#### State of California AIR RESOURCES BOARD

Resolution 85-66 September 19, 1985

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 1342-119, entitled "The Effects of Present and Potential Air Pollution on Inportant San Joaquin Valley Crops: Thompson Seedless Grapes and Cotton", has been submitted by the University of California, Riverside;

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 1342-119, entitled "The Effects of Present and Potential Air Pollution on Important San Joaquin Valley Crops: Thompson Seedless Grapes and Cotton", submitted by the University of California, Riverside for a total amount not to exceed \$132,127.

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 1342-119, entitled "The Effects of Present and Potential Air Pollution on Important San Joaquin Valley Crops: Thompson Seedless Grapes and Cotton", submitted by the University of California, Riverside for a total amount not to exceed \$132,127.

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 \$132,127.

I hereby certify that the above is a true and correct copy of Resolution 85-66 as adopted by the Air Resources Board.

Holmes, Board Secretarv



ITEM NO.: 2 DATE: September 19, 1985

# State of California AIR RESOURCES BOARD

ITEM:

Research Proposal No. 1296-112(a) entitled "Proposal for Additional Effort of Technical Advisory Group for Design of the Southern California Air Quality Field Study."

RECOMMENDATION: Adopt Resolution 85-67 approving Proposal No. 1296-112(a) for funding in an amount not to exceed \$8,340.00.

SUMMARY: The proposed effort would augment the current program planning effort for the upcoming Southern California Air Quality Study. Initial meetings between ARB, EPA, the South Coast Air Quality Management District and industry representatives have shown that the interest and participation in the ARB's cooperative air quality study is much greater than originally anticipated, with potential contributions to the study valued at 3 to 3 1/2 million dollars.

> The Technical Advisory Group (TAG) for the study, which consists of a group of internationally recognized air quality experts, has been assembled by Sonoma Technology to provide input to the study design. Additional TAG members and an extra participants' workshop have become necessary as a result of the widespread interest shown in the study by other governmental and industry groups. This proposal is to convene an additional workshop for the TAG and all interested groups in the latter phase of the design study. The completion date for this study would not be changed by this augmentation.

> The Research Screening Committee recommends funding this augmentation request from the University of California, Los Angeles. The principal investigators are Drs. Sheldon Friedlander and Susanne Hering.

## State of California AIR RESOURCES BOARD

Resolution 85-67 September 19, 1985

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 to Augment Contract A4-114-32, entitled "Proposal for Additional Effort of Technical Advisory Group for Design of the Southern California Air Quality Field Study", has been submitted by Sonoma Technology, 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:

An Augmentation to Contract A4-114-32, entitled "Proposal for Additional Effort of Technical Advisory Group for Design of the Southern California Air Quality Field Study", submitted by Sonoma Technology, Inc. for a total amount not to exceed \$8,340.00.

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:

An Augmentation to Contract A4-114-32, entitled "Proposal for Additional Effort of Technical Advisory Group for Design of the Southern California Air Quality Field Study", submitted by Sonoma Technology, Inc. for a total amount not to exceed \$8,340.00.

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 \$8,340.00.

I hereby certify that the above is a true and correct copy of Resolution 85-67 as adopted by the Air Resources Board.

Harold Holmes, Board Secretary

ITEM NO.: DATE: September 19, 1985

## State of California AIR RESOURCES BOARD

ITEM: Research Proposal No. 33-13 entitled 'Investigation of the Effects of Acid Deposition Joon California Chops".

RECOMMENDATION: Adopt Resolution 85-68 approving Proposal No. 93-13 for funding in an amount not to exceed \$153,518.

SUMMARY: The Kapiloff Act requires the ARB to study the physiological effects of acid deposition upon plants, to develop dose response functions, and to determine the economic consequences of acid deposition upon crops. The proposed research will provide needed information on economically important crops in two of the agricultural areas of the State that are most likely to be affected by acid fogs and acid precursors.

> The objectives of the proposal are to identify the metabolic basis for sensitivity of crop species to acidic fogs and to test for interactive effects of acidic fogs and ambient ozone upon these crops. Two experiments would be performed. 0ne experiment would expose carrot, potato, onion, and alfalfa plants to simulated acid fogs that chemically resemble San Joaquin Valley fogs during the winter growing season. second experiment would expose tomato, pepper, strawberry, and celery plants to simulated fors that chemically resemble South Coast Air Basin fogs; these plants would also be exposed to ambient ozone concentrations representative of the Basin during spring. These physiological measurements, including net photosynthesis, transpiration, and stomatal resistance, would be recorded during the course of both experiments.

At the end of each experiment, plant weight and elemental composition would also be determined. These physiological measurements would be correlated with any observed plant injury and with the growth measurements.

The physiological measurements should provide useful markers to identify acid fog-injured plants growing under field conditions and will aid in relating damage to yield and growth effects. This information is needed to provide an initial basis for assessing crop loss due to acid deposition in California.

#### State of California AIR RESOURCES BOARD

Resolution 85-68 September 19, 1985

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring in California pursuant to Health and Safety Code Sections 39900 through 39915; and

WHEREAS, an unsolicited research proposal, Number 93-13, entitled "Investigation of the Effects of Acid Deposition Upon California Crops," 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 Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

Proposal Number 93-13 entitled "Investigation of the Effects of Acid Deposition Upon California Crops," submitted by the University of California, Riverside for a total amount not to exceed \$153,518.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39906, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

Proposal Number 93-13 entitled "Investigation of the Effects of Acid Deposition Upon California Crops," submitted by the University of California, Riverside for a total amount not to exceed \$153,518.

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 \$153,518.

I hereby certify that the above is a true and correct copy of Resolution 85-68 as adopted by the Air Resources Board.

Holpes, Board Secretary