APPENDICES

Multiple Air Toxics Exposure Study in the South Coast Air Basin

MATES III Final Report

September 2008

South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD

Chairman: WILLIAM A. BURKE, Ed. D.

Speaker of the Assembly Appointee

Vice-Chairman: S. ROY WILSON, Ed. D.

Supervisor, Fourth District Riverside County Representative

MEMBERS:

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

MICHAEL A. CACCIOTTI

Councilmember, City of South Pasadena Cities Representative, Los Angeles County Eastern Region

BILL CAMPBELL

Supervisor, Third District Orange County Representative

JANE W. CARNEY

Senate Rules Committee Appointee

RONALD O. LOVERIDGE

Mayor, City of Riverside Cities Representative, Riverside County

JOSEPH K. LYOU, PH.D.

Governor's Appointee

GARY OVITT

Supervisor, Fourth District

San Bernardino County Representative

JAN PERRY

Councilmember

City of Los Angeles Representative

MIGUEL PULIDO

Mayor, City of Santa Ana

Cities Representative, Orange County

TONIA REYES URANGA

Councilmember, City of Long Beach

Cities Representative, Los Angeles County,

Western Region

DENNIS YATES

Mayor, City of Chino

Cities Representative, San Bernardino County

EXECUTIVE OFFICER:

BARRY R. WALLERSTEIN, D.Env

AUTHORS AND CONTRIBUTORS

The following individuals contributed to the development, implementation, and reporting of this project.

South Coast Air Quality Management District

Executive Officer
Barry R. Wallerstein, D.Env.

Deputy Executive Officers

Elaine Chang, Dr. PH Chung Liu, D. Env.

Planning, Rule Development & Area Sources Science and Technology Advancement

Assistant Deputy Executive Officers

Laki Tisopulos, Ph.D., P.E. Henry Hogo

Planning, Rule Development & Area Sources

Mobile Source Division, Science and

Technology Advancement

AUTHORS

Jean Ospital, Dr. PH Health Effects Officer

Joe Cassmassi Planning and Rules Manager

Tom Chico Program Supervisor

CONTRIBUTORS

Libby Ayers Meteorological Technician

Dale Barber Temporary Air Quality Instrument Specialist I

Steven Barbosa Principal Air Quality Chemist
Tracy Basler Temporary Laboratory Technician

Mark Bassett Air Quality Specialist

Rene Bermudez Principal Air Quality Instrument Specialist

Roger Bond Air Quality Chemist
Malou Cartwright Laboratory Technician

Wimol Chanjamsri Chemist

Paul Chavez Senior Air Quality Instrument Specialist

Tom Chico Program Supervisor
Alice Chen Temporary Chemist

Corie Choa Principal Air Quality Chemist
Amy Chun Temporary Laboratory Technician
Kris Collins Temporary Laboratory Technician

Monique Davis
Alicia Diaz
Laboratory Technician
Laboratory Technician
Kevin Durkee
Air Quality Specialist

Rudy Eden Senior Enforcement Manager, Laboratory Services

Lila Enriquez Air Quality Instrument Specialist I
Philip Fine Atmospheric Measurements Manager
Jeremy Graham Air Quality Instrument Specialist I

Tracy Goss Program Supervisor Sam Guo Air Quality Chemist

Refaat Hanna Air Quality Instrument Specialist II

Sheri Hanizavareh Student Intern

Sandra Hom Senior Air Quality Chemist

Dan Houghton Air Quality Chemist

Tai-Ching Hu Senior Air Quality Chemist

Judy Hwa Air Quality Chemist

Eddie Hwang Temporary Laboratory Technician

Laura Julius Air Quality Inspector II
Aaron Katzenstein Senior Air Quality Chemist
Bong Mann Kim Air Ouality Specialist

Cindy Kirkpatrick Temporary Laboratory Technician
Mike Koch Air Quality Instrument Specialist I

Sally Kou Air Quality Chemist
Jong Hoon Lee Air Quality Specialist
Sang-Mi Lee Air Quality Specialist
Kay Liu Air Quality Chemist

Eddie Lui Temporary Laboratory Technician Jason Low Quality Assurance Manager

Joe Macias Temporary Air Quality Instrument Specialist I

Satoru Mitsutomi Program Supervisor

Ricardo Morales Air Quality Instrument Specialist I

Chris Nelson Senior Staff Specialist Kevin Orellana Air Quality Inspector II

John Parrack II Assistant Air Quality Chemist
Richard Parent Air Quality Instrument Specialist II

Tom Parsons Atmospheric Measurements Manager (retired)

Tuyet-le Pham Air Quality Specialist

Ed Ruffino Air Quality Instrument Specialist II

Ken Sanchez Air Quality Chemist

David Sawyer Principal Air Quality Instrument Specialist

Mike Shu Air Quality Chemist (retired)
Steve Taw Laboratory Technician
Na Mon Trinh Laboratory Technician

Solomon Teffera Principal Air Quality Chemist

Lyovit Usares Air Quality Inspector II

Brian Vlasich Air Quality Instrument Specialist II

Thy Vo Temporary Chemist

Jill Whynot Director of Strategic Initiatives

Paul Williamson Air Quality Chemist

Sumner Wilson Principal Air Quality Instrument Specialist

Robert Yi Air Quality Chemist Xinqiu Zhang Air Quality Specialist

List of Appendices

Appendix	Title
I	List of Substances and Their Associated Risk Factors
II	MATES III Technical Advisory Group Members
III	Monitoring and Laboratory Analysis Protocol
IV	Measurements of Ambient Naphthalene and Other Polycyclic Aromatic Hydrocarbons
V	PM _{2.5} Particulate-Bound Organic Compound Analysis
VI	Summaries of MATES III Fixed Monitoring Sites
VII	PM _{2.5} Source Apportionment for the South Coast Air Basin Using the Chemical Mass Balance Receptor Model
VIII	2005 Emissions by Major Source Category
IX	Regional Modeling Analyses
X	Weekday/Weekend PM _{2.5} Speciation Project