for a general discussion of program start date. Comments requesting credit for "early" introductions in MY1997 would be inapplicable if National LEV were to begin in MY1997.<sup>5</sup> Assuming that National LEV begins after MY1997, however, National LEV is not likely to motivate manufacturers to supply such early introductions until it is fairly certain that the program will come into effect. Consequently, any credits for such early introductions would likely be windfall credits and hence would be inappropriate. See the preamble to the final rule, section IV.B.3.b., for a discussion of windfall credits.

If necessary in light of the final start date set for National LEV, EPA will continue to work with individual manufacturers in the course of normal certification procedures to determine whether there is specific data generated for California certification that would be acceptable to show compliance with comparable federal requirements.

## **7. Other Equivalence Issues**

### Comments

Two commenters (3, 52) expressed a concern that under National LEV, states would lose the emissions benefits from the earlier start dates of some OTC LEV programs. One commenter (3) stated that the benefits from migration of cleaner vehicles after MY2001 will not offset the effect of the less stringent National LEV NMOG curve in MY1998 and MY1999, and thus that the MY2001 introduction of National LEV nationwide will do little to help meet the CAA 1999 air quality attainment deadlines in much of the OTR.

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<sup>5</sup>MY1997 is used in this notice as a placeholder for the actual start date. See n.2 above.



Several commenters (58, 74, 83, 87) expressed concern that the analysis does not use accurate assumptions about I/M and/or reformulated gasoline (RFG) programs, including their effects on vehicle deterioration. One commenter (29) questioned the apparent assumption that RFG will be used throughout the OTR, and questioned whether the same emissions reductions would be obtainable using the range of available fuels. Similarly, one commenter (52) stated that in areas such as the OTR where CA Phase II RFG is not available, if gasoline powered ULEVs are certified on CA Phase II RFG, they will not emit as ULEVs, while an alternative fueled vehicle certified as a ULEV will actually emit at the same levels to which it is certified.

Two commenters (35, 48) asserted that EPA did not adequately model the transport of emissions into the OTR because such information does not yet exist. One commenter (35) believes that the impact of transport must be so small as to make National LEV cost-ineffective. Another (48) stated, similarly, that the sale of cars far from the OTR could not possibly affect clean air in the OTR.

### Response

The modeling does, in fact, assume that NY, MA, and CT have LEV programs starting earlier than the rest of the OTR. Up through MY1996, the modelling assumes that LEV programs are in place in these states under either the OTC LEV or the National LEV programs. From MY1997 on, however, these programs are addressed as part of the equivalency determination. Thus, the early benefits that these programs would have produced under OTC LEV are credited toward OTC LEV. These and other reductions under OTC LEV are offset by reductions produced by National LEV, which results in the finding that the two programs as designed are essentially equivalent.

Although the commenter is correct that the MY2001 introduction of National LEV vehicles nationwide (except California) will not address attainment of the CAA 1999 air quality attainment deadlines. However, National LEV will help maintain the air quality standards throughout the OTR from MY1999 on.

EPA's analysis used the best assumptions available for I/M and RFG programs at the time the analysis was done. More recent changes in these programs generally should have equivalent impacts on both OTC state-by-state adoption of CAL LEV programs and National LEV. As a result, EPA does not believe that any current or proposed changes in those programs would change the equivalence determination.

While EPA's analysis does assume RFG throughout the OTR, any change in this assumption will have no impact on equivalency because NLEV vehicles and OTC states' CAL LEV vehicles would be affected similarly. The appropriate comparison for equivalency purposes is to LEV programs as they would operate in the OTC, not to the LEV program as it would operate in California. Under OTC LEV, vehicles would also be certified on CAL Phase II RFG but would operate on fuels available in the northeast, so any resulting higher emissions would

occur under either approach and would have no effect on equivalency. EPA's analysis of the benefits of OTC LEV and National LEV includes an adjustment to account for the fact that these vehicles are certified on CAL Phase II RFG but operated on Federal Phase II RFG.

At most there is a very small incremental benefit associated with the assumption that alternative fueled ULEVs will emit at the same levels to which they are certified (because they operate on the same fuel they were certified on), while gasoline ULEVs will emit at a higher level (because of the difference between certification and in-use fuel). This is because alternative fueled ULEVs are expected to comprise a small portion of the ULEV fleet, which in turn comprise a small portion of the total fleet, and because the incremental difference in in-use emissions between a ULEV operated on CAL Phase II RFG and a ULEV operated on Federal Phase II RFG will be relatively small.

EPA did not attempt to include the effects of atmospheric transport of ozone or ozone precursors into the OTR in this analysis. The impact of Tier 1 vehicles outside the OTR on the transport of ozone or ozone precursors may indeed be small, but vehicle migration, not atmospheric transport, is the basis of the equivalency determination. The equivalency determination assumes that the sale of Tier 1 vehicles outside the OTR affects emissions inside the OTR only to the extent such vehicles actually operate within the OTR and have higher emission rates than OTC LEV vehicles, which will clearly diminish air quality in the OTR. Thus, the concerns raised by commenters regarding modelling of transport of emissions have no effect on the equivalency determination.

## **B. Equivalence Over Time**

### Comments

Several commenters (27, 77, 83, 87) stated that equivalence between the OTC LEV and the National LEV programs must be guaranteed, with some requesting that EPA reassess the equivalency determination on a regular basis (e.g., annually, every three years) or upon request. One commenter (77) added that if the National LEV program has a shortfall of emissions reductions when compared to OTC LEV, states should no longer be bound by the commitments that they have made. Another (58) asserted that National LEV should include a monitoring program to verify that the modeled results of National LEV are being achieved and should assign responsibility for any failure to meet attainment milestones.

### Response

As discussed in more detail in the preamble, EPA is planning to issue an SNPRM to take comment on issues associated with OTC State commitments and will include a consideration of periodic reassessment of the equivalency finding in that notice.

## **C. Enforceability of Emissions Reductions**

### **1. Enforceability of Requirements Against Manufacturers in the National LEV Program**

#### Comments

Several commenters expressed concern regarding the enforceability of National LEV. One commenter (83) was unsure when National LEV would become legally enforceable. Another commenter (49) noted that an MOU is not binding in nature and hence does not provide either EPA or the states with a legally enforceable document. Several commenters (53, 82, 83) asserted that EPA has failed to examine how the air pollution reductions will be achieved if some manufacturers fail to opt in. However, one commenter (26) supported EPA's proposal to make the National LEV program enforceable in the same manner as other federal motor vehicle regulations. It noted that the compliance assurance function is best left to the federal government, to ensure vehicle manufacturers a level playing field with respect to enforcement activity.

One commenter (82) expressed concern that an MOU alone will not provide enough accountability to achieve real emission reductions; therefore, the commenter stated, states should submit the MOU as a formal SIP revision so that they are accountable for those emission reductions. Another commenter (53) asked whether National LEV provides states with the tools and time to put workable SIPs in place that will ensure required emissions reductions.

#### Response

EPA agrees that National LEV is not enforceable against manufacturers that do not opt into the program, and that an MOU alone is not legally binding. However, EPA is confident that National LEV is enforceable against manufacturers that have opted into the program. Moreover, National LEV is not intended to be a substitute for OTC state-by-state adoption of CAL LEV programs unless the manufacturers opt into the program and EPA finds it is in effect, making it legally binding and fully enforceable. Thus, the lack of enforceability in a situation where a manufacturer has not opted in does not undermine a finding that the program is enforceable.

National LEV will be enforceable against manufacturers that have opted into the program. EPA has authority to promulgate the National LEV regulations, as discussed in the preamble to the final rule in section IV.D., and under those regulations, an opt-in will be legally binding upon the party opting in. Once manufacturers have opted into the National LEV program and EPA has found the program to be "in effect," manufacturers will be governed by the same scheme of enforcement that exists for other federal emission control programs under Title II of the Act. The provisions for enforcement, including testing, warranty, penalties, injunctive relief, etc. have provided for reliable enforcement of the federal automobile emission control program in the past and will continue to do so in the future. While EPA recognizes that an MOU

is not a legally binding document, the enforceability of the National LEV program rests on the federal National LEV regulations, not the MOU.

Manufacturers and states also understand that if they do not challenge the program within sixty days after the publication of the program, they are precluded by section 307(b) of the Act from challenging the program at a later time, such as in an enforcement action. Manufacturers will probably be expected to opt into the program within a short time after the complete National LEV regulations are final, which would be roughly the same timeframe as the period to file a legal challenge. The opt-in provisions require a party opting in to National LEV to renounce challenges to the program's legal authority. In the SNPRM, EPA will discuss similar provisions that may apply as part of the OTC States' commitments. Given the timing for opt-ins and challenges, as well as the OTC States' and manufacturers' support for the program, it is unlikely that either manufacturers or the OTC States would challenge the program during the time required by the Act. Moreover, as discussed above, EPA is confident that any challenge to the National LEV program would not be successful.

The fact that National LEV is unenforceable against any manufacturer that does not opt into the program is irrelevant to whether the program is enforceable overall. At this point, EPA is still expecting, and has been assured, that every manufacturer will opt into the National LEV program if an agreement is reached.

One advantage of National LEV as an alternative for the states is that it would be a federal program, as discussed above. National LEV will be enforceable by EPA independent of state action. This means the states do not need to adopt and submit the National LEV program as a SIP revision to ensure emissions reductions, as suggested by one commenter (apart from whatever SIP revisions the OTC States will need to make to commit to the National LEV program). Further, it is unclear how a need for tools and time to adopt SIP revisions relates to ensuring emissions reductions from the National LEV program.

## **2. Stability of National LEV Program**

### Comments

A commenter (84) stated that the stability of National LEV is "essential to EPA's finding that the National LEV program is enforceable" and is necessary for the Agency to determine the program will remain in effect for its expected lifetime.

Several commenters questioned whether the National LEV program is enforceable by EPA, given concerns about program instability. One commenter (5) raised concerns regarding premature termination of National LEV due to invalidation by a court or trigger of an offramp. Some commenters state that the National LEV program could be challenged by parties other than manufacturers, leading to instability in the program that, they claim, distinguishes the National LEV program from the OTC LEV program. One commenter stated that OTC LEV is preferable

to National LEV because OTC LEV has already survived legal challenges. Some commenters (37, 53, 82) felt that the presence of opt-out provisions in the National LEV program make the proposal effectively non-enforceable. One commenter (82) believed that even if a MOU is consented to by the parties, questions of opt-ins and opt-outs still leave enforceable SIP commitments on shaky ground.

Commenters further suggested that the presence of OTC LEV backstops provides the Agency with the only enforcement tool to require manufacturers who opt out of National LEV to meet emission standards more stringent than Tier 1 levels. One commenter (3) stated that beyond allowing states to have backstop LEV provisions, the National LEV program provides no national mechanism to ensure that auto manufacturers build clean cars if they opt out of or do not join the National LEV program. One commenter (37) noted that without a new vehicle emissions program in a SIP, such as the OTC LEV program, a state would be in violation of the Clean Air Act if National LEV was not in effect.

Various commenters (37, 53, 82) claimed that EPA has failed to examine all eventualities occurring in a situation where some manufacturers opt-out. One commenter (58) asserted that if National LEV could be canceled by one manufacturer opting out, then National LEV "is so unstable that it is essentially unenforceable."

#### Response

EPA agrees that the stability of National LEV is essential to a finding that the program is enforceable. Prior to finalization of the OTC State commitments portion of the program, EPA cannot fully assess the program's stability. At this point, however, EPA believes that none of the finalized program elements would prevent the Agency from subsequently finding the program stable.

In light of the OTC LEV court decision, it is clear that National LEV at least is not more vulnerable to legal challenge than the OTC LEV SIP call. Moreover, EPA continues to believe, as discussed elsewhere, that the National LEV program would be upheld by a reviewing court. See the preamble to the final rule section IV.D.; Final Rule on Ozone Transport Commission; Low Emission Vehicle Program for the Northeast Ozone Transport Region, 60 FR 4712, at 4714-15 (January 24, 1995). In addition, during the pendency of any litigation, the National LEV program will be in effect. If EPA makes the in-effect finding, manufacturers that opt into the program will be required to meet the provisions of the program while any case is pending.

EPA disagrees with the comments that the "opt out" provisions will make the program unenforceable. Manufacturers may only opt out as a result of certain unlikely acts by either EPA or an OTC State. These possible conditions allowing opt-out are specific and narrowly drawn. The only circumstances allowing the program to terminate prematurely would be an OTC State's failure to meet whatever commitments it makes regarding adoption of motor vehicle programs under section 177 of the Act or certain EPA changes to Stable Standards. There are a variety of

disincentives for either the OTC States or EPA to act in a manner that would trigger an offramp. In this rulemaking, EPA is not evaluating how providing an offramp for an OTC State's violation of its commitment affects the stability of National LEV. EPA will address this issue in a subsequent SNPRM so as to ensure that National LEV will be stable and thus will produce enforceable emissions reductions. However, EPA is finding in this rulemaking that the Agency is unlikely to change any of the Stable Standards in a manner that would give the auto manufacturers the right to opt out of National LEV, and hence, that inclusion of this opt-out condition does not make the program unstable. For more detail see the discussion in the preamble to the final rule, section IV.A.2.b. See section II.A.1. for discussion of opt-ins.

EPA agrees that in the absence of National LEV, manufacturers could only be required to meet standards more stringent than Tier 1 through state section 177 programs. The comment critiques National LEV because it does not provide a mechanism to enforce more stringent standards if it is not in effect. Yet the absence of this mechanism would not undermine a determination that the program is stable. To make National LEV an enforceable program for SIP credit purposes, EPA will ensure that National LEV is stable by limiting the opportunities for and likelihood of an opt-out; the program does not attempt to provide some further national alternative if National LEV is no longer in effect. Issues regarding the applicable requirements if National LEV is no longer in effect are discussed above in section II.A.2.e. on opt-outs.

In light of the court decision overturning the OTC LEV SIP call, EPA will need to address in the SNPRM whether National LEV would terminate automatically if a manufacturer opted out and the consequent effects upon program stability.

### **3. OTC State Adoption of CAL LEV Backstops**

#### Comments

The issue of whether to require states to adopt OTC LEV programs as backstops for the National LEV program has been one of the more contentious issues in the development of the National LEV program. One group of commenters (24, 27, 37, 58, 82, 83) believes that EPA should require the OTC States to adopt the OTC LEV program as a backstop, partly to ensure that these States would have in place an enforceable emission reduction plan in case the National LEV program was no longer in effect.

One commenter (5) expressed concern about the air pollution that could occur between the time of a premature termination and the implementation of effective OTC LEV programs or Tier 2 standards throughout the OTC. In the absence of required backstops, the commenter states that it is unclear how many of the OTC States will actually retain backstops. The commenter notes that for those states without backstops, it would take at least two years before an OTC LEV program could come into effect. Moreover, the commenter anticipates that the motor vehicle manufacturers would attempt to argue that the CAA two year lead-time requirement would apply even for those states with backstops.

Some commenters (93, 98) also asserted that the existence of OTC LEV program backstops would increase pressure on the manufacturers not to breach the National LEV program and could enhance the enforceability and stability of the National LEV program. Several commenters (77, 81) urged EPA to support states' adoption of backstops, while another (98) requested EPA to find necessary the retention of existing OTC LEV programs as backstops. Others (37, 58, 82, 83) commented that backstop programs, such as the OTC LEV program or "ZEV trigger" mechanisms, should be immediately available to make up any deficiency, without any leadtime requirement.

Other commenters made the converse argument that individual state LEV programs are not necessary as backstops to the National LEV program. One commenter (28) asserted that no individual OTC LEV backstops are necessary if the parties truly believe that the National LEV program should be implemented. Several commenters (44, 84) stated that the current level of state OTC LEV programs (New York, Massachusetts, and Connecticut at the time the comment period closed) was a sufficient number of backstops to provide the requisite incentives to automakers to remain in the National LEV program and that EPA should make a finding in the final rule that National LEV is enforceable on this basis. One commenter (44) noted its belief that region-wide backstops weaken state commitments because there is no incentive for a state to fulfill its obligation when it has a fall-back program.

### Response

The primary mechanism for ensuring that manufacturers stay in the program and emissions reductions are achieved is to set specific, limited offramps based on the occurrence of conditions that are outside of the manufacturers' control. EPA agrees with commenters that having a backstop in one or more states provides an additional assurance of emission reductions and incentive for the manufacturers to stay in the National LEV program. EPA believes that the currently adopted OTC State LEV programs provide a sufficient measure of program stability. The court decision vacating EPA's OTC LEV SIP call undercuts the commenters' arguments that all OTC States should be required to adopt OTC LEV backstops. Thus, the final rule does not require a backstop in every OTC State. The manufacturers have indicated that they would bear substantial costs in supplying different vehicles to even some different states. The desire to avoid such a patchwork of requirements contributes strongly to the manufacturers' support for a 49-state program, even if the alternative is not immediate application of a CAL LEV program in every OTC State.

EPA recognizes that in the unlikely event of premature program termination, it would be at least two years before OTC States without backstops could adopt and implement CAL LEV programs. However, as discussed further in section IV.A.2.c. of the preamble to the final rule, this effect of triggering an offramp provides an additional incentive for EPA and the OTC States to continue to meet their commitments to avoid such an offramp and thereby enhances overall program stability. At this time, EPA is not addressing how the section 177 requirement for two

years of leadtime would apply in the context of backstop programs. EPA is deferring this issue to the SNPRM on OTC State commitments.

EPA believes that the program as currently structured provides fully adequate constraints on and disincentives to a manufacturer opting out; therefore, a "ZEV-trigger" to further discourage opt-outs is unnecessary. As discussed above, the conditions allowing opt-out are narrowly structured, unlikely to occur, and are controlled by the OTC States and EPA, not the manufacturers. In addition, the prospect of losing the harmonization benefits of National LEV and becoming subject to CAL LEV programs in at least some OTC States provides manufacturers strong practical disincentives to opting out, even if an offramp is triggered. Moreover, National LEV is a voluntary program, which will only be implemented if the auto manufacturers choose to be bound by it. The parties to the negotiations have given no indication to EPA that a "ZEV trigger" might be an acceptable condition of the agreement. Thus, the final rule does not include a "ZEV-trigger" for opt-outs.



## **IV. Advanced Technology Vehicle Component**

### **Proposal**

In the proposal, EPA stated its beliefs that the National LEV program, together with the agreement between the parties on which it is based, would provide important opportunities to promote ATVs. The regulatory portion of the proposed National LEV program does not address ATVs, as they are not a legally necessary component of a substitute for OTC LEV. However, the MOUs pursuant to which the OTC States and auto manufacturers would implement National LEV would include an ATV component.

The NPRM stated EPA's strong support for the anticipated innovative approach that the OTC States, major motor vehicle manufacturers, other states, EPA, DOE, fuel providers, converters, fleet operators and other manufacturers of specialty motor vehicles will take in facilitating the introduction of ATVs. EPA further stated that it will work with each state individually to determine the appropriate SIP credit for the ATV component.

### **Comments**

#### *ATV Component Enforceability*

Several commenters (11, 19, 46) agreed with EPA's statements that the ATV component is not a legally necessary (nor legally enforceable) component of the National LEV program, and therefore that the National LEV regulations need not address the ATV component.

On the other hand, one commenter (52) asserted that the lack of an enforceable ATV component guarantees long term failure of the National LEV program and questioned how it is that EPA can enforce a voluntary National LEV program, yet cannot find a way to enforce an ATV Program.

#### *Equitable Acquisition Among States*

One commenter (69) stated concern that if manufacturers concentrate on sending ATVs to the OTC States, other states may not have the same opportunity to acquire ATVs.

#### *Mandates & Subsidies*

Many commenters (11, 40, 42, 45, 50, 90) opposed mandates or subsidies for ATVs, while several other commenters (58, 93, 98) argued that the ATV component should be a mandatory part of the National LEV Program. One commenter (51) stated further that the ATV component in the National LEV Program should be coordinated with the Clean Cities Program, federal funding should be provided for acquisition of ATVs by federal fleets, EPA and the

Department of Energy should work to ensure EPA's alternative fuel programs are fully funded and implemented, and non-OTC States should also be included in ATV discussions.

One commenter (58) recommended that the ATV component should be strengthened by requiring ATV commitments in opt-in notifications, providing substantial SIP credit for ATV introduction programs, requiring continued future reductions in NMOG, and designing NMOG credits to encourage ATVs. This commenter also asserted that since the ATV component is not enforceable, EPA should make credits broadly available to encourage parties to participate in the ATV component. Specifically, EPA should give extra NMOG credits for early introduction of ZEVs.

### *Emissions Reduction*

Many commenters (24, 39, 51, 52, 52, 58, 83, 93, 95, 98) stated that the ATV component as proposed is insufficient due to its unenforceability and various provisions that need strengthening. Several commenters (39, 40, 52) expressed concerns that some proposed provisions could result in diminished emissions reduction benefits. These provisions included allowing flexible fuel vehicles to certify to less stringent NMOG standards when operating on gasoline, and certifying vehicles to a standard whose achievement is contingent on the use of reformulated gasoline that is not available in the 49 states. (See section III.A.2 for response regarding flexible fuel vehicles and vehicle certification on CA RFG II.) One commenter (52) added that such provisions give greater weight to the argument for not including reformulated gasoline vehicles among ATVs.

### *ATV Definition*

One commenter (71) recommended that EPA add provisions and preamble language that allow broad definition of ATVs and provide recognition that emerging technologies could qualify as ATVs. Specifically, this commenter requested that the National LEV program permit states to consider advanced technologies that can result in equivalent ozone benefits and that EPA credit such benefits in determining compliance with the fleet average requirements. Similarly, another commenter (84) stated that the definition of ATV should be broadened to include emerging technologies in addition to technologies that can achieve large emissions reductions in the short term. This commenter further stated that the ATV definition should include all alternative-fueled vehicles certified to a standard more stringent than Tier 1.

One commenter (58) said that the ATV program will be more important for forcing technology if significant changes are made in the California ZEV sales mandate. Yet another commenter (95) stated that the California LEV program will continue to "push the evolution of emission control technology," but EPA should actively pursue strategies that will result in widespread use of these technologies; while the ATV component is an important concept, in its present form the ATV component is insufficient to achieve this result.

## Response

The regulatory portion of the National LEV program does not address ATVs, as they are not a legally necessary component of a substitute for OTC LEV and equivalence with OTC LEV is itself no longer a legal requirement for National LEV. Although advancing technology is not a legal requirement, EPA recognizes that including some advanced technology component is important for all the parties to sign an MOU committing to an alternative to OTC state-by-state adoption of CAL LEV and could provide additional environmental benefits beyond the emissions reductions that would be produced by the National LEV requirements. To meet the parties' interests in promoting the development of ATVs, the auto manufacturers and the OTC States had agreed on language for an "ATV component," which would be included as an attachment to the MOU if they finalize that agreement. EPA supports the approach the OTC States and auto manufacturers have been discussing to introduce and establish ATVs in the OTR and urges the parties to complete those efforts.

Because the ATV component is not incorporated in the regulatory portion of the National LEV program, EPA will generally defer to the parties to the agreement to develop an advanced technology vehicle component that is acceptable to all parties. EPA's deference regarding the ATV component has been partly dictated by the voluntary nature of the National LEV program; EPA cannot impose significant additional obligations on the parties that are outside of the scope of the program reflected in the initialled MOUs. For further discussions on the effect of ATVs on the emission benefits of National LEV and OTC state-by-state adoption of CAL LEV programs, see the RIA.

The initialled MOUs contemplate an implementation process in which all stakeholders will work to develop an ATV market. The parties had identified and will address the means to achieve a viable ATV market, including infrastructure development, vehicle technology improvements, and incentive programs. The ATV component of the MOU rests on willing action by the parties and does not commit them to specific numbers of vehicles or pricing requirements, consistent with the views of a number of commenters. The ATV component of the MOU would rely on California's program to force technology development, and would ensure that technology takes hold in the OTR by having all parties work together to establish and maintain a sustainable, viable market for ATVs at the retail level. This program would be based on and build upon the requirements of the EPAct. The ATV component anticipates that OTC States, major motor vehicle manufacturers, other states, EPA, the Department of Energy, fuel providers, converters, fleet operators, and other manufacturers of specialty motor vehicles would each have roles to play to facilitate the introduction of ATVs. EPA strongly supports this innovative approach for implementing the ATV component and looks forward to participating in this effort by development of new approaches or programs and appropriate coordination with existing programs, like Clean Cities, that could foster ATV introduction. EPA also reiterates that parties with specific concerns or suggestions for the ATV component should be involved in the multi-party implementation effort in the OTC because the details of the ATV component will be developed there.

The ATV component of the MOU would present the parties with an important opportunity to show that government/industry partnerships can achieve important environmental benefits and do so in a way that provides the parties with greater flexibility, while still holding them responsible for achieving the end goal. EPA is aware that this approach involves risks that are not present in traditional regulatory approaches -- the ATV component of the MOU would not be legally enforceable; no one could go to court if the parties do not follow through on their commitments. However, by focusing resources on cooperative efforts to make a market-oriented program work, this approach has great potential for benefits. EPA believes this is an appropriate opportunity to take the risk and try to use a different model to achieve environmental benefits. Resulting benefits will supplement the emission reductions required under the National LEV regulations once manufacturers have opted in.

Under the ATV component in the initialled MOUs, the OTC States and auto manufacturers defined ATVs as vehicles that are certified by CARB for sale in California or by EPA for sale outside California and that are (1) dual fuel, bi-fuel, or dedicated alternatively fueled vehicles certified as TLEVs or more stringent when operated on the alternative fuel, (2) certified as ULEVs or Inherently Low Emission Vehicles (ILEVs) using any fuel, or (3) dedicated electric vehicles or HEVs. For MY2000 and later, the ATV component provided an additional definition of "Lower Emitting ATVs," which are defined as: (1) a dual fuel, bi-fuel or dedicated alternatively fueled ATV certified as a LEV or more stringent on all fuels that the vehicle is designed to operate on, or (2) a ULEV or ILEV (irrespective of whether conventional or alternatively fueled), or (3) a dedicated or hybrid electric vehicle. Additional definitions may be possible, but the proper forum for analyzing such definitions is the ATV program development process and not the National LEV rulemaking. Vehicle types and definitions are based on those contained in the California LEV program. The parties had indicated their intent to develop an ATV market that included alternatively-fueled vehicles as well as very clean vehicles fueled with reformulated gasoline, and EPA supports this determination. EPA expects that the parties involved in developing the ATV component would work to include newly developed and expected technologies so that the ATV portion of the National LEV program would address technologies produced by the California LEV program, but would also provide enough flexibility to incorporate technologies developed independent of any regulatory requirements.

While the initial focus of the ATV component of a signed MOU would be in the OTC States, EPA expects and hopes that other states will be involved in the process. Efforts in identifying roadblocks to the successful creation of a viable market for ATVs in the OTC States could be used by other states to quickly put in place those provisions that prove necessary for the ATV market. Additionally, consumer demand in the OTC for ATVs would signal manufacturers to produce such vehicles and thus make it easier to purchase them in other parts of the country. Therefore, EPA believes that an ATV agreement focused on the OTC States would promote, rather than hinder, ATV introductions in other states.

EPA would work with each state individually to determine the appropriate SIP credit for the ATV component. As currently drafted, under the ATV component there initially would be uncertainty concerning the number and types of ATVs that would be introduced into each state. This would preclude EPA from providing SIP credit based on an agreement to the ATV component. However, EPA expects that SIP credits would become available if the program were implemented. As ATVs are bought in individual states, EPA and the state would be able to calculate the emissions benefits for the life of the ATVs. In addition, EPA would also work with states to determine whether and what SIP credit would be appropriate for specific measures (such as commitments to buy a specified number of ATVs). The National LEV program provides NMOG credits for manufacturers who introduce cleaner vehicles, including ATVs, into the OTC and the 37 States before they are required. The ability to earn, bank and sell NMOG credits should also provide an incentive to manufacturers to produce extra numbers of cleaner vehicles, which could also be ATVs.

## **V. Public Process and Participation**

### Proposal

The National LEV NPRM developed out of a public process initiated to provide opportunity for public participation in the decisionmaking regarding the OTC LEV petition. Following the OTC LEV NPRM, published April 26, 1994, EPA held a series of public "roundtable" meetings, in addition to a public hearing on the notice. These roundtable meetings were designed to provide specific, detailed analyses of the relevant issues through interactive discussion among the various interested parties and members of the public, including states, environmental and public health groups, automobile manufacturers, and representatives from other industries in the OTR. These discussions produced promising advances towards development of a 49-state motor vehicle emissions control program as an alternative to the OTC LEV program.

The public interest in the OTC LEV decision process, and especially in the development of a 49-state motor vehicle emissions control program, prompted EPA to establish the Subcommittee on Mobile Source Emissions and Air Quality in the Northeastern States (hereinafter "the Subcommittee") of the Clean Air Act Advisory Committee in accordance with the Federal Advisory Committee Act. The Subcommittee was charged with evaluating the issues related to the petition and providing a public forum to discuss alternative motor vehicle standards that could apply in all states, except California. The Subcommittee members represent the spectrum of interests potentially affected by the OTC petition and any alternative programs. These interests include state and local governments within and outside the OTR, public health and environmental groups, automobile manufacturers and dealers, utilities, fuel providers, alternative fuel vehicle proponents and labor. In addition, the Subcommittee formed four working groups that allowed additional participants to focus on specific issues implicated by a 49-state motor vehicle emissions control program, including fuels, enforcement, incentives for the development of advanced technology vehicles, and emissions trading. The Subcommittee and the workgroups met frequently from September through November 1994. EPA published a Supplemental NPRM regarding the OTC LEV program on September 22, 1994 (59 FR 48664), and a Final Rule on January 24, 1995 (60 FR 4712). Possible program elements for the National LEV NPRM were discussed with the Subcommittee and Committee in June, 1995.

On October 10, 1995, EPA published an NPRM proposing the National LEV program, detailing the structure of the National LEV program and requesting comments in specific issue areas. A widely attended public hearing was held on November 1, 1995, and the comment period remained open until December 1, 1995.

### Comments

EPA received comments regarding various aspects of the public process employed by the Agency for this rulemaking. Comments (11, 17, 25, 35, 40, 57, 65, G2) in general stressed the

critical importance of achieving buy-in from all stakeholders, including Congress, State Governors, State legislatures, the petroleum industry, and consumers to assure a successful program. One commenter (2) requested an extension of the comment period of 60 days from the proposed November 9 closing to January 9, 1996. One commenter (3) commented that the time frame required for the National LEV rule "suggests little consideration to comments received during this Notice of Proposed Rulemaking."

Several commenters raised concerns about a lack of involvement in the process by states outside the OTR. A commenter (45) asked that EPA ensure that "non-OTC States are fully aware of the breadth of the program prior to its finalization, to minimize the possibility that these states would be dissatisfied with the final program." Another (67) commented that the National LEV program, with national implications, was developed based largely on the input from one region of the nation, and asked that this "large deficiency..be remedied" in the final rule. Two commenters (25, 57) suggested that it is not fair for EPA to require the participation of the 37 states outside the OTR when a hearing has not been scheduled outside the OTR and those states are not given an opportunity to vote or opt-in or opt-out. A commenter (48) commented that National LEV "is essentially being forced on all states to solve a problem that exists in only thirteen states." Another (91) commented that the 37 states "might be hesitant to support the proposed program if it is viewed as being an imposition on citizens that cannot be tied to emission benefit and attainment." Another commenter (57) commented that EPA must remember that four states voted against the OTC LEV recommendation, and that the 37 states outside the OTR, who will be affected by the National LEV program, "have not been a party to the discussions described in the preamble."

Comments from several commenters (11, 13, 17, 25, 35, 57, 91, G2) focused on achieving the buy-in of consumers nationwide. Two (25, 57), citing the resistance to reformulated gasoline demonstrated to date by consumers, commented that introducing any new unique fuels will generate negative consumer reactions if the public is not allowed to participate in the decision. They specifically ask, given the experience with RFG, what EPA will do to promote consumer acceptance of National LEV. One (11) commented that consumers will "ultimately bear the cost of this program" and that broad consumer support within and outside the OTR is critical to success. Another (91), citing difficulty in its state of implementing inspection/maintenance programs and employer trip reduction programs, is likewise concerned about public acceptability. One commenter (17) indicated an expectation that future discussions will include consumer representatives. A commenter (35) commented that EPA should quantify the burden to every automobile purchaser and inform the public of those costs, stating that car buyers in the 37 states "already have clean air and have not been part of the negotiating process," and another (57) suggested that citizens in these states "may resent the National LEV program and the new costs it will impose."

Several commenters (38, 57, 75, 76, 102) commented on the importance of involving state-elected representatives both within and outside the OTR in the development and implementation of the National LEV program. Two (38, 75) expressed concern that the National

LEV program has not been reviewed and commented on by representatives of state legislatures, and that input from elected officials should be considered, given the potential impacts on state transportation costs. One commenter (76) stressed similar concerns, noting that state legislators often must draft and enact enabling legislation as a result of federal regulations.

Still others (3, 17, 56, 57, 65, 67, G2) cited concerns that the development of the NPRM was not as inclusive as EPA suggested in the preamble to the NPRM, and that they were, in fact, excluded from the discussions. In particular, several commenters (3, 17, 57, 65, G2) asserted that despite EPA's reference to the oil industry in the preamble, major segments of the industry, such as the gasoline marketers and refiners, were left out of the process.

### Response

Regarding the request that EPA extend the close of the comment period from November 9, 1995 to January 9, 1996, on November 17, 1995, EPA published a notice in the Federal Register extending the comment period to December 1, 1995 (60 FR 57691). EPA determined that, given the need to promulgate a final rule as quickly as possible, it was not appropriate to extend the comment period beyond December 1, 1995. Moreover, the quantity (over 100) and depth of comments received indicates that interested parties were fully able to respond in the time given.

Regarding comments that EPA did not involve all stakeholders, EPA notes that throughout the OTC LEV/National LEV process EPA has solicited and received broad participation from all members of the public that may have an interest in these proceedings. Following the receipt of the OTC LEV petition, EPA published an NPRM in the Federal Register that specifically identified the central issues of concern regarding the petition and requested comment on the petition. EPA then held a public hearing on the petition and held a series of roundtable meetings that addressed in great detail the issues implicated by the petition. At these roundtable discussions, numerous interested parties were represented, including states, automobile manufacturers, consumer advocates, environmental and public health groups, utility companies, representatives of the oil industry and other energy industries, etc. It was impossible to have every member of the public represented at these roundtables, given the limitations of such meetings; however, EPA was very careful to attempt to have representatives from all sectors that had expressed an interest in the proceedings through comments or other means. EPA then promulgated a supplemental notice of public rulemaking again requesting comment from all members of the public regarding the petition.

As a result of public interest in the OTC LEV proceedings and the possibility of a 49-state LEV program, EPA convened a Subcommittee on Mobile Source Emissions and Air Quality in the Northeastern States of the Clean Air Act Advisory Committee. Once again, EPA attempted to include within the subcommittee representatives of the spectrum of interests potentially affected by the OTC LEV and National LEV programs. Aside from the interests mentioned above, the subcommittee also included representatives of states outside the OTR.



State legislators in the OTR were also invited to participate. In addition, these meetings were open to the public and the public was encouraged to participate at times during the meetings. A notice of every meeting of the Subcommittee, as well as every roundtable meeting mentioned above, was published prior to the meeting. EPA has also been available to meet (and has met) with members of the public, including parties not represented in the earlier public meetings, regarding these programs. In particular, EPA has met with representatives of petroleum refineries who claimed they were not represented earlier in the process. In addition, following the NPRM for this rulemaking, EPA has received comments from numerous parties with an interest in this proceeding. EPA has reviewed these comments and taken these comments into account in promulgating this final rule. EPA has attempted to address the concerns of all stakeholders in this final rule.

Regarding comments that EPA should seek out the participation and support of representatives of the 37 non-OTC States and consumers in those states, representatives from these states have participated significantly in the discussions regarding the National LEV program. Two representatives of non-OTR states were members of the Subcommittee. EPA received comments supporting a National LEV program from 14 governors from non-OTR states. EPA has also had contacts with other representatives from the 37 states, including several mayors.

In addition, EPA believes that the National LEV program will have substantial benefits for consumers outside the non-OTC States. Of the 37 states outside the OTR and California, 16 of them contain nonattainment areas for ozone. Reduction of ozone precursors from automobiles in such areas will help such areas reach attainment. Reductions in other pollutants, including particulates and air toxics, are also beneficial to the health of people in these states. Consumers in all states will also benefit because of the cost reductions for auto manufacturers who will need to make only one vehicle for fifty states. These reductions in costs will allow manufacturers to keep prices down and will likely result in a final increase in price that will be minimal. As discussed in the section on program costs, the average price of a vehicle is estimated to increase by only \$45 for a TLEV and \$76 for a LEV. In fact, Honda has produced a vehicle that meets the standard for LEVs at no additional cost. In the absence of the National LEV program, numerous states both inside and outside the OTR may have to implement programs to meet air quality needs that may be more expensive and/or more time consuming and disruptive to the consumer than the National LEV program. These other programs include some of the programs that commenters noted above, which have been the subject of some controversy in some areas where they have been implemented.

## **VI. States' Rights - Operation of Section 177 of the Clean Air Act**

### Proposal

The Agency supported in the NPRM the right of states to adopt California's motor vehicle emission control program under section 177 of the CAA. The Agency did not propose to require states to accept the National LEV program in place of the states' adoption of the CAL LEV program.

### Comments

Many commenters (24, 27, 37, 43, 57, 66, 83) supported a state's right to adopt and keep the CAL LEV program, including the ZEV sales mandate. Commenters felt that rights to implement motor vehicle emission control programs given to states under the Clean Air Act, such as those listed in section 177, should be maintained. They concurred with EPA's discussion in the proposal that any decisions regarding ZEV requirements are left to the individual states. One commenter (81) noted that states also reserved the right to adopt other portions of the California vehicle emission control program besides LEV, as long as such adoptions were consistent with the Clean Air Act. Some commenters were concerned that the National LEV program might undermine the ability of OTC States to adopt ZEV sales mandates because they fear that the automaker's insistence on the lack of ZEV sales mandates as a condition for their opt in to National LEV could force EPA to unduly pressure states to back away from ZEVs.

The auto industry has asked that the OTC States forgo the exercise of certain of their section 177 rights as a condition of the automakers opting into the National LEV program.

EPA also received comments regarding whether the National LEV program limits the rights of non-OTC states. One commenter (82) asked what recourse states would have if they determine that National LEV does not provide sufficient emissions reductions and they need additional reductions from mobile sources, such as could be obtained through a ZEV sales mandate.

One commenter proposed that the states embracing National LEV should do so exclusively by participation in an interstate compact pursuant to Article 1, Section 10, Clause 3 of the Constitution. The commenter stated that this would provide an enforceable commitment and a process for commitment that respects the sanctity of each state's republican form of government.

### Response

As EPA noted in the NPRM, EPA agrees that states have the right to promulgate California's LEV program, including any ZEV component that meets the requirements of section

177. (Courts in the 1st and 2nd Circuit have agreed.) EPA stated in the NPRM that it could not require the OTC States to accept National LEV in lieu of the CAL LEV program. However, EPA is providing the National LEV program as an alternative to which the OTC States can agree if they choose, through the ongoing negotiations between the states and the auto manufacturers. Ultimately, the decision not to promulgate a CAL LEV program (or to make optional a program already adopted) is voluntary for a state. However, EPA believes that the National LEV program is a cleaner, cheaper alternative.

In addition, as EPA stated in the NPRM, EPA believes that the decision whether or not to adopt a ZEV mandate consistent with the CAA is a decision that must be left up to each individual OTC State. (See also OTC LEV Response to Comments Document.) EPA has said it is willing to incorporate in the National LEV regulations any agreements between OTC States and auto manufacturers on ZEVs. This will be addressed in the SNPRM.

Regarding manufacturer pressure to exclude ZEV requirements or not to include the CAL LEV program as a backstop in a particular state, as discussed above, OTC States and manufacturers ultimately will have to decide to what they can agree. This rulemaking does not prevent any state from adopting these provisions.

Regarding comments concerning states' rights for states outside of the OTR, neither this rulemaking nor the agreement currently under discussion by the OTC States and the manufacturers would prevent or inhibit states outside the OTR from exercising their rights under the CAA and such action would have no effect on National LEV outside of that state. States would not have the right in any case to prevent manufacturers from voluntarily selling vehicles that meet standards more stringent than those required by federal law. Also see the discussions in the legality and public participation sections of this document.

Regarding the comment concerning the form of the OTC State commitments, EPA will take comment on the issues of the form and content of state commitments to the National LEV program in an upcoming Supplemental Notice of Proposed Rulemaking and address such issues in a subsequent supplemental final rule.

## **VII. SIP Credits and Related Issues**

### **Proposal**

The Agency proposed that an enforceable National LEV program would ensure that the expected emission reductions would occur and would enable states to be credited with those expected reductions in their SIPs. The Agency also proposed that EPA would work with each state individually to determine the appropriate SIP credit for an ATV component.

#### **A. SIP Credits**

### **Comments**

One commenter (83) declared that states should not be allowed SIP credits for National LEV if auto manufacturers can opt out for any reason. Another commenter (58) suggested that adoption of OTC LEV as a backstop should be an express requirement for crediting National LEV emissions reductions in SIPs.

Several commenters (69, 91) requested clarification as to how SIP credit would be taken or verified upon implementation by the 37 States outside the OTR. They expressed a concern that distribution of National LEV vehicles throughout the non-OTR States is uncertain, yet states are required to make specific, enforceable commitments to emission reductions on behalf of each nonattainment area. One commenter (91) further argued that significant underestimation of benefit could lead to imposition of other significant on-road mobile source control measures, while significant overestimation of benefit could lead to sanctions for failure to meet SIP commitments. Similarly, another commenter (45) asserted that each state must receive proper SIP credit for the vehicle mix within that state. One commenter (69) requested that the clarification on how the other 37 States will receive SIP credit for National LEV also address credit for vehicles that are using conventional gasoline or Federal RFG rather than CA Phase II RFG, and credit for flex/dual fueled vehicles that have different certification standards for the various fuels they may use. Another commenter (52) argued that since EPA will not allow use of California Phase II gasoline to demonstrate compliance with Tier I standards, a gasoline powered ULEV certified on California Phase II gasoline presumably should not receive full SIP credits as a ULEV.

### **Response**

EPA will allocate SIP credits for National LEV on a state-by-state basis. EPA will work with each individual state to determine how appropriately to credit the state for emissions reductions produced by the National LEV program. For purposes of calculating SIP credits, EPA will apply the same policy guidance to National LEV as it would apply to CAL LEV programs outside California.

EPA could only grant SIP credits for National LEV if there is sufficient certainty that the program will produce the expected emissions reductions, and the likelihood of such reductions depends in part on whether National LEV is stable. The stability of National LEV depends on the likelihood of opt-outs. EPA will take further comment on the issue of program stability in a supplemental notice of proposed rulemaking addressing the content and mechanisms for OTC State commitments to the National LEV program. In a subsequent supplemental final rule EPA will promulgate additional provisions for National LEV related to OTC State commitments to make the emissions reductions from National LEV sufficiently assured to render them creditable for SIP purposes. See section II.C. on enforceability and the preamble to the final rule, section V.B., for further discussion of these issues.

National LEV will be an enforceable program that will ensure a certain level of emissions control throughout the 49 States. While individual states will not be able to control the precise numbers of different types of National LEV vehicles sold in their states, throughout the 49 states, National LEV will produce a quantifiable level of emissions reductions. It is unlikely that the manufacturers would offer and could sell a significantly different vehicle mix in different states. Rather, the pressures of a nationwide market should ensure that vehicle prices and vehicle mixes are substantially similar across states. Given this, it should be relatively simple to allocate equitably to each state its share of the overall emissions reductions, modified, if appropriate, by factors unique to specific states. EPA will allocate these credits on a state-by-state basis.

EPA will adjust SIP credits for vehicles certified on California Phase II RFG, but operated on conventional gasoline or federal RFG, in the same manner as EPA currently makes such adjustments under MOBILE5. The MOBILE model, on which SIP credits are based, has different output options for different operating fuels, given vehicles certified to a specified emissions level. The MOBILE model assumes that gasoline National LEV vehicles (except Tier 1 vehicles) are certified on CA Phase II RFG rather than Federal certification fuel and it adjusts the basic emission rates accordingly. As a result, MOBILE emission estimates for TLEVs, LEVs, and ULEVs reflect the fact that when these vehicles are operated on Federal RFG or on conventional fuel, they will emit at a higher rate than when operated on their certification fuel. EPA will allocate SIP credits consistent with these MOBILE emissions estimates. Further, states with conventional gasoline will receive emissions credits for the benefits associated with that fuel, while states with RFG will receive the higher benefits associated with it. EPA has not yet addressed the issue of SIP credits for flexible/dual fueled vehicles under National LEV, although to date, EPA's general policy has been to allocate SIP credits on the assumption that such vehicles are operating on gasoline.

## **B. Other SIP-Related Issues**

### Comments

Several commenters (37, 76, 82) expressed concern about the result if no agreement is reached and states have relied on National LEV for emissions reductions. One (76) was

concerned specifically about sanctions, asserting that EPA should provide states adequate time to adopt California LEV or some other program if a National LEV agreement is not reached or auto manufacturers opt out of the program.

Several commenters (37, 53, 73, 82) asked who will be held responsible for making up an emissions shortfall if manufacturers opt out of National LEV and there is a lag before the introduction of OTC LEV.

### Response

Due to the court decision vacating EPA's OTC LEV decision, the OTC States no longer have a specific legal obligation to adopt OTC LEV absent a LEV-equivalent program.

With regard to the comments on emissions shortfalls, to the extent that the expected emissions reductions from National LEV are not achieved for any reason and a state is relying on those reductions to attain the NAAQS, then the state is responsible for making up the emissions reductions. If the states do not need the reductions, however, then no party would be responsible for making them up.

## **VIII. Federal Compliance Requirements**

### **A. Void Ab Initio**

#### **Proposal**

The Agency proposed in the NPRM that the fleet average NMOG credit program would be implemented and enforced through the certificate of conformity. The certificate for each vehicle would be conditioned on each vehicle meeting the applicable National LEV tailpipe and related emission standards, and on the manufacturer demonstrating compliance with the applicable NMOG fleet average standard. If a manufacturer did not meet the latter condition, the vehicles causing the NMOG fleet average violation would be considered not covered by the certificate applicable to the engine family. EPA could then assess penalties on an individual vehicle basis for sale of vehicles not covered by a certificate. The Agency would calculate the number of noncomplying vehicles and could void ab initio the certificates of conformity for those nonconforming vehicles.

#### **Comments**

Commenters from the auto industry (44, 84) opposed EPA's proposal to enforce the banking and trading provisions by using the mechanism of voiding ab initio certificates of conformity. They claimed EPA's ability to apply this scheme is precluded by sections 206(a)(1) and 206(b)(2)(A)(i) of the Act. The commenters stated that section 206(a)(1) imposes a mandatory duty on EPA to issue certificates of conformity to manufacturers who comply with the applicable regulations. Further, they continued, once EPA has issued a certificate, it may not be revoked, except under the circumstances spelled out in section 206(b). The commenters argue that section 206(b)(2)(A)(i) provides that suspensions and revocations may only apply prospectively, and that EPA may withdraw certificates only for nonconformity with "regulations with respect to which the certificate of conformity was issued." One commenter (84) also stated that EPA's use of this enforcement scheme in other arenas, such as Tier 1 phase-in, is irrelevant. Another commenter (44) expressed concern regarding how voiding a certificate ab initio would affect manufacturers' responsibility for vehicles already on the road.

A commenter (84) asserted that the better approach here is for EPA to revoke certificates of offending vehicles and assess an appropriate penalty.

#### **Response**

In the final rule, for different kinds of violations, EPA uses two slightly different enforcement mechanisms based on: (1) conditioning a certificate as it applies to individual vehicles; or (2) conditioning a certificate and voiding it ab initio. Where manufacturers altogether fail to keep records or report, EPA may void ab initio the underlying certificate for the

entire engine family. Most of the provisions of the National LEV program, however, will be enforced through a finding that individual vehicles are not covered by a certificate of conformity due to the manufacturer's violation of a condition on that certificate.

EPA will place certain conditions on the certificates of conformity for NLEVs. Section 206(a)(1) of the Act provides the Administrator the authority to "issue a certificate of conformity upon such terms,...as [s]he may provide." EPA's issuance of the certificate is conditional upon the manufacturer's compliance with the conditions. Where the conditions are violated, depending upon the nature of the violation, EPA may either revoke the entire certificate ab initio or deem the vehicles causing the violation not to be covered by the certificate. EPA will consider all vehicles not covered by the certificate, whether individual vehicles or the entire engine family, to have been sold without a certificate in violation of section 203(a)(1).

Under the final regulations, EPA may void certificates ab initio only for a manufacturer's failure to retain records or provide such information as specified upon request. Smaller record-keeping and reporting violations, such as submitting late reports, are violations of section 203(a)(1) of the Act, subjecting the manufacturer to applicable civil penalties. EPA will enforce most of the other National LEV requirements through conditioning the certificate and identifying individual noncomplying vehicles in the event of a violation.

EPA has determined that the authority to void certificates ab initio for major record-keeping and reporting violations is an important enforcement mechanism for programs in which compliance must be demonstrated using data held by manufacturers. For many flexible compliance schemes, such as averaging, banking and trading approaches or phase-ins of requirements, the absence of records and reports on how the regulated entities complied could preclude EPA from enforcing the underlying substantive requirements. For example, EPA could never prove that a particular vehicle violates a fleet average or a phase-in by testing that vehicle; enforcement of a fleet average or a phase-in depends on accurate records for the entire fleet. Thus, in return for giving regulated parties some flexibility in meeting the requirements, EPA must have a mechanism to ensure that the manufacturers keep the records and make the reports necessary to verify compliance. EPA could only void a certificate ab initio for the most egregious record-keeping and reporting violations, where a manufacturer's records or reporting are so substantially incomplete that EPA cannot determine compliance with the fleet average NMOG standard or other substantive requirements. Thus, EPA does not believe that this approach is "unreasonably draconian." Moreover, EPA regulations currently provide for voiding certificates ab initio for record-keeping and reporting violations for several motor vehicle requirements with some compliance flexibility. (See e.g., Tier 1 (40 CFR 86.094-23), and evaporative emissions (40 CFR 86.096-23)). Both precedent and practical enforcement concerns support providing this strong penalty as a critical means to ensure the enforceability of underlying substantive requirements, such as the fleet average NMOG requirements.

Conditioning the certificate of conformity on a manufacturer's compliance with certain requirements and deeming specified vehicles not covered by the certificate is also a critical



enforcement tool in the National LEV program. Under the Clean Air Act, EPA has specific enforcement authority for violations of the prohibited acts listed in section 203, which include sale of a vehicle without a certificate and various provisions related to reporting, testing and tampering. Unlike CARB, EPA does not have authority to directly enforce against a manufacturer that fails to make up debits within the required timeframe. However, it is well within the Administrator's discretion under section 206 of the Act to condition a certificate upon the manufacturer's compliance with a fleet average standard, to be demonstrated through a zero balance of debits at a given point in time. EPA uses this method of enforcement in other mobile source control programs, such as Tier 1 and heavy-duty averaging, banking, and trading. EPA believes that this approach is the best way to structure enforcement of a trading program or phase-in of requirements pursuant to the Agency's enforcement authority under the Act.

Section 206 does not prevent EPA's use of this enforcement mechanism as some commenters stated. In either determining that certain vehicles are not covered by a certificate or voiding it ab initio, EPA is not revoking or suspending a certificate pursuant to section 206. Section 206(b)(2)(A)(i) only addresses suspension and revocation of certificates for nonconforming motor vehicles identified through tests conducted under section 206(b)(1). Further, such suspension or revocation only affects certification of new motor vehicles generally manufactured after the date of EPA notification of nonconformity. The National LEV enforcement provisions address failure to meet the conditions upon which a certificate was issued, as determined through the manufacturer's reports or the manufacturer's substantial failure to keep records or to report; these provisions are not concerned with a vehicle's nonconformity with a standard as determined through vehicle testing. Also, the vehicles affected by an EPA enforcement action under these provisions would in all likelihood have already been produced and sold to the ultimate purchasers; manufacturers are not required to report their NMOG fleet average calculations until May 1 of the calendar year following a given model year. Therefore, section 206(b)(2)(A)(i) does not apply to the National LEV enforcement provisions at issue here.

Further, contrary to the commenters' assertions, identified noncomplying vehicles would be in violation of regulations with respect to which the certificate was issued. The National LEV regulations set as conditions for a vehicle to be covered by a certificate that the manufacturers' overall fleet must meet the fleet average NMOG requirements and that manufacturers must keep records and report. Violation of any of these conditions is a violation of the regulations with respect to which the certificate was issued.

Finally, EPA's approach of conditioning the certificate and deeming certain vehicles not covered by the certificate has the same practical effect as the commenter's suggested approach of revoking the certificates of the "offending" vehicles and assessing an appropriate civil penalty. As discussed in the preamble to the final rule at section IV.B.3.c, manufacturers would be liable for penalties for the one-time violation of selling a vehicle without a certificate. Any applicable penalties would be calculated on a per-vehicle basis and not on per-vehicle/per day basis. The violation would not subject the manufacturer to further penalties for sale of a vehicle without a certificate for failure to meet the fleet average NMOG standard, although the vehicles, as any

other vehicles, would still be subject to a federal recall action under section 207(c) if EPA found they did not meet their certification standards in use.<sup>6</sup> Thus, the effect on a manufacturer of an enforcement action based on sale of a vehicle not covered by a certificate should be the same as under the commenter's suggested approach, were it possible to implement.

In the preamble to the final rule section IV.B.3.d, EPA clarifies when EPA will provide an opportunity for a hearing prior to an enforcement action. A manufacturer would have an opportunity for a hearing only if EPA voids a certificate ab initio for a reporting violation, but not if EPA determines that certain vehicles are not covered by a certificate due to a violation of a condition of the certificate.

Section 206(b)(2)(B)(i) requires that the Administrator provide an opportunity for a hearing upon a revocation or suspension of a certificate pursuant to section 206(b)(2)(A)(ii). However, this requirement does not apply to a determination that certain vehicles are not covered by a certificate due to violation of a condition on that certificate. As discussed above and in the preamble, in this situation EPA is not suspending or revoking the certificate. In particular, this is not a revocation or suspension under section 206(b)(2)(A)(ii) pursuant to testing conducted under section 206(b)(1). Rather, EPA is applying a limitation included in granting the certificate to determine which vehicles the certificate covers. Further, EPA is applying the limitation on the basis of information tracked and reported by the manufacturer, without any reference to testing pursuant to section 206(b)(1). Finally, a hearing would not serve any useful purpose under these circumstances. A determination that certain vehicles are not covered by a certificate will only affect a manufacturer in a subsequent enforcement action on that basis. This in no way will affect a manufacturer's ongoing production, as would the suspension or revocation of a certificate pursuant to an SEA, where the suspension or revocation would stop the manufacturer from producing vehicles under that certificate. Also, the manufacturer would still have an opportunity for a hearing on the validity of EPA's determination in the course of any subsequent enforcement action.

Voiding a certificate ab initio similarly is not a revocation or suspension under section 206(b)(2)(A)(ii), and thus the hearing requirement in section 206(b)(2)(B)(i) does not apply. Nevertheless, EPA has decided to provide the opportunity for a hearing if a certificate is voided ab initio. Voiding a certificate for an entire engine family has a potentially much greater effect on a manufacturer than deeming individual vehicles not covered by the certificate, even if a manufacturer generally would have already completed production under that certificate by the time of the EPA action. While the manufacturer would still have an opportunity for a hearing in the course of any subsequent enforcement action, EPA believes it is appropriate in this instance to provide an additional hearing opportunity given the implications of the Agency's action.

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<sup>6</sup>For purposes of any in-use enforcement action, the vehicles will be held to the certification standards stated in the certificate that would have covered the vehicles but for the violation of the condition on the certificate.

## **B. EPA In-Use Compliance Program**

### Proposal

As proposed in the NPRM, the in-use testing and recall provisions of the federal motor vehicle program would not be changed by the National LEV Program. EPA would continue to follow its standard procedures in conducting in-use testing to determine vehicle compliance with the relevant certified emissions standards. California would continue to implement its in-use testing and recall program unaffected by the voluntary agreement.

### Comments

One commenter (44) stated that it believed that EPA was proposing not to continue to conduct its own in-use testing program in order to harmonize requirements with California. This commenter added that it generally agreed with the concept that vehicles must be tested in the in-use programs using the same procedures used in certification.

The commenter also proposed that if a purged vehicle fails to meet emission requirements in an in-use test, EPA would be obligated to find a like vehicle that has operated on California-type gasoline and run the tests on that new vehicle. Then, only if that second vehicle fails the emissions test could EPA pursue any enforcement action against the engine family being tested.

### Response

Contrary to the commenter's belief, EPA did not propose to drop its own in-use enforcement program as part of the National LEV program. The preamble to the proposed rule (60 FR 52766) stated that EPA "would continue to follow its procedures in conducting in-use testing." This was because the federal and California programs have "different enforcement goals necessitated by differing statutory authority as well as considerations attributed to running a state-wide versus a nationwide enforcement program." EPA continues to believe that it is necessary to provide federal in-use enforcement of the National LEV program in addition to enforcement actions undertaken by California. The Agency is charged by the Clean Air Act to determine the in-use compliance of vehicles certified to emissions standards under section 202, which will include NLEVs. Additionally, since vehicles are required to meet the emissions standards when in use throughout the country, EPA believes it is important that compliance testing utilize vehicles whose normal areas of operation reflect varied existing conditions such as weather or driving conditions; the Agency typically tests vehicles from the Ann Arbor, Michigan, Washington, D.C., or the Denver, Colorado areas. Sole reliance on a California in-use enforcement program would not assure that NLEVs were meeting the in-use requirements throughout the country, under a variety of conditions.

As is currently the case, EPA and California will coordinate enforcement actions where appropriate in order to reduce the burden expended by all parties to enforcement actions. EPA compliance testing will use, where appropriate, the same procedures and conditions utilized in the certification testing of the engine family at issue, as is EPA's current practice in its in-use testing program. This practice could be modified subject to the resolution of the issue of effects of commercially-available federal fuel on NLEVs, as discussed further below.

EPA understands manufacturers' concerns over the potential fuel effects of commercially available fuel sold in the 49 states on in-use emissions compliance. However, EPA does not agree that requiring compliance testing of vehicles operating on California in-use fuels as a precondition to any recall action is an appropriate method to address any potential detrimental effects. In any recall test program, a manufacturer may provide data showing that vehicle emission exceedances are solely based on effects beyond the control of the manufacturer, such as choice of fuel or owner driving characteristics. EPA would then analyze this data and could decide not to pursue a recall action. Thus, a manufacturer has always had, and will continue to have, the ability to avoid recall liability if its vehicles are found to be in noncompliance due to a factor beyond its control. It should be noted that manufacturers must design their vehicles to operate properly on a wide range of fuel specifications and conditions, so this issue should be addressed in the design stage as well.

It is not appropriate at this time for EPA to drastically change its in-use enforcement program based on the possible existence of detrimental long-term fuel effects on vehicle emission systems performance. EPA believes that generally the proper method to address this issue is through modification or application of the current test procedures, certification, and in-use testing requirements, such as additional vehicle preconditioning. If future data shows the need for additional actions to address this issue, then EPA will work with the affected parties to devise an appropriate solution.

EPA does not agree with the commenter's proposed enforcement scheme, which would require EPA to test similar vehicles that normally run on California fuels in order to pursue any enforcement action. If additional preconditioning were warranted to address emissions performance due to commercially available fuel sold in the 49 states, EPA would likely consider that process sufficient to alleviate any potential fuel effects on the emissions performance of any National LEV vehicle. If EPA determined that a National LEV engine family failed to meet the emissions standards, EPA would follow its current practice in pursuing an enforcement action.

### **C. Extra Pre-Conditioning for In-use Testing**

#### Proposal

The Agency did not propose in the NPRM to change the in-use and recall testing provisions in the current federal regulations.

## Comments

A commenter (44) requested that EPA modify the National LEV regulations to allow additional preconditioning prior to in-use testing of NLEVs that have been operated on fuels other than California Phase 2 gasoline. This commenter recognized that this approach would require testing to determine the preconditioning necessary to purge the catalyst sufficiently.

## Response

EPA recognizes the potential need for additional pre-conditioning of in-use testing vehicles that have been operated on fuels other than California Phase 2 gasoline. See OTC LEV Response to Comments document, Docket No. A-94-11, V-C-01, Volume 3. EPA believes, however, that it is premature to specify a pre-conditioning process when the effect of commercially available federal fuels on California vehicles is still uncertain. When a potential effect is identified, EPA will work with the interested parties to determine any necessary level of in-use preconditioning.

Current regulations, specifically 40 CFR 86.132-96, provide a mechanism to allow for extra preconditioning “[f]or unusual circumstances where the need ... is demonstrated by the manufacturer,” provided advanced approval of such procedures by the Administrator. Detrimental effects on NLEVs attributed to commercially available fuel sold in the 49 states would likely be considered an unusual circumstance. EPA will examine any data provided by a manufacturer, as well as other data, to determine whether additional preconditioning would be warranted for an in-use engine family test class.

### **D. Use of California Assembly-Line Test Procedures Data for 50-State Engine Families in EPA Compliance Action**

## Proposal

The NPRM proposed a process to reduce the duplicative testing and remediation of EPA’s Selective Enforcement Audit (SEA) and California’s Assembly-Line Test Procedures Quality Audit programs. EPA proposed that, if CARB determines a 50-state engine family or configuration to be in non-compliance based on testing conducted by a manufacturer under the California Assembly-Line Test Procedures Quality Audit, EPA would be able to evaluate that emissions testing data and use it as a basis for suspension or revocation of a certificate, if appropriate, without requiring the manufacturer to conduct duplicate testing under the federal program.

## Comments

Commenters (44, 84) opposed EPA's proposal to utilize California Assembly-Line Test Procedures Quality Audit data from 50-state engine families in the Agency's SEA program. They stated that CAA section 206 prohibits EPA from using this data because it provides only for testing to be conducted "by the Administrator directly, or in accordance with conditions specified by the Administrator, by the manufacturer." One (84) argued that this leaves no role for third parties, such as CARB. However, it asserted, under the California program, CARB requires the testing and specifies the test conditions, both generally and in case-specific interactions with the manufacturer. The commenter continued that any possible remedy for this problem, such as simultaneous regulatory interpretations, would be impractical and legally insufficient.

The commenters also stated that if National LEV was not implemented, this proposal would not make sense given the different fuels used in the Federal and California testing programs, which would yield different emissions results on the same vehicle.

### Response

The California Assembly-Line Test Procedures program uses data derived from manufacturer testing of vehicles. The manufacturers test these vehicles in accordance with California and federal FTP requirements and CARB uses the data to determine whether the engines are in compliance. In those instances where CARB finds a 50-state engine family in noncompliance based on these tests, EPA will use the data generated to determine compliance pursuant to the Agency's SEA authority. This will reduce the resources expended by both manufacturers and EPA in meeting SEA requirements. It is inefficient for EPA to require manufacturers to test another set of engines from an engine family that has already been tested in accordance with federal requirements and has been found to be in non-compliance. See the preamble to the final rule section VI.C.1 for further discussion of how EPA will evaluate and apply the test data.

EPA believes that section 206 of the Act provides the Agency the authority to suspend or revoke certificates of conformity based on test data generated by manufacturers under the California Quality Audit program, where the tests were conducted in accordance with conditions specified by EPA. Section 206(b)(2)(A)(i) provides:

(2)(A)(i) If, based on tests conducted under paragraph (1) ..., the Administrator determines that all or part of the vehicles ... so covered do not conform with the regulations with respect to which the certificate of conformity was issued ..., [s]he may suspend or revoke such certificate in whole or in part....

Section 206(b)(1) provides:

(1) In order to determine whether new motor vehicles ... being manufactured by a manufacturer do in fact conform with the regulations with respect to which the certificate of conformity was issued, the Administrator is authorized to test such vehicles.... Such tests may be conducted by the Administrator directly or, in accordance with conditions specified by the Administrator, by the manufacturer.

Section 206(b)(1) provides the Administrator the authority to conduct tests and to specify conditions for tests conducted by the manufacturer. While this provision allows the Administrator to require a manufacturer to conduct tests in accordance with conditions specified by EPA, the language of the statute does not restrict the Administrator's authority to specify conditions for acceptable tests to the situation where the Administrator directly requires the manufacturer to conduct tests. Further, paragraph (2) refers to tests conducted under paragraph (1), which encompasses both tests conducted by EPA and tests for which the Administrator has specified the conditions. The plain language of the reference to paragraph (1) does not require EPA directly to have required the manufacturer to conduct the test, in order to rely upon the data produced. Rather, tests conducted under section 206(b) paragraph (1) are tests that the Administrator has determined to be probative of a vehicle's conformity with its certificate, which are either tests that EPA conducts directly, or tests conducted by the manufacturer in accordance with conditions specified by the Administrator.

In 40 CFR part 86, EPA prescribes procedures for testing whether new motor vehicles conform to the regulations. Most of these procedures are the same as the procedures required by California in the Assembly-Line Test Procedures Quality Audit, and EPA expects that the federal and California test procedures will become increasingly similar through harmonization efforts underway in this and other rulemakings. EPA has modified the regulations for manufacturer SEA testing to prescribe the procedures detailed in the regulations or substantially similar procedures, which could encompass testing performed under the California Quality Audit program. Substantially similar procedures must produce results that are reliable and probative indicators of the likely outcome of an SEA based on the part 86 testing requirements detailed in the SEA regulations. Regardless of whether CARB specifies additional details in the course of testing by the manufacturer, as long as the test that the manufacturer actually conducts is still in accordance with procedures substantially similar to those detailed by EPA, such a test will be in accordance with the conditions specified by the Administrator. Moreover, manufacturers opposed to this approach have not suggested that the data would indicate a false result and that engine families failing the California testing would actually pass an SEA, if EPA were to require duplicative testing.

Today's action does not expand the overall scope of EPA's authority under section 206 because nothing in the National LEV program would prevent EPA from pursuing an SEA action under its current regulations and the Agency will continue to be able to test 50-state engine families under its own program. However, EPA will now have the option of applying test data generated by a manufacturer in response to California's program to the SEA structure without the

need for additional testing. This option will only apply where the test procedures are substantially similar to the procedures detailed by EPA.

EPA recognizes that data generated under the California program showing a noncompliance would not necessarily always be cause for suspension or revocation of a certificate under the federal SEA program. It is possible that testing procedures used in some California Quality Audits will not be substantially similar to those listed in 40 CFR part 86. Before acting to suspend or revoke a certificate based on data generated under the California Quality Audit program, EPA, in conjunction with CARB and the manufacturer, would determine if federal enforcement action in that case would be appropriate. EPA would consider all relevant data, including testing procedures used. Additionally, a manufacturer would retain the right to request a public hearing on EPA's decision to suspend or revoke a certificate of conformity if it disagreed with EPA's decision.

EPA is modifying the regulations to allow the Agency to rely on California Assembly-Line Test Procedures data in potential SEA actions regardless of whether the National LEV program comes into effect. Although California has different fuel specifications (i.e., California phase 2 reformulated gasoline) than federal requirements, California provides manufacturers the option of certifying their vehicles using either California phase 2 reformulated gasoline or federal certification gasoline (most commonly, indolene). Thus, manufacturers may test vehicles under the California Quality Audit program using federal fuel. More likely, because California phase 2 reformulated gasoline is "cleaner" than indolene, EPA may be able to find that a vehicle failing tests using California test fuel is even more likely to fail when tested on federal test fuel. Therefore, EPA believes that allowing the Agency the ability to evaluate and possibly use data derived from the California Quality Audit program makes sense under either the National LEV program or under the current federal motor vehicle program. These modifications to the regulations will help reduce regulatory and administrative burdens on manufacturers and the Agency by eliminating the need for costly duplicative unnecessary emissions testing.



## **IX. Unfunded Mandate Requirements**

### Proposal

EPA determined in the NPRM that the requirements of the Unfunded Mandates Reform Act of 1995 did not apply to the proposed rule. The unfunded mandates provisions only apply to federal mandates, and National LEV is a voluntary program, which would implement an agreement reached between the OTC States and the motor vehicle manufacturers.

### Comments

Some commenters believed that the National LEV program represents an unfunded mandate that EPA is imposing on the non-OTC States. Commenters (25, 57) challenge EPA's characterization of the National LEV program as voluntary, asserting that "[t]he non-OTC States are forced into the program whether or not they desire to participate." The commenters also stated that EPA failed to abide by the requirements in the Unfunded Mandates Reform Act (UMRA). One (57) argues that EPA's claim that the voluntary nature of the National LEV program avoids the UMRA trigger is wrong as a matter of law. Another (25) pointed to EPA's completion of a Regulatory Impact Analysis because National LEV's costs exceed \$100M as showing that National LEV meets the cost threshold for UMRA. One commenter (48) claimed that because National LEV is imposing vehicle costs on consumers in the 37 States, this shows that UMRA also applies.

### Response

As stated in the NPRM, EPA has determined that the written statement requirements of sections 202 and 205 of the Unfunded Mandates Reform Act of 1995 (UMRA) do not apply to this rule, and thus do not require EPA to conduct further analyses pursuant to those requirements. The UMRA written statement requirements only apply to rules that contain certain kinds of federal mandates, specifically, "federal intergovernmental mandates" or "federal private sector mandates" that may result in expenditures of \$100 million or more by State, local or tribal governments, in the aggregate, or by the private sector in any one year. UMRA defines "federal intergovernmental mandate" and "federal private sector mandate" as any provision in regulation that would impose an "enforceable duty" upon State, local or tribal governments or the private sector, respectively, subject to certain exceptions such as duties arising from participation in a voluntary Federal program.

National LEV is not a federal intergovernmental mandate because it would impose no enforceable duty on any State, local or tribal government. The National LEV regulations are not directed at State, local or tribal governments and would not impose any requirements on such governments.

National LEV also is not a federal private sector mandate because any duties it may impose on the private sector arise from participation in a voluntary Federal program, which motor vehicle manufacturers may choose to operate under to implement an agreement reached between the OTC States and the motor vehicle manufacturers. While National LEV may impose private sector costs above the level identified in UMRA, as a threshold matter, UMRA's written statement requirements only apply if any such costs stem from imposition of an enforceable duty that does not arise from participation in a voluntary federal program.

Moreover, even if the UMRA written statement provisions did apply to this rule, they are met by the Regulatory Impact Analysis prepared pursuant to E.O. 12866 and contained in the docket. The RIA contains a qualitative and quantitative assessment of the anticipated costs and benefits of National LEV. See the preamble to the final rule section IV.A.2.e. and section IV.E. of this document for further discussion of the effect of National LEV on the 37 States.

## **X. Impact on Clean Fuel Fleet Programs**

### Proposal

The Agency did not propose any changes to the federal Clean Fuel Fleet Program regulations.

### Comments

EPA received comments requesting clarification of the implication of the National LEV program on the Clean Fuel Fleet Program (CFFP) described in Part C of Title II of the Clean Air Act (69). One commenter also claimed that the proposed National LEV standards are less stringent than the standards EPA established for the CFFP (3).

Some commenters stated that National LEV appears to be inconsistent with the Energy Policy Act's mandate to reduce the use of diesel and gasoline and/or with the Department of Energy's (DOE) Clean Cities Program (3, 52, 53, 98). Their reasoning is that National LEV does not force the use of alternative, cleaner fuels, thus making such vehicles less readily available.

### Response

As required by section 243 of the Clean Air Act, EPA established emissions standards for clean fuel vehicles. See 59 FR 50042 (September 30, 1994). These standards apply to vehicles in Clean Fuel Fleet Programs adopted by states pursuant to section 246 and section 182(c)(4)(a) of the Act. The Act requires clean fuel vehicles, regardless of the fuel on which they operate, to comply with the exhaust emissions standards described in section 243 of the Act, which are identical to the CAL LEV program exhaust standards, plus all other federal motor vehicle emissions control requirements that apply to comparable conventional vehicles in the same vehicle category and model year. See section 242(b) and section 243 of the Clean Air Act.

The relative stringency of the National LEV standards and the clean fuel vehicle standards is not an issue in this rulemaking. However, EPA does not agree that the National LEV standards are less stringent than EPA's clean fuel vehicle standards. The exhaust standards for both programs are identical, and vehicles in both programs must meet all other applicable federal requirements, such as evaporative emissions, ORVR, OBD, and others. Therefore, once the National LEV program goes into effect, National LEV vehicles will qualify as clean fuel vehicles, and can be used by fleet operators to satisfy the purchase requirements of a state-adopted CFFP.

In its comment, DOE supported EPA's belief that National LEV is consistent with DOE's Clean Cities program. DOE stated its intent to use the Clean Cities program to work with

stakeholders in placing ATVs in the OTR. DOE also recommended that the ATV components be “very aggressive” in order to make up for what it perceived to be differences in how OTC LEV and National LEV foster introduction of ATVs into the market. See the discussion on Advanced Technology Vehicles for EPA’s views on the likely ability of OTC state-by-state adoption of CAL LEV programs and National LEV to lead to introduction of ATV’s in the OTR, as well as other issues related to ATV market development.

## **XI. Costs and Benefits**

### **A. National LEV Program Costs**

#### Proposal

The costs associated with the National LEV program were set forth in the Regulatory Impact Analysis.

#### Comments

One party (69) commented that no cost analysis has been performed that justifies EPA's claim in the NPRM that the National LEV program will be cheaper. Another commenter (48) challenged EPA's assertion that National LEV is a cheaper program than OTC LEV because National LEV will impose vehicle costs on consumers in the 37 states.

Citing the present range of cost estimates for the National LEV program vehicles, one party's (25) comments asked for EPA's projection of costs of NLEVs and asked if studies had been conducted to identify these costs.

Another party (78) commented that more expensive National LEV cars would mean consumers will delay replacing their older, more-polluting vehicles, and will thereby reduce the emission benefits attributed to National LEV.

#### Response

EPA's analysis, set forth in the RIA document, analyzed the costs of the OTC LEV and National LEV motor vehicle control programs, and compared these costs to current federal Tier 1 vehicle costs. While NLEVs will be slightly more expensive than Tier 1 vehicles available today, National LEV is also a cheaper method for a state to obtain emissions reductions from automobiles than adoption of the California program under section 177 of the Clean Air Act. Apart from National LEV, adoption of CAL LEV under section 177 is the only means for states to obtain emission reductions from motor vehicles before MY2004. Economies of scale for a program set up on a national, as opposed to a regional or statewide, basis will provide additional cost savings for cleaner vehicles. EPA estimates that the estimated \$96 price differential for a LEV-type vehicle in California will fall to approximately \$76 when the requirements are applied on a national scale.<sup>7</sup> Price differentials for a LEV-type vehicle under a state's adoption of the

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<sup>7</sup>A November, 1996 CARB Staff Report modified CARB's cost estimates. CARB now estimates the incremental costs for LEVs at approximately \$120. EPA's cost analysis looks at vehicle costs in California and then estimates National LEV program costs based on nationwide sales volumes. Two principal reasons for vehicle price differentials between California and National LEV vehicles are economies of scale in production volumes and

CAL LEV program will fall between these two values. The overall costs of the National LEV program will be greater than those for OTC state-by-state adoption of CAL LEV programs solely due to the additional number of states, and therefore vehicles, covered by the National LEV program, but EPA continues to believe the more relevant comparison is on a cost-per-vehicle basis, which shows National LEV is cheaper than OTC LEV (and by inference individual state adoption of California LEV). See the preamble and RIA for further discussion on this issue.

The EPA estimates of the cost of NLEVs are based on analyses and data provided to EPA by various stakeholders. This includes analyses and data provided during the review of California's request for a waiver of Federal preemption for the CAL LEV program and the review of the OTC LEV recommendation.

After reviewing the available cost estimates, EPA chose to base the estimates of cost contained in the National LEV RIA on the cost estimates made by California, modified to reflect the economies of scale that will be realized through producing vehicles for the entire country, rather than only for California. EPA chose to use the California numbers based on the thoroughness of California's cost analysis (described in California's April 1994 Low-Emission Vehicle and Zero-Emission Vehicle Program Review-Staff Report) and California's continued review and update of its estimates (updates completed in April, 1996 and November, 1996). Comments provided by others during the OTC LEV review, such as those from the Manufacturers of Emission Controls Association (MECA) (docket A-94-11 IV-D-232) supported California's contention that both the cost and the complexity of the hardware required to meet the standards will continue to decrease as the technology is finalized. A final review of costs associated with the National LEV program will be done as part of the analysis in the upcoming SNPRM and final rule, and EPA will use the most current information available for this analysis.

EPA does not believe that the incremental price increase attributed to National LEV will cause consumers to delay purchasing these cleaner cars and instead continue to drive their older, more polluting vehicles. See the RIA for more discussion on this topic.

## **B. National LEV Program Cost-Effectiveness**

### Proposal

The costs associated with the National LEV program were set forth in the Regulatory Impact Analysis.

### Comments

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allocation of costs among the number of vehicles being produced, with such costs distributed over an appropriate number of years. EPA's cost estimates rely in part on the National LEV start date, so once the actual start date is determined, EPA will recalculate its estimates for vehicle costs using up-to-date cost information.

A party (35) commented that the NPRM "defined neither the costs nor benefits in quantitative terms." Another party (98) commented that the benefit analysis should be conducted for the years 1997 through 2004, rather than 2005 ..." which is presumably after federal Tier II standards will have come into effect."

### Response

The Regulatory Impact Analysis and the accompanying technical analysis (Pechan Analysis), which is available in the National LEV docket (A-95-26), contains a quantitative analysis of the costs and benefits of the National LEV Program.

The years 2005 and 2007 were selected for analysis because section 181 of the Clean Air Act requires that severe nonattainment areas demonstrate compliance by 2005 or 2007. Data covering other years is provided in the RIA. See also the discussion in section III.A.3.

## **XII. State Commitments**

### **Comments**

EPA received several comments relating to how the OTC States will commit to the National LEV program.

### **Responses**

EPA will address these comments in a final rule following the SNPRM on OTC State commitments. See the preamble to the final rule, sections IV.A.2.a.(1) and V.B. for further discussion of the SNPRM.