

US EPA ARCHIVE DOCUMENT

## ENVIRONMENTAL PROTECTION AGENCY

### “National Air Toxics Monitoring Program- Community Assessments - Request for Applications”

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of Solicitation# OAR-EMAD-03-08, Amendment 002

**SUMMARY:** This notice announces the availability of funds and solicits applications for pilot demonstration projects designed to assist state and local communities in characterization of their local air toxics problems and in tracking their air toxics reduction activities.

**DATES/DEADLINES:** To allow for efficient management of the competitive process, the Office of Air Quality Policy and Standards (OAQPS) is requesting eligible organizations submit an informal notice of “Intent to Apply” by September 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 submission of Final proposals is **March 31, 2004**. Applications submitted via U.S. Mail must be received by the deadline date.

**QUESTIONS/COMMENTS:** All questions or comments must be communicated, in writing only, via regular U.S. mail, facsimile, or electronic mail to the contact person indicated in the section titled “For Further Information Contact” below. **TELEPHONE INQUIRIES WILL NOT BE ACCEPTED.** Responses will be posted on EPA’s Office of Air and Radiation Grants/Funding home page ([http://www.epa.gov/air/grants\\_funding.html](http://www.epa.gov/air/grants_funding.html)) beginning September 5, 2003. The site will be updated with additional questions/comments/responses on a weekly basis, as warranted, until the closing date for submission of final proposals.

**SUPPLEMENTARY INFORMATION:** The statutory authority for this action is Clean Air Act, Section 103(b)(3). The [Catalog of Federal Domestic Assistance](#) (CFDA) number is 66.034. Executive Order 12372, Intergovernmental Review of Federal Programs is applicable to awards resulting from this announcement (see Section VIII below).

**FOR FURTHER INFORMATION CONTACT:** Brenda Millar (Mail Code C-339-02), US EPA, Office of Air Quality Planning and Standards, Emissions Monitoring and Analysis Division, Mail Code C-339-02, Research Triangle Park, NC 27711, Fax (919) 541-1903, or email [millar.brenda@epa.gov](mailto:millar.brenda@epa.gov)

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## **I. Overview and Deadlines**

### **A. Overview**

EPA is soliciting grant applications for pilot demonstration projects designed to assist state and local communities on characterization of their local air toxics problems and to track their air toxics reduction activities. The national air toxics monitoring program is being developed in conjunction with both the National Air Monitoring Strategy and the Agency's Air Toxics Strategy. Information on the Air Toxics Program, including the Concept Paper that addresses the components of the strategy, and general information on the overall Strategy can be found at:

<http://www.epa.gov/ttn/amtic/airtxfil.html> (toxics)

<http://www.epa.gov/ttn/amtic/monitor.html> (Overall strategy)

As the air toxics and general ambient air monitoring strategies are formulated, a common set of needs is being addressed on behalf of the ambient air monitoring community.

The National Air Monitoring Strategy has provided a basic framework under which the air toxics program is well integrated. The linkage to the national strategy is illustrated by two dominant principles that emerged from the national strategy. First, monitoring programs must have an appropriate balance between national prescriptive measurements (e.g. trends) and more flexibility to address local issues that are not well handled through a national design given the diversity of toxics issues across the nation. The balance between the National Air Toxics Trends System (NATTS) and the emerging community monitoring assessments reflects adherence to this principle. Second, the national strategy is directing a movement toward multiple measurements across numerous pollutant groups, recognizing the fact that most air pollution issues are well integrated from a scientific perspective, and enormous economies of scale are realized from integrating program management efforts across pollutant groups.

The goal of the national-scale assessment, or NATA, is to identify those air toxics which are of greatest potential concern, in terms of contribution to population risk. The assessment includes compiling a national emissions inventory of air toxics emissions from outdoor sources, estimating population exposures across the contiguous United States, and characterizing potential public health risk due to inhalation of air toxics including both cancer and non-cancer

effects. With this solicitation, the remaining goal of estimating ambient concentrations of air toxics across the contiguous United States is being implemented. This monitoring is in support of the aforementioned activities and will aid decision makers at both the state and national level in assessing current activities by comparing monitored values with modeled data. In addition, projects are being solicited that will assess community reduction projects via pre- and post-monitoring at project sites.

## B. Deadlines

In order to efficiently manage the selection process, OAQPS requests that an informal “Intent to Apply” be sent by September 24, 2003, to the contact person listed under the section labeled “For Further Information Contact.” Please provide name of the organization, point of contact, phone number, email address and project title.

An informal notice of “Intent to Apply” simply states in the form of email or fax that your organization intends to submit a proposal to be received by the deadline. Submitting an “Intent to Apply” does not commit an organization to submit a final proposal. The “Intent to Apply” is an optional submission; those not submitting an “Intent to Apply” may still apply by the deadline.

The deadline for receipt of completed final proposals (a narrative work plan, budget, and budget details, and one completed and signed federal grant application package, plus six copies of the complete submission) is **March 31, 2004**. Refer to *Section VII, Proposals* for detailed instructions on preparing and submitting proposals.

## II. Eligible Entities

Proposals will only be accepted from air pollution control agencies as defined under Section 302(b) of the Clean Air Act. [Section 302\(b\)](#) of the Clean Air Act defines “air pollution control agencies” as any of the following:

- (1) A single State agency designated by the Governor of that State as the single air pollution control agency for purposes of the Act.
- (2) An agency established by two or more States and having substantial powers or duties pertaining to the prevention and control of air pollution.
- (3) A city, county, or other local government health authority, or, in the case of any city, county or other local government in which there is an agency other than the health authority charged with responsibility for enforcing ordinances or laws relating to the prevention and control of air pollution.
- (4) An agency of two or more municipalities located in the same State or in different States and having substantial powers or duties pertaining to the prevention and control of air pollution.

- (5) An agency of an Indian tribe.

EPA's regional offices are responsible for confirming that a submitting organization is eligible within the meaning of "eligible entity" as set forth in this section.

### **III. Background and Scope of Work**

#### **A. Background**

The main purpose of these grants is to support efforts to provide greater spatial resolution that could capture important concentration gradients across communities; detect impact signatures from differences between areas subjected to stationary, area, or mobile sources, and address in-depth specific community exposure and risk issues. In principle, these community studies are expected to achieve characterizations that are focused on a more local perspective in contrast to the National Air Toxics Trends System (NATTS) which attempts a much more broad scale characterization. The proposals can include an entirely new monitoring network or can include enhancement of existing networks.

#### **B. Scope of Work**

Based on available funding, it is hoped that community-scale monitoring projects in at least 10 cities will be funded. These cities should have several (e.g., at least four or five) monitors representing a variety of land use types, including neighborhood-scale (population-oriented) locations, industrial source-oriented, such as a large facility or airport (exposure-based, not fenceline sampling), mobile source-oriented, and commercial source-oriented. The idea with monitoring siting is to ensure sufficient resolution to capture representative concentrations (for each land use type) and characterize spatial gradients over the urban area. The estimated funding level is expected to be about \$500,000 per city. Although this guidance appears to restrict community assessments to similar sized studies in around 12 locations, there is no intension of excluding proposed projects that leverage existing studies resulting in important contributions to multiple cities.

A final report outlining the results, including the data, data analysis, and relation to risk will be required of the grantee. This work will also be presented by the grantee at the annual data analysis workshop. In addition, all work done with this funding will need to follow the field and measurement protocols as outlined for the NATTS sites, including the demonstration that the area is participating in the National Toxics Inventory effort (see table of NATTS requirements below.) Detailed methods and protocols for these monitoring activities are outlined in a Technical Assistance Document (TAD.) The Draft TAD can be found at:

<http://www.epa.gov/ttn/amtic/files/ambient/airtox/nattsdraf.pdf>

## Objectives for Community Monitoring Assessments.

These studies are intended to complement the NATTS by providing the flexibility to address issues that are not ubiquitous at a national level and to provide additional spatial resolution beyond a NATTS. Ideally, the aggregate of projects should provide some prototypical examples that can be relied upon without duplication in other areas. An example might be a single airport analysis or characterization of wood smoke that allows for either direct translation of results to other locations or provides directions for similar studies in areas experiencing common problems. A list of expected data uses follows:

1. Evaluating air quality models that in turn are used for exposure assessments. Air quality models are the direct tool for exposure assessments. However, they require supporting observations to instill confidence in model results, or to direct needed improvement in underlying model formulations or related emission inventories.
2. Develop a baseline reference frame of air quality concentrations that provide the basis for the longer term measuring of progress of a planned emissions strategy program.
3. Develop spatial differences in pollutant concentrations that are driven by factors such as proximity to major roadways, influence associated with important stationary sources and other factors unique to particular communities.
4. Characterize pollutants that are not ubiquitous everywhere (e.g., mobile source BTEX compounds), yet remain a problem on a national scale. An example might be characterization of wood smoke problems that are not isolated geographically (for example, issues in the Northwest, upper Midwest, Northeast, mountainous regions in general) but do not require a true trends approach. Specific violation issues pertaining to a local plant operation that are very unique to a single area would not be under the scope of this objective.
5. Test the application of available advanced technologies that can be operated on a routine basis.

### C. Requirements for all grantees

1. Applicants must demonstrate a commitment to undertake a cooperative effort with the purpose of creating a monitoring system for the measurement of toxic pollutant compounds as well as a commitment to upload all analyzed data into the US EPA Air Quality System (AQS).
2. Grantees participating in this program are required to follow certain parameters (as outlined below) that will aid in a consistent data base for long term data analysis and air toxics characterization. Please note the following table which lists requirements to be addressed in each grant application. **For additional information related to quality assurance**

requirements for proposals submitted under this announcement, please see the Air Toxics Monitoring Strategy (draft), Section 3.2, posted at the following website on or around December 5, 2004:

<http://www.epa.gov/ttn/amtic/airtxfil.html>

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Date Due                                                                                                                                 | Comments                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quality Assurance Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Due to Regions before monitoring begins                                                                                                  |                                                                                                                                                                                                                                                                                                                      |
| Measured target pollutants:<br>benzene<br>carbon tetrachloride<br>chloroform<br>1,3-butadiene<br>1,2-dichloropropane:<br>(propylene dichloride)<br>methylene chloride<br>tetrachloroethylene:<br>(perchloroethylene, PCE)<br>trichloroethylene, TCE<br>vinyl chloride<br>arsenic and compounds<br>beryllium and compounds<br>cadmium and compounds<br>Hexavalent chromium<br>lead and compounds<br>manganese and compounds<br>nickel and compounds<br>acetaldehyde<br>formaldehyde<br>acrolein | All data to be reported to AQS quarterly – January, April, July, October - for previous quarters, 90 days after the end of each quarter. | NOTE- comprehensive QA is required for the six following compounds:<br><br>Hexavalent chromium<br>Benzene<br>Formaldehyde<br>Acrolein*<br>Arsenic<br>1,3-Butadiene<br><br>Community projects can omit and/or include other pollutants to include as is appropriate for their study, with the exception of mercury.** |
| Methods IO-3, TO-15, and TO-11A                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                          | These are available on AMTIC:<br><a href="http://www.epa.gov/ttn/amtic/">http://www.epa.gov/ttn/amtic/</a>                                                                                                                                                                                                           |
| QA budget not less than 10% of total expenditures – co-location not less than 10% of sampling.                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                          | Colocation sampling can be from monitors in close proximity to a site – please give details in grant                                                                                                                                                                                                                 |

application.

PM10 federal reference method to be followed

Please reference EPA QA handbook Volume II Section 2.11 for operation and procurement:  
<http://www.epa.gov/ttn/amtic/files/ambient/qaqc/2-11meth.pdf>

Each site encouraged to follow Technical Assistance Document (TAD) for NATTS

TAD will be final late winter 2003, however draft will be available at:  
<http://www.epa.gov/ttn/amtic/files/ambient/airtox/nattsdra.pdf>

A 2002, 2005, and 2008 EI due in conjunction with the National Toxics Inventory (NTI) Emission Inventory due dates.

A complete emission inventory required for each study area. Refer to the Emission Inventory Regional Representative for guidance, "complete area" definitions, and NTI due dates.

\*Laboratory methods for acrolein measurement are currently being revised. Grantees are encouraged to work with their laboratories on using alternative methods when measuring this chemical, or may elect to forego this measurement until US EPA has formalized an appropriate method (target date FY 2005.)

\*\*Mercury measurements are funded through other EPA grants and thus will not be covered in this program.

These cooperative agreements will be awarded under the authority of Section 103(b)(3) of the Clean Air Act 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.

#### **IV. Funding Issues**

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

The estimated project period for awards resulting from this solicitation is **September 2004 through January 2006**. EPA anticipates the length of each project to be 18 months. EPA is requesting applications that will carry out actual monitoring over a 12 month period.

For purposes of the application process, applicants should assume the project period beginning date will be **September , 2004**. A final report must be submitted to the EPA Project Officer covering study protocols, results, and grantee's plans for use of results in relation to their community needs, within 90 days upon completion of the grant.

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

EPA anticipates awarding up to 15 cooperative agreements, subject to availability of funds, and the quality of applications submitted. Applications evaluated, but not selected for this funding, may be retained for a period of six months to be considered in possible future awards.

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;
5. review and comment on reports prepared under the assistance agreement.

EPA will not select employees or contractors employed by the recipient(s) and the final decision on the content of reports rests with the recipient(s).

C. What is the amount of funding available?

Cooperative agreements resulting from this announcement will be funded in total. Initial awards, in fiscal year 2004, will range up to \$500,000 per award. The total estimated funding for this project is \$6,200,000.

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

Yes, 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. 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.

Please note that EPA will not be a party to these transactions.

## V. Selection Criteria

### A. Evaluation Factors

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 80 points possible.

| Criterion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Maximum Points per Criterion |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Clarifying spatial concentration patterns of key hazardous air pollutants (HAPs) within urban areas. Such pollutants could include those monitored as part of the NATTS as well as location specific pollutants.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 25                           |
| Projects developed to either pre- or post-monitor for a planned air toxic reduction project, or correlating results with the community’s effort at characterizing air toxic risk. For example, community-based projects initiated at the request of the community or city and with a strong EPA and/or State/Local/Tribal presence. This might include projects already funded through federal grants or monies such as the Community Assessment Risk Reduction Initiative (CARRI) from the Office of Air and Radiation.                                                                                                                                                                                                     | 25                           |
| Projects focused on model-to-monitor relationships for the specific community or region.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 15                           |
| The inclusion of one or more non-routine advanced technologies that have strong potential for routine operations for State/local agencies and Tribes. Types of monitoring, such as DOAS, other optical based approaches, emerging continuous technologies can be considered. The intent here is to encourage fresh uses of existing technologies to address the gaps in in-situ continuous methods given that virtually all routine toxics measurements use time integrated decoupled (i.e., sampling collection followed by laboratory analysis) sampling and analysis approaches. Note, this is not intended to serve as a vehicle for new methods development or research that is beyond the intended scope of resources. | 10                           |
| Demonstrated effort to leverage other resources; particularly the use of measurements from PM and ozone (or Photochemical Assessment Monitoring Stations - PAMS) to assist in interpreting air toxics source-receptor and other characterization needs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5                            |

### B. Other Factors

EPA, in evaluating applications, will carefully consider other factors in the final ranking and selection decision. These factors are:

1. **Geographic Equity:** EPA will attempt to distribute funds in both urban and rural communities throughout the United States.
2. **Project Diversity:** This factor addresses the value added of a proposed project in relation to the collection of proposed projects to minimize redundant efforts and optimize total value of the program as they relate to national objectives.

## **VI. Evaluation and Selection**

### **A. How does the selection process work?**

Each application will be evaluated by a team chosen to address a full range of air toxics monitoring matters. EPA will base its evaluation solely on the selection criteria and other factors disclosed in this notice.

The Office of Air Quality Planning and Standards expects to complete the Evaluation/Selection process and make recommendations to EPA's grants office by **May 2004**. All applicants will be notified promptly, after final selections, regarding their application's status.

EPA reserves the right to reject all proposals or applications and make no award. Formal disputes challenging the Agency award decision, will be resolved using the Dispute Procedures at 40 [CFR](#) 30.63 and 40 CFR 31.70.

## **VII. Proposals**

Applications must contain a narrative work plan a detailed budget, and one completed and signed federal grant application package. The complete grants application package can be downloaded at: <http://www.epa.gov/ogd/AppKit/index.htm>. The narrative, a maximum of 10 pages in length, must explicitly describe the project and address how it meets each of the selection criteria disclosed in Section V. Pages exceeding the maximum length may not be considered. Please include eight copies of everything submitted. A duplicate of the cover letter should be attached to each copy submitted. Please do not include binders or spiral binding. The application should conform to the following outline:

1. Project title.
2. Applicant (Organization) name, contact person, phone number, fax and e-mail address.
3. Prepare a work plan. Summarize the project and specifically explain how the project meets the criteria.
4. Indicate the amount of funding you are requesting from EPA.
5. Provide the total cost of project (identify other funding sources including any in-kind resources).

6. Prepare a detailed budget. Clearly explain how EPA funds will be used. Provide a budget for the following categories:
- Personnel
  - Fringe Benefits
  - Contractual Costs
  - Travel
  - Equipment
  - Supplies
  - Other
  - Total Direct Costs
  - Total Indirect Costs: must include documentation of accepted indirect rate
  - Total Cost
7. Define the project period. Applicants should assume an 18 month period of performance beginning **September 1, 2004** (with a minimum monitoring period of 12 months.)

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.

#### **VIII. Executive Order 12372 Compliance**

Applicants selected for funding will be required to provide a copy of their proposal to their [State Point of Contact](#) (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.

#### **IX. How to Apply**

COMPLETED APPLICATION PACKAGES must be received via regular mail or express mail no later than 5 p.m. EST, **March 31, 2004**. Applications received after the deadline date will not be considered for funding. Please provide an original proposal, as described in *Section VII, Proposals*, eight copies of the application package, and one completed and signed Application for Federal Assistance.. Facsimile and e-mail submissions will not be accepted.

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 should be addressed to:

#### **Mailing (USPS) and Express Delivery (FedEx, UPS, etc.)**

Brenda Millar (Mail Code C-339-02)  
U.S. EPA/EXPOS/Monitoring and Quality Assurance Group  
Room Number C355D-1  
4930 Old Page Road  
Research Triangle Park NC 27709

