State of California
AIR RESOURCES BOARD

Resolution 86-2
January 23, 1986

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 1352-121, entitled "Development and Implementation of an Up-to-Date Photochemical Mechanism for Use in Airshed Modeling," 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 1352-121, entitled "Development and Implementation of an Up-to-Date Photochemical Mechanism for Use in Airshed Modeling," submitted by the University of California, Riverside, for a total amount not to exceed $98,003.

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 1352-121, entitled "Development and Implementation of an Up-to-Date Photochemical Mechanism for Use in Airshed Modeling," submitted by the University of California, Riverside, for a total amount not to exceed $98,003.

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 $98,003.

I hereby certify that the above is a true and correct copy of Resolution 86-2 as adopted by the Air Resources Board.

Harold Holmes, Board Secretary

ITEM NUMBER:
DATE: January 23, 1986

State of California
AIR RESOURCES BOARD

ITEM: Research Proposal Number 1352-121 entitled "Development and Implementation of an Up-to-Date Photochemical Mechanism for Use in Airshed Modeling."

RECOMMENDATION: Adopt Resolution 86-2 approving Proposal Number 1352-121 for funding in an amount not to exceed $98,003.

SUMMARY: There is an immediate need to update the chemical mechanisms used in the airshed models that the ARB staff are currently using for control strategy assessments. In addition, ARB needs to make future updates to the chemical mechanisms in these models to incorporate new kinetic and mechanistic data.

This one-year project would: 1) update the photochemical mechanism now used by the Board to produce an improved representation of smog chemistry; 2) condense and adapt this detailed mechanism so it can be employed in airshed model calculations with as much chemical fidelity as possible, given the constraints of computer time and memory; 3) modify the portions of the airshed model software used to implement the chemical mechanism so that future changes to the chemical mechanism can be more readily implemented; and 4) review and critically evaluate the atmospheric chemistry of the various classes of emitted organic compounds that are of concern to the Board.

The Research Screening Committee has recommended that this contract be awarded to the University of California, Riverside. The principal investigator will be Dr. William Carter.

BUDGET SUMMARY

University of California, Riverside

"Development and Implementation of an Up-to-Date Photochemical Mechanism for Use in Airshed Modeling"

BUDGET ITEMS:

Salaries	$48,115	
Benefits	11,652	
Supplies	7,000	
Other Costs	1,580	
Travel	1,200	
TOTAL, Direct Costs		$69,547
TOTAL, Indirect Costs		28,456
TOTAL PROJECT COST		$98,003