

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **FINAL ENVIRONMENTAL IMPACT REPORT FOR:**

**Los Angeles Department Of Water And Power's Installation Of Five Combustion Turbines At The Harbor Generating Station, Installation Of Three Selective Catalytic Reduction Systems At The Scattergood Generating Station, And The Installation Of One Combustion Turbine At The Valley Generating Station**

**January 2001**

**SCAQMD#:** 003011DWS

**SCAG#:** I20000498

**SCH#:** 2000101008

**Executive Officer**

Barry R. Wallerstein, D. Env.

**Deputy Executive Officer**

**Planning, Rule Development and Area Sources**

Jack Broadbent

**Assistant Deputy Executive Officer**

**Planning, Rule Development and Area Sources**

Elaine Chang, Dr PH

**Planning and Rules, Manager**

**CEQA, Socioeconomic Analysis, PM/AQMP Control Strategy**

Alene Taber, AICP

---

Prepared by:

ENSR Corporation

Parsons

Reviewed by:

Darren W. Stroud, J.D. - Air Quality Specialist, SCAQMD

Steve Smith, Ph.D. - Program Supervisor, SCAQMD

Bill Wong, Senior Deputy District Counsel, SCAQMD

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD**

Chairman: WILLIAM A. BURKE, Ed.D.  
Speaker of the Assembly Appointee

Vice Chairman: NORMA J. GLOVER  
Councilmember, City of Newport Beach  
Cities Representative, Orange County

## **MEMBERS:**

MICHAEL D. ANTONOVICH  
Supervisor, Fifth District  
Los Angeles County Representative

HAL BERNSON  
Councilmember, City of Los Angeles  
Cities Representative, Los Angeles County, Western Region

JANE CARNEY  
Senate Rules Committee Appointee

CYNTHIA P. COAD, Ed.D.  
Supervisor, Fourth District  
Orange County Representative

BEATRICE J.S. LAPISTO-KIRTLEY  
Councilmember, City of Bradbury  
Cities Representative, Los Angeles County, Eastern Region

RONALD O. LOVERIDGE  
Mayor, City of Riverside  
Cities Representative, Riverside County

JON D. MIKELS  
Supervisor, Second District  
San Bernardino County Representative

LEONARD PAULITZ  
Councilmember, City of Montclair  
Cities Representative, San Bernardino County

CYNTHIA VERDUGO-PERALTA  
Governor's Appointee

S. ROY WILSON, Ed.D.  
Supervisor, Fourth District  
Riverside County Representative

## **EXECUTIVE OFFICER:**

BARRY R. WALLERSTEIN, D. Env.

## PREFACE

This document constitutes the Final Environmental Impact Report (EIR) for the Los Angeles Department of Water and Power's Installation of Five Combustion Turbines at the Harbor Generating Station, Installation of three Selective Catalytic Reduction Systems at the Scattergood Generating Station, and the Installation of One Combustion Turbine at the Valley Generating Station. The Draft EIR was released for a 30-day public review and comment period from December 1, 2000 to January 2, 2001. Five comment letters were received from the public. These comment letters as well as responses to these comment letters are contained in Appendix H.

To ease in identifying modifications and/or changes to the document after the release of the Draft EIR, new text is denoted in *italics* and deleted text is denoted with ~~strike-throughs~~. None of the modifications and/or changes alter any conclusions reached in the Draft EIR, nor provide new information of substantial importance relative to the Draft document.

**TABLE OF CONTENTS**

	Page
1.0 EXECUTIVE SUMMARY .....	1-1
1.1 Introduction.....	1-1
1.2 Executive Summary .....	1-1
1.2.1 Project Need .....	1-1
1.2.2 Purpose and Authority .....	1-2
1.2.3 Scope of EIR and Format .....	1-4
1.3 Chapter 2 Summary – Project Description .....	1-5
1.3.1 Harbor Generating Station.....	1-5
1.3.2 Scattergood Generating Station .....	1-6
1.3.3 Valley Generating Station.....	1-6
1.4 Chapter 3 Summary – Existing Summary .....	1-6
1.4.1 Air Qualtiy.....	1-6
1.4.2 Biological Resources .....	1-7
1.4.3 Cultural Resources .....	1-7
1.4.4 Energy.....	1-7
1.4.5 Geology/Soils .....	1-8
1.4.6 Hazards and Hazardous Materials.....	1-8
1.4.7 Hydrology/Water Quality.....	1-8
1.4.8 Noise.....	1-9
1.4.9 Solid/Hazardous Waste .....	1-10
1.4.10 Transportation/Traffic .....	1-10
1.5 Chapter 4 Summary – Potential Environmental Impacts and Mitigation Measures .....	1-10
1.5.1 Air Qualtiy.....	1-12
1.5.2 Biological Resources .....	1-12
1.5.3 Cultural Resources .....	1-12
1.5.4 Energy.....	1-12
1.5.5 Geology/Soils .....	1-12
1.5.6 Hazards and Hazardous Materials.....	1-13
1.5.7 Hydrology/Water Quality.....	1-13
1.5.8 Noise.....	1-13
1.5.9 Solid/Hazardous Waste .....	1-13
1.5.10 Transportation/Traffic .....	1-13
1.5.11 Mitigation.....	1-14
1.5.12 Impacts Found Not To Be Significant .....	1-14
1.5.13 Other CEQA Topics.....	1-14
1.6 Chapter 5 Summary – Project Alternatives.....	1-15
1.7 Chapter 6 Summary – Cumulative Impacts .....	1-18

1.8	Chapters 7 and 8 Summary – Persons and Organizations Consulted and References.....	1-18
2.0	PROJECT DESCRIPTION .....	2-1
2.1	Project Objectives .....	2-1
2.2	Project Overview.....	2-1
2.2.1	Harbor Generating Station.....	2-1
2.2.2	Scattergood Generating Station .....	2-2
2.2.3	Valley Generating Station.....	2-2
2.3	Project Location .....	2-2
2.4	Proposed Project .....	2-9
2.4.1	Harbor Generating Station.....	2-9
2.4.2	Scattergood Generating Station .....	2-14
2.4.3	Valley Generating Station .....	2-15
2.5	Permits and Approvals.....	2-17
2.6	Construction.....	2-21
2.6.1	Schedule .....	2-21
2.6.2	Construction Plan .....	2-21
2.7	Operation of the Project .....	2-23
2.8	Project Termination and Decommissioning .....	2-23
3.0	SETTING.....	3-1
3.1	Introduction.....	3-1
3.2	Air Quality .....	3-1
3.2.1	Regional Climate .....	3-2
3.2.2	Meteorology in the Vicinity of the Project.....	3-5
3.2.3	Existing Air Quality .....	3-7
3.2.4	Regional Emissions Inventory .....	3-24
3.2.5	Regulatory Setting.....	3-26
3.3	Biological Resources .....	3-26
3.4	Cultural Resources .....	3-28
3.5	Energy Resources .....	3-28
3.6	Geology and Soils.....	3-29
3.6.1	Geologic Setting .....	3-29
3.6.2	Structural Setting.....	3-30
3.6.3	Seismicity .....	3-31
3.6.4	Soils (Surficial Geology) .....	3-34
3.7	Hazards and Hazardous Materials .....	3-36
3.8	Hydrology and Water Quality .....	3-38
3.8.1	Water Supply.....	3-38
3.8.2	Water Quality .....	3-39
3.9	Noise Resources.....	3-59
3.9.1	Noise Measurement Criteria and Local Ordinances.....	3-59

3.9.2	Existing Noise Environment.....	3-62
3.10	Solid/Hazardous Waste.....	3-63
3.10.1	Nonhazardous Waste.....	3-64
3.10.2	Hazardous Waste.....	3-64
3.10.3	Waste Minimization .....	3-65
3.11	Transportation/Circulation .....	3-65
3.11.1	Surrounding Highway and Rail Network .....	3-65
3.11.2	Local Roadways and Circulation Routes .....	3-66
3.11.3	Existing Traffic Conditions .....	3-67
3.12	Other Issue Areas Eliminated During the Initial Study .....	3-72
4.0	POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES.....	4-1
4.1	Introduction.....	4-1
4.2	Air Quality .....	4-2
4.2.1	Construction Emissions and Impacts.....	4-4
4.2.2	Operational Emissions.....	4-14
4.2.3	Significance of Project Operational Emissions.....	4-40
4.2.4	Potential Health Risks from Diesel Exhaust Particulate Matter .....	4-49
4.2.5	Mitigation Measures .....	4-52
4.2.6	AQMP Consistency .....	4-56
4.3	Biological Resources .....	4-56
4.3.1	Construction Impacts.....	4-57
4.3.2	Operational Impacts .....	4-58
4.3.3	Mitigation.....	4-58
4.4	Cultural Sources .....	4-58
4.4.1	Construction Impacts.....	4-58
4.4.2	Operation Impacts .....	4-60
4.4.3	Mitigation.....	4-60
4.5	Energy Resources .....	4-60
4.5.1	Construction Impacts.....	4-60
4.5.2	Operation Impacts .....	4-61
4.5.3	Mitigation.....	4-62
4.6	Geology and Soils.....	4-62
4.6.1	Construction Impacts.....	4-62
4.6.2	Operation Impacts .....	4-63
4.6.3	Mitigation Measures .....	4-64
4.7	Hazards and Hazardous Materials .....	4-65
4.7.1	Applicable Hazards Regulations.....	4-67
4.7.2	Overview of Approach .....	4-68
4.7.3	Hazardous Chemicals Associated with the Project .....	4-68
4.7.4	Review of Potential Hazards.....	4-70
4.7.5	Categorize the Risk .....	4-74
4.7.6	Select Specific Scenarios .....	4-75

4.7.7	Estimate Likelihood of Accidents .....	4-75
4.7.8	Assess Consequences .....	4-77
4.7.9	Potential Risks from Transportation Accidents.....	4-84
4.7.10	Mitigation Measures .....	4-85
4.8	Hydrology/Water Quality (Water Resources).....	4-87
4.8.1	Water Supply Effects.....	4-87
4.8.2	Water Quality Effects.....	4-89
4.8.3	Operational Impacts .....	4-91
4.8.4	Mitigation Measures .....	4-93
4.9	Noise Resources.....	4-93
4.9.1	Construction Impacts.....	4-95
4.9.2	Operational Impacts .....	4-99
4.9.3	Mitigation Measures .....	4-103
4.10	Solid/Hazardous Waste.....	4-104
4.10.1	Nonhazardous Waste .....	4-104
4.10.2	Hazardous Waste.....	4-105
4.10.3	Mitigation Measures .....	4-108
4.11	Transportation/Traffic.....	4-108
4.11.1	Trip Generation .....	4-108
4.11.2	Operational Traffic.....	4-114
4.11.3	Mitigation Measures .....	4-114
4.12	Environmental Impacts Found Not To Be Significant .....	4-114
4.13	Other CEQA Topics .....	4-114
4.13.1	Irreversible Environmental Changes.....	4-115
4.13.2	Growth-Inducing Impacts.....	4-115
5.0	PROJECT ALTERNATIVES .....	5-1
5.1	Introduction .....	5-1
5.2	Alternatives Rejected as Infeasible .....	5-1
5.3	Project Alternatives .....	5-5
5.3.1	Alternative A – No Project .....	5-5
5.3.2	Alternative B – Install Two New 20,000-gallon Ammonia Tanks at HGS.....	5-5
5.3.3	Alternative C – No Tank Demolition and Demolition of One Cooling Tower at VGS.....	5-6
5.4	Alternatives Analysis .....	5-6
5.4.1	Air Quality.....	5-6
5.4.2	Biological Resources .....	5-11
5.4.3	Cultural Resources .....	5-11
5.4.4	Energy.....	5-11
5.4.5	Geology/Soils .....	5-12
5.4.6	Hazards and Hazardous Materials.....	5-12
5.4.7	Hydrology/Water Quality.....	5-14

---

5.4.8	Noise.....	5-16
5.4.9	Solid/Hazardous Waste .....	5-16
5.4.10	Transportation/Traffic .....	5-16
5.5	Conclusion .....	5-17
6.0	CUMULATIVE IMPACTS.....	6-1
6.1	Introduction .....	6-1
6.2	Other Proposed Projects.....	6-1
6.2.1	Projects Proposed Near HGS.....	6-1
6.2.2	Projects Proposed Near SGS .....	6-2
6.2.3	Proposed Projects Near VGS .....	6-2
6.3	Cumulative Effects .....	6-3
6.3.1	Air Quality.....	6-3
6.3.2	Biological Resources.....	6-4
6.3.3	Cultural Resources.....	6-4
6.3.4	Energy Sources.....	6-4
6.3.5	Geology/Soils .....	6-4
6.3.6	Hazards and Hazardous Materials.....	6-5
6.3.7	Noise.....	6-5
6.3.8	Solid/Hazardous Waste .....	6-5
6.3.9	Transportation/Traffic .....	6-6
6.4	Mitigation Measures.....	6-6
7.0	ORGANIZATIONS AND PERSONS CONSULTED .....	7-1
7.1	Organizations.....	7-1
7.2	Persons Consulted.....	7-2
7.3	List of Preparers .....	7-2
8.0	REFERENCES.....	8-1

## **LIST OF FIGURES**

Figure 1.1-1 South Coast Air Quality Management District .....	1-3
Figure 2.3-1 - Site Location Map - Harbor Generating Station .....	2-4
Figure 2.3-2 - Site Location Map – Scattergood Generating Station .....	2-5
Figure 2.3-3 - Site Location Map – Valley Generating Station .....	2-9
Figure 2.3-4 - Site Plan – Harbor Generating Station.....	2-6
Figure 2.3-5 - Site Plan – Scattergood Generating Station .....	2-7
Figure 2.3-6 - Site Plan - Valley Generating Station.....	2-9
Figure 2.4-1 - Harbor and Valley Process Flow Diagram .....	2-12
Figure 2.4-2 - Process Flow Diagram for Scattergood Generating Station .....	2-16
Figure 3.2-1 – Regional Map .....	3-3
Figure 3.2-2 - Meteorological Monitoring Stations in the Project Area .....	3-8
Figure 3.2-3 - Dominant Wind Patterns in the Basin .....	3-9

Figure 3.2-4 – Long Beach Station.....	3-10
Figure 3.2-5 – Los Angeles Station .....	3-11
Figure 3.2-6 – Glendale Station.....	3-12
Figure 3.2-7 - Ambient Air Monitoring Stations in South Coast Air Basin.....	3-16
Figure 3.2.8 - Major Pollutants Contributing To Cancer Risk In The South Coast Air Basin.....	3-23
Figure 3-8-1 HGS Intake and Outfall Locations.....	3-46
Figure 3.8-2 HGS Schematic of Process Water Flow .....	3-48
Figure 3.8-3 SGS Schematic of Process Water Flow.....	3-53
Figure 3.8-4 VGS Schematic of Process water Flow .....	3-56
Figure 3.11-1 Existing AM Peak Hour Turn Volumes (HGS).....	3-69
Figure 3.11-2 Existing PM Peak Hour Turn Volumes (HGS).....	3-70
Figure 4.2-1 HGS Site Boundary and Grid Receptor Locations .....	4-30
Figure 4.2-2 SGS Site Boundary and Grid Receptor Locations .....	4-31
Figure 4.2-3 VGS Site Boundary and Grid Receptor Locations .....	4-32
Figure 4.7-1 HGS Impacts.....	4-80
Figure 4.7-2 SGS Impacts .....	4-81
Figure 4.7-3 VGS Impacts.....	4-82
Figure 4.11-1 Existing Project PM Peak Hour Turn Volumes.....	4-114
Figure 5.4-1 HGS Alternate Impact .....	5-13
Figure 5.4-2 VGS Alternate Impact .....	5-15

## LIST OF TABLES

Table 1.4.1 – Summary of Potential Environmental Impacts from the Project, Project Alternatives or Cumulatively with other Projects .....	1-11
Table 1.5-1 Comparison of Adverse Environmental Impacts Associated with Project Alternatives to the Proposed Project .....	1-15
Table 1.5-2 Ranking of Alternatives .....	1-17
Table 2.5-1 List of Federal, State, and Local Agency Permits, Approvals, and Other Requirements.....	2-18
Table 3.2-1 Average Monthly Temperatures and Precipitation for Los Angeles International Airport, CA, 1961-1990 .....	3-6
Table 3.2-2 Ambient Air Quality Standards .....	3-13
Table 3.2-3 Background Air Quality Data for the South Coastal Los Angeles (ID No. 072) (1996-1999) .....	3-17
Table 3.2-4 Background Air Quality Data for the Southwest Coastal Los Angeles County Monitoring Station (ID No. 094) (1996-1999) .....	3-18
Table 3.2-5 Background Air Quality Data for the East San Fernando Valley Station (ID No. 069) - (1996-1999) .....	3-20
Table 3.2-6 Anthropogenic Sources of Criteria Pollutant Emissions for Baseline Year 1993 (ton/day, annual average) .....	3-24

Table 3.2-7 1998 Annual Average Day Toxic Emissions for the South Coast Air Basin (lbs/day) .....	3-25
Table 3.5-1 Projected Gasoline And Diesel Fuel Demand For Transportation In The Los Angeles Region <sup>a</sup> (Million Gallons Per Year) .....	3-29
Table 3.6-1 Ground Motion and Maximum Magnitude Estimates for the Project Sites .....	3-33
Table 3.7-1 Emergency Response Planning Guidelines (Ammonia Impact) .....	3-38
Table 3.8-1 Harbor Generating Station's Discharge Limitations .....	3-44
Table 3.8-2 Scattergood Generating Station's Discharge Limitations .....	3-50
Table 3.8-3 Valley Generating Station's Discharge Limitations.....	3-57
Table 3.9-1 Local Noise Ordinances .....	3-62
Table 3.11-1 Existing Level of Service Summary .....	3-71
Table 3.11-2 Comparison of Existing (Year 2000) and 1991 Traffic Volumes .....	3-72
Table 4.2-1 Air Quality Significance Thresholds.....	4-3
Table 4.2-2 Construction Schedule, Equipment Requirements, and Motor Vehicle Trips.....	4-7
Harbor Generating Station.....	4-7
Table 4.2-3 Construction Schedule, Equipment Requirements, and Motor Vehicle Trips.....	4-8
Table 4.2-4 Construction Schedule, Equipment Requirements, and Motor Vehicle Trips -Valley Generating Station.....	4-9
Table 4.2-5 Motor Vehicle Classes, Speeds and Daily VMT, for Construction Activities .....	4-11
Table 4.2-6 Peak Daily Construction Emissions by Project Site for Each Construction Phase (Pre-Mitigation) .....	4-11
Table 4.2-7 Overall Peak Daily Emissions During Construction (Pre-Mitigation) .....	4-13
Table 4.2-8 SCAQMD Permitting Emission Limits for HGS, SGS and VGS Project Sites .....	4-17
Table 4.2-9 Criteria Pollutant Maximum Hourly and Annual Emissions for HGS and VGS Project Sites - Normal Startup of New CTs .....	4-17
Table 4.2-10 Toxic Air Contaminant Annual Emissions Estimates for HGS and VGS Project Sites - Normal Startup of New CTs .....	4-18
Table 4.2-11 Criteria Pollutant Maximum Hourly and Annual Emissions .....	4-19
for HGS and VGS Project Sites - Normal Operation of New CTs .....	4-19
Table 4.2-12 Toxic Air Contaminant Annual Emissions Estimates for HGS and VGS Project Sites - Normal Operation of New CTs .....	4-20
Table 4.2-13 Maximum Hourly and Annual Ammonia and Particulate Matter Emissions Estimates for SGS Project Site - Normal Operation of New SCR Systems.....	4-21
Table 4.2-14 Annual NO <sub>x</sub> Emissions Estimates for the SGS Project Site .....	4-21
Table 4.2-15 Criteria Pollutant Maximum Hourly and Annual Emissions .....	4-22
for HGS and VGS Project Sites - Diesel Fuel Readiness Testing of New CTs .....	4-22
Table 4.2-16 Toxic Air Contaminant Annual Emissions Estimates for HGS and VGS Project Sites - Black Start Diesel-Fueled Generator Testing .....	4-23
Table 4.2-17 Criteria Pollutant Maximum Hourly and Annual Emissions for HGS and VGS Project Sites - Black Start Diesel Fueled Generator Readiness Testing ....	4-24
Table 4.2-18 Toxic Air Contaminant Annual Emissions Estimates for HGS and VGS Project Sites - Black Start Diesel-Fueled Generator Testing .....	4-24

Table 4.2-19 Overall Peak Daily Mobile Source Emissions from Aqueous Ammonia Delivery Trips (Pre-Mitigation) .....	4-26
Table 4.2-20 Dispersion Modeling Options for ISCST3.....	4-28
Table 4.2-21 Grouping of Operating Scenarios for Air Dispersion Modeling for the HGS Site...	4-33
Table 4.2-22 Grouping of Operating Scenarios for Air Dispersion Modeling for VGS .....	4-34
Table 4.2-23 Dispersion Modeling Source Location and Stack Parameters Used for the Proposed Project .....	4-36
Table 4.2-24 Emission Rates Modeled for Criteria Pollutant Analysis at the HGS Project Site .	4-37
Table 4.2-25 Emission Rates Modeled for Criteria Pollutant Analysis at the SGS Project Site..	4-37
Table 4.2-26 Emission Rates Modeled For Criteria Pollutant Analysis at the VGS Project Site	4-37
Table 4.2-27 Overall Peak Daily Operational Non-RECLAIM Daily Mass Emissions .....	4-41
Table 4.2-28 Project RECLAIM NO <sub>x</sub> Peak Daily Emissions.....	4-42
Table 4.2-29 Summary of Air Quality Impacts for Pollutants at the HGS Project Site .....	4-43
Table 4.2-30 Sulfur Dioxide Impacts at the HGS Project Site And Estimated Background Air Quality Concentrations for SCAQMD South Coastal	
Los Angeles County Monitoring Station .....	4-44
Table 4.2-31 Summary of Air Quality Impacts for PM <sub>10</sub> at the SGS Project Site.....	4-45
Table 4.2-32 Summary of Air Quality Impacts for Pollutants at the VGS Project Site .....	4-46
Table 4.2-33 Sulfur Dioxide Impacts at the VGS Project Site And Estimated Background Air Quality Concentrations for SCAQMD East San Fernando Valley Monitoring Station .....	4-46
Table 4.2-34 70-Year Cancer Risk per Million from the HGS Project Site for the Maximum Exposed Individual .....	4-48
Table 4.2-35 70-Year Cancer Risk per Million from the VGS Project Site for the Maximum Exposed Individual .....	4-50
Table 4.2-36 Construction-Related Mitigation Measures and Control Efficiency .....	4-53
Table 4.2-37 Peak Daily Construction Emissions by Project Site for Each Construction Phase (Mitigated).....	4-54
Table 4.2-38 Overall Peak Daily Emissions During Construction (Mitigated).....	4-55
Table 4.5-1 Total Projected Fuel Usage For Construction-Related Activities.....	4-61
Table 4.7-1 Qualitative and Quantitative Estimates of Failures that may Contribute to Hazardous Releases .....	4-76
Table 4.7-2 Distance in Meters to Endpoint from Center of Upset.....	4-78
Table 4.9-1 Guidelines for Noise Compatible Land Use .....	4-94
Table 4.9-2 Typical Site Construction Equipment Noise Levels (dBA).....	4-95
Table 4.9-3 Estimated Construction Noise Levels.....	4-98
Table 4.9-4 Estimated Operational Noise Levels .....	4-102
Table 4.9-5 Noise Mitigation Measures for Construction.....	4-104
Table 4.11-1 Construction Traffic Summary.....	4-109
Table 4.11-2 Project Level of Service Summary .....	4-112
Table 5.2-1 Description of Alternatives Rejected as Infeasible .....	5-2
Table 5.4-1 Peak Daily Construction Emissions During Foundations Construction and Equipment Installation at HGS for Alternative B (Mitigated).....	5-7

Table 5.4-2 Overall Peak Daily Emissions During Construction for Alternative B (Mitigated) .....	5-8
Table 5.4-3 Peak Daily Construction Emissions During Demolition at VGS for Alternative B (Mitigated) .....	5-9
Table 5.4-4 Overall Peak Daily Emissions During Construction for Alternative C (Mitigated) ....	5-10
Table 5.5-1 Comparison of Adverse Environmental Impacts Associated with Project Alternatives to the Proposed Project.....	5-18
Table 5.5-2 Ranking of Alternatives .....	5-20

## **LIST OF APPENDICES**

**APPENDIX A– NOTICE OF PREPARATION AND INITIAL STUDY**

**APPENDIX B – NOTICE OF PREPARATION AND INITIAL STUDY**

**COMMENT LETTERS AND RESPONSES TO COMMENTS SUBMITTED**

**APPENDIX C- CONSTRUCTION- AND OPERATIONAL-RELATED AIR QUALITY  
IMPACTS ESTIMATION METHODOLOGIES**

**APPENDIX D – HAZARDS RISK ANALYSIS MODELING ASSUMPTIONS  
AND RESULTS**

**APPENDIX E – TRAFFIC IMPACT ANALYSIS**

**APPENDIX F –PHASE 1 ARCHAEOLOGICAL STUDY**

**APPENDIX G – HEALTH RISK ASSESSMENT METHODOLOGY**

**APPENDIX H – COMMENTS AND RESPONSES ON THE DRAFT EIR**