

US EPA ARCHIVE DOCUMENT

AGENCY: U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

TITLE: Indoor Environments: Reducing Public Exposure to Indoor Pollutants

ACTION: Request for Application - Initial Announcement

RFA NO.: EPA-OAR-IED-05-21

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NO: 66.034

DATES:

The closing date for receipt of concept proposals is **Monday, December 12, 2005 at 4:00 pm Eastern Standard Time (EST)**.

The proposals **MUST** be received by the contact point listed in Stage 3, Section III, C. 3, on or before the deadline date and time above. **NO LATE PROPOSALS WILL BE CONSIDERED.**

Due to the unique circumstances involving U.S. postal mail screening (*that can delay delivery by several weeks*), EPA strongly recommends that express mail option (i.e., FedEx, UPS, DHL, etc.) be used to submit all materials.

1. A pre-proposal conference call will be held on **Tuesday, October 25, 2005 from 2:00 pm to 4:00 pm EST**. If you are interested in participating in this conference call please send an e-mail to "iaq.rfa@epa.gov" providing your organization's contact information (see Section IV, Stage 1) by **Wednesday, October 19, 2005**.
2. A concept proposal consisting of a cover letter of up to two pages, SF-424, 424A and B, and a narrative workplan of up to 12 pages is due on or before **Monday, December 12, 2005 at 4:00 pm EST** (see Section IV, Stage 2).

SUMMARY

EPA seeks applications from eligible entities for projects to support demonstration, training, outreach and/or education cooperative agreements that reduce exposure to indoor air pollutants and yield measurable environmental outcomes.

FUNDING/AWARDS: The total estimated funding for this competitive opportunity is approximately \$3-4 million. EPA anticipates award of 20-25 cooperative agreements resulting from this announcement, subject to availability of funds and the quality of applications received.

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I. FUNDING OPPORTUNITY DESCRIPTION

A. Background

The goal of this Request for Applications (RFA) is to support demonstration, training, outreach and/or education projects that are aligned with EPA's strategic objective to increase the number of people breathing healthier indoor air as well as our indoor air pollutant priority air objectives and the agency's annual measures and long-term measures detailed in I.C.1.

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) directs EPA to conduct and coordinate research and develop and disseminate information on all aspects of indoor air quality. In addition, Title III of the Toxic Substances Control Act (TSCA) directs EPA to undertake a variety of activities to address the public health risks posed by exposures to indoor radon. The law directs EPA to study the health effects of radon, assess exposure levels, set an action level and advise the public of steps they can take to reduce exposure, evaluate mitigation methods, and assist states with program development through the administration of a grants program.

Under Clean Air Act (CAA) §103, EPA is authorized to conduct, and promote the coordination and acceleration of, research, investigations, experiments, demonstrations, surveys, studies, and training relating to the causes, effects, extent, prevention, and control of air pollution. Section 103(b) of the Clean Air Act authorizes EPA to make grants to public or non-profit agencies, institutions, and organizations, to support these activities.

Based on several reports and studies conducted or commissioned by EPA since the 1980's, EPA has identified and characterized significant risks to public health from environmental contaminants that are commonly found in a wide range of buildings, including homes, schools, and office buildings.

Most Americans spend about 90% of their time indoors, primarily in homes, schools and office buildings. Indoor levels of air pollution may be 2-5 times higher, and occasionally 100 times higher, than outdoor levels. Sources of indoor pollution are diverse, ranging from natural sources (e.g., radon, mold and moisture) to products used indoors (e.g., finishes, furnishings, and cleaning products) to indoor processes and behaviors (e.g., smoking, use of unvented combustion sources, cleaning, operation and maintenance procedures). Building systems, as well as the many products and materials used indoors, have a direct influence on the type and amount of exposure building occupants may experience from environmental contaminants indoors. Human exposure to unhealthy indoor air in buildings can be reduced through better design, construction, operation and maintenance practices, and mitigation of other indoor air quality problems.

EPA strives to improve indoor air quality (IAQ) and reduce associated human health risks, such as asthma attacks, posed by pollutants in indoor environments/building types described below. This is accomplished by increasing awareness and understanding of

indoor air quality principles and risks, as well as by promoting appropriate voluntary practices and risk reduction actions by the public and key stakeholders to improve IAQ. EPA is also committed to working with disproportionately impacted populations and tribes to reduce risks from poor IAQ.

EPA encourages submission of innovative demonstration, training, outreach and/or education projects that achieve environmental results in indoor air quality priority areas (i.e., indoor air pollutants and/or building types).

Indoor air pollutants include:

Radon

Radon is a naturally-occurring colorless, odorless gas and the second leading cause of lung cancer in the U.S., after smoking. Based on analysis by the National Academy of Sciences, EPA estimates that radon is responsible for approximately 21,000 deaths per year. Nearly one in 15 homes has radon concentrations above the EPA recommended action level.

Since the mid -1980s, the United States has made significant progress in reducing the risk from exposure to radon. This progress is the result of a long-term effort between EPA, citizens, non-profit organizations, state, local and tribal governments, the business community, and other Federal agencies working together. EPA partners include State radon programs that are supported by State Indoor Radon Grants, non-profit environmental health advocacy organizations, home builders, and the radon service industry. Today, more Americans are knowledgeable about radon than at any time since the mid-1980's, when radon became a national health concern. Approximately two thirds of Americans are generally aware of radon as an environmental health hazard. Since the mid-1980's, millions of homes have been tested for radon, and over 500,000 homes now have working active mitigation systems. Approximately 1.3 million new homes have been built with radon resistant features since 1990. EPA continues to focus its efforts and those of its partners on achieving actual risk reduction through the mitigation of existing homes and the building of new homes to be radon resistant. EPA is also encouraging integrated Air Toxics Reduction Programs to include radon which is listed as an air toxic under the Clean Air Act.

Indoor Asthma Triggers

An estimated 20 million people in the United States have asthma, including 6 million children. The number of children with asthma has more than doubled since 1980. In addition, there are disturbing and significant racial and ethnic disparities in asthma morbidity and mortality in the United States; African-Americans continue to have higher rates of asthma emergency room visits, hospitalizations, and deaths than Caucasians.

While the mechanisms that cause asthma are complex and prevalence rates vary among population groups, there is substantial evidence that indoor exposures to irritants such as environmental tobacco smoke (ETS) and allergens from house dust mites, pests, molds, and animals play a significant role in triggering asthma episodes, and, in some instances (ETS and dust mites), are causally linked to the development of the disease. For the

purpose of this RFA, all asthma irritants and environmental triggers are considered pollutants.

A recent EPA survey found that while fifty-eight percent of all people with asthma have had their personal asthma triggers diagnosed by a physician, less than thirty percent of people with asthma are taking all of the essential actions to reduce their exposure to indoor environmental asthma triggers. Additionally, children with asthma were just as likely to be exposed to ETS in their home as children in general and ETS exposure is significantly higher in households at or below the poverty-level and in households with a lower educational level (less than a college degree).

As part of a coordinated federal strategy to reduce the environmental factors contributing to asthma attacks among children in the U.S., EPA plays a significant role in ensuring that environmental factors are addressed as part of a comprehensive asthma management program. Through these efforts, EPA strives to improve environmental health outcomes for people with asthma -- including segments of the population that are disproportionately impacted such as children and low-income individuals by: 1) increasing knowledge of the importance of working with a doctor, developing an asthma action plan, and identifying personal asthma triggers; 2) fostering acquisition of new skills and behavior changes to reduce exposure to environmental asthma triggers in the home, school and/or workplace; and 3) impacting the type and quality of care provided to people with asthma. To accomplish this, EPA works directly with people with asthma as well as with a variety of stakeholders, including health care providers, commercial and public health insurers, state agencies, child care and school personnel, community-based organizations, and coalitions.

Environmental Tobacco Smoke

Environmental tobacco smoke poses risks to all segments of the population; however children are especially vulnerable because they are still growing and developing. Exposure to environmental tobacco smoke causes serious health effects in children, including bronchitis, pneumonia, ear infections, worsened asthma and has been associated with sudden infant death syndrome. For children, particularly young children, the most likely place of exposure is their home. In the U.S., 11% of homes with children aged six and younger currently allow smoking.

EPA has a multi-prong program that focuses on reducing children's exposure to ETS by: 1) increasing the knowledge of the harmful health effects from children's exposure to ETS; 2) promoting individual behavior changes to create and sustain smoke-free environments for children, including homes, cars, child care facilities, schools and other environments where children spend time; and 3) sustaining current and building new institutional systems that support and encourage smoke-free environments for children through national social services agencies, health care systems, and other child-focused organizations. EPA uses a number of channels to deliver the education and encourage behavior change including health care providers, schools, child care centers, community-based organizations/coalitions, parent groups, and state, local, and federal agencies. EPA focuses on raising awareness and action in low-income, low-education populations. ETS is comprised of more than 4,000 substances, several of which are listed as air toxics under the Clean Air Act.

Air Toxics

EPA assists local communities in the design and implementation of effective integrated air toxics reduction programs. EPA partners with communities to put into place multi-stakeholder air toxic reduction campaigns which achieve measurable reductions from stationary, indoor, and mobile sources of air toxics.

Building types include:

Schools

According to the U.S. Department of Education's National Center for Education Statistics, in 1999, 43% of America's public schools reported at least one unsatisfactory environmental condition (i.e., lighting, heating, ventilation, indoor air quality, acoustics or noise control). Approximately 25% of public schools reported that ventilation was unsatisfactory, while IAQ was reported to be unsatisfactory in about 20% of schools. Further reports from the U.S. General Accountability Office indicate that public elementary and secondary schools in the U.S. need guidance about how to identify, prevent, and correct environmental problems in school buildings that can impact the health and comfort of students and staff and result in increased human health risks such as asthma attacks. These problems are often related to improper operation, deferred maintenance of building facilities, as well as poor design, construction and/or renovation practices. Poor IAQ can impact the comfort and health of students and staff, which in turn can affect concentration, attendance, and student performance.

EPA's goal is to ensure good IAQ management practices are used in urban, suburban, rural, and tribal K-12 public and private schools nationwide and promote holistic approaches that help schools address the entire range of environmental issues that they face. In 1995, EPA developed the voluntary *Indoor Air Quality Tools for Schools (IAQ TFS)* kit in response to complaints of poor indoor air quality in schools and the alarming rise in cases of asthma among school and preschool age children. The kit provides step-by-step guidance that enables schools to prevent, identify, and resolve indoor air quality problems in order to provide a healthier learning and teaching environment. In 2003, EPA released the web-based *IAQ Design Tools for Schools* to assist school facility planners, designers and others involved in the planning and construction of school facilities in creating high performance school facilities that provide superior indoor air quality while also saving energy and resources. In October 2005, EPA will release a unique software tool to help school districts establish and manage comprehensive voluntary school facility self-assessment programs. Together, these tools and resources can be used by school districts to design, build, maintain and continually evaluate their school facilities for key environmental, safety and health issues and protect the health and safety of children and staff. EPA's goal is for all schools to use *IAQ TFS*, or comparable IAQ practices, to ensure a strong IAQ management plans and subsequent improved IAQ in schools.

EPA offers school districts and communities specialized training and recognition opportunities, such as the *IAQ TFS* Awards Program, and produces education and outreach documents to raise awareness about the importance of good IAQ practices and ensuring healthy school environments.

Public and Commercial Buildings

An estimated 45% of the workforce in office buildings with no use of best IAQ practices report at least one health symptom related to the workplace. In addition, on average there is a reported 3% productivity loss due to IEQ in office buildings. Indoor air quality concerns in public and commercial buildings, such as office buildings, include: inadequate ventilation and pollutants from indoor sources (e.g., building materials, furnishings, cleaning products, pesticides, mold, office equipment, poor operation and maintenance practices, and other occupant activities) and outdoor sources (e.g., trash dumpsters, radon, vehicle exhaust, industrial stacks, construction, pesticide applications and other facility maintenance practices). It is estimated that Americans spend approximately \$12-20 billion dollars annually to improve their indoor air quality.

To improve IAQ in public and commercial buildings, EPA identifies best practices and develops guidance and tools for those involved in building design, construction, renovation, and operations and maintenance activities. Current tools include the Indoor Air Quality Building Education and Assessment Model (I-BEAM), an interactive computer program with extensive information on how to manage offices and other large buildings in ways that protect the health of their occupants. EPA plans to begin developing and releasing additional public and commercial guidance and tools in the next few years. EPA has begun a related outreach effort to increase awareness of IAQ among building professionals, including partnerships with key industry associations and green building programs, and coordination with EPA's ENERGY STAR program for commercial buildings. EPA welcomes proposals that are consistent with green building programs and principles.

Homes

Some of the major indoor air contaminants found in the home include radon, environmental tobacco smoke, mold, irritant and allergenic asthma triggers, combustion by-products and volatile organic compounds released from cleaning products, building materials, and furnishings. People spend 60% or more of their time in their homes, more than in any other building type and therefore may be potentially exposed to several of these contaminants for extended periods of time. The section on indoor air pollutants, above, discusses some of the public health impacts and ways in which homeowners can be educated on strategies to reduce risks from many of these pollutants

IAQ in homes also could be greatly improved through demonstration, training, outreach and/or education on IAQ best practices for the homebuilding trades, which have significant potential to protect and enhance IAQ through their design, construction and renovation activities. Current EPA IAQ programs aimed at the homebuilding trades include the Radon Resistant New Construction guidance.

EPA is developing a companion label to the ENERGY STAR for homes label to help the new construction industry adopt a variety of construction practices and technologies that decrease the risk of poor IAQ in their new homes. This label, referred to as ENERGY STAR with Indoor Air Package, is currently being piloted through the proven ENERGY STAR for Homes program, which has resulted in voluntary ENERGY STAR labeling of over 400,000 new homes. A pilot project limited to only a few locations is currently underway. The draft specifications for the Indoor Air Package being used in this pilot are

available on the Internet at: <http://www.energystar.gov/homes>. These draft specifications illustrate EPA's primary IAQ concerns in homes, and proposed best practices for meeting these concerns.

More information about EPA's Indoor Environments Program is available on the Internet at <http://www.epa.gov/iaq/>.

B. Scope of Work

The goal of EPA's Indoor Environments Program is to reduce the environmental health risks posed by contaminants in indoor environments. This is achieved first through the use of sound science to gain a better understanding of environmental health risks as well as effective prevention and control methods. This knowledge is then used to promote appropriate environmental risk reduction activities through voluntary actions by the general public and key stakeholders to improve indoor air quality.

EPA is soliciting proposals from eligible entities (described in Section III.A) to conduct demonstration, training, education, and/or outreach projects that seek to reduce exposure to indoor air pollutants. Demonstrations generally must involve new or experimental technologies, methods, or approaches, where the results of the project will be disseminated so that others can benefit from the knowledge gained in the demonstration project. A project that is accomplished through the performance of routine, traditional, or established practices, or a project that is simply intended to carry out a task rather than transfer information or advance the state of knowledge, however worthwhile the project might be, is not a demonstration. Proposals that address stationary and mobile sources of air toxics will also be considered. Proposals must measure the results of the activities conducted under those projects.

Applicants are encouraged to address at least one indoor air quality priority area, but where appropriate are encouraged to submit innovative projects that focus on multiple aspects of EPA's indoor air quality priority areas. As described in Section I.A.1-2 and I.C.1 of this RFA, indoor air quality priority areas include:

- Pollutants: radon, environmental tobacco smoke, and indoor environmental asthma triggers such as dust mites, pests, mold, and animals that may trigger asthma, and air toxics
- Building types: schools, commercial, and homes

For each priority area selected, applicants must articulate their project goals, objectives, activities and expected results. Results are expressed as outputs and outcomes. An output is an activity, effort and/or associated product related to a larger environmental or programmatic goal or objective; to be produced or provided over a specific period of time or by a specified date and that will be measurable, either qualitatively or quantitatively, within the assistance funding period. An outcome is the measurable impact, result, effect or consequence that will occur from carrying out the program or activity. It may be programmatic, behavioral, environmental or health-related in nature. Impacts of programs or changes in behavior are typically intermediate outcomes that will eventually lead to desired changes in environmental or health status or 'end' outcomes. Accordingly, achievement of the end environmental outcome may not be able to be attributed to, or measurable within, the time frame of a single assistance agreement.

While it may be beyond the scope of the outreach and education proposals under this solicitation to directly measure the impact of their actions on the long-term environmental health goal or condition, each proposal should describe its relationship to the environmental health outcome that can be expected to occur as a result of the project's efforts. Examples of these relationships specific to indoor air pollutants, are illustrated in Tables 1-1 through 1-3. This information is provided to applicants to assist them in preparing their proposal.

Additionally, all project activities proposed for funding under this RFA must clearly fall within EPA's statutory authorities. With respect to asthma, only those activities that directly address environmental factors that may influence asthma onset or exacerbation are eligible for funding under this RFA. Applicants are encouraged to integrate environmental trigger avoidance into comprehensive asthma management programs, as recommended by the National Asthma Education Prevention Program (NAEPP) <http://www.nhlbi.nih.gov/about/naepp/>. While it is appropriate to place environmental trigger avoidance into the broader context of medical management in EPA-funded activities, where non-environmental asthma management (e.g., medical management) activities are proposed which are not purely intended to frame this context, applicants should be prepared to document alternative funding sources for such activities.

With respect to ETS, only those activities that directly address the health risks of ETS, reducing children's exposure to ETS and promoting smoke-free home messages are eligible for funding under this RFA. Activities primarily intended to discourage non-smokers (e.g., teens) from starting to smoke, or which are intended to encourage or assist smokers in quitting (cessation), fall outside of EPA's authorities to conduct research and disseminate information on indoor air pollutants and are therefore ineligible for funding through this Request for Applications.

With respect to schools, activities must also fall within EPA's authority to conduct demonstration, training, outreach and/or education activities which disseminate information on the causes, extent, prevention and control of indoor air pollution in school environments. Project proposals may not go beyond these authorized activities and applicants are cautioned against proposing "programs" or "program implementation" projects. All proposed activities must be consistent with the information and guidance in EPA's Indoor Air Quality Tools for Schools kit.

C. EPA's Strategic Plan and Anticipated Programmatic and Environmental Results

1. Linkage to EPA Strategic Plan

This Request for Applications supports EPA's strategic objective to increase the number of people breathing healthier indoor air. The competitive opportunity also supports the Agency's annual measures and long-term measures as detailed below. These goals build on the Agency's Strategic Plan; Goal 1: Clean Air and Global Climate Change; Objective 1.2 Healthier Indoor Air; Sub-objective 1.1.1 – More People Breathing Cleaner Air located at <http://www.epa.gov/ocfo/plan/2003sp.pdf>.

To accomplish the goals of the Agency's Strategic Plan, EPA's, Office of Radiation and Indoor Air, Indoor Environments Program has developed indoor air quality priority area objectives which are identified below. Applicants must identify project objectives and

goals that are aligned with the following indoor air quality priority areas. As discussed further in Sections C.2-3, proposed projects must quantify environmental outputs for identified activities and achieve measurable environmental outcomes that demonstrate progress towards achieving project objectives and goals within these priority areas.

Indoor Air Pollutant Priority Area Objectives

- **Radon**- To prevent future cancer deaths through the mitigation of existing homes and buildings and the construction of new radon resistant homes and buildings.
- **Indoor asthma triggers**- To increase the number of people with asthma taking actions to reduce their exposure to environmental triggers. As part of this goal, EPA has identified children and low income individuals as disproportionately impacted and therefore has placed particular emphasis on reaching these populations, as well as training the healthcare workforce on asthma trigger management.
- **ETS**- To reduce the exposure of children 6 years of age and under to environmental tobacco smoke, predominantly in homes, child care facilities, and cars. Independent research has shown that children in low-income and low-education households are most adversely affected by exposure to this pollutant. EPA will continue to make a concerted effort to reach families of children within this population.
- **Air Toxics**- To reduce multi-media and cumulative air toxics risks through national, regional, and community-based programs.

Building Type Priority Area Objectives

- **Schools**- To increase the number of primary and secondary schools with effective indoor air quality management practices and plans based on, or consistent with, *IAQ Tools for Schools*. Effective plans comprise a set of actions shown to have a significant effect on improving indoor air quality and reducing associated adverse environmental health impacts such as asthma attacks. Priorities include urban and rural (including tribal) schools which may have significant indoor air quality and infrastructure problems and substantial resource challenges. Improving IAQ in these schools will likely have a relatively greater impact on air quality, and therefore on health effects of students and staff.
- **Public and Commercial Buildings**- To improve building occupant health and productivity and decrease stressors by increasing the number of public and commercial buildings actively employing IAQ best practices equivalent to EPA guidance. Examples of this guidance currently include the Indoor Air Quality Building Education and Assessment Model (I-BEAM) and the document "Mold Remediation in Schools and Commercial Buildings".
- **Homes**- To improve occupant health and reduce stressors in residential buildings by reducing exposure to indoor pollutants, both by following strategies consistent with EPA's indoor air pollutant priority area objectives mentioned above, and by increasing the number of homes actively designed and constructed with the use of IAQ best practices equivalent to EPA guidance. Examples of this guidance currently include the Radon Resistant New Construction Guidance and the draft specifications for the ENERGY STAR for Homes Indoor Air Package.

For three of the program priority areas quantitative annual and long-term goals have been established:

Annual Measures:

- Radon mitigations and radon resistant new construction
- Health care professionals trained on environmental asthma triggers
- Schools adopting effective IAQ management plans

Long –Term Measures:

- By 2012, 3.9 million homes in the United States will be equipped with radon reducing features – through mitigations of existing homes and radon resistant new construction – this will translate into 1,250 future cancer deaths prevented annually.
- By 2012, 6.5 million people with asthma will be taking essential actions to reduce their exposure to environmental triggers.
- By 2012, 1,000 new schools a year will be establishing effective IAQ management plans, for a total of 40,000 schools nationwide.

2. Outputs

As described below in Tables 1-1 through 1-3, applicants are responsible for quantifying environmental health related outputs for proposed demonstration, training, education and/or outreach project activities. These outputs must describe the level of activity that will be provided over a period of time (e.g., number of publications produced or number of people trained) and should demonstrate progress from a stated baseline¹ towards achieving substantial measurable environmental outcomes.

3. Outcomes



As described below in Tables 1-1 through 1-3, applicants are responsible for achieving substantial measurable environmental outcomes that demonstrate progress towards achieving project goals, objectives, and long-term environmental health benefits. Environmental outcomes must describe the intended result of carrying out a program or activity and may be classified as intermediate action outcomes and long-term environmental health outcomes. Intermediate action outcomes describe behavior changes achieved (e.g. increase in radon testing, additional patients taking action to reduce asthma triggers) beyond the current stated baseline¹. Applicants must estimate the intermediate action outcomes they will achieve and describe how they will quantify them.

Intermediate action outcomes ultimately lead to long term environmental health outcomes of the project. Health benefits can not always be quantified by partners, but are desirable when possible, (e.g. lung cancer deaths avoided, decrease in asthma emergency room visits, decrease in lost school/work days due to indoor air quality problems, etc.). While applicants may not be able to quantify the link between intermediate action outcomes and long-term environmental health outcomes, they should be able to qualitatively describe this link.

• ¹ baseline- the starting point from which progress is measured and targets are set. The baseline proposed should incorporate the most recent information available prior to the start of the project. Baselines can be based on organizational experience, estimates from past performance, national data, or expert opinion. Examples of baselines and corresponding targets are listed in Section IV, *Stage 2 Elements of the Concept Proposal* under F:



Table 1-1 provides definitions and demonstrates the relationship between project activities, environmental outputs, and intermediate environmental action outcomes that may ultimately reduce exposure to indoor air pollutants and improve long-term environmental health outcomes.

Table 1-1 – Definitions



 Activities	 Programmatic/ Environmentally Related Outputs	Anticipated Environmental Outcomes	
		Intermediate Action Outcomes	Long-term (End) Environmental Health Outcomes
Description of services your project will provide (e.g., conduct training, organize conference, develop a demonstration)	These outputs describe the level of activity that will be provided over a period of time, including a description of the characteristics (e.g., timeliness) established as standards for the activity (e.g., number of publications produced or people trained)	Intermediate action outcomes describe the intended result of carrying out a program or activity. Shorter term action environmental outcomes might describe behavior changes achieved (e.g., increase in radon testing, additional patients taking action to reduce asthma triggers)	Long-term environmental health outcomes are the ultimate health benefit of the project. Environmental health outcomes can not always be quantified by partners, but are desirable when possible (e.g., lung cancer deaths avoided, decrease in asthma E.R. visits, decrease in lost school/work days due to IAQ problems)



Tables 1-2 and 1-3 demonstrate the relationship between project activities, environmental health outputs, and intermediate environmental health outcomes that may ultimately reduce exposure to indoor air pollutants and improve long-term environmental health outcomes. The activities and environmental outputs, listed in this table are **examples only** and are **not** intended to limit the submission of creative and innovative approaches for achieving environmental health results. **Linkage to at least one of the long-term environmental health outcomes listed in tables 1-2 and 1-3 must be addressed by project activities.** Additional environmental outcomes are acceptable.



**Table 1-2
INDOOR AIR POLLUTANTS**

 Example Activities	 Example Programmatic/ Environmentally Related Outputs	Example Anticipated Environmental Outcomes	
		Intermediate Action Outcomes	Long-term (End) Environmental Health Outcomes
RADON			
Train builders on radon resistant new construction techniques	Number of trainings and builders trained	Number of houses and schools built with radon resistant new construction	Reduction in lung cancer due to radon resistant new construction
Partner with industry and community to increase radon testing and mitigation	Number of people educated on the environmental health risks of radon and actions that they can take to reduce the risk	Number of additional radon tests performed and resulting mitigations	Reduction in lung cancer due to increased radon mitigations
Educate state, local, and tribal officials on environmental health risks of radon and ways to reduce risks	Number of officials educated	<ul style="list-style-type: none"> Number of state and local laws, ordinances, regulations and/or policies promoting radon information disclosure, testing, and/or mitigation Estimated resulting mitigations Number of tribal members or communities testing their home(s) for radon and mitigating high levels 	Reduction in lung cancer due to increased radon mitigations
ASTHMA			
Identify, develop and disseminate new or existing education and outreach products and services (e.g. training) targeted toward asthma patients and caregivers that will encourage individuals to take action to reduce exposure to indoor environmental asthma triggers in homes, schools and/or workplaces	<ul style="list-style-type: none"> Number of products and services developed and/or or disseminated Number of children and low-income adults educated about indoor environmental asthma triggers and mitigation solutions Number of child care providers and/or school personnel educated about indoor environmental asthma triggers and mitigation solutions 	<ul style="list-style-type: none"> Number of people demonstrating increased knowledge of indoor environmental asthma triggers and mitigation solutions Number of people with asthma reducing their exposure to their environmental asthma triggers in their homes, schools and/or workplaces Number of schools and/or childcare providers reducing environmental triggers 	<ul style="list-style-type: none"> Reduction in number of emergency room visits Reduction in other indicators of asthma morbidity such as number of inpatient hospital admissions, sick visits to primary care physicians for asthma, school days missed, symptom days, rescue medication used, and improvement in quality of life indicators



 Example Activities	 Example Programmatic/ Environmentally Related Outputs	Example Anticipated Environmental Outcomes	
		Intermediate Action Outcomes	Long-term (End) Environmental Health Outcomes
		of asthma in their facilities	
Identify, develop and disseminate new or existing education and outreach products and services (e.g., training, economic information, trigger reduction recommendations) targeted toward healthcare community (e.g., doctors, respiratory therapists, school nurses, case managers, lay health educators, and private and public health plans) that will support incorporation of environmental controls into standards of care	<ul style="list-style-type: none"> • Number of products and services developed and/or disseminated • Number of healthcare professionals educated about indoor environmental asthma triggers and mitigation solutions 	<ul style="list-style-type: none"> • Number of healthcare professionals demonstrating increased knowledge of indoor environmental asthma triggers and mitigation solutions • Number of healthcare providers delivering comprehensive asthma education and care to patients • Number of health plans incorporating environmental asthma trigger management • Estimated number of asthma patients reducing exposure to environmental asthma triggers in their homes, schools and/or workplaces 	<ul style="list-style-type: none"> • Reduction in number of emergency room visits • Reduction in other indicators of asthma morbidity such as number of inpatient hospital admissions, sick visits to primary care physicians for asthma, school days missed, symptom days, rescue medication used, and improvement in quality of life indicators
Identify, develop and disseminate new or existing methods for communities to facilitate comprehensive asthma management	Number of people educated about community approaches for facilitating comprehensive asthma management	<ul style="list-style-type: none"> • Number of community policies or guidance supporting comprehensive asthma management • Estimated number of people with asthma with reduced exposure to environmental asthma triggers in their homes, schools and/or workplaces 	<ul style="list-style-type: none"> • Reduction in number of emergency room visits • Reduction in other indicators of asthma morbidity such as number of inpatient hospital admissions, sick visits to primary care physicians for asthma, school days missed, symptom days, rescue medication used, and improvement in quality of life indicators
ENVIRONMENTAL TOBACCO SMOKE (ETS)			
Identify and implement changes through various levels in health care systems to educate parent(s) and caregivers about the dangers of ETS exposure to children	<ul style="list-style-type: none"> • Number of health care systems educating parent(s) and caregivers about the dangers of ETS exposure to children 	<ul style="list-style-type: none"> • Number of parent(s) and/or caregivers with increased knowledge about the dangers of ETS exposure to children 	<ul style="list-style-type: none"> • Reduction in the number of medical office visits due to inner ear infection, bronchitis, asthma, and pneumonia induced from children's

 Example Activities	 Example Programmatic/ Environmentally Related Outputs	Example Anticipated Environmental Outcomes	
		Intermediate Action Outcomes	Long-term (End) Environmental Health Outcomes
	<ul style="list-style-type: none"> Number parent(s) educated through health care systems about the dangers of ETS exposure to children 	<ul style="list-style-type: none"> Number of people committed not to smoke around children Reduction in children's exposure to ETS 	exposure to ETS <ul style="list-style-type: none"> Reduction in number of episodes of inner ear infection, bronchitis, asthma, cases of pneumonia
Identify and implement systems changes in child-focused organizations and buildings (i.e., schools and child-care facilities) that include education for parent(s) and caregivers about the dangers of ETS exposure to children	<ul style="list-style-type: none"> Number of child-focused organizations committed to create, maintain and sustain smoke-free environments for children Number of professionals in child-focused buildings and/or facilities, especially schools and child-care facilities promoting, partnering and collaborating with social services organizations and culturally-diverse community-based organizations to educate low-education/low-income communities 	<ul style="list-style-type: none"> Number of parent(s) and caregivers with increased knowledge about the dangers of ETS exposure to children Number of people committed not to smoke around the children Reduction in children's exposure to ETS 	<ul style="list-style-type: none"> Reduction in the number of medical office visits due to inner ear infection, bronchitis, asthma, and pneumonia induced from children's exposure to ETS Reduction in number of episodes of inner ear infection, bronchitis, asthma, cases of pneumonia
Disseminate, promote and conduct outreach and education through various culturally-diverse community-based groups about the dangers of ETS exposure to children	<ul style="list-style-type: none"> Number of culturally-diverse community-based organizations educating low-education/low-income populations Number of communities committed to create, maintain and sustain smoke-free environments for children; 	<ul style="list-style-type: none"> Number of culturally diverse communities with increased knowledge about the dangers of ETS exposure to children Number of people committed not to smoke around the children 	<ul style="list-style-type: none"> Reduction in the number of medical office visits due to inner ear infection, bronchitis, asthma, and pneumonia induced from children's exposure to ETS Reduction in number of episodes of inner ear infection, bronchitis, asthma, cases of pneumonia

 Example Activities	 Example Programmatic/ Environmentally Related Outputs	Example Anticipated Environmental Outcomes	
		Intermediate Action Outcomes	Long-term (End) Environmental Health Outcomes
Institutionalize messages and standards of practice/service in federal, state and local programs/system to educate parent(s) and caregivers about the dangers of ETS exposure to children	<ul style="list-style-type: none"> Number of programs/systems that institutionalized messages and education of the dangers of ETS exposure to children 	<ul style="list-style-type: none"> Number of people in the programs/systems receiving messages and/or educations about ETS and children 	<ul style="list-style-type: none"> Reduction in the number of medical office visits due to ear infections and asthma episodes induced from children's exposure to ETS Reduction in number of episodes of inner ear infection, bronchitis, asthma, cases of pneumonia
Develop and disseminate educational videos, publications, and or other tools to medical and healthcare professionals that provide instruction on how to reduce children's exposure to ETS	<ul style="list-style-type: none"> Number of outreach products and services developed and disseminated that provide instruction on how to reduce children's exposure to ETS to medical and healthcare professionals 	<ul style="list-style-type: none"> Number of medical and healthcare professionals with increased knowledge about the dangers of ETS exposure to children Number of health plan providers that have strengthened provisions in their plans or guidance related to reducing children's exposure to ETS Number families reached through collaboration with healthcare delivery systems, healthcare professionals, and/or educators Reduction in children's exposure to ETS 	<ul style="list-style-type: none"> Reduction in number of episodes of inner ear infection, bronchitis, asthma, cases of pneumonia
Air Toxics			
Design a community-based toxics reduction program that addresses indoor air quality (but also may include outdoor air components)	<ul style="list-style-type: none"> Number of community based air toxics reduction programs that address IAQ 	<ul style="list-style-type: none"> Reduction in exposure to air toxics Number of lbs/tons of toxics reduced in the community through radon reduction, good IAQ practices in schools (such as TfS), and ETS projects in coordination with outdoor stationary 	<ul style="list-style-type: none"> Reduction in lung cancer due to increased radon mitigations Reduction in number of episodes of inner ear infection, bronchitis, asthma, cases of pneumonia

 Example Activities	 Example Programmatic/ Environmentally Related Outputs	Example Anticipated Environmental Outcomes	
		Intermediate Action Outcomes	Long-term (End) Environmental Health Outcomes
		and mobile source risk reduction projects <ul style="list-style-type: none"> • Number of tribal homes adopting IAQ management methods to reduce indoor air toxics 	

**Table 1-3
TYPES OF BUILDINGS**

 Example Activities	 Example Programmatic/ Environmentally Related Outputs	Example Anticipated Environmental Outcomes	
		Intermediate Action Outcomes	Long-term (End) Environmental Health Outcomes
SCHOOL			
Identify, develop and disseminate new or existing education and outreach products and services (e.g., training, curriculum development) targeted toward school district personnel and/or school advocates	<ul style="list-style-type: none"> • Number of products and services developed and/or disseminated • Number of school district personnel and/or school advocates educated about good indoor air quality (IAQ) management practices in schools consistent with <i>IAQ Tools for Schools (TfS)</i> 	<ul style="list-style-type: none"> • Number of school district personnel and/or school advocates demonstrating increased knowledge about good indoor air quality management practices in schools consistent with <i>IAQ TfS</i> • Number of schools implementing good indoor air quality management practices consistent with <i>IAQ TfS</i> • Reduction in exposure to indoor air pollutants in schools of staff and students • Number of district and/or statewide IAQ policies developed and/or implemented 	<ul style="list-style-type: none"> • Reduction in staff and student absenteeism • Reduction in number of asthma attacks, allergic reactions, and other IAQ related symptoms • Increase in occupant performance and productivity attributable to IAQ best practices
Conduct education and outreach activities in support of EPA's national <i>IAQ TfS</i> Symposium	<ul style="list-style-type: none"> • Number of attendees recruited to <i>IAQ TfS</i> Symposium • Number of follow-ups to support good IAQ management practices with 	<ul style="list-style-type: none"> • Number of schools implementing good indoor air quality management practices consistent with <i>IAQ Tools for Schools</i> • Reduction in student and staff exposure to indoor 	<ul style="list-style-type: none"> • Reduction in staff and student absenteeism • Reduction in asthma attacks, allergies, and other IAQ related symptoms • Increase in occupant performance and

	sponsored attendees	air pollutants	productivity attributable to IAQ best practices
Identify, develop and disseminate new or existing education and outreach products and services (e.g. training) addressing the specific needs of urban, rural and tribal schools and/or schools whose students are disproportionately affected by poor indoor air quality	<ul style="list-style-type: none"> • Number of products and services developed and/or disseminated • Number of school district personnel and/or school advocates educated about good indoor air quality(IAQ) management practices in schools consistent with <i>IAQ TFS</i> 	<ul style="list-style-type: none"> • Number of school district personnel and/or school advocates demonstrating increased knowledge about good indoor air quality management practices in schools consistent with <i>IAQ TFS</i> • Number of schools implementing good indoor air quality management practices consistent with <i>IAQ TFS</i> • Reduction in student and staff exposure to indoor air pollutants 	<ul style="list-style-type: none"> • Reduction in staff and student absenteeism • Reduction in asthma attacks, allergies, and other IAQ related symptoms • Increase in occupant performance and productivity attributable to IAQ best practices
Develop, promote, and conduct outreach and training for school districts building professionals and others about design and construction practices for schools consistent with <i>IAQ Design Tools for Schools</i>	<ul style="list-style-type: none"> • Number of school districts building professionals and others trained about design and construction practices for schools • Number of products and services developed and/or disseminated 	<ul style="list-style-type: none"> • Number of school districts building professionals and others demonstrating increased knowledge about good indoor air quality management practices in schools • Number of schools implementing construction practices consistent with <i>IAQ Design Tools for Schools</i> • Reduction in exposure to indoor air pollutants in schools of staff and students 	<ul style="list-style-type: none"> • Reduction in staff and student absenteeism • Reduction in asthma attacks, allergic reactions, and other IAQ related symptoms • Increase in occupant performance and productivity attributable to IAQ best practices

PUBLIC and COMMERCIAL BUILDINGS

Provide technical assistance, and/or conduct outreach and training to building design, construction, operations and/or maintenance professionals on IAQ best practices and protocols consistent with EPA guidance	<ul style="list-style-type: none"> • Number of building professionals trained about design, construction, operation, and/or maintenance IAQ best practices • Number of relevant products and services developed and/or disseminated • Number of building professionals receiving technical assistance 	<ul style="list-style-type: none"> • Number of building professionals and others demonstrating increased knowledge about IAQ best practices • Number of buildings that use design, construction, operation and/or maintenance practices that improve IAQ • Number and significance of model specifications, contracts and similar vehicles including IEQ best practices 	<ul style="list-style-type: none"> • Reduction in occupant exposure to indoor air pollutants • Reduction in occupant absenteeism, turnover and complaints attributable to IAQ, and reduction in negative health effects • Increase in occupant performance and productivity attributable to IAQ best practices
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<p>Conduct one or more case studies to demonstrate best practices for IAQ consistent with EPA IAQ guidance in design and construction of a new building and/or operation and maintenance in an existing building and widely disseminate results</p>	<ul style="list-style-type: none"> • Number of high-quality, useful case study reports distributed • Number of publications, websites, and other outlets in which the reports are published, linked to, described and/or publicized. 	<ul style="list-style-type: none"> • Number of building professionals, building organizations and others demonstrating awareness of the case study results • Number of buildings and/or building professionals using the case study results to justify, develop and implement IAQ 	<ul style="list-style-type: none"> • Reduction in building occupant exposure to indoor air pollution • Reduction in occupant absenteeism, turnover and complaints attributable to IAQ, and reduction in negative health effects • Increase in occupant performance and productivity attributable to IAQ best practices
<p>Education, training, and outreach on IAQ which includes substantial content on moisture control, mold prevention, and mold remediation consistent with EPA guidance found in EPA publications such as: <i>Mold Remediation in Schools and Commercial Buildings</i> on www.epa.gov/mold, <i>IAQ Tools for Schools</i> on www.epa.gov/iaq, or <i>IAQ Building Education and Assessment Tool (I-BEAM)</i> on www.epa.gov/iaq</p>	<p>Number of public health, environmental health, or other professionals who manage IAQ programs in public/commercial buildings including schools, who are trained or educated about moisture control, mold prevention, and mold remediation</p>	<p>Number of IAQ programs incorporating substantial content on moisture control, mold prevention, and mold remediation</p>	<p>Reduction of exposure of the public to mold and other pollutants from damp indoor environments</p>
<p>HOMES</p>			
<p>Develop new design, and construction protocols, and/or expand existing protocols, along with a training, demonstration and/or outreach program to disseminate them, in a manner consistent with EPA guidance for improving Indoor Air Quality (IAQ) during home retrofit, remodeling, or improvement projects.</p>	<ul style="list-style-type: none"> • Number of high-quality, useful protocols developed and/or expanded • Number of copies of protocols disseminated to homebuilding professionals • Number of homebuilding professionals trained on IAQ protocols 	<ul style="list-style-type: none"> • Number of building professionals and others demonstrating increased knowledge about IAQ best practices • Number of home retrofit, remodeling, and/or improvement programs adopting IAQ protocols • Number of homes with improved IAQ, based on use of IAQ protocols 	<ul style="list-style-type: none"> • Reduction in occupant exposure to indoor air pollutants • Reduction in measurable health impacts attributable to IAQ best practices (e.g. reduced emergency room (ER) visits, sick days, etc.)
<p>Conduct demonstration projects to test feasibility of the Energy Star with Indoor Air Package recommended specifications and/or equivalent guidance, especially in underserved and/or high risk sectors (e.g. communities with high incidence of respiratory disease)</p>	<ul style="list-style-type: none"> • Number of high quality, useful case study reports, articles, and/or other high visibility public relation coverage • Number of publications, 	<ul style="list-style-type: none"> • Number of building professionals, building organizations, and/or others demonstrating awareness of the case study results • Number of programs and/or building 	<ul style="list-style-type: none"> • Reduction in occupant exposure to indoor air pollutants, particularly in high risk and/or underserved populations • Reduction in measurable health impacts attributable to IAQ best

	websites, and/or other outlets in which the reports are published, linked to, described and/or publicized.	professionals using the case study results to justify, develop, and implement IAQ best practices <ul style="list-style-type: none"> Number of homes built consistent with EPA Indoor Air Package recommended specifications. 	practices (e.g. reduced ER visits, sick days, etc.)
Education, training, and outreach to homeowners, renters, and/or landlords/property managers on reducing indoor mold, moisture control, mold prevention, and mold remediation consistent with EPA guidance found in EPA publications such as: <i>A Brief Guide to Mold, Moisture, and Your Home</i> on www.epa.gov/mold , or <i>Clear Your Home of Asthma Triggers: Your Children Will Breathe Easier</i> on http://www.epa.gov/iaq/ .	<ul style="list-style-type: none"> Number of homeowners, renters, and/or landlords/property managers educated on reducing indoor mold, moisture control, mold prevention, and mold remediation 	<ul style="list-style-type: none"> Number of homeowners, renters, and/or landlords/property managers starting/expanding IAQ maintenance programs with substantial content on moisture control, mold prevention, and mold remediation 	<ul style="list-style-type: none"> Reduction in exposure of the public to mold and other pollutants from damp indoor environments
Collaborate with urban, rural, or tribal community based programs to educate families about indoor air risks and actions to address those risk in homes	<ul style="list-style-type: none"> Number of building health, local officials trained Number of trainees enrolled 	<ul style="list-style-type: none"> Number of families taking action to reduce indoor air quality risks 	<ul style="list-style-type: none"> Reduction in occupant's exposure to indoor pollutants

D. Supplementary Information

The statutory authority for this action is Clean Air Act (CAA) §103 which authorizes the award of grants for research, investigations, experiments, demonstrations, surveys, studies, and training related to projects that reduce exposure to indoor air pollutants and yield measurable environmental outcomes/results. For detailed information on the CAA go to <http://www.epa.gov/oar/caa/caa103.txt>

II. AWARD INFORMATION

A. What is the amount of funding available?

The total estimated funding for this competitive opportunity is approximately \$3-4 million.

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

EPA anticipates awarding 20-25 cooperative agreement(s) resulting from this announcement totaling between \$3-4 million per year, subject to the availability of funds with project periods up to 3 years or 36 months, and depending on the quality of applications submitted.

Applications evaluated but not selected for funding may be retained for a period of 4 months for possible future award under this announcement, subject to the availability of additional funds. EPA reserves the right to make no awards under this funding opportunity.

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

1. close monitoring of the successful applicant's performance to verify the results proposed by the applicant;
2. collaboration during performance of the scope of work;
3. in accordance with 40 CFR 31.36(g), review of proposed procurements
4. approving qualifications of key personnel (EPA will not select employees or contractors employed by the award recipient);
5. review, comment, and acceptance of reports prepared under the cooperative agreement (the final decision on the content of reports rests with the recipient); and
6. approving proposed changes to work plan and/or budgets

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

The estimated budget and project period for awards resulting from this solicitation is 10/01/06 to 09/30/09. All projects must be completed within the negotiated project performance period of 3 years or 36 months.

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

Funding may be used to acquire services or fund partnerships, provided the recipient follows procurement and subaward or subgrant procedures contained in 40 CFR Parts 30 or 31, as applicable. Selected applicants must complete contracts for services and products and conduct cost and price analysis 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 concept proposal. Moreover, the fact that a selected applicant has named a specific contractor or consultant in the concept proposal EPA approves does not relieve it of its obligations to comply with competitive procurement requirements.

Sub-grants or sub-awards may be used to fund partnerships with universities and non-profit organizations. Successful applicants cannot use sub-grants or sub-awards 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 sub-grantee must be consistent with the standards for distinguishing between vendor transactions and sub-recipient assistance under Sub-part B Section .210 of OMB Circular A-133, and the definitions of "sub-award" at 40 CFR 30.2(ff) or "sub-grant" at 40 CFR 31.3, as applicable. EPA will not be a party to these transactions.

E. Will EPA consider partial funding for projects?

Yes. EPA reserves the right to partially fund proposals/applications by funding discrete activities, portions, or phases of the proposed project. If EPA decides to partially fund the proposal/application, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the proposal/application, or portion thereof, was evaluated and selected for award, and that maintains the integrity of the competition and the evaluation/selection process. In order to ensure appropriate funding is provided for partially funded projects, EPA requests that applicants provide an approximation of the percentage of the budget designated for each major activity.

III. ELIGIBILITY INFORMATION

A. Eligible Entities

Proposals will be accepted from universities, States, territories, Indian Tribes, and possessions of the U.S., including District of Columbia; international organizations; public and private universities and colleges; hospitals; laboratories; and other public or private nonprofit institutions, which submit applications proposing projects with significant technical merit and relevance to EPA's Office of Air and Radiation's mission.

Nonprofit 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. Note that OMB Circular A-122 specifically excludes the following types of organizations from the definition of "nonprofit organization" because

they are separately defined in the Circular:(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. While not considered to be "nonprofit organization(s)" as defined by OMB-Circular A-122, colleges and universities; hospitals; state, local, and federally-recognized Indian tribal governments are, nevertheless, eligible to submit applications under OMB Circular A-122 and this RFA.

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.

Are matching funds required?

No. Although cost-sharing or matching is not required, as a condition of eligibility, or otherwise, proposals from applicants proposing a voluntary financial or in-kind commitment or resources may improve their score under Section V. Evaluation Criteria, VI.2. Under this criteria, applicants will be evaluated based on the extent they demonstrate (i) how they will coordinate the use of EPA funding with other Federal and/or non Federal sources of funds to leverage additional resources to carry out the proposed project(s) and/or (ii) that EPA funding will compliment activities relevant to the proposed project(s) carried out by the applicant with other sources of funds or resources.

Applicants may use their own funds or other resources for a voluntary match or cost share if the standards at 40 CFR 30.23 or 40 CFR 31.24, as applicable, are met. Only eligible and allowable costs may be used for matches or cost shares. Other Federal grants may not be used as matches or cost shares without specific statutory authority (e.g. HUD's Community Development Block Grants). In addition, applicants will be evaluated on how the project will be managed if leveraging, in-kind or cost sharing if proposed.

IV. APPLICATION AND SUBMISSION PROCESS

The application process involves:

- **Stage 1:** Participate in optional pre-proposal conference call
- **Stage 2:** Submit Cover Letter, Concept Proposal (attached as a project narrative attachment form in Grants.gov), and SF-424, 424A, and 424B
- **Stage 3:** Invitation to Submit Formal SF-424 Package -- EPA will review concept proposals (attached as a project narrative attachment form in Grants.gov) and invite a select number of applicants to submit a full application package. Applicants chosen to complete this process will receive a formal letter of invitation requesting them to:
- **Stage 4:** Participate in a conference call to discuss the formal submission process, to answer questions about the full application package. Internal award recommendations do not constitute a commitment on the part of EPA to award a cooperative agreement to those invited to submit formal applications.
- **Stage 5:** Submit a Formal SF-424 Application Package including all supporting documentation after those selected for internal award recommendations have been notified.

Stage 1: Pre-proposal Conference Call

The pre-proposal conference call will be held **Tuesday, October 25, 2005 from 2:00 PM to 4:00 PM EST**. The purpose of this call is to answer any questions potential applicants may have concerning eligibility, scope of work, budget, formal application for federal assistance awards, project monitoring, etc. Participation is strongly encouraged, but not required. If your organization is interested in participating in the pre-proposal conference call, please e-mail EPA at iaq.rfa@epa.gov by **Wednesday, October 19, 2005**. In your e-mail please provide the organization's contact information including: the name of the organization; a contact person's name; e-mail address; and phone and fax number. The questions and answers from this call will be posted on the OAR website http://www.epa.gov/air/grants_funding.html.

Stage 2: Cover Letter, Concept Proposal and SF-424, 424A and 424B Submission

In addition to completing SF-424, 424A and 424B, applicants must complete a **cover letter** (maximum 2 pages) and **concept proposal** (maximum 12 pages, attached as a project narrative attachment form in Grants.gov) as described below. Only the concept proposal will be evaluated using the evaluation criteria set forth in Section V. of this RFA.

This information must be received **no later than Monday, December 12, 2005, 4:00 pm EST to Shelley Blake**. Proposals received after this deadline will not be considered.

How to Submit your Stage 2 Package Electronically:

The electronic submission of your application must be made by an official representative of your institution who is registered with Grants.gov. For more information, go to <http://www.grants.gov> and click on "Get Started," and then "Authorized Organization Representative (AOR)." *Note that the registration process may take a week or longer to complete.* If your organization is not currently registered with Grants.gov, please encourage your office to designate an AOR and ask that individual to begin the registration process as soon as possible.

To begin the application process for this grant program, go to <http://www.grants.gov> and click on "Apply for Grants." Then click on "Apply Step 1: Download a Grant Application Package and Application Instructions" to download the PureEdge viewer and obtain the application package https://apply.grants.gov/forms_apps_idx.html. Please note that the cover letter and concept proposal are attached as part of the project narrative attachment form in Grants.Gov. You may retrieve the application package by entering the Funding Opportunity Number, EPA-OAR-IED-05-21, in the space provided. You may also access the application package by clicking on the button at the bottom right side of the Find synopsis that says **Apply for Grant Electronically**.

How to Submit your Stage 2 Package via Mail:

If you choice to submit your Stage 2 Package via Mail your package must be received **no later than Monday, December 12, 2005, 4:00 pm EST to Shelley Blake**. Mailing address below:

Regular Mail Delivery Address (U.S. Postal Service)

U.S.EPA

Attn: Shelley Blake

1200 Pennsylvania Avenue, NW (Mail Code 6609J)

Washington, DC 20460

Phone: (202) 343-9819

Express Delivery Address (i.e., FedEx, UPS, DHL, etc.)

U.S.EPA

Attn: Shelley Blake

1310 L Street, NW, Room 413J

Washington, DC 20005

Phone: (202) 343-9819

Elements of the Cover Letter (will be attached as part of the project narrative attachment form in grants.gov)

The maximum two page cover letter will not be evaluated but must provide all of the following information:

- 1) Contact information for the organization:
 - a) Name of organization
 - b) Contact person's name
 - c) Mailing address (express mail address if different than mailing address)
 - d) E-mail address
 - e) Phone and fax numbers
- 2) A statement that your organization has eligibility status (see Section III. A)
- 3) A description of your organization and its mission
- 4) Identification of the indoor air quality priority area(s) that the concept proposal addresses.

Elements of the Concept Proposal (attached as part of the project narrative attachment form in grants.gov)

In addition to the cover letter, SF-424, 424A and B, organizations must submit a maximum **12** page concept proposal, including detailed budget; **any pages exceeding this page limit will not be considered.**

Each page of the cover letter and concept proposal should identify the name of the applicant organization.

The concept proposal should address the elements listed below in the indicated order. These elements will be evaluated according to the point distribution listed in section V.A.

A. Project Title

B. Project Goals and Objectives

Discuss how goals and objectives:

- align with EPA's Strategic Plan and indoor air quality priority area goals identified in Section I.C.1 of this RFA
- address one or multiple EPA indoor air program priority objectives and goals where appropriate

- demonstrate innovative approaches
- address disproportionately impacted audiences

C. Narrative workplan

The narrative workplan should:

- address activities including a detailed description of methods and materials used over the entire project period
- demonstrate the practicality and feasibility of the project
- identify intended audience and demonstrate that the project is appropriate for that audience
- demonstrate that collaborations and partnerships will be developed
- provide a timeline of these activities, including milestones, as well as projected timeframes of environmental outputs and environmental outcomes for the entire project period as detailed in Tables 1.1 through 1.3, Section I.C of this RFA
- quality assurance plan if proposed project activities require one

D. Organizational Experience and Past Performance

The work experience and staff section provide descriptions of:

- past performance in successfully completing projects similar in size, scope, and relevance to the proposed project
- organizational experience and plan for timely and successfully achieving the objectives of the project
- staff expertise/qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the project. In addition to evaluating applicants for programmatic capability purposes, EPA will consider information provided by the applicant in their application/proposal as well as information from other sources including Agency files.

E. Sustainability and Replication

The sustainability and replication section should provide an explanation of:

- the applicant's ability to sustain their efforts beyond the conclusion of the EPA assistance agreement
- the impacted audience's ability to sustain their efforts beyond the conclusion of the EPA assistance agreement
- the applicant's ability to demonstrate that activities are replicable and can yield large scale impacts

F. Monitoring and Evaluating Progress and Results

The monitoring and evaluating progress and results section should provide:

- a practical approach to identifying, measuring, and evaluating programmatic outputs and programmatic and/or environmental outcomes
- a baseline - the starting point from which progress is measured and targets are set. The baseline proposed should incorporate the most recent information available prior to the start of the project. Baselines can be based on organizational experience, estimates from past performance, national data, or expert opinion. Examples of baselines and corresponding targets:

-As of 2004, 100 homes in the target area had been mitigated for radon, out of an estimated 1,000 with elevated levels. Our proposed outreach activities will increase the homes mitigated to 300.

-From 2000-2004 the organization educated 2,000 of its 15,000 nurse members on environmental asthma triggers such as ETS. We propose to educate an additional 2,000 nurses during the grant period.

-Based on commitments from district officials in each of the 50 school districts in our target area, none were using an effective IAQ management plan. Our demonstration project will attempt to implement IAQ plans consistent with EPA guidance in 10 of these districts.

- a tracking method to evaluate progress toward achieving goals, objectives, and measurable environmental outputs/environmental outcomes identified in Section I.C.3 of this RFA. No EPA funds may be used to conduct a survey under this funding opportunity.

EPA will work with applicant to determine acceptable tracking activities that adhere to Federal Policies

G. Budget/Detailed Itemized Budget

Provide an appropriate budget for the following categories, specifying unit costs:

- Personnel
- Fringe Benefits
- Contractual Costs
- Travel
- Equipment
- Supplies
- Other
- Total Direct Costs
- Total Indirect Costs: must include documentation of accepted indirect rate
- Total Cost
- Total Project Cost. Specify total cost of the project (EPA funding and cost-share if any). Identify funding from other sources including any in-kind or leveraging of resources. Describe your ability to leverage funding for this project including any special measures to maximize cost effectiveness in implementing the project.
- Project period/Budget period. Provide beginning and ending dates (for planning purposes, applicants should assume funds will be available in October 1, 2006 through September 30, 2009).

Budget narrative should include an approximation of the percent of the budget used for each major activity proposed:

For Example:

Training health care providers on Asthma= 15% of budget allotted
 Developing tools for health care providers = 20% of budget allotted
 Schools outreach= 30 % of budget allotted

The two-page cover letter, SF-424, 424A and B and **12** page concept proposal (known as a project narrative attachment form in Grants.gov) with the scope of work, budget and

key personnel must be submitted no later than **Monday, December 12, 2005, 4:00 pm EST to Shelley Blake. No late proposals will be considered.**

Applicants are to avoid submission of extraneous materials. Pages exceeding the maximum length will not be considered. The maximum page length includes any pieces that may be submitted by a third party (e.g., references or letters confirming commitments). All application materials must be completed in English to be considered for award under this solicitation.

Applicants must submit information relating to the programmatic capability criteria to be evaluated under the ranking factor(s) in section V of the announcement. EPA will consider information provided by the applicant and may consider information from other sources including Agency files.

Stage 3: Invitation to Submit Full Application Package

EPA anticipates notifying the applicants selected for award recommendation within 15 days after recommendation decisions are made. At that time selected applicants will be invited to submit a complete full application package and all required supporting documentation.

Stage 4: Participate in a Conference Call Detailing the Formal Submission Process

The intent of the formal application assistance conference call is to answer any questions selected applicants for award recommendation may have about the federal assistance application process. Instructions will be e-mailed on how to participate in the conference call. This call will be scheduled on **Tuesday, February 7, 2006 from 1:00 PM to 3:00 pm EST to Shelley Blake.**

Stage 5: Submit a Full Application Package including all Supporting Documentation

When submitting the formal SF-424 "Request for Federal Assistance" application, it must be consistent with the selected concept proposal. Formal SF-424 applications and all supporting documentation from selected applicants are due on or before **Monday, February 27, 2006 at 4:00 pm EST to Shelley Blake.**

The complete grants application (Formal SF-424 "Application Kit for Federal Assistance" package) for selected applicant(s) can be downloaded from EPA's Office of Grants and Debarment website at: <http://www.epa.gov/ogd/AppKit/application.htm> or http://www.epa.gov/ogd/grants/how_to_apply.htm. Applicants selected for award recommendation may request a paper copy of the application package by contacting the agency contact person listed in Section VII of this announcement.

Full Application Package Instructions and Submission Dates and Time

How to Submit your Full Application Package Electronically:

The electronic submission of your application should be made by an official representative of your institution who is registered with Grants.gov. For more

information, go to <http://www.grants.gov> and click on “Get Started,” and then “Authorized Organization Representative (AOR).” *Note that the registration process may take a week or longer.* If your organization is not currently registered with Grants.gov, please encourage your office to designate an AOR and ask that individual to begin the registration process as soon as possible.

To begin the application process for this grant program, go to <http://www.grants.gov> and click on “Apply for Grants.” Then click on “Apply Step 1: Download a Grant Application Package and Application Instructions” to download the PureEdge viewer and obtain the application package https://apply.grants.gov/forms_apps_idx.html. Please note that the concept proposal is equivalent to the project narrative attachment form in Grants.Gov. You may retrieve the application package by entering the Funding Opportunity Number, EPA-OAR-IED-05-21, in the space provided. You may also access the application package by clicking on the button at the bottom right side of the Find synopsis that says **Apply for Grant Electronically**.

Application Submission Deadline: Your organization’s AOR must submit your complete application electronically to EPA through Grants.gov (<http://www.grants.gov>) no later than **Monday, February 27, 2006, 4:00 pm EST to Shelley Blake**. Applications received after the deadline will not be considered for funding.

Please submit *all* of the application materials described below.

Application Materials

The following forms and documents are required under this announcement:

1. Application for Federal Assistance (SF-424)
2. Budget Information for Non-Construction Programs (SF-424A)
3. EPA Key Contacts Form 5700-54
4. Assurances for Non-Construction Programs (SF-424B)
5. Grants.gov Lobbying Form
6. EPA Form 4700-4 – Preaward Compliance Review Report
7. Concept Proposal/Project Narrative Attachment Form (Work Plan)
8. Budget Narrative Attachment Form (Budget Detail)
9. Disclosure of Lobbying Activities (SF-LLL), if applicable

Deadline for Submission. The deadline for submission of the completed formal application package is **Monday, February 27, 2006, 4:00 pm EST to Shelley Blake**. 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.

Confidential Business Information. In accordance with 40 CFR 2.203, applicants may claim all or a portion of their application/proposal as confidential business information. EPA will evaluate confidential claims in accordance with 40 CFR Part 2. Applicants must clearly mark applications/proposals or portions of applications/proposals they claim as

confidential. If no claim of confidentiality is made, EPA is not required to make the inquiry to the applicant otherwise required by 40 CFR 2.204 (c)(2) prior to disclosure.

NOTE: Due to the unique circumstances involving U.S. postal mail screening (*that can delay delivery by several weeks*), the Agency strongly **recommends** that applicants use an express mail option (i.e., FedEx, UPS, DHL, etc.) to submit their concept proposals and full applications. **No late proposals will be considered.** Applicants must provide an original signed proposal and two copies to:

Regular Mail Delivery Address (U.S. Postal Service)

U.S.EPA

Attn: Shelley Blake

1200 Pennsylvania Avenue, NW (Mail Code 6609J)

Washington, DC 20460

Phone: (202) 343-9819

Express Delivery Address (i.e., FedEx, UPS, DHL, etc.)

U.S.EPA

Attn: Shelley Blake

1310 L Street, NW, Room 413J

Washington, DC 20005

Phone: (202) 343-9819

V. APPLICATION REVIEW INFORMATION

Each concept proposal will be evaluated against the proposal evaluation criterion set forth below. Concept proposals that are best able to directly and explicitly address these criteria will have a greater likelihood of selection. Each concept proposal will be rated under a points system, with a total of 200 points possible.

A. Evaluation Criteria

Proposal Evaluation Criterion		Maximum Points per Criteria (200 Point Scale)
I. Project Goals and Objectives:		Total Points: 60
1.	The proposed project goals and objectives align with EPA’s Strategic Plan and indoor air quality priority area goals (as described in Section I.C.1).	15
2.	The proposed project goals and objectives demonstrate the ability to achieve substantial measurable environmental outcomes (as described in Section I. C3.)	15
3.	The proposed project shows innovative approaches to achieving project goals, objectives, and measurable environmental outcomes.	15
4.	The proposed project goals and objectives are likely to reduce exposures to indoor air pollutants for socio-economically disadvantaged or disproportionately impacted populations (as described in Section I.A).	15
II. Narrative Workplan: Activities; Methods; Materials; and Timeline:		Total Points: 55
1.	The narrative workplan sufficiently describes the activities, methods, materials, and timeline that will be used to achieve each goal, objective, and measurable environmental health outcomes.	10
2.	The narrative workplan describes the practicality and feasibility of project’s proposed activities, methods, materials, timeline for achieving the project goals, objectives and outcomes.	15
3.	The narrative workplan describes activities, methods, and materials that are appropriate for the designated target audience(s).	10
4.	The narrative workplan demonstrates the development and utilization of collaborations/partnerships to achieve the project’s goals, objectives, and measurable environmental outcomes.	10

5.	The project timeline specifies quarterly and final reports, as well as appropriate proposed milestones, and projected timeframe of programmatic outputs and environmental health outcomes.	10
III. Organizational Experience and Past Performance		Total Points: 20
1.	The proposal provides evidence of sufficient organizational experience, including relevant performance in achieving substantial measurable environmental outcomes in past projects of comparable size and scope.	10
2.	The proposal demonstrates that the applicant has sufficient past performance in completing federally and non-federally funded projects similar in scope, size and relevance to the proposed project, a history of meeting reporting requirements, organizational experience, and staff expertise/qualifications. In addition to evaluating applicants for programmatic capability purposes, EPA will consider information provided by the applicant in their application/proposal as well as information from other sources including Agency files. Applicants that do not have past performance history they will receive a neutral rating.	10
IV. Project Sustainability and Replication		Total Points: 20
1.	The proposed project addresses how applicant will sustain successes in meeting goals, objectives, and environmental outcomes beyond the conclusion of the EPA assistance agreement.	5
2.	The proposed project addresses how the impacted audience (e.g. schools, asthmatics, etc) will sustain successes in achieving measurable outcomes beyond the conclusion of the EPA assistance agreement.	10
3.	The proposed project demonstrates that activities are replicable and can yield large scale impacts.	5
V. Monitoring and Evaluating Environmental Results:		Total Points: 25
1.	The proposed project specifies practical approaches to identify, measure, and evaluate programmatic outputs and environmental outcomes and identifies baseline(s) to measure them.	15
2.	The proposed project specifies how progress towards achieving goals, objectives, and measurable environmental outcomes will be tracked and reported.	10
VI. Budget and Matching Funds:		Total Points: 20
1.	The proposed project budget is appropriate to accomplish the proposed goals, objectives, and measurable environmental outcomes. The budget also provides an approximation of the percentage of the budget designated for each major activity.	15

2.	Under this criteria, applicants will be evaluated based on the extent they demonstrate (i) how they will coordinate the use of EPA funding with other Federal and/or non Federal sources of funds to leverage additional resources to carry out the proposed project(s) and/or (ii) that EPA funding will compliment activities relevant to the proposed project(s) carried out by the applicant with other sources of funds or resources.	5
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B. Other Factors

In addition to the evaluation of proposals against the ranking criteria described above in Section V. A., the following factors (listed below) may be considered by the Approving Official in making selection award decisions for all cooperative agreements:

- balance between indoor air quality program priority areas
- geographic balance among the EPA Regions
- diverse nature based on ranking of the projects proposed
- balance of type of community targeted (e.g., rural, urban, low-income, disadvantaged, underserved, disproportionately impacted populations, etc.)

C. Review and Selection Process

Each concept proposal will be reviewed by an evaluation team with expertise in indoor air quality pollutant areas as well as public education, training and outreach activities. The evaluation team will base its evaluation on the evaluation criteria contained in Section V. of this RFA. The highest numerically ranked concept proposal(s) subject to their quality, the availability of funds, and consideration of factors listed in Section V. B., will be selected for this award.

VI. AWARD ADMINISTRATION INFORMATION

A. Award Notices

Following final selections, all applicants will be notified regarding the status of their application.

1. EPA will notify selected applicant(s) via telephone or email within 15 days after internal award recommendation decisions are made. This notification, which advises that the applicant’s concept proposal is selected by review panel and recommended for award, is not an authorization to begin the project activities. The award notice signed by the EPA grants officer is the authorizing document and will be provided through postal mail. At a minimum, this process can take up to 60 days from the date of selection.
2. EPA will notify unsuccessful applicant(s) via telephone or email within 15 days after internal award recommendation decisions are made. In either event, the notification will be sent to the original signer of the concept proposal.

B. Administrative and National Policy Requirements

1. A listing and description of general EPA Regulations applicable to the award of assistance agreements may be viewed at:
http://www.epa.gov/ogd/AppKit/applicable_epa_regulations_and_description.htm.
2. Executive Order 12372, Intergovernmental Review of Federal Programs may be applicable to awards, resulting from this announcement. Applicants selected for funding may be required to provide a copy of their proposal to their State Point of Contact (SPOC) for review, pursuant to Executive Order 12372, Intergovernmental Review of Federal Programs. This review is not required with the Initial Proposal and not all states require such a review.
3. All applicants are required to provide a Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) number when applying for a Federal grant or cooperative agreement. Applicants can receive a DUNS number, at no cost, by calling the dedicated toll-free DUNS Number request line at 1-866-705-5711, or visiting the D&B website at: <http://www.dnb.com>.
4. Grants and agreements with institutions of higher education 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.
5. Programmatic Terms and conditions will be negotiated with the selected recipient.

C. Reporting Requirements

Quarterly performance reports and a detailed final technical report will be required during the project performance period. The final technical report should include (but is not limited to) a summary covering work status, work progress, publications, and measurable environmental outputs/environmental outcomes pertinent to the project goals and objectives for the entire period. The schedule for submission of quarterly reports will be established by EPA, after award.

While the Agency will negotiate precise terms and conditions relating to substantial involvement as part of the award process, EPA expects to closely monitor the successful applicant(s) performance, collaborate during the performance of the scope of work, approve the substantive terms of proposed contracts, approve the qualifications of key personnel, review and comment on reports prepared under the cooperative agreement, and evaluate the engineering improvements on an EPA demonstration project. 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).

D. Disputes

Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) which can be found at: <http://www.epa.gov/fedrgstr/EPA-GENERAL/2005/January/Day-26/g1371.htm>. Copies of these procedures may also be requested by contacting Victoria Drew.

E. Pre-Award Administrative Capability Review

Non-profit applicants recommended for funding under this solicitation, depending on the size of the award, may be required to complete and submit, with supporting documentation, an “EPA Administrative Capability Questionnaire.”

VII. AGENCY CONTACT

FOR FURTHER INFORMATION CONTACT: Shelley Blake

Express Delivery Address (i.e., FedEx, UPS, DHL, etc.)

Shelley Blake, US EPA
Office of Air and Radiation
Indoor Environments Division (MC 6609J)
1310 L Street, NW, Room 413J
Washington, DC 20005
Phone: (202) 343-9819
Fax (202) 343-2392
e-mail: iaq.rfa@epa.gov

Questions must be communicated in writing via express mail, facsimile, or e-mail to the contact person listed above. Answers will be posted, bi-weekly, until the closing date of this announcement at the OAR Grants/Funding webpage http://www.epa.gov/air/grants_funding.html.

VIII. OTHER INFORMATION

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

Applications evaluated but not selected for funding under this initial solicitation, may be retained for a period of 4 months to be considered for future awards subject to availability of additional funding.

The EPA Grant Award Officer is the only official that can bind the Agency to the expenditure of funds for selected projects resulting from this announcement.