



**COORDINATING RESEARCH COUNCIL, INC.**

3650 MANSELL ROAD, SUITE 140  
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[WWW.CRCAO.ORG](http://WWW.CRCAO.ORG)

December 12, 2012

In reply, refer to:

CRC Project A-84 Request for  
Proposal

Dear Prospective Bidder:

The Coordinating Research Council, Inc. (CRC) invites you to submit a written proposal to review and provide recommendations for improvement of the database of on-road mobile inputs used to create emissions for the 2011 National Emissions Inventory (NEI) for “Study of Motor Vehicle Emission System Information for the National Emissions Inventory” as described in the attached Statement of Work, Exhibit A, for CRC Project A-84.

Please indicate via letter, fax, or email by **December 14, 2012** whether or not your organization intends to submit a written proposal for the project. CRC will answer technical questions regarding the Request for Proposal if they are submitted in writing. CRC will then return written answers to all of the bidders, along with a copy of the original questions.

The CRC technical group composed of equipment, petroleum, and government representatives will evaluate your proposal. CRC reserves the right to accept or reject any or all proposals.

The reporting requirement will be monthly reports to CRC in accordance with Exhibit A Statement of Work and Exhibit B Reports. A Final Report documenting the results of the study will be published. The reporting requirement is described in more detail in the attachment entitled, “Reports” (Exhibit B).

The “Intellectual Property Rights Clause” (Exhibit C) and “Liability Clause” (Exhibit D) will be a part of the agreement, which will be executed as a result of this Request for Proposal solicitation.

The proposal must be submitted as two separate documents. The technical approach to the problem will be described in part one and a cost breakdown that is priced by task will be described in part two. The cost proposal document should include all costs associated with conducting the proposed program.

CRC expects to negotiate either a cost reimbursable or a fixed price contract. Important selection factors to be taken into account are listed in Exhibit E. CRC evaluation procedures require the technical group to complete a thorough technical evaluation before considering costs. After developing a recommendation based on technical considerations, the costs are revealed and the recommendation is modified as needed.

Electronic copies of the technical and cost proposals should be submitted to:

Mr. Brent Bailey  
Coordinating Research Council, Inc.  
3650 Mansell Road, Suite 140  
Alpharetta, GA 30022

Phone: 678-795-0506, Ext. 107

Fax: 678-795-0509

E-mail: [bkbailey@crcao.org](mailto:bkbailey@crcao.org)

The deadline for receipt of your proposal is **January 5, 2013**.

Sincerely,

Betty Taylor

## EXHIBIT A

### STATEMENT OF WORK

#### **Study of Motor Vehicle Emission Simulator (MOVES) Information for the National Emissions Inventory**

**Relevant Strategic Objectives:** The ultimate goal is to have state and local air agencies provide more accurate input for the MOVES (Motor Vehicle Emission Simulator) model. There are many parameters and many inputs for those parameters.

To achieve the ultimate goal, this project is to provide an independent review and recommendations for improvement of the database of on-road mobile inputs used to create emissions for the 2011 National Emissions Inventory (NEI), with particular focus on activity data (e.g., vehicle miles traveled and vehicle population data).

**Background:** The NEI is an inventory of annual total emissions. For on-road emissions, the NEI is produced by EPA using emissions totals and model inputs provided by state and local air agencies. EPA runs the MOVES model and related tools<sup>1</sup> to produce hourly emission estimates, which are then summed to the annual values published in the NEI. Where emissions have been provided by state and local agencies, EPA uses these data. Because of timing issues, the emissions and model inputs provided by state or local agencies for the NEI are often inconsistent with the data used to produce State Implementation Plan inventories. This leaves the possibility for further improvement of the NEI. EPA is currently working on the 2011 NEI, with a December 31, 2012 deadline for air agencies to provide their emissions and model inputs by December 31, 2012. EPA expects to produce the annual emissions estimates for review by March 25, 2013 and air agencies can provide revised emissions and inputs by April 30, 2013. The first version of the 2011 NEI is scheduled for publication by July of 2013. Project A-84 plans to provide independent review and recommendations during the development cycle regarding the state and local agencies' data in order to provide a quality assurance and opportunities for improving the 2011 and future NEI's.

#### **Methodology:**

After the release of the 2011 NEI, identify additional improvements needed for future NEI versions. As part of the second review, existing information that is not already available to EPA through the NEI process would be collected and made available to EPA for future use. Note: California emissions from EMFAC would be included in this part of the analysis.

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<sup>1</sup>EPA runs MOVES emission factors using cloud computing and then runs the Sparse Matrix Operator Kernel Emissions (SMOKE)/MOVES scripts and SMOKE programs to produce the emissions.

**Task:**

The task would begin no later than July 2013, with final documentation and additional input data delivered by September, 2013. Although the schedule may need to be adjusted if the 2011 NEI is delayed.

Independently study the input information the state and local air agencies provide. Look for trends, compare inputs between counties for parameters such as:

- Activity rates
- Heavy Duty Vehicle Truck mix
- Mean vehicle age

In consultation with CRC, run MOVES for a few selected representative counties, pollutants and time periods and compare outputs such as mean emission rates for NMHC, NO<sub>x</sub>, NMOG, CO, and TOG.

Highlight results which are not within +90% (or some other reasonable value) of the mean for that category. The list with highlights will be distributed to state and local air agencies for their reference and posted on the CRC website.

Additional ideas for NEI improvement will also be considered.

**Project Deliverables:**

Project deliverables include any emission inventories prepared as part of the task. Additionally, monthly status reports, a final report and a document suitable for journal publication are required. If any computer code is developed as part of this project, the code should be made available without any licensing restrictions.

**Utilization of Deliverables:** The National Emissions Inventory is the foundation of other air quality inventories, including those used in the development of air quality regulations. Improved inventories provide more accurate information on the impact of regulations, activity changes and other measures on air quality.

**Relevant CRC Committee:** Atmospheric Impacts Committee

## **EXHIBIT B**

### **REPORTS**

#### **MONTHLY TECHNICAL PROGRESS REPORTS**

The contractor shall submit a monthly technical progress report covering work accomplished during each calendar month of the contract performance. An electronic Microsoft Word compatible file of the monthly technical progress report shall be submitted to CRC by the contractor within ten (10) calendar days after the end of each reporting period. The report shall contain a description of overall progress, plus a separate description for each task or other logical segment of work on which effort was expended during the reporting period in accordance with Exhibit A Statement of Work.

#### **DRAFT AND FINAL REPORT**

The contractor shall distribute for the CRC an electronic pdf-compatible copy of a draft final report after completion of the technical effort specified in the contract. The draft final report shall document, in detail, the test program and all of the work performed under the contract. The report shall include tables, graphs, diagrams, curves, sketches, photographs and drawings in sufficient detail to comprehensively explain the test program and results achieved under the contract. The report shall be complete in itself and contain no reference, directly or indirectly, to the periodical report(s).

The CRC Atmospheric Impacts Committee shall furnish comments regarding the draft report to the contractor within one (1) month after the draft copy.

Within thirty (30) days after receipt of the approved draft copy of the annual report, the contractor shall make the requested changes and deliver to CRC thirty (30) hardcopies including a reproducible master copy of the final report. The final report shall also be submitted as an electronic copy in a WORD, pdf or pdf-convertible file format. The electronic copy will be made available for posting on the CRC website.

## **EXHIBIT C**

### **INTELLECTUAL PROPERTY RIGHTS**

Title to all inventions, improvements, and data, hereinafter, collectively referred to as (“Inventions”), whether or not patentable, resulting from the performance of work under this Agreement shall be assigned to CRC. Contractor X shall promptly disclose to CRC any Invention which is made or conceived by Contractor X, its employees, agents, or representatives, either alone or jointly with others, during the term of this agreement, which result from the performance of work under this agreement, or are a result of confidential information provided to Contractor X by CRC or its Participants. Contractor X agrees to assign to CRC the entire right, title, and interest in and to any and all such Inventions, and to execute and cause its employees or representatives to execute such documents as may be required to file applications and to obtain patents covering such Inventions in CRC’s name or in the name of CRC’s Participants or nominees. At CRC’s expense, Contractor X shall provide reasonable assistance to CRC or its designee in obtaining patents on such Inventions.

## **EXHIBIT D**

### **LIABILITY**

It is agreed and understood that \_\_\_\_\_ is acting as an independent contractor in the performance of any and all work hereunder and, as such, has control over the performance of such work. \_\_\_\_\_ agrees to indemnify and defend CRC from and against any and all liabilities, claims, and expenses incident thereto (including, for example, reasonable attorneys’ fees) which CRC may hereafter incur, become responsible for or pay out as a result of death or bodily injury to any person or destruction or damage to any property, caused, in whole or in part, by \_\_\_\_\_’s performance of, or failure to perform, the work hereunder or any other act of omission of Contractor in connection therewith.

## **EXHIBIT E**

### **PROPOSAL EVALUATION CRITERIA**

- 1) Merits of proposed technical approach.
- 2) Previous performance on related research studies.
- 3) Personnel available for proposed study – related experience.
- 4) Timeliness of study completion.
- 5) Cost.