

State of California

AIR RESOURCES BOARD

Resolution 93-31  
June 10, 1993

Agenda Item No.: 93-7-2

**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 2072-175, entitled "Development of Toxics Emission Factors from Source Test Data Collected Under the Air Toxics Hot Spots Program," has been submitted by Energy and Environmental Research Corporation; 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 2072-175, entitled "Development of Toxics Emission Factors from Source Test Data Collected Under the Air Toxics Hot Spots Program," submitted by Energy and Environmental Research Corporation, for a total amount not to exceed \$254,985.

**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 2072-175, entitled "Development of Toxics Emission Factors from Source Test Data Collected Under the Air Toxics Hot Spots Program," submitted by Energy and Environmental Research Corporation, for a total amount not to exceed \$254,985.

**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 \$254,985.

I hereby certify that the above is a true and correct copy of Resolution 93-31, as adopted by the Air Resources Board.

  
Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-32  
June 10, 1993

Agenda Item No.: 93-7-2

**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 2059-175, entitled "Testing of Architectural and Industrial Maintenance Coatings," has been submitted by Harlan Associates, Inc.

**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 2059-175, entitled "Testing of Architectural and Industrial Maintenance Coatings," submitted by Harlan Associates, Inc., for a total amount not to exceed \$122,483.

**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 2059-175, entitled "Testing of Architectural and Industrial Maintenance Coatings," submitted by Harlan Associates, Inc., for a total amount not to exceed \$122,483.

**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 \$122,483.

I hereby certify that the above is a true and correct copy of Resolution 93-32, as adopted by the Air Resources Board.

*Pat Hutchens*  
Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-33  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency research proposal, Number 2082-175, entitled "Bioassay and Chemical Characterization of Vapor and Particulate Phase of Heavy-Duty Diesel Exhaust Using Reformulated Fuels," 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 2082-175, entitled "Bioassay and Chemical Characterization of Vapor and Particulate Phase of Heavy-Duty Diesel Exhaust Using Reformulated Fuels," submitted by the University of California, Davis, for a total amount not to exceed \$76,846.

**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 2082-175, entitled "Bioassay and Chemical Characterization of Vapor and Particulate Phase of Heavy-Duty Diesel Exhaust Using Reformulated Fuels," submitted by the University of California, Davis, for a total amount not to exceed \$76,846.

**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 \$76,846.

I hereby certify that the above is a true and correct copy of Resolution 93-33, as adopted by the Air Resources Board.

  
Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-34  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency proposal Number 2096-176 entitled "Intermedia Transfer Factors for Toxic Air Pollutants: Development and Validation of Predictive Capabilities," has been submitted by the University of California, Los Angeles; 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 2096-176, entitled "Intermedia Transfer Factors for Toxic Air Pollutants: Development and Validation of Predictive Capabilities," submitted by the University of California, Los Angeles, for a total amount not to exceed \$116,794.

**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 2096-176, entitled "Intermedia Transfer Factors for Toxic Air Pollutants: Development and Validation of Predictive Capabilities," submitted by the University of California, Los Angeles, for a total amount not to exceed \$116,794.

**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 \$116,794.

I hereby certify that the above is a true and correct copy of Resolution 93-34, as adopted by the Air Resources Board.

*Pat Hutchens*  
Pat Hutchens, Board Secretary

**State of California**

**AIR RESOURCES BOARD**

Resolution 93-35  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency research proposal, Number 2098-176, entitled "Experimental Studies in Support of the Development of an Updated Photochemical Mechanism for VOC Reactivity Assessment," 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 2098-176, entitled "Experimental Studies in Support of the Development of an Updated Photochemical Mechanism for VOC Reactivity Assessment," submitted by the University of California, Riverside, for a total amount not to exceed \$129,656.

**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 2098-176, entitled "Experimental Studies in Support of the Development of an Updated Photochemical Mechanism for VOC Reactivity Assessment," submitted by the University of California, Riverside, for a total amount not to exceed \$129,656.

**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 \$129,656.

I hereby certify that the above is a true and correct copy of Resolution 93-35, as adopted by the Air Resources Board.

  
Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-36  
June 10, 1993

Agenda Item No.: 93-7-2

**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 research proposal, Number 2097-176, entitled "A Study to Evaluate the Impact of California Air Pollution Control Regulations on Businesses' Location Decisions," has been submitted by the California State University, Fullerton Foundation; 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 2097-176, entitled "A Study to Evaluate the Impact of California Air Pollution Control Regulations on Businesses' Location Decisions," submitted by the California State University, Fullerton Foundation, for a total amount not to exceed \$194,723.

**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 2097-176, entitled "A Study to Evaluate the Impact of California Air Pollution Control Regulations on Businesses' Location Decisions," submitted by the California State University, Fullerton Foundation, for a total amount not to exceed \$194,723.

**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 \$194,723.

I hereby certify that the above is a true and correct copy of Resolution 93-36, as adopted by the Air Resources Board.

  
Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-37  
June 10, 1993

Agenda Item No.: 93-7-2

**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 2090-176 entitled "Indirect Source Emission Minimization Strategies," has been submitted by JHK and Associates; 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 2090-176, entitled "Indirect Source Emission Minimization Strategies," submitted by JHK and Associates, for a total amount not to exceed \$119,647.

**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 2090-176, entitled "Indirect Source Emission Minimization Strategies," submitted by JHK and Associates, for a total amount not to exceed \$119,647.

**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 \$119,647.

I hereby certify that the above is a true and correct copy of Resolution 93-37, as adopted by the Air Resources Board.

  
Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-38  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency research proposal, Number 2083-175, entitled "Colloquium on Particulate Air Pollution and Human Mortality and Morbidity," has been submitted by the University of California, Irvine; 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 2083-175, entitled "Colloquium on Particulate Air Pollution and Human Mortality and Morbidity," submitted by the University of California, Irvine, for a total amount not to exceed \$70,000.

**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 2083-175, entitled "Colloquium on Particulate Air Pollution and Human Mortality and Morbidity," submitted by the University of California, Irvine, for a total amount not to exceed \$70,000.

**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 \$70,000.

I hereby certify that the above is a true and correct copy of Resolution 93-38, as adopted by the Air Resources Board.

  
Pat Hutchens, Board Secretary



State of California

AIR RESOURCES BOARD

Resolution 93-39  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency proposal, Number 2099-176, entitled "Statewide Crop Losses from Air Pollution," 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 2099-176, entitled "Statewide Crop Losses from Air Pollution," submitted by the University of California, Riverside, for a total amount not to exceed \$98,133.

**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 2099-176, entitled "Statewide Crop Losses from Air Pollution," submitted by the University of California, Riverside, for a total amount not to exceed \$98,133.

**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 \$98,133.

I hereby certify that the above is a true and correct copy of Resolution 93-39, as adopted by the Air Resources Board.

*Pat Hutchens*  
Pat Hutchens, Board Secretary

**State of California**

**AIR RESOURCES BOARD**

Resolution 93-40  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency proposal, Number 2084-175, entitled "Evaluation and Demonstration of Methods for Reducing PM10 Levels in the Antelope Valley (Western Mojave Desert) by Suppression of Fugitive Dust," 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 2084-175, entitled "Evaluation and Demonstration of Methods for Reducing PM10 Levels in the Antelope Valley (Western Mojave Desert) by Suppression of Fugitive Dust," submitted by the University of California, Riverside, for a total amount not to exceed \$88,068.

**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 2084-175, entitled "Evaluation and Demonstration of Methods for Reducing PM10 Levels in the Antelope Valley (Western Mojave Desert) by Suppression of Fugitive Dust," submitted by the University of California, Riverside, for a total amount not to exceed \$88,068.

**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 \$88,068.

I hereby certify that the above is a true and correct copy of Resolution 93-40, as adopted by the Air Resources Board.

*Pat Hutchens*  
Pat Hutchens, Board Secretary

**State of California**

**AIR RESOURCES BOARD**

Resolution 93-41  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency proposal, Number 2062-175, entitled "Use of Sputum Induction to Obtain Airway Lining Fluid After Ozone Exposure; A pilot Study to Validate Sputum Induction as an Alternative to Bronchoscopy," 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 2062-175, entitled "Use of Sputum Induction to Obtain Airway Lining Fluid After Ozone Exposure; A pilot Study to Validate Sputum Induction as an Alternative to Bronchoscopy," submitted by the University of California, San Francisco, for a total amount not to exceed \$57,644.

**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 2062-175, entitled "Use of Sputum Induction to Obtain Airway Lining Fluid After Ozone Exposure; A pilot Study to Validate Sputum Induction as an Alternative to Bronchoscopy," submitted by the University of California, San Francisco, for a total amount not to exceed \$57,644.

**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 \$57,644.

I hereby certify that the above is a true and correct copy of Resolution 93-41, as adopted by the Air Resources Board.

  
Pat Hutchens, Board Secretary

**State of California**

**AIR RESOURCES BOARD**

Resolution 93-42  
June 10, 1993

Agenda Item No.: 93-7-2

**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 interagency research proposal, Number 2095-176, entitled "Sierra Cooperative Ozone Impact Assessment Study (Year 4)," 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 2095-176, entitled "Sierra Cooperative Ozone Impact Assessment Study (Year 4)," submitted by the University of California, Davis, for a total amount not to exceed \$144,631.

**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 2095-176, entitled "Sierra Cooperative Ozone Impact Assessment Study (Year 4)," submitted by the University of California, Davis, for a total amount not to exceed \$144,631.

**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 \$144,631.

I hereby certify that the above is a true and correct copy of Resolution 93-42, as adopted by the Air Resources Board.

  
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Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-43  
June 10, 1993

Agenda Item No.: 93-7-2

**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 39900 through 39911; and

**WHEREAS**, an unsolicited research proposal, Number 252-49 entitled "Proposal for Measurement of Nitric Acid ( $\text{HNO}_3$ ) at Several Acid Deposition Sites in the South Coast Air Basin," has been submitted by Unisearch Associates 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 252-49, entitled "Proposal for Measurement of Nitric Acid ( $\text{HNO}_3$ ) at Several Acid Deposition Sites in the South Coast Air Basin," submitted by Unisearch Associates Inc., for a total amount not to exceed \$49,655.

**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 252-49, entitled "Proposal for Measurement of Nitric Acid ( $\text{HNO}_3$ ) at Several Acid Deposition Sites in the South Coast Air Basin," submitted by Unisearch Associates Inc., for a total amount not to exceed \$49,655.

**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 \$49,655.

I hereby certify that the above is a true and correct copy of Resolution 93-43, as adopted by the Air Resources Board.

*Pat Hutchens*  
Pat Hutchens, Board Secretary