OVERVIEW SECTION

AGENCY: ENVIRONMENTAL PROTECTION AGENCY (EPA)

TITLE: "COMBINED EXPERIMENTAL AND NUMERICAL INVESTIGATIONS OF ADVANCED ENGINE CLEANER COMBUSTION SYSTEM, FOR REDUCING EMISSIONS AND IMPROVING FUEL EFFICIENCY IN VEHICLES"

ACTION: Request for Applications (RFA) - Initial Announcement.

RFA NO: OAR-ATD-05-05

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NO: 66.034

DATES: The closing date and time for receipt of Applications is May 12, 2005, 4:00 EDT. All applications, however transmitted, must be received in the Program Office by the closing date and time to receive consideration.

To allow for efficient management of the competitive process, EPA requests eligible organizations submit an informal notice of "Intent to Apply" by April 28, 2005. Submission of an Intent to Apply is optional; it is a process management tool that will allow EPA to better anticipate the total staff time required for efficient review, evaluation, and selection of submitted proposals.

SUMMARY: This notice announces the availability of funds and solicits proposals from eligible entities utilizing state-of-the-art experimental techniques and numerical simulations in advanced engine technology development. This effort is part of the Clean Automotive Technology program, to develop advanced engine technologies that not only meets today's Clean Air standards, but also establishes the building block for future environmental and economic benefits. This exciting program encourages the commercialization of promising technologies by actively pursuing the transfer of EPA's technologies into the private sector. EPA partners with industry to maximize the viability of targeted technologies for commercial production through cooperative research and development agreements (CRADAs).

FUNDING/AWARDS: The total estimated funding for this competitive opportunity shall not exceed $800,000. In FY 2005, total funding shall not exceed $200,000. EPA anticipates award of one cooperative agreement, whose annual value shall not exceed $200,000, resulting from this competitive opportunity. The cooperative agreement will be funded incrementally. Additional funds may be added in each subsequent year of the agreement, subject to satisfactory performance and the availability of funds.

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Section I - Funding Opportunity Description.

A. Background.

New technologies are required in many fields of engine development to meet societal expectations, such as preservation of the global environment and effective utilization of natural resources, in the 21st century. For this reason, the future engine must be cleaner and more fuel efficient than existing engines. Although alternatives to the internal combustion engine continue to be proposed, it will remain as the mainstream power plant for the next decade or longer. This suggests that the engine technology needs to be reviewed from the basics, including fundamental structure and thermodynamics to achieve energy, environmental and economic benefits.

This project relates to EPA's involvement with the Clean Automotive Technology Program applicable to vehicles with high-efficiency hybrid systems. The program includes short-term goals such as improved manufacturing capabilities, compliance with future emissions, fuel economy, and safety regulations. The most visionary goal, however, is to develop and evaluate advanced engines as power plants for future concept vehicles with greater fuel efficiency than today's vehicles, while meeting or exceeding current emission standards. EPA's National Vehicle and Fuel Emissions Laboratory (NVFEL) in Ann Arbor, Michigan, has limited capability to investigate, design, fabricate, and analyze the feasibility of new advanced engine components to achieve the program goals. This project supports encouragement of basic and applied research in engine technologies that could make significant contribution to the field of engine development extremely dynamic and challenging.

B. EPA Strategic Plan Linkage and Anticipated Outcomes/Outputs.

1. ***Linkage to EPA Strategic Plan.*** This project supports progress towards EPA Strategic Plan Goal 1 (Clean Air and Global Climate Change), Objective 1.6 (Enhance Science and Research), Sub-Objective 1.6.2 (Conduct Air Pollution Research, Technology Development and Assessment). This project supports EPA efforts to develop advanced clean and fuel-efficient technology for a wide range of societal benefits including reducing our national dependence on imported oil, conserving capital for domestic economy and reducing carbon dioxide and greenhouse gas emissions.
2. ***Outcomes.*** Through this project EPA anticipates increasing internal combustion fuel efficiency and reducing exhaust emissions, mainly particulate matter and NOx to meet Tier II Clean Air Act (CAA), to continue building and improving engine technology to meet upcoming CAA standards.
3. ***Outputs.*** The anticipated output for this project is development of new data on in-cylinder air motion and fuel air mixing necessary to achieve a clean and efficient combustion process which is the basis to lower engine emissions and improve engine fuel efficiency.

C. Project Overview.

Under this competitive opportunity, EPA will support proposals to investigate advanced engine combustion technology, where the exothermic transformation of energy takes place in a turbulent flow field. Understanding the combustion process is essential to reaching the goal of clean and complete combustion. The investigation will consider the effect of the bowl-in-piston geometry on fuel-air mixing and combustion in direct injection engines. Additionally, the influence of in-cylinder fuel spray, fuel injection timing and duration, fuel nozzle geometry, ignition timing for best performance, and intake and exhaust ports shape on the combustion process will be investigated. The technology that will be

investigated as part of this effort will be of benefit to directly injected engines that use hydrocarbon fuels. In particular, stratified charge gasoline, homogenous charge compression ignition, and clean diesel engines may benefit by the development of technologies that allow a good evaluation of mixture formation and combustion.

The in-cylinder mixture preparation in direct injection engines is determined by the injection system, the combustion chamber shape, and the flow field of the compressed air. The bulk motion and the local turbulent structure within the flow field are very complicated. It is known that small direct injection engines require swirl. This is usually accomplished by designing intake ports that impart the swirling motion to inducted air into the cylinder. The performance of the direct injection engine is strongly dependent on the bowl-in-piston shape. Especially in diesel engines where there is a strong interaction of mixture formation and combustion since both processes occur simultaneously. The most important phenomena are the fuel spray liquid core atomization, collision and secondary break-up of fuel droplets, their momentum, energy and mass exchange with gas phase and the droplet-wall-interaction. Experimental efforts have investigated the effects of combustion chamber shape on the combustion process. The results of these studies showed that the combustion chamber design significantly influences the combustion process. However, because not all of the important parameters that affect combustion could be measured, it was difficult to interpret the results. Hence, numerical simulations in engines are becoming more accepted as an adjunct in investigating the design of engines

EPA seeks to support demonstration projects, ranging up to $800,000 depending upon the project proposal and other assistance, to further develop the internal combustion engine technology. EPA encourages applicants to explore innovative approaches for engine development to enhance the execution of the exothermic process of combustion in the engine cylinder. A controlled execution of the combustion process in the engine is, in effect, non-existent.

Demonstration projects should provide systematic procedure for engine development, which includes thermodynamic and thermochemical analysis combined with in cylinder treatment of the turbulent flow field. Advanced engine combustion technology has the potential to achieve these targets, particularly clean diesel combustion, homogeneous charge compression ignition, emissions and noise reduction, and; to expand education and training opportunities at research facilities. An important aspect of the evaluation of proposals will be an assessment of the technique, innovative technology, and their potential effectiveness to improve fuel economy and reduce emissions.

D. Scope of Work.

EPA is soliciting proposals from eligible entities to work on engine developments for the 21st century transportation system. Proposal planning activities must address and identify new technologies and analysis to obtain significant fuel economy advantage, and reduction in engine emissions and noise to meet future emissions and environmental standards. Project activities will involve characterizing in-cylinder flow, mixture formation, fuel spray dynamics and subsequent combustion events, by using advanced measurements technologies and computational tools. Controlling mixture formation and combustion by means of advanced direct fuel injection systems and engine design could lead to breakthrough technology that will meet the clean air goals. The important elements of controlled combustion are a short exothermic reaction process and minimum contact with walls during exothermic reactions. For example, if the wall heat loss is reduced by a small factor the benefits of the fuel economy and emissions would be significant. Based on this, we need to focus our efforts to make engines more energy efficient and much less polluting.

EPA encourages technological innovation in engines which is directed to obtain significant fuel economy advantage and reduction in emissions. EPA is particularly interested in seeing proposals which address the following elements: *(Strong proposals that contain elements other than those listed below will be considered.)*

1. **Experimental work.** In-cylinder flow, fuel-air mixture formation, and combustion will be visualized and characterized by using advanced laser based techniques. This will require mapping the flow field during the engine cycle and quantifying the variability of the flow motion. By controlling both the flow motion and its variability, a more favorable initial condition for combustion can be obtained, thus increasing the efficiency of the combustion process. Also, in-cylinder pressure traces will be required at different engine speeds and loads.

2. **Firing Engine.** A modular single cylinder engine assembly with full optical access is required to test several new concept combustion systems. This will provide a means for evaluating the influence that different combustion chamber configurations have on engine performance and emissions as well as investigation of the combustion process through the use of in-cylinder pressure diagnostics. The proposal should demonstrate the capability and expertise to design and build full a range of engine configurations and components for the demonstration project.

3. **Multidimensional modeling of in-cylinder flow and combustion process.** In this effort, fuel-air mixing and combustion process will be simulated in a stratified charge gasoline, homogenous charge compression ignition, and clean diesel engines to provide insightful data on in-cylinder flow motion and its interaction with the fuel spray dynamics, and the subsequent combustion events. Simulation of several engine combustion chamber shapes, intake manifolds, valve arrangements, and fuel injection systems will be considered in this effort. Commercially available codes could be used for in-cylinder flow, mixture formation and combustion studies; however particular emphasis must be focused on the accuracy of results including mesh generation and adaptive meshing technique to adapt to the nature of the physical problem that is being simulated. Also, grid independence is to be verified by using grid refinement and error estimation. Numerical results will be compared with the experimental results for validation under same engine speed and boundary conditions.

4. **Combustion Analysis.** To improve fuel efficiency of internal combustion engine is to study the behaviors in which fuel is consumed and make modifications in the combustion process based on this analysis. Evaluation of the combustion process can be challenging however, new innovative methods could enable better understanding of the phenomena taking place inside the engine cylinder at the start and during combustion process. What takes place in the combustion chamber is exothermic chemical reactions occurring within a turbulent flow field. It may, therefore, be possible to refine the execution of the combustion process by controlling this field.

5. **Participation.** Participants from the recipient organization will be required to spend a portion of their time at EPA's National Vehicle and Fuel Emissions Laboratory.

E. Supplementary Information.

The statutory authority for this action is Clean Air Act, Section 103(b)(3) which authorizes the award of grants for research, investigations, experiments, demonstrations, surveys, and studies related to the causes, effect, extent, prevention and control of air pollution.

Section II - Award Information.

A. What is the amount of funding available?

The total estimated funding for this competitive opportunity shall not exceed $800,000. In FY 2005, total funding shall not exceed $200,000.00.

B. How many agreements will EPA award in this competition?

EPA anticipates award of one cooperative agreement, whose annual value shall not exceed $200,000, resulting from this competitive opportunity.

Cooperative agreements permit substantial involvement between the EPA Project Officer and the selected applicants in the performance of the work supported. Although EPA will negotiate precise terms and conditions relating to substantial involvement as part of the award process, the anticipated substantial Federal involvement for this project will be:

1. close monitoring of the successful applicant's performance to verify the results proposed by the applicant;
2. collaboration during performance of the scope of work;
3. monthly technical discussions to determine if the best direction and sources of information on the latest efficient technologies are being utilized;
4. approving substantive terms of proposed contracts;
5. approving qualifications of key personnel (EPA will not select employees or contractors employed by the award recipient);
6. review and comment on reports prepared under the cooperative agreement (the final decision on the content of reports rests with the recipient);

C. What is the project period for awards resulting from this solicitation?

The estimated project period for awards resulting from this solicitation is August 31, 2005 through August 30, 2009. All projects must be completed within the negotiated project performance period of one to four years.

D. Can funding be used to acquire services or fund partnerships?

Funding may be used to acquire services or fund partnerships, provided the recipient follows procurement and subaward or subgrant procedures contained in 40 CFR Parts 30 or 31, as applicable. Successful applicants must compete contracts for services and products and conduct cost and price analyses to the extent required by these regulations. The regulations also contain limitations on consultant compensation. Applicants are not required to identify contractors or consultants in their proposal. Moreover, the fact that a successful applicant has named a specific contractor or consultant in the proposal EPA approves does not relieve it of its obligations to comply with competitive procurement requirements.

Subgrants or subawards may be used to fund partnerships with non profit organizations and governmental entities. Successful applicants cannot use subgrants or subawards to avoid requirements in EPA grant regulations for competitive procurement by using these instruments to acquire commercial services or products to carry out its cooperative agreement. For profit organizations are not eligible subgrant

recipients under this announcement. The nature of the transaction between the recipient and the subgrantee must be consistent with the standards for distinguishing between vendor transactions and subrecipient assistance under Subpart B Section .210 of OMB Circular A-133, and the definitions of "subaward" at 40 CFR 30.2(ff) or "subgrant" at 40 CFR 31.3, as applicable. EPA will not be a party to these transactions.

Section III - Eligibility Information.

A. Eligible Entities.

Proposals will be accepted from states, territories, Indian Tribes, and possessions of the U.S., including the District of Columbia, international organizations, public and private universities and colleges, hospitals, laboratories, other public or private nonprofit institutions, as defined by OMB Circular A-110 and OMB Circular A-122.

Non-profit organization, as defined by OMB Circular A-122, means any corporation, trust, association, cooperative, or other organization which: (1) is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest; (2) is not organized primarily for profit; and (3) uses its net proceeds to maintain, improve, and/or expand its operations. For this purpose, the term "non-profit organization" excludes (i) colleges and universities; (ii) hospitals; (iii) state, local, and federally-recognized Indian tribal governments; and (iv) those non-profit organizations which are excluded from coverage of this Circular in accordance with paragraph 5 of the Circular.

Non-profit organizations described in Section 501(c)(4) of the Internal Revenue Code that engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act of 1995 are not eligible to apply.

B. Cost-Sharing or Matching.

Although cost-sharing or matching is not required, as a condition of eligibility, or otherwise, for proposals selected for award, applicants proposing a voluntary financial or in-kind commitment of resources will improve their scoring under the "Resources" evaluation criterion of this solicitation. *(Refer to Section V(A), Evaluation Criteria.)*

Voluntary contributions of funds and/or in kind contributions of resources, if accepted by EPA, will be treated as cost shares under 40 CFR 30.24. Applicants must propose eligible and allowable in kind contributions of resources to qualify for an improved score under this criterion.

Section IV - Application and Submission Information.

A. How to Obtain Application Package.

Applicants may download individual grant application forms, or electronically request a paper application package and an accompanying computer CD of information related to applicants/grant recipients roles and responsibilities from EPA's Grants and Debarment website by visiting: http://www.epa.gov/ogd/grants/how_to_apply.htm.

B. Content and Form of Application Submission.

Applications must contain a narrative proposal, and one completed and signed federal grant application package. The narrative proposal must explicitly describe the applicant's proposed project and specifically address each of the evaluation criteria disclosed in *Section V(A), Evaluation Criteria*.

1. A complete application must contain the following, in the sequential order shown:

    a. SF-424 Application for Federal Assistance, with original signature.
    b. Narrative Statement, in the format detailed below.
    c. Other supporting documentation.
    d. SF-424 A, Budget by categories and indirect cost rate.
    e. SF-424 B, Assurances for non-construction programs.
    f. Certification Regarding Lobbying and SF LLL, if applicable.
    g. EPA Form 4700-4 Preaward Compliance review report.
    h. Quality Assurance Narrative Statement, if applicable.
    i. Copy of Negotiated Indirect Cost Rate Agreement, if applicable.
    j. Biographical Sketch.
    k. E-mail address or self-addressed envelope (to receive notification of receipt of application).

2. The narrative proposal should conform to the following outline:

    a. Cover Letter: Describe your organization's qualifications for the project; must be signed by an official with the authority to commit your organization to the project; and written on your organization's official letterhead.
    b. Summary Information Page.
        1. Project Title.
        2. Applicant Information. Include applicant (organization) name, address, contact person, phone number, fax and e-mail address.
        3. Funding Requested. Specify the amount you are requesting from EPA.
    c. Project Description. The project description must provide a concise overview of how the applicant will implement and conduct its operation and include a Project Work Plan (including a description of all tasks, dates of completion, products and deliverables, and proposed budget).

        The narrative workplan must discuss how the proposal addresses each of the selection criteria in Section V and include:
        1. A detailed project summary, describing specific actions and methods to be undertaken and the responsible institutions, including estimated time line for each task;
        2. The associated work products to be developed (e.g. partnership agreements, if any);
        3. An explanation of project benefits to the public;
        4. An explanation of how project outcomes (e.g., fuel economy and emissions benefits) will be designed for reinvestment;
        5. A detailed explanation of how project success will be evaluated; *(Refer to Section V(A), Evaluation Criteria, "Performance Measurement.")*
        6. A description of the roles of the applicant and partners, if any; and
        7. Biographical information on key personnel identified.
    d. Detailed Itemized Budget. The proposal must include a detailed budget which clearly explains

how funds will be used for the following categories:

1. Personnel
2. Fringe Benefits
3. Contractual Costs
4. Travel
5. Equipment
6. Supplies
7. Other (including intern stipends)
8. Total Indirect Costs (must include documentation of accepted indirect rate)
9. Total Cost

If not self-evident, entries under each category must be explained in the budget itself or in the project description. Costs proposed in the budget should be linked directly to the proposal.

e. Key Personnel. The applicant should submit an appendix with the resumes of up to three (3) key personnel who will be significantly involved in the project.

Applicants are strongly advised to avoid submission of non-essential materials unrelated to the proposal's requirements. Upon receipt, applications will be reviewed for content. Applications which do not conform to the specific outline and content detailed above may not be considered for award. **Incomplete applications will not be considered for award.** All application materials must be completed in English.

C. Submission Dates and Times.

1. To allow for efficient management of the competitive process, EPA requests eligible entities submit an informal notice of "Intent to Apply" by April 28, 2005, to the agency contact identified under *Section VII, Agency Contact.* Submission of an Intent to Apply is optional; it is a process management tool that will allow EPA to better anticipate the total staff time required for efficient review, evaluation, and selection of submitted proposals. Eligible entities not submitting an "Intent to Apply" are still eligible to apply by the closing date and time.

   The written notice of "Intent to Apply" may be submitted via electronic mail. Please provide the name of your organization, a point of contact, phone number, email address, and the title of your project.

2. The closing date and time for submission of completed application packages is May 12, 2005, 4:00 p.m. EDT. All applications, however transmitted, must be received in the Program Office by the closing date and time to receive consideration. Applications received after the closing date and time will not be considered for funding.

3. **Confidential Business Information.** In accordance with 40 CFR 2.203, applicants may claim all or a portion of their application/proposal as confidential business information. EPA will evaluate confidentiality claims in accordance with 40 CFR Part 2. Applicants must clearly mark applications/proposals or portions of applications/proposals they claim as confidential. If no claim of confidentiality is made, EPA is not required to make the inquiry to the applicant otherwise required by 40 CFR 2.204(c)(2) prior to disclosure.

4. Because of the unique situation involving U.S. mail screening. EPA highly recommends that applicants use an express mail option to submit their applications. The application must be addressed to:

Express Delivery Address (FedEx, UPS, DHL, etc.) or U.S. Postal Service
U.S. EPA
Attn: Fakhri Hamady, (ATD)
2565 Plymouth Road
Ann Arbor, MI 48105

Section V - Application Review Information.

A. Evaluation Criteria.

Each eligible proposal, based on Section III, Eligibility Information, will be evaluated according to the criteria set forth below. Proposals that are best able to directly and explicitly address the evaluation criteria below will have a greater likelihood of being selected for award. Each proposal will be rated under a points system, with a total of 100 points possible.

Criterion	Maximum Points per Criterion
Project Description. Extent to which the proposal advances the understanding of the exothermic combustion process in engines, improves the control of the combustion, and enhances in-cylinder fuel air distribution. Consideration under this criterion will focus on: • Significance. Applicants proposal should demonstrate the significant advances and impact on engine technology developments, environmental benefits, and effective utilization of natural resources. • Approach. Applicants proposal should demonstrate the analytical, engineering, and scientific approaches and methods adequately developed, and well integrated to the aims of the project. The applicants should demonstrate well-planned and documented evidence of achieving the research goals, and disseminate the technology developed. • Innovation. Applicants proposal should discuss new approaches, explore new research paradigms, or represent new concepts that combine engineering and sciences. New approaches or concepts that could solve current scientific or technical problems in novel way. • Environment. Applicants proposal should demonstrate that the scientific and technological environment in which the work will be done contribute to the probability of success. And, the proposed work takes advantage of the unique features of the scientific environment or employs useful collaborative arrangements within the partnership.	50

Experience: 1. Extent to which the proposal demonstrates applicant's expertise and experience in managing similar programs; and, how administration of the proposed project will further the recipient's mission. 2. Investigators. Applicant's proposal demonstrates that the principal investigator is capable of coordinating and managing effectively the proposed work and partners. 3. Experience of key personnel. Extent to which the experience of key personnel, described in detail, is related to the project proposed and demonstrates a level of expertise or proficiency. EPA will review biographical sketches to determine if staff experience is commensurate with activities proposed. Applicants must designate a primary contact, who will be responsible for the implementation of the cooperative agreement and serve as a liaison with EPA staff..	25
Resources: 1. Is the budget clearly stated, detailed, and appropriate to achieve the project's objectives? 2. Does applicant propose other sources of funding for the project (including use of in-kind goods and services)? 3. Have resources been committed by other project stakeholders? 4. The proposal demonstrates (i) how the applicant will coordinate the use of EPA funding with other Federal and/or non Federal sources of funds to leverage additional resources to carry out the proposed project(s) and/or (ii) that EPA funding will compliment activities relevant to the proposed project(s) carried out by the applicant with other sources of funds or resources. Applicants may use their own funds or other resources for a voluntary match or cost share if the standards at 40 CFR 30.23 or 40 CFR 31.24, as applicable, are met. Only eligible and allowable costs may be used for matches or cost shares. Other Federal grants may not be used as matches or cost shares without specific statutory authority (e.g. HUD's Community Development Block Grants.	15
Performance Measurement. Applicant's proposal includes an effective method for measuring progress towards development of new data on in-cylinder air motion and fuel air mixing necessary to achieve a clean and efficient combustion process which is the basis to lower engine emissions and improve engine fuel efficiency.	10

B. Other Factors.

EPA reserves the right to make award decisions based on factors that help ensure geographic equity and demonstration of a variety of technical approaches.

C. Review and Selection Process.

Each application will be evaluated by a team chosen to address the range of activities associated with engine technology developments and air quality matters. The Evaluation Team will base its evaluation solely on the selection criteria disclosed in this notice *(see Section V(A), Evaluation Criteria)*.

Completed evaluations will be referred to a Selection Committee that is responsible for further

consideration and final selection. The highest numerically-ranked proposal(s) (subject to the quality of proposals, availability of funds, and consideration of *Section V(B), Other Factors*) will be recommended for award.

Section VI - Award Administration Information.

A. Award Notices.

Following final selections, all applicants will be notified regarding their application's status.

1. EPA anticipates notification to *successful* applicant(s) will be made via telephone, electronic or postal mail by June 19, 2005. This notification, which advises that the applicant's proposal has been selected and is being recommended for award, is not an authorization to begin performance. The award notice signed by the EPA grants officer is the authorizing document and will be provided through postal mail. At a minimum, this process can take up to 90 days from the date of selection.

2. EPA anticipates notification to *unsuccessful* applicant(s) will be made via electronic or postal mail by June 19, 2005. In either event, the notification will be sent to the original signer of the application.

B. Administrative and National Policy Requirements.

1. A listing and description of general EPA Regulations applicable to the award of assistance agreements may be viewed at: http://www.epa.gov/ogd/AppKit/applicable_epa_regulations_and_description.htm.

2. Executive Order 12372, Intergovernmental Review of Federal Programs may be applicable to awards, resulting from this announcement. Applicants *selected* for funding may be required to provide a copy of their proposal to their State Point of Contact (SPOC) for review, pursuant to Executive Order 12372, Intergovernmental Review of Federal Programs. This review is not required with the Initial Proposal and not all states require such a review.

3. All applicants are required to provide a Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) number when applying for a Federal grant or cooperative agreement. Applicants can receive a DUNS number, at no cost, by calling the dedicated toll-free DUNS Number request line at 1-866-705-5711, or visiting the D&B website at: http://www.dnb.com.

C. Reporting Requirement.

The recipient agrees to submit quarterly progress reports to the EPA Project Officer within thirty days after each reporting period. These reports shall cover work status, work progress, difficulties encountered, preliminary data results and a statement of activity anticipated during the subsequent reporting period, including a description of equipment, techniques, and materials to be used or evaluated. A discussion of expenditures along with a comparison of the percentage of the project completed to the project schedule and an explanation of significant discrepancies shall be included in the report. The report shall also include any changes of key personnel concerned with the project.

D. Disputes.

Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) located on the web at: http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/05-1371.htm. Copies of these procedures may also be requested by contacting the Agency contact identified in Section VII of this solicitation.

Section VII - Agency Contact.

FOR FURTHER INFORMATION CONTACT: Fakhri Hamady, U.S. EPA, Office of Transportation and Air Quality, 2565 Plymouth Rd., Ann Arbor, MI 48105; Fax: (214) 214-4573, or email to: hamady.fakhri@epa.gov, or;

Elaine Burger, U.S. EPA, Office of Transportation and Air Quality, 2565 Plymouth Rd., Ann Arbor, MI 48105; Telephone (734) 214-4560; Fax (214) 214-4573 or email burger.elaine@epa.gov.

All questions or comments must be communicated in writing via postal mail, facsimile, or electronic mail to a contact person listed above. Answers will be posted, bi-weekly, until the closing date of this announcement at the OAR Grants/Funding webpage (http://www.epa.gov/air/grants_funding.html).

Section VIII - Other Information.

EPA reserves the right to reject all proposals or applications and make no award as a result of this announcement. The EPA Grant Award Officer is the only official that can bind the Agency to the expenditure of funds for selected projects resulting from this announcement.