



**COORDINATING RESEARCH COUNCIL, INC.**

5755 NORTH POINT PARKWAY, SUITE 265  
ALPHARETTA, GA 30022  
TEL: 678/795-0506 FAX: 678/795-0509  
[WWW.CRCAO.ORG](http://WWW.CRCAO.ORG)

**March 11, 2022**

In reply, refer to:

CRC Project No. AV-30-22

Dear Prospective Bidder:

The Coordinating Research Council (CRC) invites you to submit a written proposal to provide services for “Update of Aviation Gasoline Properties using 100LL CoAs from producers, samples analyses by AFETF, and NEG data” (CRC Project No. **AV-30-22**). A description of the project is presented in Exhibit A, “Statement of Work.”

Please indicate via email by **March 25, 2022** if you or your organization intends to submit a written proposal for this research program. 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.

A CRC technical group composed of industry representatives will evaluate your proposal. CRC reserves the right to accept or reject any or all proposals.

The reporting requirements will be monthly progress reports and a summary technical report at the end of the contractual period. The reporting requirements are described in more detail in the attachment entitled “Reports” (Exhibit B). Contract language for intellectual property and liability clauses is presented in Exhibit C and in Exhibit D, respectively. 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.

**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. The technical proposal shall not be longer than 10 pages in length (not including resumes). **The schedule / timeline information should be included in the technical proposal.**

CRC expects to negotiate a cost-plus fixed fee or cost reimbursement contract for the research program.

The technical and cost proposals should be submitted to:  
**Christopher J. Tennant** Email: [ctennant@crcao.org](mailto:ctennant@crcao.org)

The deadline for receipt of your proposal is **April 11, 2022**

## **EXHIBIT A**

### **Statement of Work**

**“Update of Aviation Gasoline Properties using 100LL CofAs from producers, samples analyses by AFETF, and NEG data”**

#### **Background**

In 2010, data was provided in conjunction with work for the FAA to review the measured properties of the 100LL aviation gasoline. This work was done to support the effort to provide information to ASTM for the identification and feasibility of a 100VLL specification for inclusion in ASTM D-910. Data evaluated included CoA information on lead content, MON and Supercharge values versus lead content, aromatics vs lead, etc. It has been ten years since this study was performed and there is growing interest in the contemporary status of the production of aviation gasoline.

#### **Objective**

It is suggested that a new review similar to the original FAA project be performed and added to the existing data.

#### **Scope of Work**

Partner with the FAA, and collect a new set of CoA's from producers, the AFETF data, and NEG data starting at 2011. Evaluate the current maximum lead content, graph the relationships between the properties, specifically lead vs MON/D909, lead vs aromatic content, and variability in measured physical properties. Data should be reported by region and if possible, by blinded refinery.

The data should be reported as a continuation of the original data sets, or the original data sets should be incorporated into this report.

Note 1: The original referenced work was based only on US refineries. There is interest in including fuels produced at European and other refineries in the rest of the world. The data outside of the U.S. would not be available from the FAA data sources. The proposer should provide information on the ability to include non-U.S. reviews and a separate cost estimate if this work is also proposed.

Note 2: An interest has been expressed to try to collect data related to the viability of refiners to specifically produce 100 VLL aviation gasoline to help reduce atmospheric lead emissions. Because of U.S. anti-trust laws and proprietary business data, it is recognized that this will make accessing such data difficult. It has been suggested that the proposer work with EAA and API through CRC to collect data related to the viability of producing the fuel, separate from an individual company's intention. The proposer should provide information on the ability to address this data collection and a separate cost estimate if this work is also proposed.

#### **Deliverables**

The CRC standard contract will describe the deliverables as monthly reports, a Final Report, and related project data. The final report should include at a minimum,

1. Charts showing information regarding the variations in measured properties.

2. Charts showing measured lead content
3. Charts showing common relationships such as aromatic content vs lead content, MON and Supercharge vs lead content, Supercharge vs lead vs MON
  - a. Note, it will be important to note the units on the reported MON data as locations may report either “Octane Number” or “Performance Number” resulting in potential confusion in interpreting the data.
4. Fully blinded and summarized assessment of the industry capability in general to produce 100 VLL

## **References**

FAA Technical Note DOT/FAA/AR-TN11/20 *Review of Certificates of Analysis and Test Data of Aviation Gasoline for Current Ranges of Lead Additive; Assessing the Viability of Producing Lower-Lead Fuels in Current Aviation Gasoline Production*

## **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 (<1 MB) of the monthly technical progress report shall be distributed 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. Periodic conference calls may also be requested by CRC to update the technical committee overseeing the project.

#### **FINAL REPORT**

The contractor shall submit to CRC a draft final report. The report shall document the test procedure, document details of each test iteration, and explain any observations noted. The test data will be recorded and reviewed, and the final report will include a certification that the test procedures were followed, noting any exceptions. The detailed data will also be supplied electronically to CRC.

The draft report must have appropriate editorial review corrections made by the contractor prior to submission to CRC to avoid obvious formatting, grammar, and spelling errors. The report should be written in a formal technical style employing a format that best communicates the work conducted, results observed, and conclusions derived. Standard practice typically calls for a CRC Title Page, Disclaimer Statement, Foreword/Preface, Table of Contents, List of Figures, List of Tables, List of Acronyms and Abbreviations, Executive Summary, Background, Approach (including a full description of all experimental materials and methods), Results, Conclusions, List of References, and Appendices as appropriate for the scope of the study. Incomplete draft reports or reports of poor quality requiring additional outside editorial review may have outside editorial services charged back to the project budget.

Comments regarding the report shall be furnished by the CRC committee to the contractor within one (1) month after receipt of the draft copy. Additional rounds of review may be required.

Within thirty (30) days after receipt of comments, the contractor shall make the requested changes and submit an electronic copy of the draft final report in both Microsoft Word and Adobe pdf file format. Once accepted, the contractor shall deliver five (5) hard copies of the final report to CRC. The final report may be prepared using the contractor's standard format, acknowledging author and sponsors. An outside CRC cover page will be provided by CRC. 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.

To the extent that a CRC member makes available any of its intellectual property (including but not limited to patents, patent applications, copyrighted material, trade secrets, or trademarks) to Contractor X, Contractor X shall have only a limited license to such intellectual property for the sole purpose of performing work pursuant to this Agreement and shall have no other right or license, express or implied, or by estoppel. To the extent a CRC member contributes materials, tangible items, or information for use in the project, Contractor X acknowledges that it obtains only the right to use the materials, items, or information supplied for the purposes of performing the work provided for in this Agreement, and obtains no rights to copy, distribute, disclose, make, use, sell or offer to sell such materials or items outside of the performance of this Agreement.

## **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 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.