

## OVERVIEW INFORMATION

**AGENCY:** ENVIRONMENTAL PROTECTION AGENCY (EPA), National Risk Management Research Laboratory

**TITLE:** Reliability and Life Expectancy of Decentralized Wastewater Treatment Systems

**ACTION:** Request for Applications (RFA) - Initial

**RFA NUMBER:** EPA-ORD-NRMRL-CI-09-05

**CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA):** 66.511 – Office of Research and Development Consolidated Research/Training/Fellowship Programs

**DATES:** The closing date and time for receipt of hard copy applications or electronic receipt of applications is **May 18, 2009, at 4:30 p.m. EST**. All applications must be post marked or submitted electronically thru email as described in Section IV., by the closing date and time to receive consideration. No late proposals will be accepted

To allow efficient management of the competitive process, EPA requests submittal of an informal notice of an “Intent to Apply,” by **May 4, 2009**. Submission of “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:** The purpose is to develop reliability and life expectancy data (tables, charts, graphs) for use by operators/managers/owners of decentralized wastewater systems. The current lack of this type of information has hindered the proper operation and maintenance of decentralized wastewater systems, contributing to failing systems that endangered public health and the aquatic environment.

**CATEGORY OF FUNDING:** Environment

**NUMBER OF EXPECTED AWARDS:** One

**CEILING:** **\$ 200,000** - EPA anticipates awarding one grant; \$100K for year one and \$100K for year two.

**COST SHARING OR MATCHING:** Cost sharing is not required by statute or regulation; however, voluntary cost sharing will be evaluated in accordance with evaluation criteria set forth in Section V.

**GEOSPATIAL INFORMATION:** Not Applicable

## **ELIGIBILITY INFORMATION:**

Programs under CFDA 66.511 are available to each State, territory and possession, and Tribal nation of the United States, including the District of Columbia, for public and private State universities and colleges, hospitals, laboratories, State and local government departments, and other public or private nonprofit institutions and in some cases, individuals or foreign entities who have demonstrated unusually high scientific ability. Profit-making firms are not eligible to receive awards. Eligible nonprofit organizations include any organizations that meet the definition of nonprofit in OMB Circular A-122. However, nonprofit 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. Universities and educational institutions must be subject to OMB Circular A-21.

## **Application Materials:**

Applicants may submit either a hard-copy printed application or an electronic application through email (but not both) for this announcement. Instructions for both forms of submission follow in Sections IV. B. and C. Grant application forms can be found at <http://www.epa.gov/ogd/AppKit/application.htm>

## **Agency Contact Person:**

Cynthia Johnson: (513) 569-7873 email: [johnson.cynthia@epa.gov](mailto:johnson.cynthia@epa.gov)

## **Link to Full Announcement**

<http://www.grants.gov> or <http://www.epa.gov/nrmrl/tech/funding.html>

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# **FULL TEXT OF ANNOUNCEMENT**

## **Reliability and Life Expectancy of Decentralized Wastewater Treatment Systems EPA-ORD-NRMRL-CI-09-05**

### **I. FUNDING OPPORTUNITY DESCRIPTION**

#### **A. BACKGROUND**

Approximately 25% of homes in the United States are served by decentralized wastewater treatment also known as onsite or septic systems. The “Decentralized Wastewater System Reliability Analysis Handbook” was published in 2005 by the National Decentralized Water Resources Capacity Development Project (NDWRCDP, Project Number: WU-HT-03-57, <http://www.ndwrcdp.org/publications/index.htm>) and outlined a framework to assist decision making in regard to decentralized wastewater systems. The report noted that “data [to use in the framework] are often hard to find, of uncertain quality, and not established in a central repository.... the industry must act on the need for solid information on costing, reliability, risk, and system information.” The purpose of this project is to acquire the raw data needed to use the framework and tools in the report, apply the tools, and present the resultant reliability and life expectancy data in a form useful to the general public and the decentralized industry. Other pertinent background information regarding decentralized wastewater can be found at: NDWRCDP ([www.ndwrcdp.org](http://www.ndwrcdp.org)); and USEPA (<http://cfpub.epa.gov/owm/septic/index.cfm>).

#### **B. OBJECTIVES (DESCRIPTION)**

This RFA solicits applications for projects that will develop useful reliability and life expectancy information for decentralized wastewater systems in the form of the tables, charts, graphs, etc, that are commonly used in other industries for this purpose (see examples in the previously mentioned handbook). The target audience is designers, managers, financial backers, and operators of decentralized wastewater systems. Experts in the decentralized wastewater industry state that decentralized wastewater systems are technically sound, reliable, and often the most cost-effective solution to wastewater treatment in many areas of the country. However the current lack of readily available, useful, and user-friendly information on the reliability and life expectancy of decentralized treatment systems has made designers, financial backers, and potential management entities reluctant to seriously consider them as an alternative to centralized wastewater treatment. With current concerns about aging infrastructure and increased costs in the centralized wastewater industry, decentralized systems must be seriously considered during the planning stage. For this to happen, the availability and usefulness of information about decentralized system reliability and life expectancy needs to approach the level of similar information available for centralized systems. It is expected that an outcome from this project is that decentralized systems can be evaluated on an equal basis with centralized systems, if only in a limited geographic area.

Considering the available resources for this project, it is anticipated that the project will focus on one of the several rural, low income areas existing in the U.S., that have a large percentage of homes served by decentralized, often failing, wastewater systems. It is also anticipated that an applicant should have access to existing data sets or will form collaboration with another eligible entity that has access to such data. It is anticipated that the collection of additional raw data will be required only as needed to fill in data gaps.

It is important for applicants to understand that the outputs from this project should not be an irrelevant collection of information. Instead, the project should (or must) be able to produce tools that can actually be used to improve public health and environmental quality through the use of decentralized wastewater systems, even if only in a limited area.

**C. ENVIRONMENTAL RESULTS (EPA Strategic Plan Linkage and Anticipated Outcomes/Outputs):**

1. **Linkage to EPA Strategic Plan.** Tasks under this announcement are in support of EPA Strategic Plan's Goal 2, "Clean and Safe Water;" Objective 2.3, "Enhance Science and Research."
2. **Outputs.** The term "output" means an environmental activity, effort, and/or associated work product related to an environmental goal and objective that will be produced or provided over a period of time or by a specified date. Outputs may be quantitative or qualitative but must be measurable during an assistance agreement funding period. An applicant's proposal will be evaluated on the extent it includes anticipated outputs (see Section V). The outputs of this project will assist users to more effectively meet Clean Water Act requirements. The expected output will be a final report and/or scientific publication with reliability and life expectancy data for decentralized wastewater systems.

Quarterly progress reports and a final report will also be required outputs, as specified in Section VI.D., of this announcement, "Reporting Requirement."

3. **Outcomes.** The term "outcome" means the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be environmental, behavioral, health-related, or programmatic in nature, but must be quantitative. They may not necessarily be achievable within an assistance agreement funding period. Applicant's proposals will be evaluated on the quantity, quality, and probability of anticipated outcomes (see Section V) arising from the proposed research. Projects to be funded under this announcement are expected to improve ground and surface water quality, as decentralized wastewater systems are operated and maintained at a higher level.

**D. STATUTORY AUTHORITIES:**

The Clean Water Act (CWA) Section 104 (b) (2) allows for the award of assistance for research, investigations, experiments, training, demonstrations, etc. for projects relating to the causes, effects, extent, prevention, reduction and elimination of water pollution.

CWA: This funding opportunity will improve the operation and maintenance of decentralized wastewater systems, resulting in cleaner water and improved aquatic ecosystems and human health.

**E. GEOSPATIAL INFORMATION: Not Applicable**

**II. AWARD INFORMATION**

A. Anticipated Funding: EPA anticipates awarding one grant from this announcement. Funding is anticipated at up to \$200,000 for the three year period of performance (\$100,000 the first year; \$100,000 the second year; and \$0 the third year). EPA funding is subject to the availability of funds.

B. Partial Funding. In appropriate circumstances, EPA reserves the right to partially fund applications by funding discrete portions or phases of proposed projects. If EPA decides to partially fund an application, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the application or portion thereof was evaluated and selected for award, and therefore maintains the integrity of the competition and selection process.

C. Number of Awards. EPA anticipates award of one grant. In addition, EPA reserves the right to make additional awards under this announcement, consistent with Agency policy, if additional funding becomes available. Any additional selections for awards will be made no later than six months after the original selection date.

D. Project Periods. The estimated project period for awards resulting from this solicitation will be as set forth below.

**July 13, 2009 – July 12, 2012**

**E. Anticipated Federal Involvement**

EPA does not anticipate substantial federal involvement.

**III. ELIGIBILITY INFORMATION**

A. Eligible Applicants: Programs under CFDA 66.511 are available to each State, territory and possession, and Tribal nation of the United States, including the District of

Columbia, for public and private State universities and colleges, hospitals, laboratories, State and local government departments, and other public or private nonprofit institutions and, in some cases, individuals or foreign entities who have demonstrated unusually high scientific ability. Profit-making firms are not eligible to receive awards. Eligible nonprofit organizations include any organizations that meet the definition of nonprofit in OMB Circular A-122. However, nonprofit 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. Universities and educational institutions must be subject to OMB Circular A-21.

B. Cost Sharing or Matching. Cost-sharing **is not required by statute or regulation.** However, voluntary cost sharing will be evaluated as part of the overall budget as set forth in Section V. A statement concerning cost-sharing should be added to the budget justification and **should be expressed as a percentage of the total budget for the project.** The dollar amount associated with this percentage must be included in the appropriate categories in the budget table.

If EPA accepts an offer for a cost share/match, applicants must meet their matching/sharing commitment as a condition of receiving EPA funds. Applicants may use their own funds or other resources for voluntary match/cost/share participation 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 voluntary matches/cost shares/participation. Any restrictions on the use of grant funds also apply to cost shares or matches. Other Federal grants may not be used as voluntary matches or cost shares without specific statutory authority (e.g., HUD's Community Development Block Grants)

Should EPA funding be reduced, the recipient cost share obligation will be adjusted based on the amount of EPA funding.

C. Threshold Eligibility Criteria:

These are requirements that if not met by the time of application submission will result in elimination of the application from consideration for funding. Only applications from eligible entities (see Section III.A above) that meet all of the following criteria will be evaluated against the ranking factors in Section V of this announcement. Applicants deemed ineligible for funding consideration as a result of the threshold eligibility review will be notified within 15 calendar days of the ineligibility determination.

1. Administrative Eligibility Criteria:

a. Applications must substantially comply with the application submission instructions and requirements set forth in Section IV of this announcement or else they will be rejected. However, where a page limit is expressed in Section IV with respect to the application, pages in excess of the page limitation will not be reviewed.

b. Applications must be received by EPA through one of the specified methods in Section IV on or before the application submission deadline published in Section IV of the announcement. Applicants are responsible for ensuring that their application reaches the designated person/office specified in Section IV of the announcement by the submission deadline.

c. Applications postmarked after the submission deadline will be considered late and returned to the sender without further consideration unless the applicant can clearly demonstrate that it was late due to EPA mishandling. For hard copy or e-mailed submissions, where Section IV requires application receipt by a specific person/office by the submission deadline, receipt by an agency mailroom is not sufficient. Applicants should confirm receipt of their application with **Cynthia Johnson at (513) 569-7873 or by email at johnson.cynthia@epa.gov** as soon as possible after the submission deadline—failure to do so may result in the application not being reviewed.

2. Relevance Eligibility Criteria: Applications that are found administratively acceptable will be subjected to a review for relevancy. Applications must propose a research project as set forth in Section I.B and Section I.C of this announcement

#### **IV. APPLICATION AND SUBMISSION INFORMATION**

Applicants must submit a complete, detailed application to include all of the documents described in Section IV.A., below, regardless of the mode of transmission. Additional guidance on completing the documents is available at EPA's Office of Grants and Debarment (<http://www.epa.gov/ogd/>). Applicants may submit either a hard-copy printed application or an electronic application through email (but not both) for this announcement. Applications may not be submitted via email. Instructions for both forms of submission follow in Sections IV.B. and C.

##### **A. Application Materials**

The application is made through submission of the materials described below. ***It is essential that the application contain all information requested and be submitted in the formats described.*** The application must contain the following items:

**1. Application For Federal Assistance (SF-424).** Complete the form. There are no attachments. Please be sure to include the organization fax number and email address in Block 5 of the SF-424.

This form will be the *first page* of the application. Instructions for completion of the SF-424 are included with the form. (However, note that EPA requires that the entire requested dollar amount appear on the 424, not simply the proposed first year expenses.)

The form must contain the original (or electronic) signature of an authorized representative of the applying institution. Please note that both the Principal Investigator and an administrative contact are to be identified in Section 5 of the SF-424. The applicant's DUNS number must be included. (See Section VIII for instructions on obtaining a DUNS number.)

**2. Budget Information for Non-Construction Programs (SF-424A).** At a minimum, complete Section B- Budget Information and Section F-Other Budget Information. The total amount of federal funding requested for the project period should be shown on line 5(e) and on line 6(k) of SF-424A. If indirect costs are included, the amount of indirect costs should be entered on line 6(j). The indirect cost rate (i.e., a percentage), the base (e.g., personnel costs and fringe benefits), and the amount should also be indicated on line 22.

For purposes of developing project budgets, EPA anticipates providing up to \$100,000 per year for the first and second year of the three year period with a total budget of \$200,000. The applicant's budget should be **increased by any voluntary cost share being evaluated in Section V.**

If amounts are budgeted for subcontracts, provide a description of the work that will be subcontracted and an explanation of why it must be subcontracted. Indicate whether the subcontracts will be awarded competitively or if not, what justification exists to make a non-competitive award.

Describe the basis for calculating the personnel, fringe benefits, travel, equipment, supplies, contractual support, and other costs identified in the itemized budget and explain the basis for their calculation. (Special attention should be given to explaining the "travel," "equipment," and "other" categories.). For any proposed equipment, identify any tangible non-expendable personal property to be purchased which has an estimated cost of \$5,000 or more per unit and a useful life of more than one year. (Personal property items with a unit cost of less than \$5,000 are considered supplies.) Tips for preparing the budget support can be found at <http://www.epa.gov/ogd/recipient/tips.htm>.

**3. Key Contact Form:** EPA Key Contacts Form 5700-54 should include the Principal Investigator, Co-Investigators, and administrative contacts. A copy of this form should also be completed for major sub-agreements (contacts at the institutions of primary co-investigators).

#### **4. Project Narrative and Supporting Documentation**

The project narrative and supporting documentation should be readable in PDF, MS Word or Word Perfect WP6/7/8 for Windows and consolidated into a single file, and must be in English. The Project Narrative must not exceed ten (10) pages consecutively numbered (bottom center), 8.5X11-inch pages of single-spaced, standard 12-point type

with 1-inch margins. This page limitation shall include all text, tables, figures, references, attachments, and appendices. The project narrative page limit does not include the materials requested below in items b and c. Also, it does not include the SF424 and SF 424A.

The project narrative describes the proposed technical approach and organizational capabilities for accomplishing the goals stated under the Funding Opportunity in Section I. In developing the project narrative, the applicant must focus on **Technical Evaluation Criteria** set forth in Section V and structure the proposal to address each criterion in the order listed.

- a. The project narrative shall contain the following components.

Detailed Project Summary: This includes a description of:

- i. Technical Approach and Environmental Results:

- a. The technical approach the demonstrates a clear understanding of relevant scientific issues and that communicates specific actions, methods, and schedule for implementing the proposed research that is responsive to the objectives described in Section I.B. The technical approach shall provide a discussion of the rationale and process for selecting, reviewing, and managing the proposed research. It shall also include a discussion of existing relevant data sets to accomplish the proposed project. If surveys are required please describe their utilization.
- b. The primary expected environmental outcomes of the project (See Section I) shall be identified, as well as key measurements that can be made to track progress toward achieving the expected outcomes. Identify measurements, if any, which will be made during the project to determine progress toward attaining the desired outcomes. The project outputs shall be identified. The link between project outputs and expected outcomes shall be described. The approach to measuring attainment of satisfactory outputs shall be described

- ii. Personnel Qualifications

The proposed staff, their roles, their estimated level of effort applied to the project, and their knowledge, skills, and experience relevant to the project shall be described. Include a discussion of the roles of Applicants and Proposed Partners. The roles of the applicant and proposed partners (see Section IV.G, if any partnerships are planned), including plans for

communications and coordination, shall be clearly described.

iii. Facilities and Equipment

The facilities and equipment that will be used to perform the project shall be described.

iv. Budget

a. The budget, including estimated funding amounts for each work component/task shall be discussed. This section provides an opportunity for narrative description of the budget or aspects of the budget found in the SF-424A such as “other” and “contractual.” Cost Sharing/Matching.

b. The applicant shall describe their ability to leverage funding including any voluntary cost-sharing/matching arrangement or in-kind contribution. Cost share/match can be in the form of funds or can come from in-kind contributions such as donated time, equipment, expertise, subject to regulations governing matching 40 CFR 30.23 and 40 CFR 31.24.

v. Quality System Description

The Quality System used by the applicant to provide the framework for planning, implementing, and assessing work performed to carry out the required quality assurance and quality control activities shall be described. The Quality System description shall include: (1) a description of the organization’s Quality System(QS) and information regarding how this QS is documented, communicated, and implemented; (2) an organizational chart showing the position of the QA function; (3) delineation of the authority and responsibilities of the QA function; (4) the background and experience of the QA personnel who will be assigned to the project; and, (5) the organization’s general approach for accomplishing the QA specifications for the proposed research.

Note: A Quality Management Plan, as specified in IV.A.4.c., shall also be submitted. The QMP, and other items required in IV.A.4.c. do not count against the 20-page limit.

vi. Supporting Documentation

As applicable, supporting documentation, obtained from user organizations in support of RFA objectives and activities, and the applicant’s technical proposal.

b. A demonstration of the applicant's programmatic capability (separate from the Project Narrative) to successfully complete and manage the proposed project, which should include documentation of past performance in meeting the reporting requirements including submitting acceptable final reports. Applicants should at a minimum submit a list of projects of similar size, scope and relevance to the proposed project that the applicant's proposed PI and (if applicable) co-PIs have undertaken in the past five years with Federal and/or non-federal agencies (assistance agreements include Federal grants and cooperative agreements but not Federal contracts). Include the title, the Principal Investigator, the total amount funded, the project period, a brief (1-3 lines) description of the project, and the record of resulting peer-reviewed publications. Describe how you documented and/or reported on whether you were making progress towards achieving the expected environmental results (e.g., outputs and outcomes) under those agreements. If you were not making progress, please indicate whether, and how, you documented why not. Provide a point of contact in the primary sponsor's organization with email address and telephone. The information provided will be used by the Agency in conjunction with other readily available information to evaluate the applicant's past performance. The Agency, as a part of the evaluation process, may contact the referenced sponsor to obtain more detailed information of the applicant's recent past performance in completing projects of similar size, scope and relevance. The documentation submitted in response to this item will not be counted against the 10-page limit for the project narrative.

c. Attachments: The following attachments will not be counted against the 10 page limitation set forth in Section 4.a. Other attachments will count against the 10-page limit.

1. Resumes (biographical sketch). Provide resumes or curriculum vitae for all principal investigators and any other key personnel.
2. Support Letters (if applicable). Specifically indicate how the supporting organization will assist in the project.
3. Certifications and Disclosures.

**All required grant certifications and disclosures shall be provided with the application. Certifications and disclosures can be obtained from the Office of Grant and Debarment website at [www.epa.gov/ogd](http://www.epa.gov/ogd)**

- ASSURANCES NON-CONSTRUCTION PROGRAMS CERTIFICATION
- CERTIFICATION REGARDING LOBBYING and SF LLL (Applicable if EPA funds are over \$100,000)
- EPA FORM 4700-4 PRE-AWARD COMPLIANCE REVIEW REPORT
- COPY OF NEGOTIATED INDIRECT COST RATE AGREEMENT

- KEY CONTACTS FORM 5700-54
- COMPLETE APPLICATION RECEIPT LETTER (If you want to receive notification of receipt)
- QUALITY ASSURANCE MANAGEMENT PLAN (QMP)
  - The QMP shall comply with ANSI/ASQ E4-2004: *Quality Systems for Environmental Data and Technology Programs — Requirements with Guidance for Use* - see EPA Order 5360.1 A2 [<http://www.epa.gov/quality/qs-docs/5360-1.pdf>]. The QMP must also comply with the requirements in Section 2.0 and Appendix B of Quality Management Plan for NRMRL, U.S. EPA (Dec., 2007), which are based on EPA Requirements for Quality Management Plans, EPA QA/R-2, March, 2001 (<http://www.epa.gov/quality/qs-docs/r2-final.pdf>).

**B. Submission Instructions for Printed Hard-Copy Applications**

Submit a complete application including all of the supporting documents identified in Section IV.A of this announcement to the following address. The complete application *must be* sent through regular mail, express mail, or a major courier and be postmarked by the closing date identified therein, **May 18, 2009**.

US Environmental Protection Agency  
 National Risk Management Research Laboratory  
 Water Supply and Water Resource Division  
 ATTN: Cynthia Johnson (Announcement EPA-ORD-NRMRL-CI-09-05)  
 MS 207  
 26 W. Martin Luther King Drive  
 Cincinnati OH 45268

Because of security concerns, applications cannot be personally delivered. To be considered timely, printed applications must be post marked by 4:30 p.m. local time and mailed to the location above by the U.S. Postal Service or a major courier. Applications post marked after the deadline will not be considered and will be returned to the submitter. Printed hard-copy applications, including all documents stated in Section IV.A. above, must be submitted in the **original with 4 copies as set forth above** and should be double-sided. Grant application forms can be found at <http://www.epa.gov/ogd/AppKit/application.htm>

**C. Submission Instructions for Electronic Application Using Email:**

Email submissions must be submitted to [johnson.cynthia@epa.gov](mailto:johnson.cynthia@epa.gov) and received by the submission deadline stated in Section IV.D of this announcement. The subject line of the email should include, “Reliability and Life Expectancy of Decentralized

Wastewater Treatment Systems” – [name of applicant] in the subject line. All required documents listed in Section IV.A of the announcement must be attached to the email as separate Adobe PDF files. Please note that if you choose to submit your materials via email, you are accepting all risks attendant to email submission including server delays. [Email submissions exceeding 15MB will experience delays and may not be received on time by the Agency. For these size submissions, applicants should submit their application materials via hardcopy or else they may be received late and not considered for funding.](#)

#### **D. Submission Dates and Times**

All applications must be postmarked or received electronically via email on or before **May 18, 2009, 4:30 p.m. EST**. Applications received after the closing date and time will not be considered for funding.

#### **E. Intergovernmental Review**

Executive Order 12372, “Intergovernmental Review of Federal Programs,” does not apply to the Office of Research and Development's research and training programs unless EPA has determined that the activities that will be carried out under the applicants' proposal (a) require an Environmental Impact Statement (EIS), or (b) do not require an EIS but will be newly initiated at a particular site and require unusual measures to limit the possibility of adverse exposure or hazard to the general public, or (c) have a unique geographic focus and are directly relevant to the governmental responsibilities of a State or local government within that geographic area.

If EPA determines that Executive Order 12372 applies to an applicant's proposal, the applicant must follow the procedures in 40 CFR Part 29. The applicant must notify their state's single point of contact (SPOC). To determine whether their state participates in this process, and how to comply, applicants should consult <http://www.whitehouse.gov/omb/grants/spoc.html>. If an applicant is in a State that does not have a SPOC, or the State has not selected research and development grants for intergovernmental review, the applicant must notify directly affected State, area-wide, regional and local entities of its proposal.

EPA will notify the successful applicant(s) if Executive Order 12372 applies to its proposal prior to award.

#### **F. Funding Restrictions**

Funding of the first year of the award is anticipated to be up to \$100,000 per year and one additional year for total EPA funding of up to \$200,000. All EPA funding is contingent upon availability of funds and satisfactory performance during the budget

period.

**Management Fees:** When formulating budgets for proposals/applications, applicants must not include management fees or similar charges in excess of the direct costs and indirect costs at the rate approved by the applicants cognizant audit agency, or at the rate provided for by the terms of the agreement negotiated with EPA. The term "management fees or similar charges" refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs that are not allowable under EPA assistance agreements. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the scope of work.

## **G. Partnerships**

EPA awards funds to one eligible applicant as the recipient even if other eligible recipient is accountable to EPA for the proper expenditure of funds.

Funding may be used to provide subgrants or subawards of financial assistance, which includes using subawards or subgrants to fund partnerships, provided the recipient complies with applicable requirements for subawards or subgrants including those contained in 40 CFR Parts 30 or 31, as appropriate. Applicants must compete contracts for services and products, including consultant contracts, and conduct cost and price analyses, to the extent required by the procurement provisions of the regulations at 40 CFR Parts 30 or 31, as appropriate. The regulations also contain limitations on consultant compensation. Applicants are not required to identify subawardees/subgrantees and/or contractors (including consultants) in their proposal/application. However, if they do, the fact that an applicant selected for award has named a specific subawardee/subgrantee, contractor, or consultant in the proposal/application EPA selects for funding does not relieve the applicant of its obligations to comply with subaward/subgrant and/or competitive procurement requirements as appropriate. Please note that applicants may not award sole source contracts to consulting, engineering or other firms assisting applicants with the proposal solely based on the firm's role in preparing the proposal/application.

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 from for-profit organizations to carry out its assistance agreement. The nature of the transaction between the recipient and the subawardee or 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. Applicants acquiring commercial goods or services must comply with the competitive procurement standards

in 40 CFR Part 30 or 40 CFR Part 31.36 and cannot use a subaward/subgrant as the funding mechanism.

Section V. of the announcement describes the evaluation criteria and evaluation process that will be used by EPA to make selections under this announcement. During this evaluation, except for those criteria that relate to the applicant's own qualifications, past performance, and reporting history, the review panel will consider, as appropriate and relevant, the qualifications, expertise, and experience of:

(i) an applicant's named subawardees/subgrantees identified in the proposal/application if the applicant demonstrates in the proposal/application that if it receives an award that the subaward/subgrant will be properly awarded consistent with the applicable regulations in 40 CFR Parts 30 or 31. For example, applicants must not use subawards/subgrants to obtain commercial services or products from for profit firms or individual consultants.

(ii) an applicant's named contractor(s), including consultants, identified in the proposal/application if the applicant demonstrates in its proposal/application that the contractor(s) was selected in compliance with the competitive Procurement Standards in 40 CFR Part 30 or 40 CFR 31.36 as appropriate. For example, an applicant must demonstrate that it selected the contractor(s) competitively or that a proper non-competitive sole-source award consistent with the regulations will be made to the contractor(s), that efforts were made to provide small and disadvantaged businesses with opportunities to compete, and that some form of cost or price analysis was conducted. EPA may not accept sole source justifications for contracts for services or products that are otherwise readily available in the commercial marketplace.

EPA will not consider the qualifications, experience, and expertise of proposed subawardees/subgrantees and/or contractors during the proposal/application evaluation process unless the applicant complies with these requirements.

## **H. Modifications to this Announcement**

Modifications to this announcement will be posted on grants.gov under this Funding Opportunity Number and the due date for applications will be extended if deemed appropriate.

## **I. Confidentiality**

By submitting an application in response to this solicitation, the applicant grants the EPA permission to make limited disclosures of the application to technical reviewers both within and outside the Agency for the express purpose of assisting the Agency with evaluating the application. Information from a pending or unsuccessful application will

be kept confidential to the fullest extent allowed under law; information from a successful application may be publicly disclosed to the extent permitted by law.

In accordance with 40 CFR 2.203, applicants may claim all or a portion of their application/proposal package as confidential business information. EPA will evaluate confidentiality claims in accordance with 40 CFR Part 2. Applicants must clearly mark applications/proposals or portions thereof that 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. However, competitive proposals/applications are considered confidential and protected from disclosure prior to the completion of the competitive selection process.

## **V. Application Review Information**

Each application that meets the eligibility requirements set forth in Section III will be subjected to technical and programmatic reviews. The technical review will be conducted by a panel consisting of at least two non-EPA reviewers and one EPA reviewer who are able to demonstrate expertise and a lack of any conflict of interest. The purpose is to evaluate the scientific merit of the proposal and the capability of the applicant to complete the project as proposed. The programmatic review will be conducted by other qualified EPA personnel who are able to demonstrate a lack of any conflict of interest. The purpose is to evaluate the applicant's past performance in conducting projects of similar size, scope and relevance.

The following criteria will be used in the evaluation process:

### **A. Evaluation Criteria**

Each eligible proposal will be evaluated according to the criteria set forth below. Applicants should directly and explicitly address these criteria as part of their proposal submittal. Each application will be rated under a points system, with a total of 100 points possible.

#### **Technical Evaluation Criteria (100 Points)**

##### **1. Adequacy of Project Summary (i.e., technical approach, specific actions, methods, and schedules) (40 points)**

- a. The proposed technical approach demonstrates a clear understanding of relevant scientific and technical issues, research, and user needs. **(10 points)**
- b. The proposed technical approach, specific actions, and methods are scientifically sound, and adequate to complete the proposed objectives, produce the planned

outputs, and demonstrate their acceptability to primary users. The schedule is reasonable. **(20 points)**

- c. The applicant's ability to demonstrate that they possess or have ready access to existing relevant data sets. **(5 points)**
- d. Environmental Results (Outputs and Outcome). There is a clear, logical link between the technical objectives in Section I.B and outputs in Section I.C. (Environmental Results-EPA Strategic Plan Linkage and Anticipated Outcomes/Outputs). **(5 points)**

**2. Adequacy and Availability of proposed personnel (15 points)**

The expertise, qualifications, number, availability, and commitment of proposed staff are adequate to successfully achieve the goals of the proposed project. (Include key and support personnel, including formal education, training, licenses, or other relevant training as it relates to expertise in conducting and/or overseeing activities described in Section I).

**3. Facilities and Equipment available to complete the project (10 points)**

The facilities and equipment, and their availability, are adequate for conducting the activities described in Section I.

**4. Budget (10 points)**

- a. The proposed budget is adequate to implement the proposed technical approach and produce all proposed outputs. **(5 points)**
- b. Voluntary Cost Share/Match: The proposal demonstrates how the proposed cost share (either funds or in-kind contributions) is used to supplement EPA funding for the reasonable and necessary expenses of carrying out the proposed project. **(5 points)**

**5. Quality System and Quality Management Plan (10 points)**

The description of the Quality System (QS) is responsive to the specifications cited in the Section IV.A.b of the proposal instructions and adequately addresses the planned research. The Quality Management Plan (QMP) is responsive to the specifications cited in IV.A.4.c., of the proposal instructions and adequately addresses the planned research.

**6. Past Performance—Programmatic Capability and Reporting on Environmental Results (15 points)**

Under this criterion, the Agency will evaluate the applicant's technical ability to successfully complete and manage the proposed project taking into account the following factors: (i) past performance of the proposed Lead Principal Investigator and (if applicable) co-Principal Investigator in successfully completing federally or non-federally funded assistance agreements (include Federal grants and cooperative agreements but not Federal contracts) of similar size, scope and relevance to the proposed project during the past five years, (ii) history of meeting reporting requirements on prior or current assistance agreements (assistance agreements include Federal grants and cooperative agreements but not Federal contracts) (during the past five years) with federal and/or non-federal organizations and submitting acceptable final technical reports, (iii) past performance in documenting and/or reporting on its progress towards achieving the expected outcomes and outputs (e.g., results) under prior or current assistance agreements (assistance agreements include Federal grants and cooperative agreements but not Federal contracts) (during the past five years) with federal and/or non-federal organizations (and if such progress was not made whether the documentation and/or reports satisfactorily explained why not), (iv) organizational experience and plan for timely and successfully achieving the objectives of the proposed project.

Organizations that have no relevant or available past performance and/or reporting information will be given a neutral rating for those criteria. In evaluating applicants under this criterion the Agency may consider information from other sources including agency files (e.g., the EPA's Grantee Compliance Assistance Initiative Database) and prior/current grantors (e.g., to verify and/or supplement the information provided by the applicant).

## **B. Review and Selection Process:**

Evaluation Review Process: The eligibility review discussed in Section III will be conducted by EPA personnel who are not part of the technical review panel. The technical review panel, which reviews the technical proposal for scientific merit and organizational capabilities, shall consist of at least one internal EPA reviewer and at least two non-EPA reviewers who are able to demonstrate technical expertise and a lack of any conflict of interest. The technical review panel will review the proposal against the criteria (Criterion 1 -5) above identified as Evaluation Criteria and rank the proposal based upon this evaluation. The programmatic review panel will consist of one or more EPA personnel who are not part of the technical evaluation panel and who are able to demonstrate a lack of any conflict of interest. The programmatic reviewer(s) will review the proposal against Criterion 6 as identified as Programmatic Evaluation Criteria above and rank the proposals based upon this evaluation. The results of the Technical and Programmatic Evaluations will be combined to determine the overall ranking of each evaluated applicant.

Source Selection: EPA will make a selection of the applicant for award based upon the combined rankings of the technical and programmatic reviews as discussed above. EPA may negotiate changes to the proposal with the selected applicant so long as they do not affect the integrity of the competition. For example, EPA will discuss significant comments received from the technical reviewers, aspects of the budget that may be questionable, the proposed terms and conditions for the agreement, and the nature and extent of EPA collaboration. The Decision Official is an Office of Research and Development (ORD) manager who will determine which applicant should receive the award based on the technical rankings resulting from the peer and programmatic reviews.

**Anticipated Announcement and Award Dates:** The anticipated award date is **June 30, 2009**.

## **VI. Award Administration Information**

**A. Award Notices:** Notice of award will be made in writing by an official in the EPA Grants Administration Division. Preliminary selection by the Decision Official in the Office of Research and Development does not guarantee an award will be made. Applicants are cautioned that only a grants officer can bind the Government to the expenditure of funds. No commitment on the part of EPA should be inferred from technical or budgetary discussions with an EPA Program Official. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the EPA Grants Award Official does so at their own risk.

**B. 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) which can be found at <http://www.epa.gov/ogd/competition/resolution.htm>. Copies of these procedures may also be requested by contacting the Agency Contact identified in Section VII.

### **C. Administrative and National Policy Requirements:**

#### Regulations and OMB Coverage:

Grants and agreements with institutions of higher education, hospitals, and other non-profit organizations are subject to 40 CFR Parts 30 and 40 and OMB Circular A-122 for non-profits and A-21 for institutions of higher learning.

Grants and agreements with state, local, and tribal governments are subject to 40 CFR Parts 31 and 40 and OMB Circular A-87.

Animal and Human Subject Research:

a. Human Subjects : A grant applicant must agree to meet all EPA requirements for studies using human subjects prior to implementing any work with these subjects. These requirements are given in 40 C.F.R. § 26. Studies involving intentional exposure of human subjects who are children or pregnant or nursing women are prohibited by Subpart B of 40 CFR Section 26. For observational studies involving children or pregnant women and fetuses please refer to Subparts C & D of 40 CFR Section 26. U.S. Department of Health and Human Services regulations at 45 CFR § 46.101(e) have long required "... compliance with pertinent Federal laws or regulations which provide additional protection for human subjects." EPA's regulation 40 C.F.R. Part 26 is such a pertinent Federal regulation. Therefore, the applicant's Institutional Review Board (IRB) approval must state that the applicant's study meets the EPA's regulations at 40 CFR § 26. No work involving human subjects, including recruiting, may be initiated before the EPA has received a copy of the applicant's IRB approval of the project and the EPA has also provided approval. Where human subjects are involved in the research, the recipient must provide evidence of subsequent IRB reviews, including amendments or minor changes of protocol, as part of annual reports.

b. Animal Welfare: A grant recipient must agree to comply with the Animal Welfare Act of 1966 (P.L. 89-544), as amended, 7 U.S.C. 2131-2156. The recipient must also agree to abide by the "U.S. Government Principles for the Utilization and Care of Vertebrate Animals used in Testing, Research, and Training." (50 Federal Register 20864-20865 (May 20,1985))

\* This clause applies if a research facility (defined as any school (except elementary or secondary), institution, organization or person) receives funds under a grant from a federal agency for the purpose of carrying out research, tests, or experiments involving animals.

Data Access and Information Release: The Office of Management and Budget (OMB) Circular A-110 has been revised to provide public access to research data through the Freedom of Information Act (FOIA) under some circumstances. Data that are (1) first produced in a project that is supported in whole or in part with Federal funds and (2) cited publicly and officially by a Federal agency in support of an action that has the force and effect of law (i.e., a regulation) may be accessed through FOIA. If such data are requested by the public, the EPA must ask for it, and the grantee must submit it, in accordance with A-110 and EPA regulations at 40 C.F.R. 30.36.

DUNS Number: Grant applicants are required to provide a Dun and Bradstreet (D&B), Data Universal Numbering System (DUNS) number when applying for Federal grants or cooperative agreements. OMB has determined that there is a need for improved statistical reporting of Federal grants and cooperative agreements. Use of the DUNS number government-wide will provide a means to identify entities receiving those awards and their business relationships. The identifier will be used for tracking purposes, and to validate address and point of contact information.

A DUNS number will be required whether an applicant is submitting a paper application or using the government-wide electronic portal (Grants.gov). The DUNS number will supplement other identifiers required by statute or regulation, such as tax identification numbers. Organizations can receive a DUNS number in one day, at no cost, by calling the dedicated toll-free DUNS Number request line at 1B866B705B5711. Individuals who would personally receive a grant or cooperative agreement award from the Federal government apart from any business or non-profit organization they may operate are exempt from this requirement. The website where an organization can obtain a DUNS number is: <http://www.dnb.com>

Non-profit Administrative Capability: Non-profit applicants that are recommended for funding under this announcement are subject to pre-award administrative capability reviews consistent with Section 8b, 8c and 9d of EPA Order 5700.8 - Policy on Assessing Capabilities of Non-Profit Applicants for Managing Assistance Awards ([http://www.epa.gov/ogd/grants/award/5700\\_8.pdf](http://www.epa.gov/ogd/grants/award/5700_8.pdf)). In addition, non-profit applicants that qualify for funding may, depending on the size of the award, be required to fill out and submit to the Grants Management Office the Administrative Capabilities Form with supporting documents contained in Appendix A of EPA Order 5700.8.

**D. Programmatic Terms and Conditions:** Terms and conditions will be negotiated with the selected recipient covering the following requirements:

- The nature and extent of collaboration between EPA and the recipient.
- The awardee shall comply with EPA NRMRL requirements for Quality Assurance Project Plans (QAPP) for environmental data collection efforts conducted under the project. QAPP specifications are identified in **R-5 - EPA Requirements for QA Project Plans (EPA/240/B-01/003) March, 2001** <http://www.epa.gov/quality/qs-docs/r5-final.pdf> A QAPP must be submitted for EPA project officer approval at least 30 days before data collection begins. Prior to preparing the QAPP, the awardee shall consult with the EPA Project Officer and QA Officer to determine the applicable level and type of QAPP.

## **Reporting Requirements**

### **1. Quarterly Progress Report**

Quarterly progress reports and a detailed final report will be required. Quarterly reports shall be submitted no later than 15 calendar days after the end of the quarter and shall contain the following:

- Narrative discussion of planned activities for the quarter and progress and findings to date

- Cost/schedule states (planned and actual)
- Revised schedule/milestones if appropriate
- Appendices, including meeting reports, trip reports, environmental results, data, summaries, etc.

2. **Final Report**

The final report shall be completed within 90 calendar days of the completion of the period of performance. The final report should include: summary of the project or activity, advances achieved and costs of the project or activity. In addition, the final report shall discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational or technical obstacles to implementing a similar project elsewhere.

3. **Quality Management Plan (QMP)**

A final QMP, which shall be revised to address reviewer comments, shall be submitted by the successful applicant within 90 calendar days post award of this agreement. The QMP will be subject to project officer approval.

**VII. Agency Contact**

The agency contact for this RFA is Cynthia Johnson, 26 W. Martin Luther King Drive, Mail Stop 207, Cincinnati OH 45268; telephone (513) 569-7873

E-mail: [johnson.cynthia@epa.gov](mailto:johnson.cynthia@epa.gov)

**VIII. Other Information**

**Questions:** All questions or comments about this RFA should be submitted in writing via email or fax to the Agency contact person listed in Section VII., by **April 27, 2009**. Do not attempt to seek information regarding this RFA from any source other than the Agency contact. Questions that are considered significant will be answered via a posting to ORD/NRMRL's website at the following URL:

<http://www.epa.gov/nrmrl/fundopps/index.html>

**Modifications:** All changes to the RFA's content will be done so by official amendment. All amendments will be posted at the following URL:

<http://www.epa.gov/nrmrl/fundopps/index.html>

## **References**

U.S. Environmental Protection Agency (USEPA). 2007. Innovation and Research for Water Infrastructure for the 21<sup>st</sup> Century – Research Plan. April.

U.S. Environmental Protection Agency (USEPA). 2002. The Clean Water and Drinking Water Infrastructure Gap Analysis (EPA-816-R-02-020), September.