State of California
AIR RESOURCES BOARD

RESEARCH PROPOSAL

Resolution 11-2

February 24, 2011

Agenda Item No.: 11-1-1

WHEREAS, the Air Resources Board (ARB or 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;

WHEREAS, a research proposal, number 2716-269, entitled "Synthesis of Policy Relevant Findings from the CalNex 2010 Field Study," has been submitted by the National Oceanic and Atmospheric Administration (NOAA);

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:

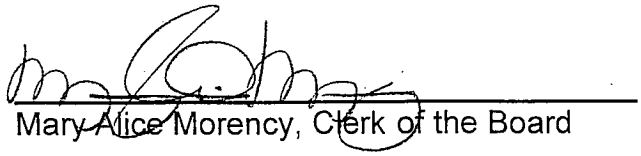
> Proposal Number 2716-269 entitled "Synthesis of Policy Relevant Findings from the CalNex 2010 Field Study," submitted by NOAA, for a total amount not to exceed $252,378.

NOW, THEREFORE BE, IT RESOLVED that ARB, 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 2716-269 entitled "Synthesis of Policy Relevant Findings from the CalNex 2010 Field Study," submitted by NOAA, for a total amount not to exceed $252,378.

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, and as described in Attachment A, in an amount not to exceed $252,378.

I hereby certify that the above is a true and correct copy of Resolution 11-2, as adopted by the Air Resources Board.



Mary Alice Morency, Clerk of the Board

ATTACHMENT A

"Synthesis of Policy Relevant Findings from the CalNex 2010 Field Study"

Background
Planning research in California at the nexus of climate change and air quality began in 2007 and culminated in the CalNex 2010 Field Study, which was conducted during May through July of 2010. CalNex is a collaborative, multiagency, intensive data collection and analysis study that will provide scientific information on climate and air quality issues that can be used to guide development of cost-effective policies that maximize the societal benefits with regard to both issues. The study was planned to address twelve specific science questions that focused upon pollutant emissions, chemical transformations, climate processes, transport and meteorology. Data reduction and quality assurance/quality control procedures are presently underway, and the final data archives are being prepared. Each CalNex principal investigator will soon begin conducting specific analyses of the data that each group collected.

Objectives
The primary objectives of this project are to synthesize the scientific results of the CalNex researchers, to conduct additional integrative data analyses, and to present relevant results and findings in a format that is useful to policy makers who are responsible for formulating California's response to the interrelated issues of air quality and climate change.

Methods
This project will coordinate and synthesize the various analyses to be conducted on the CalNex data sets into policy relevant findings that will help decision makers effectively address overlapping ambient air quality and climate change issues. The proposed effort is divided into four major tasks: Coordination of Ongoing Analyses, Identification and Performance of Additional Data Analysis, Interaction with California Regional Air Quality Modelers and other Stakeholders, and Integration of Completed Analyses. Because the support requested here is relatively modest, close attention will be paid to prioritizing the efforts in order to maximize the benefits to both the policy makers and the broader scientific community.

Expected Results
A comprehensive integration of the CalNex 2010 results in a synthesis document that will be of great value to policy makers. Because timely reporting of the CalNex findings is critical for feeding into the State Implementation Plan and climate change efforts, interim reports will be released as this project proceeds.

Significance to the Board
The full relevance and the best guidance for policy makers will come from analyses that integrate the data sets from the various CalNex researchers as well as other historical air quality studies in California. The findings from the scientific publications and from the additional integrated analyses will be synthesized in a timely fashion and in a style useful for policy makers, especially the Board as it addresses global climate change as well as the traditional criteria pollutants impacting public health and welfare.

Contractor:
National Oceanic and Atmospheric Administration

Contract Period:
36 months

Principal Investigators (PI):
Joost de Gouw, Ph.D., and David Parrish, Ph.D.

Contract Amount:
$252,378

Basis for Indirect Cost Rate:
NOAA has agreed to use the ten percent indirect cost rate historically negotiated between the State and the University of California system.

Past Experience with this Principal Investigator:
Dr. de Gouw is an expert on volatile organic compounds and secondary particulate matter formation. In addition to his affiliation with NOAA, he has joint appointments with the Cooperative Institute for Research in Environmental Sciences (CIRES, at the University of Colorado in Boulder) and also with the University of Utrecht in the Netherlands. Although he has not contracted previously with ARB, Dr. de Gouw has interacted with staff in various professional capacities (e.g., field measurements, professional conferences, peer review) and is a scientist in good professional standing.

Dr. David Parrish is the program lead person for the Tropospheric Chemistry group in NOAA's Chemical Sciences Division. He has participated in multiple field studies and synthesized results for decision-makers. His research has included ozone transport to and from California as well as validating methane emissions in southern California. He is familiar with the goals and objectives of CalNex as his group made atmospheric measurements onboard aircraft during the field study. Although he has not contracted previously with ARB, Dr. Parrish has also interacted with staff in various professional capacities and is a well-respected scientist.

Prior Research Division Funding to the National Oceanic and Atmospheric Administration or Cooperative Institute for Research in Environmental Sciences:

Year	2009	2008	2007
Funding	$0	$0	$0

BUDGET SUMMARY

Contractor: National Oceanic and Atmospheric Administration

"Synthesis of Policy Relevant Findings from the CalNex 2010 Field Study"

DIRECT COSTS AND BENEFITS				
1.	Labor and Employee Fringe Benefits	$	225,295	
2.	Subcontractors	$	0	
3.	Equipment	$	0	
4.	Travel and Subsistence	$	4,140	
5.	Electronic Data Processing	$	0	
6.	Reproduction/Publication	$	0	
7.	Mail and Phone	$	0	
8.	Supplies	$	0	
9.	Analyses	$	0	
10.	Miscellaneous	$	0	
	Total Direct Costs			$229,435
INDIRECT COSTS				
1.	Overhead	$	22,943	
2.	General and Administrative Expenses	$	0	
3.	Other Indirect Costs	$	0	
4.	Fee or Profit	$	0	
	Total Indirect Costs			$22,943
TOTAL PROJECT COSTS				**$252,378**

Note: NOAA has agreed to use the standard 10% overhead rate used by the University of California in Interagency Agreements with the ARB.