

State of California

AIR RESOURCES BOARD

Resolution 88-19
March 10, 1988

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 1588-138 entitled "Growth, Physiological and Biochemical Responses of Ponderosa Pine (Pinus ponderosa) to Ozone," 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:

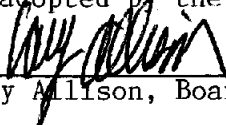
Proposal Number 1588-138 entitled "Growth, Physiological and Biochemical Responses of Ponderosa Pine (Pinus ponderosa) to Ozone," submitted by the University of California, Riverside, for a total amount not to exceed \$157,446.

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 1588-138 entitled "Growth, Physiological and Biochemical Responses of Ponderosa Pine (Pinus ponderosa) to Ozone," submitted by the University of California, Riverside, for a total amount not to exceed \$157,446.

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 \$157,446.

I hereby certify that the above is a true and correct copy of Resolution 88-19, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

B U D G E T S U M M A R Y

University of California, Riverside

"Growth, Physiological and Biochemical Responses of Ponderosa
Pine (Pinus ponderosa) to Ozone"

BUDGET ITEMS:

Salaries	\$45,566	
Benefits	12,718	
Equipment	47,645	
Supplies	17,700	
Travel	12,490	
Other Costs	<u>11,345</u>	
TOTAL, Direct Cost		\$147,464
TOTAL, Indirect Cost		<u>9,982</u>
	TOTAL PROJECT COST	\$157,446
	=====	

Equipment

Equipment Shelter	\$8,100
Dasibi ozone analyzer	5,000
Fisher analytic balance	2,000
Monitor NOx analyzer	9,000
Sorenson AC line regulator	2,200
Eight NCLAN type open top chambers (to be fabricated)	20,000
Fisher 3 kg balance	1,345

State of California

AIR RESOURCES BOARD

Resolution 88-20
March 10, 1988

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 1591-138, entitled "A Demonstration of the Effects of Smog on Ornamental and Home Garden Plants," submitted by the California Arboretum 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 1591-138, entitled "A Demonstration of the Effects of Smog on Ornamental and Home Garden Plants," submitted by the California Arboretum Foundation, for a total amount not to exceed \$36,996.

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 1591-138, entitled "A Demonstration of the Effects of Smog on Ornamental and Home Garden Plants," has been submitted by the California Arboretum Foundation, for a total amount not to exceed \$36,996.

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 \$36,996.

I hereby certify that the above is a true and correct copy of Resolution 88-20, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

B U D G E T S U M M A R Y

California Arboretum Foundation

"A Demonstration of the Effects of Smog
on Ornamental and Home Garden Plants"

BUDGET ITEMS:

Salaries	\$15,973	
Benefits	1,578	
Supplies	7,705	
Equipment	9,985	
Travel	<u>0</u>	
TOTAL, Direct Cost		\$35,241
TOTAL, Indirect Cost		<u>1,755</u>
TOTAL PROJECT COST		\$36,996

Equipment:

Dehumidifier	\$ 360
Air Conditioner (14,000 BTU)	525
VCR (Industrial grade, VHS)	550
Monitor (19", industrial grade)	550
Cabinet (for VCR & monitor)	1,000
Display improvements & materials	<u>7,000</u>
TOTAL EQUIPMENT COST	\$9,985

State of California

AIR RESOURCES BOARD

Resolution 88-21
March 10, 1988

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 request for budget augmentation for Contract No. A6-199-32, entitled "Cost of Reducing Aromatics and Sulfur Levels in Motor Vehicle Fuels," has been submitted by Arthur D. Little, Inc.; and

WHEREAS, the Research Division staff has reviewed and recommended this augmentation for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

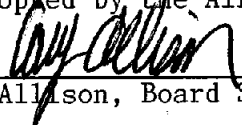
Augmentation to Contract No. A6-199-32, entitled "Cost of Reducing Aromatics and Sulfur Levels in Motor Vehicle Fuels," submitted by Arthur D. Little, Inc. by \$35,531 for a total amount not to exceed \$160,525.

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 Research Screening Committee and approves the following:

Augmentation to Contract No. A6-199-32, entitled "Cost of Reducing Aromatics and Sulfur Levels in Motor Vehicle Fuels," submitted by Arthur D. Little, Inc. by \$35,531 for a total amount not to exceed \$160,525.

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, by \$35,531 for a total amount not to exceed \$160,525.

I hereby certify that the above is a true and correct copy of Resolution 88-21, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

**State of California
AIR RESOURCES BOARD**

Resolution 88-22
March 10, 1988

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 request for budget augmentation for Contract No. A732-073, entitled "Southern California Air Quality Study: Tunable Diode Laser Absorption Spectrometer Measurements of Hydrogen Peroxide and Formaldehyde; and

WHEREAS, the Research Division staff has reviewed and recommended this augmentation for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

Augmentation to Contract No. A732-073, entitled "Southern California Air Quality Study: Tunable Diode Laser Absorption Spectrometer Measurements of Hydrogen Peroxide and Formaldehyde," submitted by Unisearch Associates Inc. by \$9,517 for a total amount not to exceed \$49,180.

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 Research Screening Committee and approves the following:

Augmentation to Contract No. A732-073, entitled "Southern California Air Quality Study: Tunable Diode Laser Absorption Spectrometer Measurements of Hydrogen Peroxide and Formaldehyde," submitted by Unisearch Associates Inc. by \$9,517 for a total amount not to exceed \$49,180.

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, by \$9,517 for a total amount not to exceed \$49,180.

I hereby certify that the above is a true and correct copy of Resolution 88-22, as adopted by the Air Resources Board.


Cary Allison, Board Secretary

**State of California
AIR RESOURCES BOARD**

Resolution 88-23
March 10, 1988

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 request for budget augmentation for Contract No. A6-048-32, entitled "A Quantitative Estimate of the Air Quality Effects of Methanol Fuel Use," has been submitted by Carnegie-Mellon University; and

WHEREAS, the Research Division staff has reviewed and recommended this augmentation for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

Augmentation to Contract No. A6-048-32, entitled "A Quantitative Estimate of the Air Quality Effects of Methanol Fuel Use," submitted by Carnegie-Mellon University by \$19,932 for a total amount not to exceed \$162,397.

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 Research Screening Committee and approves the following:

Augmentation to Contract No. A6-048-32, entitled "A Quantitative Estimate of the Air Quality Effects of Methanol Fuel Use," submitted by Carnegie-Mellon University by \$19,932 for a total amount not to exceed \$162,397.

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, by \$19,932 for a total amount not to exceed \$162,397.

I hereby certify that the above is a true and correct copy of Resolution 88-23, as adopted by the Air Resources Board.



Cary Allison, Board Secretary