

State of California

AIR RESOURCES BOARD

Resolution 93-10
March 12, 1993

Agenda Item No.: 93-5-2

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 2034-174, entitled "Demonstration of a Non-Additive Lean-NOx Catalytic Converter for Heavy-Duty Diesel Vehicles," has been submitted by the Southwest Research Institute; 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:

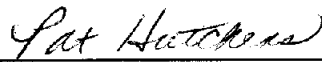
Proposal Number 2034-174, entitled "Demonstration of a Non-Additive Lean-NOx Catalytic Converter for Heavy-Duty Diesel Vehicles," submitted by the Southwest Research Institute, for a total amount not to exceed \$299,200.

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 2034-174, entitled "Demonstration of a Non-Additive Lean-NOx Catalytic Converter for Heavy-Duty Diesel Vehicles," submitted by the Southwest Research Institute, for a total amount not to exceed \$299,200.

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 \$299,200.

I hereby certify that the above is a true and correct copy of Resolution 93-10, as adopted by the Air Resources Board.



Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-11
March 12, 1993

Agenda Item No.: 93-5-2

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 2040-174, entitled "Determination of the Effects of Speed, Temperature, and Fuel Factors on Exhaust Emissions," has been submitted by Automotive Testing and Development Services, 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 2040-174, entitled "Determination of the Effects of Speed, Temperature, and Fuel Factors on Exhaust Emissions," submitted by Automotive Testing and Development Services, Inc., for a total amount not to exceed \$449,589.

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 2040-174, entitled "Determination of the Effects of Speed, Temperature, and Fuel Factors on Exhaust Emissions," submitted by Automotive Testing and Development Services, Inc., for a total amount not to exceed \$449,589.

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 \$449,589.

I hereby certify that the above is a true and correct copy of Resolution 93-11, as adopted by the Air Resources Board.



Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-12
March 12, 1993

Agenda Item No.: 93-5-2

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 2033-173 entitled "Characterization of Vapor-Phase Organic Emissions from Heavy-Duty Diesel Engines," has been submitted by the Southwest Research Institute; 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:

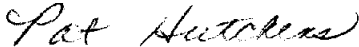
Proposal Number 2033-173, entitled "Characterization of Vapor-Phase Organic Emissions from Heavy-Duty Diesel Engines," submitted by the Southwest Research Institute, for a total amount not to exceed \$393,995.

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 2033-173, entitled "Characterization of Vapor-Phase Organic Emissions from Heavy-Duty Diesel Engines," submitted by the Southwest Research Institute, for a total amount not to exceed \$393,995.

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 \$393,995.

I hereby certify that the above is a true and correct copy of Resolution 93-12, as adopted by the Air Resources Board.



Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-13
March 12, 1993

Agenda Item No.: 93-5-2

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 2045-174, entitled "A Study to Develop Statewide and County-Level Economic Projections," submitted by the DRI/McGraw-Hill; 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:

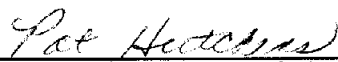
Proposal Number 2045-174, entitled "A Study to Develop Statewide and County-Level Economic Projections," submitted by the DRI/McGraw-Hill, for a total amount not to exceed \$69,932.

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 2045-174, entitled "A Study to Develop Statewide and County-Level Economic Projections," submitted by the DRI/McGraw-Hill, for a total amount not to exceed \$69,932.

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 \$69,932.

I hereby certify that the above is a true and correct copy of Resolution 93-13, as adopted by the Air Resources Board.



Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-14
March 12, 1993

Agenda Item No.: 93-5-2

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 2037-174, entitled "Effects of Increased Highway Capacity on Travel Behavior", has been submitted by Dowling 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 2037-174, entitled "Effects of Increased Highway Capacity on Travel Behavior," submitted by Dowling Associates, for a total amount not to exceed \$95,500.

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 2037-174, entitled "Effects of Increased Highway Capacity on Travel Behavior," submitted by Dowling Associates, for a total amount not to exceed \$95,500.

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 \$95,500.

I hereby certify that the above is a true and correct copy of Resolution 93-14, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-15
March 12, 1993

Agenda Item No.: 93-5-2

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 unsolicited research proposal, Number 2050-174 entitled "Proposal for Participation in the Atmospheric Free-Radical Measurements Related to Photochemical Oxidants Study: Supplementary Field Support Measurements of Formaldehyde, Hydrogen Peroxide, Nitrous Acid, Nitrogen Dioxide, Peroxyacetyl Nitrate, NO_x, Ozone, Hydrocarbons: C2-C12 and Carbonyls: C1-Benzaldehyde," has been submitted by Unisearch Associates 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 2050-174, entitled "Proposal for Participation in the Atmospheric Free-Radical Measurements Related to Photochemical Oxidants Study: Supplementary Field Support Measurements of Formaldehyde, Hydrogen Peroxide, Nitrous Acid, Nitrogen Dioxide, Peroxyacetyl Nitrate, NO_x, Ozone, Hydrocarbons: C2-C12 and Carbonyls: C1-Benzaldehyde," submitted by Unisearch Associates Inc., for a total amount not to exceed \$158,688.

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 2050-174, entitled "Proposal for Participation in the Atmospheric Free-Radical Measurements Related to Photochemical Oxidants Study: Supplementary Field Support Measurements of Formaldehyde, Hydrogen Peroxide, Nitrous Acid, Nitrogen Dioxide, Peroxyacetyl Nitrate, NO_x, Ozone, Hydrocarbons: C2-C12 and Carbonyls: C1-Benzaldehyde," submitted by the Unisearch Associates Inc., for a total amount not to exceed \$158,688.

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 \$158,688.

I hereby certify that the above is a true and correct copy of Resolution 93-15, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-16
March 12, 1993

Agenda Item No.: 93-5-2

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 unsolicited research proposal, Number 2051-174, entitled "Study of Ozone Concentration and Aerosol Profiles in the Lower Troposphere in California Using WPL's Ozone Lidar," has been submitted by NOAA/ERL/Wave Propagation Laboratory; 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 2051-174, entitled "Study of Ozone Concentration and Aerosol Profiles in the Lower Troposphere in California Using WPL's Ozone Lidar," submitted by NOAA/ERL/Wave Propagation Laboratory, for a total amount not to exceed \$150,000.

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 2051-174, entitled "Study of Ozone Concentration and Aerosol Profiles in the Lower Troposphere in California Using WPL's Ozone Lidar," submitted by NOAA/ERL/Wave Propagation Laboratory, for a total amount not to exceed \$150,000.

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 \$150,000.

I hereby certify that the above is a true and correct copy of Resolution 93-16, as adopted by the Air Resources Board.



Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-17
March 12, 1993

Agenda Item No.: 93-5-2

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 2047-174 entitled "Comparison of In-Situ and Remotely Sensed Ozone Concentrations," 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 2047-174, entitled "Comparison of In-Situ and Remotely Sensed Ozone Concentrations," submitted by the University of California, Davis, for a total amount not to exceed \$15,000.

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 2047-174, entitled "Comparison of In-Situ and Remotely Sensed Ozone Concentrations," submitted by the University of California, Davis, for a total amount not to exceed \$15,000.

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 \$15,000.

I hereby certify that the above is a true and correct copy of Resolution 93-17, as adopted by the Air Resources Board.



Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 93-18
March 12, 1993

Agenda Item No.: 93-5-2

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 2048-174, entitled "Development and Application 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:

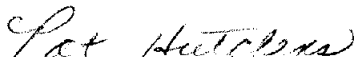
Proposal Number 2048-174, entitled "Development and Application of an Updated Photochemical Mechanism for VOC Reactivity Assessment," submitted by the University of California, Riverside, for a total amount not to exceed \$106,699.

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 2048-174, entitled "Development and Application of an Updated Photochemical Mechanism for VOC Reactivity Assessment," submitted by the University of California, Riverside, for a total amount not to exceed \$106,699.

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 \$106,699.

I hereby certify that the above is a true and correct copy of Resolution 93-18, as adopted by the Air Resources Board.



Pat Hutchens, Board Secretary