

**State of California
AIR RESOURCES BOARD**

Research Screening Committee Meeting Minutes

Air Resources Board
Research Division
First Floor Conference Room
2020 L Street
Sacramento, CA 95814
(916) 445-0753

March 2, 2000
9:30 a.m.

Attendees

Research Screening Committee

Harold Cota, Chairman
John Balmes (via telephone)
Lynn Hildemann
Kent Hoekman
Michael Lipsett
Bill Nazaroff
Amy Walton
Forman Williams
Mel Zeldin

Air Resources Board Staff

Bob Barham, Acting Chief
John Holmes, Science Advisor
Mike Scheible, Deputy Executive Officer
Manjit Ahuja
Paul Allen (PTSD)
Bart Croes (PTSD)
Steve Church
Malcolm Dole
Bob Effa (PTSD)
Fereidun Feizollahi
Scott Fruin
Steve Hui
Peggy Jenkins
Susan Lum
Annmarie Mora
Randy Pasek
Tom Phillips
Emma Plasencia
Rich Vincent
Dane Westerdahl

The Chairman convened the meeting at 9:30 a.m.

The minutes of the March 2, 2000 meeting were corrected to reflect that Dr. Balmes and Dr. Koshland had abstained from the vote of item no. 2, "Responses to Short-term Fluctuations in Particulate Air Pollution in Asthmatic Children, Parts A and B". With this correction the minutes were approved. Staff subsequently briefed the Committee on

the upcoming Indoor Symposium to be held on May 3-4, 2000 at the Double Tree Hotel in Sacramento.

REQUESTS FOR PROPOSALS

1. "Collection and Analysis of Weekend/Weekday Activity Data in the South Coast Air Basin," RFP No. 00-1

Staff informed the Committee of changes that had been made to the RFP since the time it had been mailed to them: 1) the original study domain had changed to include the SCOS97 domain; and 2) no aircraft data would be collected.

In addition to those changes, the Committee recommended the following changes be made to the RFP:

- Revise the list of monitoring sites and use Lynwood instead of Compton.
- Explicitly state that area sources will be included.
- Emphasize that while PM data is desirable, the primary focus is on data to support an analysis of ozone trends; i.e., PM data collection is a secondary, lower priority goal.
- Revise the wording regarding individual day-of-week data collection to treat Saturday and Sunday separately.
- Mention Autoscope as a possible method for on-road vehicle data collection to distinguish between cars and trucks.
- Include that a more responsive proposal will include more than one season.
- The CRC & NERL project should be referred to as the NERL project.
- Include that a more responsive proposal will include time-of-day for off-road and stationary sources.
- Include a connection between the project research and project goals.
- Address issues such as Caltrans data and traffic counters.
- Add lawn and garden/landscape trade associations to the list of persons to contact to collect off-road activity data.
- Include all restaurants not just fast food establishments.

With these modifications the Committee accepted staff's recommendation and the RFP was unanimously approved.

2. "Characterizing the Range of Children's Pollutant Exposures During School Bus Commutes," RFP No. 00-2

The Committee requested the following changes be made to the RFP:

- Staff will present a summary of the pilot study to the RSC before proceeding with the main study.

- If an SMPS or other instrumentation, sufficient to measure size-resolved ultrafine particles, is available from ARB, the contractor will use it at the school loading and unloading zones.
- Clarify the language allowing, as an option, children on board during the main study.
- Specify the maximum distance the bus routes can be from monitoring stations and the importance of proximity.
- Emphasize that wind direction and wind speed measurements must be sufficiently sensitive to measure relatively calm monitoring conditions.
- On page 5, clarify that the in-transit contribution of VOCs to overall total exposure does not include ETS contribution, especially for 1,3-butadiene.
- On page 8, change Los Angeles “winter months” to specify November and December.
- Require examination and recording of the maintenance records of test buses.
- Scale back the number of AER measurements
- Specify the PAH measurement are real-time.

The Committee made a motion to approve the RFP with modifications, with a specific request to have staff present a summary after the pilot study. The Committee voted 6-3 in favor of the motion.

SOLE SOURCE PROPOSAL

3. **“Refinement and Demonstration of a New Indoor Continuous Nitrogen Dioxide Monitor,” Battelle, \$89,947, Proposal No. 2450-213**

After a brief discussion, the Committee accepted staff’s recommendation and unanimously approved the proposal.

INTERAGENCY PROPOSAL

4. **“Development of Reactivity Scales via 3-D Grid Modeling of California Ozone Episodes,” University of California, Berkeley, \$20,000, Proposal No. 2448-213**

After a brief discussion, the Committee accepted staff’s recommendation and approved the proposal. Dr. Nazaroff abstained from the vote.

FINAL REPORTS

5. **“Development of Toxics Emission Factors from Source Test Data Collected under the Hot Spots Program - Part II,” GE Energy and Environmental Research Corporation, \$149,885, Contract No. 96-333**

The Committee requested that the following changes be made to the report.

- On page 21, clarify the statement that for the three South Coast Air Quality Management District's test methods, "no validation test procedures have been developed".
- Include an explanation of why the emission factors have low variability.
- Table 16, there should be no more significant figures than contained in the raw data.
- Table 19, many rows show "0" for det. ratio. Explain this. Also, how were the means, medians, and maximums determined.

With these modifications, the Committee accepted staff's recommendation and unanimously approved the report.

6. "Automatic Charging System for Electric Vehicles - Demonstration Project," Bevilacqua-Knight, Inc., \$483,650, Contract No. 96-321

The Committee requested that the report be revised to include, in the Executive Summary, an outline of the overall achievements and shortcoming of the program, including a background on the project's evolution. Also, the plots on pages 6-7 and 6-8 should be described in quantitative words.

The Committee directed staff to report back to them on the revised report. With these modifications, the Committee accepted staff's recommendation and unanimously approved the report.

7. "Uncertainty Analysis of Chemical Mechanisms Derived from Environmental Chamber Data," University of California, Riverside, \$157,149, Contract No. 95-331

The Committee requested that staff fix the printing of Table 1, Volume I; and in Table 4, the Kwok and Atkinson report should be listed in the citations.

With these modifications, the Committee accepted staff's recommendation and unanimously approved the report.

Other Business

- 8.** Status of the proposal entitled, "Demonstration of the High Volume Collection System (HVCS) for Direct Measurement of Mass Emission Rates of Hydrocarbon Leaks", University of California, Berkeley, \$109,000, Proposal No. 2449-213

Staff updated the Committee that this project had originally been submitted by Lawrence Berkeley National Laboratory (LBNL) and approved by the Committee in May 1999. However, ARB was unable to negotiate contract terms with LBNL and the contract was canceled. The staff asked for the Committee's approval to allow the University of California Berkeley to perform the work. The Committee unanimously approved the change in contractor.

9. Status of the contract entitled "Demonstration of a NO_x Control Technology for Reducing Particulate and NO_x Emissions", SCAQMD/Arcadis, \$225,000

Staff let the Committee know that due to continuing technical problems, it is not practical to complete the project and that a partial termination is warranted. A report of the contractor's efforts up to termination will be presented in the summer. The Committee accepted staff's recommendation.

10. Planned Air Pollution Research, Fiscal Year 2000/01 – Review of the project selection process and staff recommendations.

The Committee was briefed on the projects that had been submitted for the 2000/01 Research Plan and of the overall selection process.

The following future RSC meetings were scheduled:

- Friday, May 26, 2000
- Thursday, July 27, 2000
- Thursday, September 14, 2000
- Friday, November 3, 2000

The meeting adjourned at 3:30 p.m.