

Table of Contents

Executive Summary . . . . . iii
Table of Contents . . . . . T-1
List of Tables . . . . . T-11
List of Figures . . . . . T-19
List of Acronyms . . . . . T-21
Chapter I: Introduction . . . . . I-1
Chapter II: Health and Welfare Concerns and Emissions Benefits . . . . . II-1
A. Health and Welfare Concerns . . . . . II-1
1. Health and Welfare Concerns Raised During Public Hearings . . . . . II-1
2. Ozone . . . . . II-3
a. Health and Welfare Effects of Ozone and its Precursors . . . . . II-4
b. Photochemical Ozone Modeling . . . . . II-7
c. Results of Photochemical Ozone Modeling . . . . . II-11
d. Ozone Modeling and Analysis in 1-Hour State Implementation Plan Submittals and Other Local Ozone Modeling . . . . . II-15
e. Public Health and Welfare Concerns from Prolonged and Repeated Exposures to Ozone . . . . . II-40
3. Particulate Matter . . . . . II-55
a. Health and Welfare Effects of Ambient Particulate Matter . . . II-55
b. Public Health and Welfare Concerns from Exposure to Fine PM . . . . . II-64
4. Diesel Exhaust . . . . . II-74
a. Cancer and Noncancer Effects of Diesel Exhaust . . . . . II-74
b. The Link Between Diesel Exhaust and Diesel Particulate Matter . . . . . II-77
c. Ambient Concentrations and Exposure to Diesel Exhaust . . . II-79
d. Potential for Cancer Risk . . . . . II-90
5. Gaseous Air Toxics . . . . . II-95
a. Health Effects . . . . . II-96
b. Assessment of Exposure . . . . . II-101
6. Visibility/Regional Haze . . . . . II-105
7. Acid Deposition . . . . . II-107

8.	Eutrophication and Nitrification .....	II-108
9.	POM Deposition .....	II-110
10.	Carbon Monoxide .....	II-110
B.	Heavy-Duty Diesel Inventory Impacts .....	II-111
1.	Description of Calculation Method .....	II-111
a.	Baseline Emissions Inventory .....	II-111
b.	Controlled Emissions Inventory (Air Quality Analysis Case) ..	II-115
c.	Controlled Emissions Inventory (Updated Control Case) ...	II-117
2.	HDDE Emission Reductions .....	II-119
a.	Anticipated Reductions due to the New HDDE Standards ..	II-119
b.	Additional Reductions due to the New HDDE Standards ...	II-127
3.	HDGV Emission Reductions .....	II-129
a.	NOx Reductions .....	II-130
b.	Exhaust NMHC Reductions .....	II-131
c.	Evaporative Emission Reductions .....	II-133
d.	Air Toxics Reductions .....	II-135
4.	Total Emission Reductions .....	II-135
5.	Differences from NPRM Inventory .....	II-139
a.	Heavy-Duty Diesel Engines .....	II-140
b.	Heavy-Duty Gasoline Vehicles .....	II-141
6.	Sensitivity Analysis for In-Use PM Deterioration .....	II-142
a.	Methodology .....	II-142
b.	Results .....	II-143
7.	Contribution of HDVs to National Inventory .....	II-144
Chapter II. References .....		II-153
Chapter III: Emissions Standards Feasibility .....		III-1
A.	Feasibility of the Heavy-Duty Diesel Standards .....	III-2
1.	Engine Out Improvements .....	III-2
2.	Meeting the PM Standard .....	III-4
a.	Catalyzed Diesel Particulate Filters .....	III-5
b.	Control of Ultra-Fine PM .....	III-14
3.	Meeting the NOx Standard .....	III-15
a.	Lean NOx Catalysts .....	III-15
b.	NOx Adsorbers .....	III-16
c.	Selective Catalytic Reduction (SCR) .....	III-72
d.	Non-Thermal Plasma Assisted Catalysts .....	III-74
4.	Meeting the NMHC Standard .....	III-74
5.	Meeting the Crankcase Emissions Requirements .....	III-76
6.	The Complete System .....	III-77

## Table of Contents

---

7.	The Need for Low Sulfur Diesel Fuel	III-78
a.	Catalyzed Diesel Particulate Filters and the Need for Low Sulfur Fuel	III-79
b.	Diesel NOx Catalysts and the Need for Low Sulfur Fuel	III-87
c.	Contribution of Sulfur from Engine Lubricating Oils	III-91
B.	Feasibility of the 2008 Standards for Heavy-Duty Gasoline Vehicles & Engines	III-93
1.	Gasoline Exhaust Emission Control Technology Descriptions	III-95
a.	Base Engine Improvements	III-96
b.	Improvements in Air-Fuel Ratio Control	III-99
c.	Improvements in Fuel Atomization	III-102
d.	Improvements to Exhaust and Exhaust Emission Control Systems	III-103
e.	Improvements in Engine Calibration Techniques	III-106
2.	The 2008 Heavy-Duty Gasoline Exhaust Emission Standards	III-107
3.	Current Exhaust Emission Certification Levels for Heavy-Duty Gasoline Vehicles & Engines	III-109
4.	Technological Feasibility of the 2008 Heavy-Duty Gasoline Exhaust Emission Standards	III-112
5.	The 2008 Heavy-Duty Gasoline Evaporative Emission Standards	III-119
6.	Technological Feasibility of the 2008 Heavy-Duty Gasoline Evaporative Emission Standards	III-121
	Chapter III. References	III-124
	Chapter IV: Fuel Standard Feasibility	IV-1
A.	Feasibility of Removing Sulfur from Highway Diesel Fuel	IV-1
1.	Sources of Diesel Fuel Sulfur	IV-1
2.	Current Levels of Sulfur in Highway Diesel Fuel	IV-6
3.	Current Levels of Other Fuel Parameters in Highway Diesel Fuel	IV-8
4.	Overview of Diesel Fuel Sulfur Control	IV-12
5.	Hydrotreating and Other Hydrogen-Based Processes Which Remove Sulfur	IV-14
a.	Fundamentals of Distillate Hydrotreating	IV-15
b.	Meeting a 15 ppm Cap with Distillate Hydrotreating	IV-20
c.	Low Sulfur Performance of Distillate Hydrotreating	IV-26
d.	Undercutting Cracked Stocks	IV-29
6.	Other Desulfurization Technologies	IV-30
a.	Biodesulfurization	IV-30
b.	Chemical Oxidation and Extraction	IV-31
c.	Sulfur Adsorption	IV-31

	d.	FCC Feed Hydrotreating .....	IV-32
7.		Will There Be Enough Supply of Highway Diesel Fuel? .....	IV-33
	a.	Required Investment per Refinery .....	IV-33
	b.	Historic Refining Profit Margins .....	IV-34
	c.	Variation in Compliance Costs Faced by Refiners .....	IV-35
	d.	Other Markets for Highway Diesel Fuel .....	IV-38
	e.	Uncertainty in Requisite Desulfurization Technology .....	IV-39
	f.	Likely Price and Import Response to the New Standard ....	IV-40
	g.	Impact of Desulfurization Processes on Fuel Volume .....	IV-41
	h.	Impact of Fuel Transport on Supply .....	IV-42
	i.	Charles River Associates and Baker and O'Brien Study ....	IV-42
8.		Conclusions .....	IV-44
9.		Fuel Availability in 2006 .....	IV-45
	a.	Summary .....	IV-45
	b.	Diesel Fuel Refining Under the Temporary Compliance Option .....	IV-46
B.		Interaction with Other Programs .....	IV-56
	1.	Design and Construction Services .....	IV-56
C.		The Need for Lubricity Additives .....	IV-63
	1.	What Impacts Will the Sulfur Change Have on Lubricity? .....	IV-64
	2.	How Can One Determine Whether the Lubricity of a Fuel Is Adequate? .....	IV-66
	3.	What Experience Has There Been with Low-sulfur Fuels? .....	IV-68
	4.	What Can Be Done About Poor Lubricity Fuels? .....	IV-72
	5.	Today's Action on Lubricity: A Voluntary Approach .....	IV-75
	6.	Are There Concerns Regarding the Impact of Diesel Desulfurization on Other Fuel Properties? .....	IV-76
D.		Feasibility of Maintaining Off highway Fuel in the Distribution System ...	IV-77
	1.	Overview .....	IV-77
	2.	Feasibility of Limiting Sulfur Contamination in the Pipeline System	IV-89
	a.	Interface Handling Practices .....	IV-90
	b.	Identifying the Location of the Interface Between Fuel Batches .....	IV-95
	c.	Dead Legs .....	IV-96
	d.	Line-Fill .....	IV-97
	e.	Leaking Valves .....	IV-97
	f.	Surface Accumulation of Sulfur-Containing Substances ....	IV-98
	3.	Limiting Sulfur Contamination at Stationary Storage Facilities ....	IV-99
	a.	Quality Control Testing .....	IV-99
	b.	Product Switching in Stationary Storage Tanks .....	IV-100
	c.	Tank Manifolds .....	IV-102

**Table of Contents**

---

4.	Limiting Sulfur Contamination During Transport by Surface Vehicles .....	IV-102
5.	Limiting Sulfur Contamination During Transport by Marine Vessels .....	IV-105
6.	Limiting Sulfur Contamination from Diesel Fuel Additives .....	IV-106
7.	Handling Batches of Highway Diesel Found to Exceed the Sulfur Standard Downstream of the Refinery .....	IV-108
E.	Misfueling .....	IV-109
1.	Introduction .....	IV-109
2.	What Provision Are We Adopting to Ensure 2007 and Later Heavy-Duty Diesel Vehicles Use 15 ppm Sulfur Fuel? .....	IV-110
3.	Are Additional Requirements Necessary to Address Deliberate Misfueling? .....	IV-111
4.	Are Additional Requirements Necessary to Address Accidental Misfueling? .....	IV-114
Chapter V: Economic Impact .....		V-1
A.	Economic Impact of the 2007 Model Year Heavy-Duty Diesel Standards ...	V-1
1.	Methodology for Estimating Costs .....	V-1
2.	Heavy-Duty Diesel Technologies for Compliance with the Standards .....	V-3
3.	Technology/Hardware Costs for Diesel Vehicles and Engines .....	V-8
a.	NOx Adsorber Catalyst Costs .....	V-8
b.	Catalyzed Diesel Particulate Filter Costs .....	V-12
c.	Diesel Oxidation Catalyst (HC and H <sub>2</sub> S “Clean-Up” Catalyst) .....	V-15
d.	Closed Crankcase Filtration Systems .....	V-16
4.	Fixed Costs .....	V-17
a.	Research and Development .....	V-17
b.	Tooling Costs .....	V-21
c.	Certification Costs .....	V-24
d.	Summary of Fixed Costs .....	V-26
5.	Operating Costs .....	V-27
a.	Low Sulfur Diesel Fuel .....	V-28
b.	Maintenance Costs for Closed Crankcase Ventilation Systems .....	V-28
c.	Maintenance Costs for Catalyzed Diesel Particulate Filters .....	V-29
d.	Maintenance Savings due to Low Sulfur Diesel Fuel .....	V-30
e.	Fuel Economy Impacts .....	V-30
6.	Summary of Near and Long Term Costs .....	V-32
7.	Total Incremental Nationwide Costs for 2007 Heavy-Duty Diesel Engines .....	V-37
B.	Economic Impact of the 2008 Model Year Heavy-Duty Gasoline Standards .....	V-41
1.	Methodology for Estimating Heavy-Duty Gasoline Costs .....	V-41

2.	Technology Packages for Compliance with the 2008 Model Year Heavy-Duty Gasoline Standards .....	V-42
3.	Technology/Hardware Costs for Gasoline Vehicles and Engines ...	V-44
a.	Improved Catalysts and Catalyst Systems .....	V-44
b.	Oxygen Sensors .....	V-50
c.	Exhaust Gas Recirculation (EGR) .....	V-50
d.	Secondary Air Injection with Closed Loop Control .....	V-50
e.	Exhaust Systems .....	V-50
f.	Evaporative Emission Control Systems .....	V-51
g.	Summary of Technology/Hardware Costs .....	V-51
4.	Heavy-Duty Gasoline Fixed Costs .....	V-53
a.	R&D and Tooling Costs .....	V-54
b.	Certification Costs .....	V-55
5.	Summary of Heavy-Duty Gasoline Costs .....	V-55
6.	Total Nationwide Costs for 2008 Heavy-Duty Gasoline Vehicles ..	V-56
C.	Diesel Fuel Costs .....	V-60
1.	Methodology .....	V-60
a.	Overview .....	V-60
b.	Derivation of the Fraction of LCO and other Cracked Blendstocks in Highway Diesel Fuel for Each Refinery .....	V-62
c.	Technology and Cost Inputs from Vendors .....	V-66
d.	Development of Diesel Desulfurization Cost Projections ...	V-74
e.	Development of Desulfurization Cost Factors for Individual Diesel Blendstocks .....	V-80
f.	Future Diesel Fuel Volumes .....	V-96
2.	Projected Refinery Costs of Meeting the 15 ppm Sulfur Cap .....	V-97
a.	Other Cost Estimates for Desulfurizing Highway Diesel Fuel	V-113
3.	The Added Cost of Distributing Low-Sulfur Fuel .....	V-119
a.	Summary .....	V-119
b.	Cost of Distributing the Additional Volume of Highway Diesel Fuel Needed to Compensate for a Reduction in Energy Density .....	V-123
c.	Cost of Downgrading an Increased Volume of Highway Diesel Fuel to a Lower Value Product During Shipment by Pipeline	V-124
d.	Increased Cost of Downgrading the Current Interface Volumes Associated with Pipeline Shipments of Highway Diesel Fuel	V-126
e.	Increased Cost of Downgrading the Interface Between Pipeline Shipments of Highway Diesel Fuel and Jet Fuel or Kerosene	V-127
f.	Cost of Additional Quality Control Testing at Petroleum Terminals .....	V-129

**Table of Contents**

g.	Cost of Downgrading the Additional Pipeline Interface Volumes Associated with the Shipment of Highway Diesel Fuel that Meets a 500 ppm Sulfur Cap During the Initial Years of Our Sulfur Program .....	V-129
h.	Cost of Optimizing the Distribution System to Distribute 15 ppm Highway Diesel Fuel .....	V-130
i.	Additional Measures by Tank Truck, Tank Wagon, and Rail Car Operators to Limit Contamination .....	V-131
j.	Potential Costs Associated with the Voluntary Phase Out of High Sulfur Diesel Additives .....	V-131
k.	Costs During the Initial Years of Our Program Due to the Need for Additional Storage Tanks to Handle Two Grades of Highway Diesel Fuel .....	V-131
4.	What is the Cost of Lubricity Additives? .....	V-133
5.	Benefits of 15 ppm Diesel Fuel for the New and Existing Diesel Fleet .....	V-135
a.	Methodology .....	V-136
b.	Extended Oil Change Intervals .....	V-137
c.	Extended EGR System Life .....	V-138
d.	Extended Exhaust System Life .....	V-141
e.	Extended Rebuild Intervals and Engine Life .....	V-142
f.	Aggregate Cost Savings for the New and Existing Diesel Fleet Realized from Low Sulfur Diesel Fuel .....	V-142
6.	Per-Engine Life-Cycle Fuel Costs .....	V-145
D.	Combined Total Annual Nationwide Costs .....	V-147
Chapter V. References .....		V-151
Chapter VI: Cost-Effectiveness .....		VI-1
A.	Overview of the Per-vehicle Analysis .....	VI-1
1.	Temporal and Geographic Applicability .....	VI-2
2.	Baselines .....	VI-3
B.	Diesel Costs .....	VI-4
1.	Near and Long-Term Cost Accounting .....	VI-4
2.	Diesel Engine and Fuel Costs .....	VI-5
3.	Methodology for assigning costs to NO <sub>x</sub> , NMHC, and PM .....	VI-5
4.	Cost Crediting for SO <sub>2</sub> .....	VI-7
C.	Emission Reductions from Diesel Engines .....	VI-8
1.	NO <sub>x</sub> , NMHC, and PM .....	VI-8
2.	Sulfur Dioxide .....	VI-11
D.	Costs and Emission Reductions for Heavy-duty Gasoline Vehicles .....	VI-12

1.	Gasoline Vehicle Costs .....	VI-12
2.	Emission Reductions from Gasoline Vehicles .....	VI-13
E.	30-year Net Present Value Cost-Effectiveness .....	VI-15
F.	Results .....	VI-16
APPENDIX VI - A: Factors Used in Diesel Engine Calculations for Cost-effectiveness ...		VI-22
APPENDIX VI - B: Costs used in 30-year Net Present Value Cost Effectiveness Analysis (\$millions) .....		VI-23
APPENDIX VI - C: Emission Reductions Used in 30-year Net Present Value Cost Effectiveness Analysis (thousand tons) .....		VI-24
Chapter VI. References .....		VI-25
Chapter VII: Benefit-Cost Analysis .....		VII-1
A.	Emissions Inventory Implications .....	VII-10
B.	Air Quality Impacts .....	VII-11
1.	Ozone Air Quality Estimates .....	VII-11
a.	Modeling Domain .....	VII-12
b.	Simulation Periods .....	VII-13
c.	Converting UAM-V Outputs to Full-Season Profiles for Benefits Analysis .....	VII-14
d.	Ozone Air Quality Results .....	VII-14
2.	PM Air Quality Estimates .....	VII-17
a.	Modeling Domain .....	VII-18
b.	Simulation Periods .....	VII-18
c.	Model Inputs .....	VII-18
d.	Converting REMSAD Outputs to Benefits Inputs and Model Performance .....	VII-21
e.	PM Air Quality Results .....	VII-22
3.	Visibility Degradation Estimates .....	VII-25
a.	Residential Visibility Improvements .....	VII-26
b.	Recreational Visibility Improvements .....	VII-27
4.	Nitrogen Deposition Estimates .....	VII-29
C.	Benefit Analysis .....	VII-30
1.	Methods for Estimating Benefits from Air Quality Improvements .	VII-30
2.	Methods for Describing Uncertainty .....	VII-35
D.	Assessment of Human Health Benefits .....	VII-39
1.	Estimating Baseline Incidences for Health Effects .....	VII-39
2.	Accounting for Potential Health Effect Thresholds .....	VII-40



## Table of Contents

	3. Quantifying and Valuing Individual Health Endpoints . . . . .	VII-40
	a. Premature Mortality: Quantification . . . . .	VII-45
	b. Premature Mortality: Valuation . . . . .	VII-49
	c. Chronic Bronchitis: Quantification . . . . .	VII-53
	d. Chronic Bronchitis: Valuation . . . . .	VII-54
	e. Hospital and Emergency Room Admissions: Quantification . . . . .	VII-55
	f. Hospital Admissions: Valuation . . . . .	VII-56
	g. Asthma Attacks: Quantification . . . . .	VII-57
	h. Asthma Attacks: Valuation . . . . .	VII-58
	i. Other Health Effects: Quantification . . . . .	VII-59
	j. Other Health Effects: Valuation . . . . .	VII-61
	k. Lost Worker Productivity: Quantification and Valuation . . . . .	VII-62
	l. Estimated Reductions in Incidences of Health Endpoints and Associated Monetary Values . . . . .	VII-62
E.	Assessment of Human Welfare Benefits . . . . .	VII-65
	1. Visibility Benefits . . . . .	VII-65
	2. Agricultural and Forestry Benefits . . . . .	VII-68
	a. Agricultural Benefits . . . . .	VII-68
	b. Forestry Benefits . . . . .	VII-69
	c. Other Effects . . . . .	VII-71
	3. Benefits from Reductions in Materials Damage . . . . .	VII-72
	4. Benefits from Reduced Ecosystem Damage . . . . .	VII-72
	5. Estimated Values for Welfare Endpoints . . . . .	VII-74
F.	Total Benefits . . . . .	VII-76
G.	Comparison of Costs to Benefits . . . . .	VII-85
Appendix VII-A: Supplementary Benefit Estimates and Sensitivity Analyses of Key Parameters in the Benefits Analysis . . . . . VII-98		
A.	Introduction and Overview . . . . .	VII-98
B.	Supplementary Benefit Estimates . . . . .	VII-98
C.	Sensitivity Analyses . . . . .	VII-101
	1. Alternative Lag Structures . . . . .	VII-101
	2. PM Health Effect Threshold . . . . .	VII-103
	3. Income Elasticity of Willingness to Pay . . . . .	VII-105
Chapter VII. Appendix A References . . . . . VII-106		
Chapter VIII: Regulatory Flexibility Analysis . . . . . VIII-1		
A.	Regulatory Flexibility Analysis . . . . .	VIII-1
B.	Need for and Objectives of the Rule . . . . .	VIII-2
C.	Summary of Significant Public Comments on the IRFA . . . . .	VIII-3
D.	Types and Number of Small Entities To Which The Rule Will Apply . . . . .	VIII-3

1.	Small Refiners .....	VIII-5
2.	Small Distributors/Marketers of Highway Diesel Fuel .....	VIII-5
E.	Projected Costs of the Diesel Sulfur Standards .....	VIII-6
F.	Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Rule .....	VIII-7
1.	Registration Reports .....	VIII-7
2.	Pre-Compliance Reports .....	VIII-7
3.	Annual Compliance Reports .....	VIII-8
4.	Product Transfer Documents (PTDs) .....	VIII-8
5.	Recordkeeping Requirements .....	VIII-8
6.	Diesel Fuel Pump Labeling .....	VIII-9
G.	Regulatory Alternatives .....	VIII-9
1.	500 ppm Option .....	VIII-10
2.	Small Refiner Credit Option .....	VIII-11
3.	Diesel/Gasoline Compliance Date Option .....	VIII-11
4.	Relationship of the Options to Each Other .....	VIII-12
H.	Other Relevant Federal Rules Which May Duplicate, Overlap, or Conflict with the Low Sulfur Diesel Fuel Rule .....	VIII-13
Chapter IX: Sulfur Control in Alaska & Territories .....		IX-1
A.	What is the Authority For Exemptions? .....	IX-1
B.	Alaska Exemption From the 500 ppm Sulfur Standard .....	IX-2
1.	Why Are We Considering an Exemption for Alaska? .....	IX-2
2.	Who Commented on the 1998 Proposal for a Permanent Exemption? .....	IX-3
3.	What are the Relevant Factors Unique to Alaska? .....	IX-3
a.	Geography, meteorology, and fuel production, distribution, usage .....	IX-4
b.	Environmental and Health Factors .....	IX-13
c.	Engine and emission control system factors .....	IX-17
d.	Are there alternatives to granting or denying Alaska's Petition for permanent exemption? .....	IX-21
e.	What Flexibility Are We Offering Alaska? .....	IX-22
C.	American Samoa, Guam, and Commonwealth of Northern Mariana Islands (CNMI) .....	IX-24
1.	Why Are We Considering an Exemption for American Samoa, Guam, and CNMI? .....	IX-24
2.	What are the Relevant Factors? .....	IX-24
a.	American Samoa .....	IX-24
b.	Guam .....	IX-25
c.	Commonwealth of Northern Mariana Islands (CNMI) .....	IX-26
3.	What Are the Options for the Territories? .....	IX-27

**Table of Contents**

---

- 4. What Flexibility are we Offering the Territories? ..... IX-28
  
- Appendix A: Legal Authority for Diesel Fuel Sulfur Control ..... A-1
  - A. EPA’s Current Regulatory Requirements for Diesel ..... A-1
  - B. How the Proposed Diesel Sulfur Control Program Meets the CAA Section 211(c) Criteria  
..... A-1
    - 1. Health and Welfare Concerns of Air Pollution Caused by Sulfur in Diesel Fuel ..... A-2
    - 2. Impact of Diesel Sulfur Emission Products on Emission Control Systems ..... A-3
    - 3. Sulfur Levels that Exhaust Aftertreatment for Heavy-Duty Vehicles Can Tolerate ..... A-4
    - 4. Sulfur Sensitivity of Other Catalysts ..... A-5
    - 5. Effect of Diesel Sulfur Control on the Use of Other Fuels or Fuel Additives ..... A-7
  
- APPENDIX B: Vehicle Miles Traveled by HDDE Class for Split by Pre-2007 and 2007+ Model Years (MY) ..... B-1



## List of Tables

Table ES-1. Projected Incremental System Cost and Life Cycle Operating Cost for Heavy-Duty Diesel Vehicles .....	viii
Table ES-2. Projected Incremental System Cost and Life Cycle Operating Cost for Heavy-Duty Gasoline Vehicles .....	x
Table ES-3. Per-Engine <sup>A</sup> Cost Effectiveness of the Standards for 2007 and Later MY Vehicles .....	xiv
Table ES-4. 30-year Net Present Value <sup>A</sup> Cost Effectiveness of the Standards .....	xiv
Table ES-5. 2030 Annual Monetized Costs, Benefits, and Net Benefits for the Final HD Engine/Diesel Fuel Rule .....	xvi
Table ES-6. Key Alternative Benefits Calculations for the HD Engine/Diesel Fuel Rule in 2030 .....	xvii
Table II.A-1. Comparison of eastern U.S. regional model performance statistics between the Tier 2/Sulfur modeling and the Heavy Duty Engine modeling. ....	II-10
Table II.A-2. Eastern Metropolitan Areas with Modeled Exceedances of the 1-Hour Ozone Standard in 2007, 2020, or 2030 With and Without Emission Reductions from this Rule .....	II-14
Table II.A-3. Nonattainment Areas For Which EPA Has Proposed Action On SIP Submissions Containing 1-hour Ozone Attainment Demonstrations or Otherwise Has Considered Results of Local Ozone Modeling .....	II-18
Table II.A-4. Areas With Some Risk of Ozone Violations between 2007 and 2030 Based on Information Other Than Predictive Ozone Modeling .....	II-25
Table II.A-5. Metropolitan Areas With Established or Requested 2007 or 2010 Attainment Deadlines .....	II-30
Table II.A-6. Areas and 1999 Populations at Risk of Exceeding the Ozone Standard between 2007 and 2030 .....	II-39
Table II.A-7. Controlled Exposure of Healthy Human Subjects to Ozone .....	II-43
Table II.A-8. Ozone Exposure in Subjects with Preexisting Disease .....	II-46
Table II.A-9. Pulmonary Function Effects After Prolonged Exposures to Ozone .....	II-49
Table II.A-10. Increased Airway Responsiveness Following Ozone Exposures .....	II-52
Table II.A-11. Bronchoalveolar Lavage Studies of Inflammatory Effects from Controlled Human Exposure to Ozone .....	II-53
Table II.A-12. Percent Contribution to PM <sub>2.5</sub> by Component, 1998 .....	II-59
Table II.A-13. PM <sub>10</sub> Nonattainment Areas Violating the PM <sub>10</sub> NAAQS in 1997- 1999 ....	II-60
Table II.A-14. Areas with Significant Risk of Exceeding the PM <sub>10</sub> NAAQS without Further Emission Reductions between 2007 and 2030 .....	II-63
Table II.A-15. Effect Estimates Per 50 $\mu\text{g}/\text{m}^3$ Increase in 24-hour PM <sub>10</sub> Concentrations From U.S. And Canadian Studies .....	II-68
Table II.A-16. Effect Estimates per Variable Increments in 24-hour Concentrations of Fine Particle Indicators (PM <sub>2.5</sub> , SO, H <sup>+</sup> ) From U.S. and Canadian Studies .....	II-70

Table II.A-17. Effect Estimates per Increments\* in Annual Mean Levels of Fine Particle Indicators from U.S. and Canadian Studies . . . . . II-71

Table II.A-21. Ambient Diesel Particulate Matter Concentrations from Receptor Modeling, Dispersion Modeling and Elemental Carbon Measurements . . . . . II-82

Table II.A-22. Occupational and Population Exposure to Diesel Exhaust . . . . . II-85

Table II.A-23. Occupational and Population Exposure to Diesel Exhaust, Environmental Equivalent Exposures and Exposure Margins . . . . . II-92

Table II.A-24. Metropolitan Areas and Regions Included in Toxic Emissions Modeling . . II-102

Table II.A-25. Modeled Average 50-State Ambient Exposure to Gaseous Toxics from All Highway Motor Vehicles ( $\mu\text{g}/\text{m}^3$ ) in 1990, 1996, 2007, and 2020 without 2007 HDV Standards and for 2020 with 2007 HDV Standards . . . . . II-105

Table II.B-1. HDDE Fuel Economy Estimates by Model Year (miles per gallon) . . . . . II-113

Table II.B-2. Heavy-Duty Vehicle Exhaust Emissions Standards . . . . . II-118

Table II.B-3. Heavy-Duty Vehicle Standards Phase-In (percent of production) . . . . . II-118

Table II.B-4. Nationwide NO<sub>x</sub> Emissions from HDDEs . . . . . II-119

Table II.B-5. Nationwide PM<sub>10</sub> Exhaust and Break/Tire Wear Emissions from HDDEs Without Existing Fleet Reductions . . . . . II-120

Table II.B-6. Nationwide NMHC Exhaust Emissions from HDDEs . . . . . II-121

Table II.B-7. HDDE Fuel Consumption Estimates by Calendar Year . . . . . II-121

Table II.B-8. Consumption of Highway Diesel Fuel Including Spillover . . . . . II-122

Table II.B-9. Existing Fleet PM Reductions From Low Sulfur Fuel . . . . . II-123

Table II.B-10. Crankcase Emissions from Uncontrolled HDDEs . . . . . II-124

Table II.B-11. Total Reductions from HDDEs for this Rule . . . . . II-124

Table II.B-12. Reductions in CO from HDDEs . . . . . II-128

Table II.B-13. Reductions in SO<sub>x</sub> from Low Sulfur Fuel . . . . . II-128

Table II.B-14. Reductions in Air Toxics from HDDEs . . . . . II-129

Table II.B-15.a. Estimated Nationwide NO<sub>x</sub> Emissions from HDGVs Based on the Air Quality Analysis Case (thousand short tons per year) . . . . . II-131

Table II.B-15.b. Estimated Nationwide NO<sub>x</sub> Emissions from HDGVs Based on the Updated Control Case (thousand short tons per year) . . . . . II-131

Table II.B-16.a. Estimated Nationwide Exhaust NMHC Emissions from HDGVs Based on the Air Quality Analysis Case (thousand short tons per year) . . . . . II-132

Table II.B-16.b. Estimated Nationwide Exhaust NMHC Emissions from HDGVs Based on the Updated Control Case (thousand short tons per year) . . . . . II-133

Table II.B-17.a. Estimated Nationwide Evaporative Emissions from HDGVs Based on the Air Quality Analysis Case (thousand short tons per year) . . . . . II-134

Table II.B-17.b. Estimated Nationwide Evaporative Emissions from HDGVs Based on the Updated Control Case (thousand short tons per year) . . . . . II-135

Table II.B-18. Estimated 49-State Reductions in Air Toxics from HDGVs (thousand short tons per year) . . . . . II-135

Table II.B-19. Total NO<sub>x</sub> Emissions and Benefits for This Rule (thousand short tons per year)

## List of Tables

.....	II-138
Table II.B-20. Total PM Emissions and Reductions for This Rule (thousand short tons per year)	II-138
.....	II-138
Table II.B-21. Total NMHC Emissions and Reductions for This Rule (thousand short tons per year)	II-139
.....	II-139
Table II.B-22. Total Reductions in Air Toxics for This Rule (thousand short tons per year)	II-139
Table II.B-23. Comparison of NPRM and FRM HDDE Baseline Inventories for NO <sub>x</sub> and NMHC (thousand short tons per year)	II-141
.....	II-141
Table II.B-24. Comparison of NPRM and FRM HDDE Baseline Inventories for Exhaust PM and SO <sub>x</sub> (thousand short tons per year)	II-141
.....	II-141
Table II.B-25. Comparison of NPRM and FRM HDGV Baseline Inventories for NO <sub>x</sub> and NMHC (thousand short tons per year)	II-142
.....	II-142
Table II.B-26. Comparison of EMFAC2000 and EPA PM Deterioration Rates for HDDEs (grams per mile per 10,000 miles)	II-143
.....	II-143
Table II.B-27. 2007 Baseline Emissions Inventories for 48 Contiguous States	II-145
.....	II-145
Table II.B-28. 2020 Baseline Emissions Inventories for 48 Contiguous States	II-145
.....	II-145
Table II.B-29. 2030 Baseline Emissions Inventories for 48 Contiguous States	II-145
.....	II-145
Table III.A-1. PM Emissions from a Heavy-Duty Diesel Engine at the Indicated Fuel Sulfur Levels	III-12
.....	III-12
Table III.A-2. SET Composite Test Results with the Dual Leg NO <sub>x</sub> Adsorber System	III-45
.....	III-45
Figure III.A-3. Timed Regeneration Schedule for Switching between NO <sub>x</sub> Adsorber Legs	III-46
.....	III-46
Table III.A-4. HDDE FTP Emissions from NVFEL Test Program	III-47
.....	III-47
Table III.A-5. SO <sub>2</sub> Oxidation Rates for a Platinum Oxidation Catalyst at the Indicated Catalyst Inlet Temperatures	III-85
.....	III-85
Table III.A-6. Estimated PM Emissions from a Heavy-Duty Diesel Engine at the Indicated Average Fuel Sulfur Levels	III-86
.....	III-86
Table III.A-7. Estimated Fuel Economy Impact from Desulfation of a 90 Percent Efficient NO <sub>x</sub> Adsorber	III-89
.....	III-89
Table III.B-1. Exhaust Emission Control Hardware and Technologies That May be Used to Meet the 2008 Heavy-Duty Gasoline Standards	III-95
.....	III-95
Table III.B-2. Emission Standards for Select Federal and California Gasoline Vehicles & Engines	III-108
.....	III-108
Table III.B-3. 2000 Model Year Vehicle Certification Data (gram/mile)	III-111
.....	III-111
Table III.B-4. 2000 Model Year Engine Certification Data (g/bhp-hr)	III-112
.....	III-112
Table III.B-5. New Heavy-Duty Evaporative Emission Standards	III-119
.....	III-119
Table III.B-6. 1998-2000 Model Year Evaporative Emission Certification Data	III-122
.....	III-122
Table IV.A-1. Volume Fraction of U.S. Highway Diesel Pool from each Blendstock Component	IV-4
.....	IV-4
Table IV.A-2. Sulfur Levels of Highway Diesel Blendstocks (CA Excluded)	IV-5
.....	IV-5
Table IV.A-3. Average Highway Diesel Fuel Sulfur Levels by Geographic Area	IV-7
.....	IV-7
Table IV.A-4. Distillation Characteristics of Diesel Blendstocks (CA Excluded)	IV-9
.....	IV-9

Table IV.A-5. Properties of Diesel Blendstocks (CA Excluded) . . . . . IV-10

Table IV.A-6. Average Highway Diesel Fuel Parameter Levels by Geographic Area . . . . . IV-12

Table IV.A-7. Maximum Cost of Meeting the 15 ppm Cap . . . . . IV-36

Table IV.A-8. Number of Refineries Producing 15 ppm Diesel by PADD . . . . . IV-47

Table IV.B-1. Design and Construction Factors for Desulfurization Equipment . . . . . IV-57

Table IV.B-2. Number of Gasoline Desulfurization Units Becoming Operational on January 1 of  
the Indicated Year . . . . . IV-58

Table IV.B-3. Distribution of Personnel Requirements Throughout the Project . . . . . IV-59

Table IV.B-4. Maximum Monthly Demand for Personnel . . . . . IV-61

Table IV.B-5. Capital Expenditures for Gasoline and Diesel Fuel Desulfurization . . . . . IV-63

Table IV.D-1. Ratios Used in Comparing the Relative Difficulty in Limiting Contamination  
During the Distribution of Various Fuels . . . . . IV-84

Table V.A-1. Service Classes of Heavy-Duty Vehicles . . . . . V-3

Table V.A-2. Summary of Near and Long Term Cost Estimates . . . . . V-4

Table V.A-3. 2007 NOx Adsorber Cost Estimate . . . . . V-11

Table V.A-4. 2007 Catalyzed Diesel Particulate Filter Cost Estimate . . . . . V-15

Table V.A-5. 2007 Diesel Oxidation Catalyst Cost Estimate . . . . . V-16

Table V.A-6. 2007 Closed Crankcase Filtration System Cost Estimate . . . . . V-17

Table V.A-7. Annualized and Non-Annualized R&D Costs for Light Heavy-Duty Diesel  
Engines . . . . . V-19

Table V.A-8. Annualized and Non-Annualized R&D Costs for Medium Heavy-Duty Diesel  
Engines . . . . . V-20

Table V.A-9. Annualized and Non-Annualized R&D Costs for Heavy Heavy-Duty Diesel  
Engines and Urban Buses . . . . . V-21

Table V.A-10. Annualized and Non-Annualized Tooling Costs for Light Heavy-Duty Diesel  
Engines . . . . . V-22

Table V.A-11. Annualized and Non-Annualized Tooling Costs for Medium Heavy-Duty Diesel  
Engines . . . . . V-23

Table V.A-12. Annualized and Non-Annualized Tooling Costs for Heavy Heavy-Duty Diesel  
Engines and Urban Buses . . . . . V-23

Table V.A-13. Annualized and Non-Annualized Certification Costs for Light Heavy-Duty Diesel  
Engines . . . . . V-24

Table V.A-14. Annualized and Non-Annualized Certification Costs for Medium Heavy-Duty  
Diesel Engines . . . . . V-25

Table V.A-15. Annualized and Non-Annualized Certification Costs for Heavy Heavy-Duty  
Diesel Engines and Urban Buses . . . . . V-25

Table V.A-16. Annualized Fixed Costs for Light Heavy-Duty Diesel Engines . . . . . V-26

Table V.A-17. Annualized Fixed Costs for Medium Heavy-Duty Diesel Engines . . . . . V-26

Table V.A-18. Annualized Fixed Costs for Heavy Heavy-Duty Diesel Engines and Urban Buses  
. . . . . V-27



## List of Tables

Table V.A-19. Projected Incremental Diesel Engine/Vehicle Costs .....	V-36
Table V.A-20. Baseline Costs for Heavy-Duty Engines and Vehicles .....	V-37
Table V.A-21. Estimated Annualized Nationwide Costs for Heavy-Duty Diesel Engines Associated with the 2007 Emission Standard .....	V-39
Table V.A-22. Estimated Non-Annualized Nationwide Costs for Heavy-Duty Diesel Engines Associated with the 2007 Emission Standard .....	V-40
Table V.B-1. 2005 (Phase 1) and Expected 2008 (Phase 2) Technology Packages for Heavy- Duty Gasoline Vehicles excluding Medium-Duty Passenger Vehicles .....	V-43
Table V.B-2. Costs Associated with the Increased Use of Precious Metals .....	V-46
Table V.B-3. Costs Associated with Various Catalyst Configurations .....	V-49
Table V.B-4. Summary of Hardware Costs for the Proposed 2007 Heavy-Duty Gasoline Standards .....	V-52
Table V.B-5. Summary of Incremental Costs to Meet the 2008 Heavy-Duty Gasoline Emission Standards .....	V-56
Table V.B-6. Estimated Annualized Nationwide Vehicle Costs Associated with the 2008 Heavy- Duty Gasoline Emission Standards .....	V-57
Table V.B-7. Estimated Non-Annualized Nationwide Vehicle Costs Associated with the 2008 Heavy-Duty Gasoline Emission Standards .....	V-59
Table V.C-1. Presence of Light Cycle Oil in the Distillate of U.S. Refineries Producing Highway Diesel Fuel .....	V-64
Table V.C-2. Presence of Other Cracked Blendstocks in the Distillate of U.S. Refineries Producing Highway Diesel Fuel .....	V-65
Table V.C-3. Technology Projected to be Used to Achieve Various Diesel Fuel Sulfur Levels .....	V-69
Table V.C-4. Process Projections to Desulfurize a Typical Diesel Fuel .....	V-72
Table V.C-5. Process Projections to Desulfurize 100% Straight Run Diesel Fuel .....	V-73
Table V.C-6. Process Projections for Revamping an Existing Highway Diesel Hydrotreater for Further Desulfurizing a Typical Diesel Fuel .....	V-75
Table V.C-7. Process Projections for Revamping an Existing Highway Diesel Hydrotreater for Desulfurizing 100% Straight Run Diesel Fuel .....	V-78
Table V.C-8. Process Projections for Revamping an Existing Highway Diesel Hydrotreater for Further Desulfurizing Diesel Fuel Blendstocks to Meet a 15 ppm Cap Standard ...	V-81
Table V.C-9. Process Projections for Installing a New Grassroots Unit for Desulfurizing Untreated Diesel Fuel Blendstocks to Meet a 15 ppm Cap Standard .....	V-84
Table V.C-10. Estimated Hydrogen Consumption to Desulfurize Nontreated Distillate, Stocks to Meet the 15 ppm Highway Diesel Fuel Sulfur Cap .....	V-86
Table V.C-11. Comparison of Calculated Hydrogen Consumption with the Hydrogen Consumption provided by Vendors A and B for Specific Distillate Feeds .....	V-87
Table V.C-12. Process Operations Information for Additional Units used in the Desulfurization Cost Analysis .....	V-90
Table V.C-13. Offsite and Location Factors Used for Estimating Capital Costs .....	V-92

Table V.C-14. Economic Cost Factors Used in Calculating the Capital Amortization Factor ..... V-93

Table V.C-15. Summary of Costs From EIA Information Tables for 1999, and Other Cost Factors ..... V-95

Table V.C-16. Estimated Per-Refinery Capital, Operating and Per-Gallon Cost for Full Implementation of Desulfurizing Highway Diesel Fuel to Meet a 15 ppm Cap Standard ..... V-98

Table V.C-17. Costs for Treating LCO, Coker, and Straight Run Diesel Feedstocks (1999 Dollars and 7% before tax ROI) ..... V-100

Table V.C-18. Overall Estimated Per-Refinery Capital, Operating and Per-Gallon Cost for Years 2006 and 2010 for Implementation of Desulfurizing Highway Diesel Fuel to Meet a 15 ppm Cap Standard (1999 Dollars, 7% ROI before taxes) ..... V-101

Table V.C-19. Projected U.S. Aggregate Operating and Capital Cost of Desulfurizing Highway Diesel Fuel to Meet a 15 ppm Cap Standard (1999 Dollars, 7% ROI before taxes) V-103

Table V.C-20. Per-Gallon Cost for Desulfurizing Highway Diesel Fuel to Meet a 15 ppm Cap Standard Based on Different Capital Amortization Rates ..... V-104

Table V.C-21. PADD-Average Price Difference Between 500 ppm Highway and Non-Highway Diesel (1999 Dollars, 7% ROI before taxes) ..... V-106

Table V.C-22. Costs Under Nonhighway Production Shift Scenario (1999 Dollars, 7% ROI before taxes) ..... V-109

Table V.C-23. Estimated Costs of Nonhighway Production Shift Scenario versus Current Highway Producer Scenario to Meet 15 ppm Highway Diesel Fuel Cap Standard (1999 dollars, 7% ROI before taxes) ..... V-111

Table V.C-24. Comparison of Mathpro’s and EPA’s Costs for Meeting a 15 ppm Highway Diesel Fuel Sulfur Cap Standard (7% ROI before taxes) ..... V-114

Table V.C-25. Comparison of DOE and EPA Refining Costs for Meeting a 15 ppm Highway Diesel Fuel Sulfur Cap Standard (7% ROI before taxes) ..... V-118

Table V.C-26. Distribution Costs During the Initial Years of Our Sulfur Program and After the Program Becomes Fully Effective ..... V-122

Table V.C-27. Data Used to Calculate the Cost of Distributing the Additional Volume of Highway Diesel Fuel Needed to Compensate for a Reduction in Energy Density . V-124

Table V.C-28. MathPro Lubricity Additive Cost Estimates ..... V-134

Table V.C-29. Components Potentially Affected by Lower Sulfur Levels in Diesel Fuel . V-136

Table V.C-30. Cost Savings to the Existing Fleet from Extend Oil Change Intervals Made Possible by Low Sulfur Diesel Fuel ..... V-138

Table V.C-31. Cost Savings to the Existing Fleet for Reduced EGR System Replacement Made Possible by Low Sulfur Diesel Fuel ..... V-139

Table V.C-32. Cost Savings to the New Fleet (2007 and later) for Reduced EGR System Replacement Made Possible by Low Sulfur Diesel Fuel ..... V-140

Table V.C-33. Cost Savings to the Existing Fleet from Extend Exhaust System Replacement Intervals Made Possible by Low Sulfur Diesel Fuel ..... V-141

## List of Tables

Table V.C-34. Aggregate Savings to the Existing Fleet (pre-2007 fleet) Made Possible by Low Sulfur Diesel Fuel .....	V-143
Table V.C-35. Aggregate Savings for the New Fleet (2007 and later) Made Possible by Low Sulfur Diesel Fuel .....	V-144
Table V.C-36. Fleet Average Per-Engine Lifecycle Costs .....	V-147
Table V.D-1. Total annualized costs of heavy-duty diesel engines, heavy-duty gasoline vehicles, and 15 ppm diesel fuel .....	V-149
Table VI.B-1. Fleet-average, Per-engine Costs for HDDE .....	VI-5
Table VI.B-2. Fleet Average Per-Engine Costs for HDDE Used in Cost-effectiveness ....	VI-8
Table VI.C-1. Per-engine Discounted Lifetime Tons for HDDE .....	VI-10
Table VI.C-2. Engine Class Sales Weighting Factors for HDDE .....	VI-10
Table VI.C-3. Fleet average, Per-engine Discounted Lifetime Tons for HDDE .....	VI-11
Table VI.D-1. Fleet-average, Per-vehicle Costs for HDGV Used in Cost-effectiveness ...	VI-13
Table VI.D-2. Per-vehicle Discounted Lifetime Tons for HDGV .....	VI-14
Table VI.D-3. Vehicle Class Sales Weighting Factors for HDGV .....	VI-14
Table VI.D-4. Fleet average, Per-vehicle Discounted Lifetime Tons for HDGV .....	VI-15
Table VI.F-1. Per-vehicle Cost-effectiveness of the Standards .....	VI-17
Table VI.F-2. 30-year Net Present Value Cost-effectiveness of the Standards .....	VI-17
Table VI.F-3. Per-vehicle Cost-effectiveness of the Standards Using 3 Percent ROI and Discount Rate .....	VI-18
Table VI.F-4. 30-year Net Present Value Cost-effectiveness of the Standards Using 3 Percent ROI and Discount Rate .....	VI-19
Table VI.F-5. Cost-effectiveness of Previous Mobile Source Programs for NO <sub>x</sub> + NMHC .....	VI-19
Table VI.F-6. Cost-effectiveness of Previous Mobile Source Programs for PM .....	VI-20
Table VII-1. Human Health and Welfare Effects of Pollutants Affected by the HD Engine/Diesel Fuel Rule .....	VII-6
Table VII-2. Summary of UAM-V Derived Ozone Air Quality Metrics Due to HD Engine/Diesel Fuel Standards for Health Benefits EndPoints: Eastern U.S. ....	VII-16
Table VII-3. Summary of UAM-V Derived Ozone Air Quality Metrics Due to HD Engine/Diesel Fuel Standards for Welfare Benefits Endpoints: Eastern U.S. ....	VII-17
Table VII-4. Summary of 2030 Base Case PM Air Quality and Changes Due to HD Engine/Diesel Fuel Standards .....	VII-23
Table VII-5. Distribution of PM <sub>2.5</sub> Air Quality Improvements Over 2030 Population Due to HD Engine/Diesel Fuel Standards .....	VII-24
Table VII-6. Summary of Absolute and Relative Changes in PM Air Quality Due to HD Engine/Diesel Fuel Standards .....	VII-25
Table VII-7. Distribution of Populations Experiencing Visibility Improvements in 2030 Due to HD Engine/Diesel Fuel Standards .....	VII-26
Table VII-8. Summary of 2030 Baseline Visibility and Changes by Region: Residential .	VII-27

Table VII-9. Summary of 2030 Baseline Visibility and Changes by Region: Recreational (Annual Average Deciviews) . . . . . VII-28

Table VII-10. Summary of 2030 Nitrogen Deposition in Selected Estuaries and Changes Due to HD Engine/Diesel Fuel Rule (million kg/year) . . . . . VII-30

Table VII-11. Elasticity Values Used to Account for Projected Real Income Growth . . . . VII-34

Table VII-12. Adjustment Factors Used to Account for Projected Real Income Growth . VII-35

Table VII-13. Primary Sources of Uncertainty in the Benefit Analysis . . . . . VII-38

Table VII-14. Endpoints and Studies Included in the Primary Analysis . . . . . VII-42

Table VII-15. Unit Values Used for Economic Valuation of Health Endpoints . . . . . VII-44

Table VII-16. Alternative Concentration-Response Models Relating Premature Mortality and Chronic Exposure to Fine Particulates . . . . . VII-49

Table VII-17. Expected Impact on Estimated Benefits of Premature Mortality Reductions of Differences Between Factors Used in Developing Applied VSL and Theoretically Appropriate VSL . . . . . VII-51

Table VII-18. Recent Studies on the Effects of Air Pollution on Asthma Symptoms . . . . VII-59

Table VII-19. Primary Estimate of Annual Health Benefits Associated With Air Quality Changes Resulting from the HD Engine/Diesel Fuel Rule in 2030 . . . . . VII-64

Table VII-20. Reduction Goals and 1998 Nitrogen Loads to Selected Eastern Estuaries (tons per year) . . . . . VII-73

Table VII-21. Estimated Annual Reductions in Nitrogen Loadings in Selected Eastern Estuaries for the Final HD Engine/Diesel Fuel Rule in 2030 . . . . . VII-73

Table VII-22. Primary Estimate of Annual Monetary Values for Welfare Effects Associated With Improved Air Quality Resulting from the HD Engine/Diesel Fuel Rule in 2030/VII-75

Table VII-23. Primary Estimate of Annual Monetized Benefits Associated With Improved Air Quality Resulting from the HD Engine/Diesel Fuel Rule in 2030 . . . . . VII-77

Table VII-24. Alternative Estimates of Premature Mortality Benefits for the HD Engine/Diesel Fuel Rule in 2030 . . . . . VII-79

Table VII-25. Additional Alternative Benefits Calculations for the HD Engine/Diesel Fuel Rule in 2030 . . . . . VII-81

Table VII-26. 2030 Annual Monetized Costs, Benefits, and Net Benefits for the Final HD Engine/Diesel Fuel Rule . . . . . VII-87

Table VII-A-1. Supplemental Benefit Estimates for the Final HD Engine/Diesel Fuel Rule for the 2030 Analysis Year . . . . . VII-101

Table VII-A-2. Sensitivity Analysis of Alternative Lag Structures for PM-related Premature Mortality . . . . . VII-103

Table VII-A-3. Sensitivity Analysis of Alternative Income Elasticities . . . . . VII-105

Table VIII-1. Industries Containing Small Businesses Potentially Affected by the Low Sulfur Diesel Fuel Rule . . . . . VIII-4

Table VIII-2. Types and Number of Small Entities to Which the Diesel Sulfur Program Will Apply . . . . . VIII-4

List of Figures

Figure ES-1. Total Annualized Costs ..... xi

Figure II.B-1. Projected DSPM from Pre-2007 Engines Using Highway Diesel Fuel ..... II-123

Figure II.B-2. Projected HDDE NO<sub>x</sub> Emissions Due to 2004 and 2007 Standards ..... II-125

Figure II.B-3. Projected Nationwide PM Emissions from HDDEs ..... II-126

Figure II.B-4. Projected Nationwide NMHC Emissions from HDDEs ..... II-127

Figure II.B-5. Projected Nationwide Exhaust NO<sub>x</sub> Emissions from HDGVs ..... II-130

Figure II.B-6. Projected Nationwide Exhaust NMHC Emissions from HDGVs ..... II-132

Figure II.B-7. Projected Nationwide Evaporative Emissions from HDGVs ..... II-134

Figure II.B-8. Projected NO<sub>x</sub> Inventory for Heavy-Duty Highway Vehicles ..... II-136

Figure II.B-9. Projected PM Inventory for Heavy-Duty Highway Vehicles ..... II-137

Figure II.B-10. Projected NMHC Inventory for Heavy-Duty Highway Vehicles ..... II-137

Figure II.B-11. Projected HDDE Exhaust PM Inventory with and without Consideration of Tampering and Malmaintenance ..... II-144

Figure III.A-1. HD CDPF PM Removal Efficiency Over the Federal Test Procedure ..... III-8

Figure III.A-2. HD PM Removal Efficiency for a CDPF Over the Supplemental Emission Test (SET) ..... III-10

Figure III.A-3. Schematic Representation of the Operation of a Dual-Bed NO<sub>x</sub> Adsorption Catalyst ..... III-23

Figure III.A-4. A functional schematic representation of the PM and NO<sub>x</sub> exhaust emission control system tested at NVFEL shown together with one possible approach having the same functionality, but with further integration of components ..... III-25

Figure III.A-5. NO<sub>x</sub> Adsorber Efficiency Characteristics versus Exhaust Temperature ... III-30

Figure III.A-6. Modal Definitions ..... III-36

Figure III.A-7. SET & AVL Composites, and Temperature vs. NO<sub>x</sub> Chart for Adsorber A III-39

Figure III.A-8. SET & AVL Composites, and Temperature vs. NO<sub>x</sub> Chart for Adsorber B III-40

Figure III.A-9. SET & AVL Composites, and Temperature vs. NO<sub>x</sub> Chart for Adsorber D III-41

Figure III.A-10. SET & AVL Composites, and Temperature vs. NO<sub>x</sub> Chart for Adsorber E III-42

Figure III.A-11. NO<sub>x</sub> Adsorber FTP Preconditioning Cycle used in NVFEL Testing ..... III-44

Figure III.A-12. Comparison of NO<sub>x</sub> Conversion Efficiency before and after Desulfation . III-58

Figure III.A-13. Flow Reactor Testing of a NO<sub>x</sub> Adsorber with Periodic Desulfations ... III-61

Figure III.A-14. Influence of Maximum Catalyst Bed Temperature During Desulfation ... III-62

Figure III.A-15. Integrated NO<sub>x</sub> Conversion Efficiency following Aging and Desulfation . III-64

Figure III.A-16. Integrated NO<sub>x</sub> Conversion Efficiency after Repeated Desulfation ..... III-65

Figure III.A-17. Repeated Sulfur Poisoning and Desulfation on a Bench Pulsator ..... III-67

Figure III.A-18. Effect of Fuel Sulfur on Regeneration Temperature ..... III-81

Figure III.A-19. NO and SO<sub>2</sub> Conversion Rates Over Platinum ..... III-84

Figure III.A-20. Diesel Fuel Sulfur Effect on NO<sub>x</sub> Adsorber Performance after 150 hours III-87

Figure III.A-21. Sulfate PM Emissions versus Diesel Fuel Sulfur Level with 3,500 ppm Sulfur Engine Oil ..... III-93

Figure III.B-1. Impact of Coating Architecture on HC and NOx Emissions ..... III-104

Figure III.B-2. Emissions after an equivalent of 50,000 miles for various tested configurations of Ford Expedition LDT4 SUVs with 5.4L V8 engines ..... III-115

Figure III.B-3. Emissions after an equivalent of 50,000 miles for various tested configurations of 1999 GM Chevrolet Silverado LDT3 pickups with 5.3L V8 engines ..... III-116

Figure IV.A-1. Diagram of a Typical Complex Refinery ..... IV-2

Figure IV.A-2. Map of U.S. Petroleum Administrative Districts for Defense ..... IV-7

Figure V.A-1. Distribution of Progress Ratios ..... V-34

Figure V.C-1. Refinery Specific Costs for Fully Implemented 15 ppm Sulfur Cap Standard V-99

Figure V.C-2. Refinery Specific Production Rates of Highway Diesel versus No. 2 Oil Distillate Pool ..... V-107

Figure V.C-3. Lowest Refinery Costs for Converting NonHighway to 15 PPM Highway Diesel Fuel ..... V-108

Figure V.C-4. Refinery Costs per PADD for Current Highway Units Scenario for Meeting the 15 ppm Sulfur Highway Diesel Fuel Cap Standard ..... V-111

Figure V.C-5. Refinery Costs per PADD under Converted NonHighway Units Shift Scenario for Meeting the 15 ppm Highway Diesel Fuel Cap Standard ..... V-112

Figure V.D-1. Total annualized costs of heavy-duty diesel engines, heavy-duty gasoline vehicles, and 15 ppm diesel fuel ..... V-148

Figure VII-1. Steps in the Heavy Duty Engine/Diesel Fuel Benefits Analysis ..... VII-5

Figure VII-2. UAM-V Modeling Domain for Eastern U.S. .... VII-13

Figure VII-3. REMSAD Modeling Domain for Continental U.S. .... VII-18

Figure VII-4. Example of REMSAD 36 x 36km Grid-cells for Maryland Area ..... VII-20

Figure VII-5. Recreational Visibility Regions for Continental U.S. .... VII-28

Figure VII-6. Alternative Approaches for Assessing the Value of Reduced Mortality Risk VII-52

Figure VII-A-1. Impact of PM Health Effects Threshold on Avoided Incidences of Premature Mortality Estimated with the American Cancer Society/Krewski, et al. (2000) C-R Function ..... VII-104

..... VII-104

## List of Acronyms

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
A/F	air to fuel ratio
ANPRM	Advance Notice of Proposed Rulemaking
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
bbbl	barrel
BTU	British Thermal Unit
CAA or the Act	Clean Air Act
CARB	California Air Resources Board
CASAC	Clean Air Scientific Advisory Committee
CMB	chemical mass balance
CNMI	Commonwealth of Northern Mariana Islands
CO	carbon monoxide
CSMAs	consolidated metropolitan statistical areas
DECSE	Diesel Emission Control Sulfur Effects
DOC	diesel oxidation catalyst
EGR	exhaust gas recirculation
EHC	electrically heated catalyst
EIA	Energy Information Administration
EPA or the Agency	U.S. Environmental Protection Agency
FCC	fluidized catalytic cracker
FTP	federal test procedure
g/bhp-hr	grams per brake-horsepower-hour
GVWR	gross vehicle weight rating
HC	hydrocarbon
HD-FTP	heavy-duty federal test procedure
HDE	heavy-duty engine
HDV	heavy-duty vehicle
HLDT	heavy light-duty truck
I/M	inspection/maintenance

IARC	International Agency for Research on Cancer
IRFA	initial regulatory flexibility analysis
LCO	light cycle oil
LDT	light-duty truck
LDV	light-duty vehicle
LEV	low emission vehicle
LLDT	light light-duty truck
LPG	liquid petroleum gas
MDPV	medium-duty passenger vehicle
MECA	Manufacturers of Emission Controls Association
MECA	Manufacturers of Emission Controls Association
MSAs	metropolitan statistical areas
MSCF	thousand standard cubic feet
MY	model year
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCPs	non-conformance penalties
NMHC	non-methane hydrocarbons
NMOG	non-methane organic gases
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	oxides of nitrogen
NPC	National Petroleum Council
NPRA	National Petrochemical & Refiners Association
NPRM	Notice of Proposed Rulemaking
NPV	net present value
NRC	National Research Council
NSR	New Source Review
NSWS	National Surface Water Survey
NTE	not-to-exceed
OAQPS	Office of Air Quality Planning and Standards
OBD	on-board diagnostics
OMB	Office of Management and Budget

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## List of Acronyms

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OMS	Office of Mobile Sources
PADD	Petroleum Administrative Districts for Defense
Pd	palladium
PM	particulate matter
POM	polycyclic organic matter
ppm	part per million
Pt	platinum
R&D	research and development
RFA	Regulatory Flexibility Act
RfC	reference concentration
Rh	rhodium
RIA	Regulatory Impact Analysis
ROI	return on investment
SBA	U.S. Small Business Administration
SBARP or the Panel	Small Business Advocacy Review Panel
SBREFA	Small Business Regulatory Enforcement Fairness Act
SCR	selective catalytic reduction
SER	Small Entity Representative
SFTP	supplemental federal test procedure
SIC	Standard Industrial Classification
SIGMA	Society of Independent Gasoline Marketers of America
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
SOF	soluble organic fraction
SO <sub>x</sub>	oxides of sulfur
TAC	toxic air contaminant
TOG	total organic gases
TW	test weight
UDDS	urban dynamometer driving schedule
ULEV	ultra-low emission vehicles
VMT	vehicle miles traveled
VOC	volatile organic compound

