State of California AIR RESOURCES BOARD

Resolution 85-16 March 21, 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, a solicited research proposal, Number 1296-112, entitled "South Coast Field Study," has been submitted by Sonoma Technology, Inc.; to the Air Resources Board; 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 1296-112, entitled "South Coast Field Study", submitted by Sonoma Techology, Inc. for a total amount not to exceed \$87,121.

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 1296-112, entitled "South Coast Field Study", submitted by Sonoma Techology, Inc. for a total amount not to exceed \$87,121.

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 \$87,121.

I hereby certify that the above is a true and correct copy of Resolution 85-16, as adopted by the Air Resources Board.

Frold Holdes, Board Secretary

ITEM NO.: 85-4-5b(1)

DATE: March 21, 1985

State of California AIR RESOURCES BOARD

ITEM:

Research Proposal No. 1296-112 entitled "South Coast Field Study."

RECOMMENDATION:

Adopt Resolution 85-16 approving Proposal No. 1296-112 for funding in an amount not to exceed \$87,121.

SUMMARY:

This is a project to design and develop a management plan for the large scale, multi-year air quality study in the South Coast Air Basin called for in the Board's long-range research plan. The contractor will prepare a detailed draft program plan that will:

- document specific objectives and hypotheses to be tested and a list of measurement methods and analyses to achieve objectives and test hypotheses;
- identify options on how to perform the study, considering the need for cooperative participation by a number of funding entities; at least one option is to include a core program of measurements and analyses which will be funded by the Air Resources Board in the event little or no cooperative participation is obtained;
- identify data requirements based on program objectives, to avoid unnecessary measurements;
- define detailed protocols for quality control and quality assurance in order to produce data of known validity, accuracy, and precision; and
- provide a management plan for the coordination of sponsors and researchers for the conduct of the study.

Many air pollution field studies conducted in the past have been performed without clearly-defined methods of attack and accompanying goals and objectives. Inasmuch as research funds are limited, and the need for additional progress toward clean air in the South Coast Air Basin is obvious, it is essential that a well-defined program with clearly articulated goals and objectives be produced and agreed upon by program participants. As a result, scarce resources will not be wasted in collecting useless or unnecessary data. Conversely, the recording of essential data will not be inadvertently omitted from the protocol.

The program plan resulting from this proposal will provide a scientifically sound and defensible plan for the successful implementation of the field study called for in the Board's long-range research plan.

BUDGET SUMMARY

Sonoma Technology, Inc.

"South Coast Field Study"

BUDGET ITEMS:

Salaries/Benefits Travel Other Costs Consultants*	\$16,913 5,478 3,250 33,940		
TOTAL, Direct Costs			\$59,581
Labor Overhead G & A Expenses Fee (3.5%)	20,296 4,267 2,977		
TOTAL, Indirect Costs			\$ 27 , 540
		TOTAL PROJECT COST	<u>\$87,121</u>

*CONSULTANTS:

Dr. George Hidy, Desert Research Institute	\$ 2,355
Dr. John Watson, Desert Research Institute	15,930
Dr. Sheldon Friedlander, UCLA	2,700
Dr. Susanne Hering, UCLA	3,850
Dr. Glen Cass, Caltech	1,875
Dr. Peter McMurry, Univ. of Minnesota	2,000
Dr. Ted Smith, Ted B. Smith Associates	800
Dr. Daniel Grosjean, Daniel Grosjean Assoc.	2,430
Dr. Warren Johnson, SRI International	2,000
TOTAL CONSULTANTS	\$33,940

State of California AIR RESOURCES BOARD

Resolution 85-17 March 21, 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, a solicited research proposal, Number 1286-112, entitled "Sources and Concentrations of Chloroform in the South Coast Air Basin", has been submitted by Science Applications International Corporation;

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 1286-112, entitled "Sources and Concentrations of Chloroform in the South Coast Air Basin", submitted by Science Applications International Corporation for a total amount not to exceed \$199,976.

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 1286-112, entitled "Sources and Concentrations of Chloroform in the South Coast Air Basin", submitted by Science Applications International Corporation for a total amount not to exceed \$199,976.

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 \$199,976.

I hereby certify that the above is a true and correct copy of Resolution 85-17, as adopted by the Air Resources Board.

Harold Holmes, Board Secretary

ITEM NO.: 85-4-5b(2)

DATE: March 21, 1985

State of California AIR RESOURCES BOARD

ITEM:

Research Proposal No. 1286-112 entitled "Sources and Concentrations of Chloroform Emissions in the South Coast Air Basin".

RECOMMENDATION:

Adopt Resolution 85-17 approving Proposal No. 1286-112 for funding in an amount not to exceed \$199,976.

SUMMARY:

This project is a part of the Board's program to identify and regulate emissions of toxic air contaminants as mandated by the Health and Safety Code. The ARB staff has compiled a list of potential toxic air contaminants classified according to: degree of risk, amount of emissions, persistence in the atmosphere and ambient concentrations. Chloroform, one of the compounds listed, is regularly identified and measured in the atmosphere in the South Coast Air Basin; however, the known sources of chloroform emissions account for only a small fraction of the chloroform found in the atmosphere.

The objectives of this research project are to investigate both primary and secondary sources of chloroform in the South Coast Air Basin and to identify and quantify the emission sources and atmospheric mechanisms that are responsible for the observed atmospheric concentrations. The study was initiated in response to a request from the Toxic Pollutants Branch of the Stationary Source Division.

This research project will be conducted in two phases. The first phase involves a literature search for all known and suspected sources of chloroform emissions in the Basin, including chloroform possibly produced by atmospheric reactions. The second phase consists of quantifying chloroform emissions from these sources to achieve a mass balance. Probable rates for atmospheric reactions will be determined and documented.

The final report will include a complete description of all the research work performed to reduce the uncertainties in the mass balance for chloroform.

The results of this project will be used by the Air Resources Board staff and others to assist in control stategy development for risk management.

BUDGET SUMMARY

Science Applications International Corporation

"Sources and Concentrations of Chloroform in the South Coast Air Basin"

BUDGET ITEMS:

Salaries	\$35,891
Benefits	\$14,356
Supplies	\$31,832
Other Costs	\$47,383
Travel	\$ 6,212
Overhead	\$29,646
General &	•
Administrative	\$16,477
Fee	\$18,179

TOTAL, Direct Costs
TOTAL, Indirect Costs

\$165,320 \$ 34,656

TOTAL PROJECT COST

\$199,976