

State of California

AIR RESOURCES BOARD

Resolution 89-80
November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 1700-151 entitled, "Regulatory Strategies for Emissions from Selected Off-Road Mobile Sources," has been submitted by Booz, Allen & Hamilton, Inc.; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

Proposal Number 1700-151, entitled, "Regulatory Strategies for Emissions from Selected Off-Road Mobile Sources," submitted by Booz, Allen & Hamilton, Inc., for a total amount not to exceed \$245,624.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1700-151, entitled, "Regulatory Strategies for Emissions from Selected Off-Road Mobile Sources," submitted by Booz, Allen & Hamilton, Inc., for a total amount not to exceed \$245,624.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$245,624.

I hereby certify that the above is a true and correct copy of Resolution #89-80, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

**Resolution 89-81
November 9, 1989**

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 1696-151, entitled "Measurement of Ambient Concentrations of Chlorinated Dioxins and Furans, and Polycyclic Aromatic Hydrocarbons," has been submitted by ENSR Consulting and Engineering; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

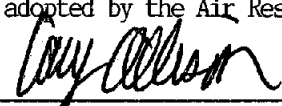
Proposal Number 1696-151, entitled "Measurement of Ambient Concentrations of Chlorinated Dioxins and Furans and Polycyclic Aromatic Hydrocarbons," submitted by ENSR Consulting and Engineering, for a total amount not to exceed \$218,162.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1696-151, entitled "Measurement of Ambient Concentrations of Chlorinated Dioxins and Furans and Polycyclic Aromatic Hydrocarbons," submitted by ENSR Consulting and Engineering, for a total amount not to exceed \$218,162.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$218,162.

I hereby certify that the above is a true and correct copy of Resolution #89-81, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-82
November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 1705-151, entitled "Development of an Improved Source Sampling Method for Polycyclic Aromatic Compounds and Other Semi-Volatile Organic Species," has been submitted by the California Department of Health Services; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

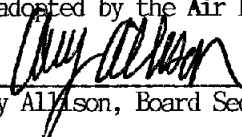
Proposal Number 1705-151, entitled "Development of an Improved Source Sampling Method for Polycyclic Aromatic Compounds and Other Semi-Volatile Organic Species," submitted by the California Department of Health Services, for a total amount not to exceed \$192,959.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1705-151, entitled "Development of an Improved Source Sampling Method for Polycyclic Aromatic Compounds and Other Semi-Volatile Organic Species," submitted by the California Department of Health Services, for a total amount not to exceed \$192,959.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$192,959.

I hereby certify that the above is a true and correct copy of Resolution #89-82, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-83
November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 1679-146, entitled "Development of Laser Diagnostic Methods for PAH, PCDD and PCDF," has been submitted by the University of California, Davis; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

Proposal Number 1679-146, entitled "Development of Laser Diagnostic Methods for PAH, PCDD and PCDF," submitted by the University of California, Davis, for a total amount not to exceed \$59,941.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1679-146, entitled "Development of Laser Diagnostic Methods for PAH, PCDD and PCDF," submitted by the University of California, Davis, for a total amount not to exceed \$59,941.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$59,941.

I hereby certify that the above is a true and correct copy of Resolution #89-83, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-84
November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 1694-151 entitled "An Investigation of Error Propagation in the California Air Resources Board's Airshed Model," has been submitted by Professors Armistead G. Russell and Gregory J. McRae; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

Proposal Number 1694-151, entitled "An Investigation of Error Propagation in the California Air Resources Board's Airshed Model," submitted by Professors Armistead G. Russell and Gregory J. McRae, for a total amount not to exceed \$108,300.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1694-151, entitled "An Investigation of Error Propagation in the California Air Resources Board's Airshed Model," submitted by Professors Armistead G. Russell and Gregory J. McRae, for a total amount not to exceed \$108,300.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$108,300.

I hereby certify that the above is a true and correct copy of Resolution #89-84, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-85

November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 1704-151 entitled "Development and Application of an Up-To-Date Photochemical Mechanism for Airshed Modeling and Reactivity Assessments," has been submitted by the University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:


Proposal Number 1704-151, entitled "Development and Application of an Up-To-Date Photochemical Mechanism for Airshed Modeling and Reactivity Assessments," submitted by the University of California, Riverside, for a total amount not to exceed \$99,559.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1704-151, entitled "Development and Application of an Up-To-Date Photochemical Mechanism for Airshed Modeling and Reactivity Assessments," submitted by the University of California, Riverside, for a total amount not to exceed \$99,559.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$99,559.

I hereby certify that the above is a true and correct copy of Resolution #89-85, as adopted by the Air Resources Board.



Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-86
November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 1707-151, entitled "Vehicle Monitoring to Characterize the Los Angeles Fleet Near Areas Having High Carbon Monoxide Concentrations" has been submitted by AV Projects Inc.; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

Proposal Number 1707-151, entitled "Vehicle Monitoring to Characterize Los Angeles Fleet Near Areas Having High Carbon Monoxide Concentrations", submitted by AV Projects Inc. for a total amount not to exceed \$50,000.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1707-151, entitled "Vehicle Monitoring to Characterize Los Angeles Fleet Near Areas Having High Carbon Monoxide Concentrations", that has been submitted by AV Products Inc. for a total amount not to exceed \$50,000

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$50,000.

I hereby certify that the above is a true and correct copy of Resolution #89-86, as adopted by the Air Resources Board.



Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-87
November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 1703-151 entitled "Are Mucin and Mucin RNA Reliable Markers for Hyper-secretion in Humans with Irritant-Induced Bronchitis?" has been submitted by the University of California, San Francisco; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

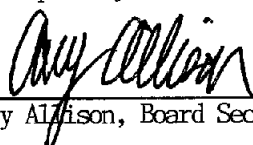
Proposal Number 1703-151, entitled "Are Mucin and Mucin RNA Reliable Markers for Hyper-secretion in Humans with Irritant-Induced Bronchitis?" submitted by the University of California, San Francisco, for a total amount not to exceed \$59,854.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1703-151, entitled "Are Mucin and Mucin RNA Reliable Markers for Hyper-secretion in Humans with Irritant-Induced Bronchitis?" submitted by the University of California, San Francisco, for a total amount not to exceed \$59,854.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$59,854.

I hereby certify that the above is a true and correct copy of Resolution #89-87, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-88

November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 1706-151, entitled "Comparison of Young Adult Male and Female Responses to Ozone Inhalation Consequent to Continuous Exercise at the Same Absolute and Relative Minute Ventilation," submitted by the University of California, Davis; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

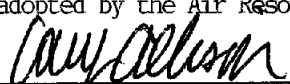
Proposal Number 1706-151, entitled "Comparison of Young Adult Male and Female Responses to Ozone Inhalation Consequent to Continuous Exercise at the Same Absolute and Relative Minute Ventilation," submitted by the University of California, Davis, for a total amount not to exceed \$35,614.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1706-151, entitled "Comparison of Young Adult Male and Female Responses to Ozone Inhalation Consequent to Continuous Exercise at the Same Absolute and Relative Minute Ventilation," submitted by the University of California, Davis, for a total amount not to exceed \$35,614.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$35,614.

I hereby certify that the above is a true and correct copy of Resolution #89-88, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-89

November 9, 1989

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 1702-151, entitled "Sierra Ozone Impact Assessment Study," has been submitted by the University of California, Davis; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

Proposal Number 1702-151, entitled "Sierra Ozone Impact Assessment Study," submitted by the University of California, Davis, for a total amount not to exceed \$199,182.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

Proposal Number 1702-151, entitled "Sierra Ozone Impact Assessment Study," submitted by the University of California, Davis, for a total amount not to exceed \$199,182.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$199,182.

I hereby certify that the above is a true and correct copy of Resolution #89-89, as adopted by the Air Resources Board.



Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-90
November 9, 1989

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, a solicited research proposal, Number 185-34, entitled "Clinical Pilot Study to Develop Sensitive Markers for Detecting the Health Effects of Acidic Atmospheres", has been submitted by C-E Environmental, Inc.; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

Proposal Number 185-34 entitled "Clinical Pilot Study to Develop Sensitive Markers for Detecting the Health Effects of Acidic Atmospheres", submitted by C-E Environmental, Inc., for a total amount not to exceed \$105,937.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee and approves the following:

Proposal Number 185-34 entitled "Clinical Pilot Study to Develop Sensitive Markers for Detecting the Health Effects of Acidic Atmospheres", submitted by C-E Environmental, Inc., for a total amount not to exceed \$105,937.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$105,937.

I hereby certify that the above is a true and correct copy of Resolution #89-90, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 89-91
November 9, 1989

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911;

WHEREAS, a solicited research proposal, Number 204-35 entitled "Investigation of the Effects of Atmospheric Acidity Upon Economically Significant Materials," has been submitted by the University of Southern California;

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

Proposal Number 204-35, entitled "Investigation of the Effects of Atmospheric Acidity Upon Economically Significant Materials," submitted by the University of Southern California, for a total amount not to exceed \$359,396.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

Proposal Number 204-35, entitled "Investigation of the Effects of Atmospheric Acidity Upon Economically Significant Materials," submitted by the University of Southern California, for a total amount not to exceed \$359,396.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed \$359,396.

I hereby certify that the above is a true and correct copy of Resolution #89-91, as adopted by the Air Resources Board.


Cary Allison, Board Secretary