ENVIRONMENTAL PROTECTION AGENCY (EPA)
"MEXICO CITY DIESEL RETROFIT PILOT PROGRAM"
Request for Applications (RFA) - Initial Announcement.

RFA NO: OAR-CCD-04-01

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NO: 66.034

DATES: To allow for efficient management of the competitive process, the Office of Transportation and Air Quality (OTAQ) is requesting eligible organizations submit an informal notice of "Intent to Apply" by November 24, 2003. 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.

The deadline for receipt of Final proposals is December 15, 2003. Applications submitted via U.S. Mail must be received by the deadline date.

SUMMARY: This notice announces the availability of funds and solicits applications to assist the government of Mexico in implementing a diesel retrofit demonstration project designed to reduce pollution from a heavy-duty diesel bus fleet in Mexico City through the use of EPA verified or certified pollution reduction retrofit technology and ultra low sulfur diesel fuel (ULSD). The project will investigate the costs and in-use effectiveness of diesel particulate filters and diesel oxidation catalysts under Mexican operating conditions.

The goals of the demonstration project are to: (1) demonstrate the in-use effectiveness of EPA verified diesel retrofit technologies, including diesel particulate filters, diesel oxidation catalysts, and ULSD only, on Mexican heavy-duty diesel vehicles under Mexican operating conditions; (2) develop quantitative information on costs and emissions reductions of retrofit technologies in Mexico for dissemination to Mexican and Partnership stakeholders; (3) develop a program appropriate for Mexico that can be replicated to retrofit other fleets in Mexico (and in other countries); and (4) build technical capacity in Mexico to implement such a program by working in close collaboration with Mexican partners during this project.

FUNDING/AWARDS: The total estimated funding for this project is \$350,000. EPA anticipates award of one cooperative agreement resulting from this announcement; however, award of up to two cooperative agreements, ranging from \$50,000 to \$300,000 is possible, to make implementation of the project more efficient, or increase program effectiveness.

All applicants must contribute a minimum of 10 percent of the total project cost. The cost-share may be provided in the form of cash or an "in-kind" contribution.

CONTENTS BY SECTION

- I. Funding Opportunity Description
- II. Award Information
- III. Eligibility Information
- IV. Application and Submission Information
- V. Application Review Information
- VI. Award Administration Information
- VII. Agency Contact
- VIII. Other Information

I. <u>Funding Opportunity Description</u>

A. Background.

EPA is soliciting applications for a cooperative agreement to implement a pilot demonstration project that will assist the government of Mexico in reducing air pollution from heavy-duty diesel vehicles through the use of ULSD and EPA verified or certified pollution reduction devices¹. EPA recognizes that Mexico may encounter a variety of obstacles to implementing successful projects to reduce pollution caused by existing heavy-duty diesel vehicles. Through this solicitation, EPA seeks to support efforts to implement a diesel retrofit project in Mexico City and to compile information about ways to overcome any structural, organizational, or technical challenges that may arise in implementing a project to reduce pollution from heavy-duty diesel vehicles, including information regarding the effectiveness of verified or certified technology on a range of diesel engine types and model years operating in a variety of conditions. The results of this case study will be made available to all stakeholders interested in pursuing similar projects.

Diesel exhaust has health implications for everyone. Fortunately, diesel emissions can be reduced through the installation and proper use of pollution control technologies retrofitted on existing diesel vehicles. The technologies are available now and the benefits are immediate. Demonstrating successful approaches to reducing pollution from heavy-duty diesel vehicles in Mexico will provide an important tool for Mexico as it moves to implement similar cleaner diesel projects.

EPA's Office of Transportation and Air Quality (OTAQ) and Office of International Affairs (OIA) are working with the government of Mexico – the Secretariat of Environment and Natural Resources (SEMARNAT), the Ecology Institute (INE), and the local government of Mexico City – to develop and implement a diesel retrofit demonstration project in Mexico City, in support of

¹ EPA's verification process evaluates retrofit technologies under a range of conditions and quantifies the percent reduction in emissions that the technology achieves. The verification process also identifies engine operating criteria and conditions that must exist for these technologies to achieve the certified reductions. A list of verified or certified technologies is available at: <u>http://www.epa.gov/otaq/retrofit/retroverifiedlist.htm</u>.

the Partnership for Clean Fuels and Vehicles² (Partnership). Air pollution in Mexico City as in many other cities in developing countries is a serious public health problem. According to the World Health Organization, only 15% of the largest cities in developing countries have acceptable air quality. Poor air quality is related to millions of deaths and respiratory problems around the world each year. Because older diesel vehicles emit significant quantities of air pollutants, including particulates and ozone precursors, retrofitting them with emission control devices in conjunction with the use of ULSD can achieve immediate emission reductions and help improve air quality.

The Mexico City demonstration project will build on the successes and experience of EPA's Voluntary Diesel Retrofit Program³ (VDRP). VDRP was launched in 2000 to address the harmful emissions from the current U.S. diesel fleet through the use of innovative technologies. As part of the VDRP, a technology verification process was established to review, test, and approve the emission reduction potential of various after-market pollution control technologies. In order to increase the likelihood for success, the Mexico City demonstration project will use technologies on EPA's Verified Technology List.

B. Scope of Work.

The purpose of this solicitation is to implement a diesel retrofit demonstration project in Mexico City that will serve as a case study for the government of Mexico and other stakeholders seeking to implement similar emission reduction programs. The selected applicant will develop and implement the project with Mexican counterparts.

The fleet subject to retrofit should be a bus fleet based in Mexico City. The project should investigate and compare the costs and effectiveness of retrofitting with diesel particulate filters and diesel oxidation catalysts and using ULSD. The effectiveness of these technologies and fuel should be demonstrated on buses representing a wide range of model years.

The goals of the demonstration project are to: (1) demonstrate the in-use effectiveness of EPA verified diesel retrofit technologies, including diesel particulate filters, diesel oxidation catalysts, and ULSD only, on Mexican heavy-duty diesel vehicles under Mexican operating conditions; (2)

² The Partnership was established at the World Summit on Sustainable Development in September 2002 to reduce vehicular air pollution in developing countries through the promotion of clean fuels and vehicles. For additional information, see the Partnership for Clean Fuels and Vehicles web site, <u>http://www.unep.org/pcfv/main/Main.htm</u>

³ VDRP is helping to reduce emissions from the current diesel fleet. EPA has promulgated new regulations, known as the Heavy-Duty Diesel Rule that will apply only to 2007 and later model year highway diesel engines and requires that these newly manufactured diesel engines meet the most stringent emission standards. The new regulation also mandates the use of ULSD starting in mid-2006. A new heavy-duty vehicle under 2007 standards will be up to 95 percent cleaner than today's vehicle. Pre-2007 diesel vehicles are not required to meet these new standards. VDRP is helping to bring the existing diesel vehicles closer to the stricter emissions standards that will be required for new engines in 2007. VDRP has received commitments to retrofit approximately 150,000 diesel vehicles and engines. For additional information, see http://www.epa.gov/otaq/retrofit.

develop quantitative information on costs and emissions reductions of retrofit technologies in Mexico for dissemination to Mexican and Partnership stakeholders; (3) develop a program appropriate for Mexico that can be replicated to retrofit other fleets in Mexico (and in other countries); and (4) build technical capacity in Mexico to implement such a program by working in close collaboration with Mexican partners during this project.

Applicants must be willing to work cooperatively with SEMARNAT, INE, the local government of Mexico City, EPA, and other potential partners to achieve the goals listed above and to oversee the implementation and evaluation of the project. The applicant must also be willing to work very closely with Mexico City and its staff on the planning and implementation of this retrofit project, and provide hands-on technical advice and assistance. Implementation and evaluation of the project should include, but are not limited to, the following:

- 1. Identify and characterize the fleet for the project.
- 2. Select appropriate vehicles within the fleet and retrofit technologies for the project.
- 3. Procure ULSD for the duration of the project.
- 4. Develop emissions testing protocols and calculate baseline emissions.
- 5. Procure and install retrofit technologies.
- 6. Measure emissions reductions from retrofit technologies and analyze emissions data. (Actual emissions testing with on-board testing equipment may be conducted by either the applicant or a project partner.)
- 7. Monitor vehicle performance.
- 8. Develop public outreach materials.
- 9. Document the costs of the project.
- 10. Develop a case study report in Spanish and English for the project.
- C. Supplementary Information.

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

II. Award Information

A. What is the amount of funding available?

The total funding for this project is estimated to be \$350,000.

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

EPA anticipates award of one cooperative agreement resulting from this announcement, subject to availability of funds and the quality of applications submitted. Award of two cooperative agreements, ranging from \$50,000 to \$300,000 is possible if, based on the evaluated results of all proposals, doing so will make implementation of the project more efficient or increase program

effectiveness.

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;
- 2. collaboration during the performance of the scope of work;
- 3. approving substantive terms of proposed contracts;
- 4. approving qualifications of key personnel (EPA will not select employees or contractors employed by the recipient.);
- 5. review and comment on reports prepared under the cooperative agreement (The final decision on the content of reports rests with the recipient.);
- 6. approving quality assurance plans for collecting and assessing data, if warranted.

C. What is the project period for award(s) resulting from this solicitation?

The estimated project period for award(s) resulting from this solicitation is March 2004 through March 2005.

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 <u>CFR</u> 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. 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 <u>OMB Circular A-133</u>, 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.

III. <u>Eligibility Information</u>

A. Eligible Entities.

Applications will be accepted from state, local, multi-state, and tribal governmental agencies, universities, and non-profit organizations, as defined by <u>OMB Circular A-122</u>.

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.

Applicants must demonstrate a commitment to undertake a cooperative effort with Mexico and EPA for the purpose of: 1) demonstrating implementation strategies for reducing emissions from heavy-duty diesel vehicles through the use of EPA verified or certified pollution reduction devices and ULSD, and 2) building the technical capacity of the Mexican government and organizations to implement similar emission reduction programs in the future.

B. Cost Sharing or Matching.

All applicants must contribute a minimum of 10 percent of the total project cost. The cost-share may be provided in the form of cash or an "in-kind" contribution. An in-kind contribution is the reasonable value of property and services which benefit the project. Matching funds must comply with 40 CFR 30.23 (for non-profit organizations) or 40 CFR 31.24 (for governmental agencies).

The requirements associated with matching or cost sharing are subject to the conditions deatailed in OMB Circular A-110. Specifically, non-federal cash and third-party in-kind contributions must be accepted when such contributions:

- 1. are verifiable from the recipient's records;
- 2. are not included as contributions for any other federally assisted project or program;
- 3. are necessary and reasonable for proper and efficient accomplishment of project or program objectives;
- 4. are allowable under the applicable cost principles;
- 5. are not paid by the federal government under another award, except where authorized by federal statute;
- 6. are provided for in the approved budget when required by the federal awarding agency; and
- 7. conform to other provisions in A-110

The value of the grant is the total Federal contribution plus the total value of the recipient's inkind (or matching) contribution. If at closeout, the recipient has not contributed the full value of their match, any difference must be paid back to the government. EPA's implementing regulations on cost-sharing are found in 40 CFR 30.23 (for non-profit organizations) or 40 CFR 31.24 (for governmental agencies).

EPA will consider letters of support for and/or commitment to the project from potential partners. These letters should include information on any matching funds or in-kind resources that partners will provide. Favorable consideration will be given to applicants contributing more than the required 10 percent match. *(Refer to Section V(B), Other Factors.)*

- C. Other Eligibility Criteria.
- 1. All applicants must have personnel and/or partners proficient in both Spanish and English verbal and written in order to communicate effectively with Mexican counterparts, EPA, and other stakeholders and to write a case study report and related documents.
- 2. Applicants are advised that retrofit devices involved in this project must be verified or certified technologies through EPA's VDRP or another EPA certification program. EPA funds may only be applied to the cost differential between current diesel fuel and ULSD. The participating fleet owner will be expected to pay for a portion of the ULSD costs, equivalent to the cost of regular diesel fuel required for normal operation of vehicles in the pilot project for the duration of the pilot project. EPA funds can be used toward the incremental costs of ULSD procurement, including delivery and storage if applicable. A list of EPA verified or certified technologies is available at: http://www.epa.gov/otaq/retrofit/retroverifiedlist.htm.

IV. Application and Submission Information

A. How to Obtain Application Package.

The complete grants application package can be downloaded from EPA's website at: <u>http://www.epa.gov/ogd/AppKit/index.htm.</u> Potential applicants may request a paper copy of the application package by contacting the agency contact listed in Section VII of this announcement.

B. Content and form of Application Submission.

All proposals must contain one completed and signed federal grant application package, and a narrative workplan. The narrative workplan must explicitly describe the applicant's proposed project and specifically address how it meets each of the evaluation criteria. The narrative workplan may not exceed 15 pages in length. Applicants are strongly advised to avoid submission of extemporaneous materials. The maximum page length shall include any pieces that may be submitted by a third party (e.g., references or letters confirming commitments from third parties that will be contributing a portion of the required cost sharing). Pages exceeding the maximum length may not be considered.

Applicants must submit one original signature document and three copies of the completed federal grant application package and narrative workplan. All application materials must be completed in English.

- 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. Debarment and Suspension Certification.
 - g. Certification Regarding Lobbying and SF LLL, if applicable.
 - h. EPA Form 4700-4 Preaward Compliance review report.
 - i. Quality Assurance Narrative Statement⁴, if applicable.
 - j. Copy of Negotiated Indirect Cost Rate Agreement, if applicable.
 - k. Biographical Sketch.
 - 1. E-mail address or self-addressed envelope (to receive notification of receipt of application).
- 2. The narrative statement should conform to the following outline:
 - a. Project Title.
 - b. Applicant Information. Include applicant (organization) name, address, contact person, phone number, fax and e-mail address.
 - c. Funding Requested. Specify the amount you are requesting from EPA.
 - d. Project period. Provide beginning and ending dates (for planning purposes, applicants should assume funds will be available in March 2004).
 - e. Narrative Workplan. Summarize the project and specifically explain how the project meets the criteria.
 - f. Qualifications. Summarize your technical experience and knowledge, language proficiency in Spanish and English, project management experience, and international experience. Demonstrate how your qualifications meet the criteria. Resume or CV may be attached at the end of the narrative (not to be included in 15 page limit).
 - g. Total Project Cost. Specify total cost of the project. Identify funding from other sources including any in-kind resources.
 - h. Detailed Itemized Budget. Clearly explain how EPA funds will be used as well as how any matching contributions – both financial and in-kind services – will be used. Provide a budget for the following categories:
 Personnel

⁴ Quality Assurance (QA) plans for emissions data collection may be requested of *selected* applicants, if warranted. Submission of QA plans is <u>not</u> necessary at this time, but *selected* applicants may need to develop appropriate QA plans for EPA concurrence prior to award.

- Fringe Benefits
- Contractual Costs
- Travel
- Equipment
- Supplies
- Other
- Total Direct Costs
- Total Indirect Costs: must include documentation of accepted indirect rate
- Total Cost
- i. Reporting Requirements. Discuss quarterly updates (schedule to be established by EPA) and a detailed follow-up case-study report. The case-study report should include: summary of the project, specifications of technologies and fuel used, detailed description of the demonstration fleet, summary of emissions testing procedures and emissions reductions achieved, cost analyses, problems, successes, and lessons learned.
- C. Submission Dates and Times.

In order to efficiently manage the review and selection process, EPA requests that an informal notice of "Intent to Apply" be submitted, not later than November 24, 2003, to the agency contact identified under *Section VII, Agency Contact*.

An informal notice of "Intent to Apply" simply states that your organization intends to submit a proposal to be received by the deadline. Submission of the "Intent to Apply" is optional and does not commit an organization to submit a final proposal. Eligible entities not submitting an "Intent to Apply" are still eligible to apply by the deadline. The notice of "Intent to Apply" should be written and may be submitted via electronic mail. Please provide name of the organization, point of contact, phone number, email address and project title.

The deadline for submission of completed application packages is December 15, 2003, 5 p.m. EST. All application packages must be received in the program office listed below by the deadline. Applications received after the deadline will not be considered for funding.

Because of the unique situation involving U.S. mail screening in Washington, DC, EPA highly recommends that applicants use express mail to submit their applications. The application should be addressed to:

Express Delivery Address (FedEx, UPS, DHL, etc.) Jane Metcalfe US EPA – Office of International Affairs Ronald Reagan Building 1300 Pennsylvania Ave, NW 3rd Floor Washington, DC 20004 Phone: 202-564-6451

Regular Mail Delivery Address (U.S. Postal Service) Jane Metcalfe US EPA – Office of International Affairs Mail Code 2670R 1200 Pennsylvania Avenue, NW Washington, DC 20460

V. Application Review Information

A. Evaluation Criteria

Each eligible application will be evaluated according to the criteria set forth below. Applications which are best able to directly and explicitly address these criteria will have a greater likelihood of being selected for award. Each application will be rated under a points system, with a total of 100 points possible.

Criterion	Maximum Points per Criterion
Technical Experience and Knowledge: Describe your technical experience and knowledge involving retrofit technologies, diesel vehicles, emissions testing, fuel production and delivery, air quality improvement measures, environmental regulations, and any other elements that may be valuable to Mexico. Describe prior and/or current experience with any other air quality improvement or transportation projects.	30
Implementation Plan: Project implementation should be done in collaboration with project partners especially those based in Mexico City. Describe your project management experience and plan for implementing the demonstration project in Mexico City including a timeline for each phase of the project. Describe your plan to build the technical capacity of Mexico City to undertake future retrofit programs.	25
International Experience: Describe your experience in Mexico, particularly in Mexico City, or other relevant international experience. Describe any international experience that demonstrates a commitment to support policies and programs for clean fuel and vehicles. Describe your level of language proficiency in both Spanish and English – verbal and written.	25
Cost Effectiveness: Provide an itemized budget. We will evaluate the estimated cost per installed retrofit, the incremental costs of ULSD fuel per gallon, emissions testing costs per vehicle, and administrative costs. Applicants should describe their ability to leverage total funding for the project, including a detailed description of any special measures proposed to maximize cost effectiveness in implementing the project.	20

B. Other Factors.

Although cost sharing is an eligibility criterion, reviewers will give favorable consideration to applications whose contributions above the minimum 10 percent match requirement (cash or in-kind resources), as detailed in the narrative statement, clearly demonstrate significant enhancements in the quality and effectiveness of the demonstration project. The cost-share may be provided in the form of cash or an "in-kind" contribution.

An in-kind contribution is the reasonable value of property and services which benefit the project. Matching funds must comply with 40 CFR 30.23 (for non-profit organizations) or 40 CFR 31.24 (for governmental agencies).

C. Review and Selection Process

Each application will be evaluated by a team chosen to address a full range of transportation air quality matters, including a representative of the local government of Mexico City. 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 Office of Transportation and Air Quality expects to complete the Evaluation/Selection process by January 30, 2004.

VI. <u>Award Administration Information</u>

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 February 6, 2004. This notification, which advises that the applicant's proposal has been selected and is being recommended for award, is <u>not</u> 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. 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 February 6, 2004. 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: <u>http://www.epa.gov/ogd/AppKit/applicable_epa_regulations_and_description.htm</u>.

- 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 <u>State Point of Contact</u> (SPOC) for review, pursuant with Executive Order 12372, Intergovernmental Review of Federal Programs. This review is not required of initial applications and not all states require such a review.
- C. Reporting Requirement.

Quarterly performance reports and a detailed follow-up case-study report will be required. The case-study report should include: summary of the project, specifications of technologies and fuel used, detailed description of the demonstration fleet, summary of emissions testing procedures and emissions reductions achieved, cost analyses, problems, successes, and lessons learned. The schedule for submission of quarterly reports will be established, by EPA, after award.

VII. Agency Contact

FOR FURTHER INFORMATION CONTACT: Roy Katayama, US EPA Office of Transportation and Air Quality, 1200 Pennsylvania Avenue NW (MC 6405J), Washington, DC 20460, Phone (202)564-9302, Fax (202)565-2057; e-mail <u>katayama.roy@epa.gov</u>.

All questions or comments must be communicated in writing via electronic mail, postal mail, or facsimile to the contact person listed above.

VIII. Other Information

Applicants should clearly mark information in their application which they consider confidential. EPA will make final confidentiality decisions in accordance with Agency regulations at 40 CFR Part 2, Subpart B.

EPA reserves the right to reject all proposals or applications and make no award as a result of this announcement.

Formal disputes challenging the Agency award decision, will be resolved using the Dispute Procedures at 40 <u>CFR</u> 30.63 and 40 CFR 31.70.