

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-5300-N-20]

Notice of Funding Availability (NOFA) for HUD's Fiscal Year 2009 Green and Healthy Homes Technical Studies Program

AGENCY: Office of the Secretary—Office of Healthy Homes and Lead Hazard Control, HUD.

ACTION: Notice of Funding Availability for HUD's Fiscal Year (FY) 2009 Green and Healthy Homes Technical Studies Program.

SUMMARY: This NOFA announces the availability of funding for approximately \$2.4 million for HUD's Green and Healthy Homes Technical Studies Program for FY2009 to fund cooperative agreements to improve knowledge of the effects green residential building has on: 1) indoor environmental quality, and 2) occupant health, with a particular focus on children and other sensitive populations in low income households. The funding of HUD's Green and Healthy Homes Technical Studies Program is authorized by the Department of Housing and Urban Development Appropriations Act, 2009 (Pub. L. 111-8). HUD's FY2009 Notice of Funding Availability Policy Requirements and General Section (FY2009 **General Section**) published in the Federal Register on December 29, 2008, as amended on April 16, 2009 (74 FR 17685), along with subsequent FY2009 **General Section** technical corrections or supplementary information published in the Federal Register, establish threshold and other critical application submission requirements that affect this NOFA. Applicants for this assistance are, therefore, directed to review the FY2009 **General Section** prior to submitting an application. See Section IV of this NOFA for important information regarding application submission. This replaces the requirement to submit applications electronically using Grants.gov as described in the FY 2009 **General Section**, published on December 29, 2008, as amended.

DATES: The deadline for receipt of the application by email is **5:00 PM eastern time, November 17, 2009.**

FOR FURTHER INFORMATION CONTACT: Questions regarding specific program requirements should be directed to the agency contact identified in this program NOFA.

Questions regarding the FY2009 **General Section** should be directed to the Office of Departmental Grants Management and Oversight at 202-708-0667 (this is not a toll-free number) or the NOFA Information Center at 1-800-HUD-8929 (toll-free). Persons with hearing or speech impairments may access this number via TTY by calling the Federal Relay Service at 1-800-877-8339. The NOFA Information Center is open between the hours of 10:00 AM and 6:30 PM eastern time, Monday through Friday, except federal holidays.

OVERVIEW INFORMATION:

A. Federal Agency Name: Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control.

B. Funding Opportunity Title: Green and Healthy Homes Technical Studies Program.

C. Announcement Type: Initial announcement.

D. Funding Opportunity Number: FR-5300-N-20, OMB Paperwork Approval number is 2539-0015.

E. Catalog of Federal Domestic Assistance (CFDA) Number: 14.911, Green and Healthy Homes Technical Studies Program.

F. Application Receipt:

1. The deadline for receipt of the application by email is 5:00 PM eastern time, November 17, 2009.
2. Information on Application.

Copies of the published NOFA and application forms may be downloaded from the HUD website at <http://www.hud.gov/offices/adm/grants/fundsavail.cfm> or <http://www.hud.gov/offices/lead>.

- a. *E-mail Address for Submitting Applications.* Completed applications, as described below, must be submitted to OHHLHCNOFAreview@HUD.gov (the capital letters are optional).
 - b. *Application Materials.* The application shall be submitted as one email (or more than one if necessary) with the narratives and forms attached as described in Appendix D, Procedures for Submitting Grant Applications by Email, of this NOFA.
 - c. *Submission Procedures.* The procedures that apply to the submission of applications under this NOFA are described in Appendix E, Procedures for Submitting Grant Applications by Email. Please read that appendix carefully and completely, because failure to comply with the procedures may disqualify your application.
3. Only one application will be accepted from any given organization for a given project under this grant program. If more than one application for the same project or essentially similar projects is received from an organization, the application that was received last by HUD before the deadline will be considered for funding.

G. Additional Information:

1. Purpose: To fund cooperative agreements to improve our knowledge of the effects green building has on: 1) indoor environmental quality, and 2) occupant health, with a particular focus on children and other sensitive populations in low income households.
2. Available funding: Approximately \$2.4 million in FY 2009 and prior-year funds is available for the Green and Healthy Homes Technical Studies Program.

3. Anticipated awards: Approximately 4 to 7 awards are anticipated under the Green and Healthy Homes Technical Studies Program, ranging from approximately \$350,000 to a maximum of \$700,000 each for the entire period of performance, subject to available funding.
4. Type of awards: Cooperative agreements, with substantial involvement of the government, will be awarded (see Section II.C for a description of substantial involvement).
5. Eligible applicants: Academic, not-for-profit and for-profit institutions located in the U.S., state and units of general local government, and federally recognized Native American tribes are eligible to apply. For-profit firms are not allowed to earn a fee (i.e., make a profit from the project). Individuals are not eligible to apply.
6. Match: Cost sharing or “matching” is not required; however, applicant “leveraging” contributions are encouraged (see Section V.A.2.d).
7. Limitations: There is no limit on the number of applications that each applicant may submit.
8. Application Information: The application for this NOFA can be found at <http://www.hud.gov/offices/adm/grants/fundsavail.cfm> and <http://www.hud.gov/offices/lead/>.

FULL TEXT OF ANNOUNCEMENT:

I. Funding Opportunity Description:

A. Purpose of the Program: The overall purpose of the Green and Healthy Homes Technical Studies Program is to improve our knowledge of the effects green building has on: 1) indoor environmental quality and 2) occupant health, with a particular focus on children and other sensitive populations in low income households.

B. Background:

1. Healthy Homes Program: The Green and Healthy Homes Technical Studies Program is a part of the Healthy Homes Program, within HUD’s Office of Healthy Homes and Lead Hazard

Control (OHHLHC). Initiated in 1999, the mission of the Healthy Homes Program is to mitigate key health and safety hazards in housing by providing research, technical and policy guidance, outreach, and capacity building for partners, practitioners, and the public, with a focus on protecting the health of children and other sensitive populations in low income households. The Healthy Homes Program also sponsors the Healthy Homes Technical Studies and Healthy Homes Demonstration Grant Programs (NOFAs for these programs are published separately). These grant programs and other Healthy Homes program activities are expected to improve the health, productivity and quality of life of residents and reduce healthcare and related costs from common housing-related illness and injuries.

Appendix A of this NOFA briefly describes the key housing-associated health and safety hazards OHHLHC considers targets for intervention, among them: asthma and allergy triggers, mold and moisture, pests and pesticides, injury hazards, and poor indoor air quality. OHHLHC has also developed resource papers on a number of these topics, including: mold, environmental aspects of asthma, carbon monoxide, pesticides, and unintentional injuries. These resource papers can be downloaded from <http://www.hud.gov/offices/lead/researchers.cfm> (under “Related Information”). The Healthy Homes Program departs from the more traditional approach of attempting to correct one hazard at a time (e.g., radon, lead). OHHLHC is interested in promoting approaches that are cost-effective and efficient and result in the reduction of health threats for the maximum number of residents and, in particular, children and other sensitive populations in low income households.

OHHLHC is currently in the process of updating the strategic plan for the Healthy Homes Program. This process has resulted in the identification of four key goals to guide the Program’s future activities:

- 1) *Building a National Framework*: Foster partnerships for implementing a healthy homes agenda.
- 2) *Creating Healthy Housing through Key Research*: Support strategic, focused research on links between housing and health and cost-effective methods to address hazards.
- 3) *Mainstreaming the Healthy Homes Approach*: Promote the incorporation of healthy homes principles in ongoing practices and programs.
- 4) *Enabling Communities to Create and Sustain Healthy Homes*: Build sustainable local healthy homes programs.

A complete draft of the Healthy Homes Strategic Plan can be found on the OHHLHC website at <http://www.hud.gov/offices/lead/>.

2. **Green Building**: For the first time, in FY2009, HUD has identified “Promoting Energy Star and Green Development” as a policy priority in the **General Section**. Though the Department has been encouraging energy-saving measures for several years now, broadening the scope to green building generally is a notable change. This shift reflects growing momentum among HUD programs, the Federal government, and the U.S. housing market at large toward the development of homes that are not only less expensive to operate (i.e., energy efficient) but also built in a more sustainable manner and healthier for occupants.

There are various approaches to defining “green building;” (see Section I.C.4.a, below) the U.S. Environmental Protection Agency (EPA) describes it generally as “the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition” (see <http://www.epa.gov/greenbuilding/pubs/about.htm>). Traditionally, the focus of green building programs has been on maximizing energy and water efficiency, selecting “environmentally preferable” products and materials, and minimizing the

effects of development on the outdoor environment. Many proponents of the concept have also emphasized the potential of green building to improve indoor environmental quality (IEQ) with resulting benefits to occupant health.

In the past, some well-meaning programs targeted at reducing energy consumption did not adequately account for the negative effects that increased tightening of the building envelope could have on IEQ (e.g., the reduction in passive ventilation resulting in excess moisture buildup within the home). As buildings became more airtight in an effort to conserve energy, indoor air quality suffered and moisture and mold problems arose. Fortunately, many green building programs today stress the importance of health by promoting: 1) better ventilation, 2) avoidance of materials which give off volatile organic compounds (VOCs), and 3) tighter construction methods and the use of integrated pest management (IPM) practices in property maintenance that would be expected to prevent the migration of pests and moisture into the home.

In 2008, the National Center for Healthy Housing (NCHH) assessed the “healthy homes components” of several green building guidelines: the National Association of Home Builders’ *Green Home Building Guidelines*, the U.S. Green Building Council’s *LEED for Homes*, Enterprise Community Partners’ *Green Communities Criteria*, and the EPA’s *Energy Star with Indoor Air Package Pilot Specifications*. Though the NCHH found variation among the guidelines’ consideration of occupant health, they concluded that these programs offered a considerable opportunity for moving toward healthier homes. However, while all of these programs had components aimed at improving resident health, many were missing critical elements for healthier homes, most notably injury prevention measures (e.g., grab bars in showers, anti-scald devices, lockable medicine cabinets) and surfaces that are easy to keep clean (e.g., smooth non-porous surfaces, low pile carpeting). Their analysis also noted the significance

of mandatory versus optional criteria. For example, though *LEED for Homes* addresses many aspects related to IEQ, only some of these are mandatory, making it difficult to discern what criteria a builder might actually meet. A positive finding of the report was that three of the four programs reviewed required adequate measures to ensure proper moisture control and ventilation. Mandatory criteria included: compliance with American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 62.2 (an industry standard for ventilation in low-rise residential buildings), effective air filtration, and avoidance of mold-susceptible materials. The study also noted the incorporation of criteria to minimize pest infestations and encourage proper maintenance of homes. Ultimately, this report suggests that green building programs have the potential to lead to improved home environments and resident health, but that they need to be more comprehensive in order to maximize the potential health benefits (for more information on this report and green building guidelines, please see Appendix B).

There is a need for improved knowledge regarding the specific IEQ and health benefits that will result from green building practices, as well as the specific practices that provide the greatest benefits. To date, there have been only a handful of studies which have used research methods to quantify the effects of green development on household hazards and occupant health. Preliminary research indicates that there is reason to expect that some green building practices can lead to improvements in IEQ and associated improvements in the health of occupants (for more information on relevant research to date, please see Appendix B). But as the green building movement expands, both at the federal and national level, it will be increasingly critical to ensure that green housing and healthy housing are in fact synonymous.

C. Program Description: It is with this critical need in mind, that the OHHLHC introduces the Green and Healthy Homes Technical Studies Program as part of its Healthy Homes Program in FY2009. This new grant program will award cooperative agreements to improve our knowledge of the effects residential green construction has on: 1) IEQ and, 2) occupant health, with a particular focus on children and other sensitive populations, such as the elderly, in low income households. The Green and Healthy Homes Technical Studies Program will forward two of our newly revised Healthy Homes Program goals: “creating healthy housing through key research” and “mainstreaming the healthy homes approach.” Further, it supports the HUD policy priority of “Promoting Energy Star and Green Development” in a safe and healthy way.

1. Goals: The Green and Healthy Homes Technical Studies Program has two overarching goals:

- a. To improve our knowledge of the benefits of residential green building methods on indoor environmental quality, and
- b. To improve our knowledge of the benefits of residential green building methods on occupant health.

It is expected that benefits would be most likely observed for respiratory health outcomes and reductions in irritation-related symptoms (e.g., throat and eye irritation, headache).

2. Objectives: In addition to advancing the goals of HUD and the Healthy Homes Program, the

Green and Healthy Homes Technical Studies Program has the following primary objectives:

- a. To identify residential green building methods (for both the construction of new housing and the rehabilitation of existing housing) that are cost effective at improving IEQ and providing the maximum health benefits to housing occupants, with a particular focus on children and other sensitive populations; and

b. To promote the incorporation of cost effective residential green building methods into the construction and rehabilitation of low- and moderate-income housing.

3. Specific Areas of Interest: OHHLHC is particularly interested in the following topics:

- a. Greening of Low-Income Housing: Applicants are encouraged to design studies that focus on low income housing, including federally-supported housing. Examples of green initiatives sponsored or supported by HUD include: the Office of Affordable Housing Preservation's Mark to Market Green Rehab Initiative, the Office of Community Development and Planning's Competitive Reallocation of Community Housing Development Organizations Funds to Provide for Energy Efficient and Environmentally-Friendly Housing for Low-Income Families, and HOPE VI housing that incorporates green design features. For resources on designing, implementing and evaluating a project for the assessment and remediation of housing-related environmental health and safety hazards that result in illnesses to children, please see Appendix C. For more information on HUD green building programs and projects, please see Appendix D.
- b. Voluntary Guidelines: Assessing the IEQ and health benefits of residential green building conducted according to various voluntary guidelines, including: U.S. EPA's *Energy Star with Indoor Air Package*, Enterprise Community Partners *Green Communities Criteria*, U.S. Green Building Council's *LEED for Homes*, and National Association of Home's Builder's *Green Home Building Guidelines* (for more information on green building guidelines, please see Appendix B).
- c. Determining the Effects of Specific Features: HUD is interested in the IEQ and health benefits of including specific practices (e.g., IPM, or upgrades to ventilation systems) in residential green construction. HUD is interested in identifying features that may not be part of a

specific green building program, but which significantly enhance the effects of the program on IEQ and health.

d. Injury Prevention Measures: HUD is interested in demonstrating the feasibility and cost-effectiveness of incorporating injury prevention measures into residential green building. Such measures (e.g., grab bars in showers, anti-scald devices, lockable medicine cabinets) are not typically included in a green building program but could be incorporated to enhance the effects of the program on resident safety and health.

e. Other Topic Areas: OHHLHC will also consider funding applications on other topics that are consistent with the overall goals and objectives of the Green and Healthy Homes Technical Studies Program and Healthy Homes Program.

4. Project Design: In addition to designing a project which will be consistent with the overall goals and objectives of the Green and Healthy Homes Technical Studies Program and Healthy Homes Program, applicants are encouraged to consider the following guidance when developing their project.

a. Terminology: There are various approaches to defining “green building” and various standards for buildings to qualify as “green.” For the purposes of the Green and Healthy Homes Technical Studies Program, applicants should keep in mind the general U.S. EPA description of green building as the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition (see Section I.B.2, above, and Appendix B). As used in this NOFA, the process of “building” refers to new construction, repair, renovation, and/or operation and maintenance. Because there is no universally recognized definition of “green building,” and there are varying standards a building can meet to qualify as “green,” applicants are not required to study any one set of green building guidelines,

but should be explicit about the guidelines they are using and their source. The research to be conducted under this NOFA should, among other results, help in the development of performance-based definitions and/or standards of greenness that incorporate health considerations.

b. Significant Contribution: OHHLHC wishes to fund projects which will make significant contributions towards achieving some or all of this Program's stated goals and objectives.

Applicants should design projects which have the potential to substantially advance the state of knowledge in their proposed topic area.

c. Community Participation: It is important for researchers to incorporate meaningful community participation in the development and implementation of projects that are conducted in communities and/or involve significant interaction with community residents. Community participation can improve project effectiveness in various ways, including the development of more appropriate research objectives, improving recruitment and retention of project participants, improving participants' involvement in and understanding of a project, improving ongoing communication between researchers and the affected community, and more effectively disseminating project findings.

d. Partnering: Applicants should consider the advantages of working cooperatively with other organizations, including, but not limited to: recipients of other OHHLHC grants (information on current grantees is available at <http://www.hud.gov/offices/lead/grantprograms.cfm>) and/or other HUD funds (for more information on HUD green building programs and projects, please see Appendix D), colleges, universities, health departments and other state and local government entities, grassroots faith-based and other community organizations, and contractors/developers.

5. Authority: The Green and Healthy Homes Technical Studies Program is authorized under Sections 501 and 502 of the Housing and Urban Development Act of 1970 (12 U.S.C. 1701z-1 and 1701z-2). FY2009 funds for this program are authorized under the Department of Housing and Urban Development Appropriations Act, 2009 (Pub. L. 111-8).

II. Award Information:

A. Funding Available: Approximately \$2.4 million in FY2009 and prior-year funds are available for Green and Healthy Homes cooperative agreements. Cooperative agreements will be awarded on a competitive basis following evaluation of all eligible proposals according to the rating factors described in Section V.A.2 of this NOFA. HUD anticipates that approximately 4 to 7 awards will be made for the Green and Healthy Homes Technical Studies Program. Awards will range from approximately \$350,000 to a maximum of \$700,000. Applications for amounts larger than the maximum amount or for longer periods of performance than that allowed in Section II.B.1 will be deemed ineligible and will not be reviewed.

B. Anticipated Start Date and Period of Performance for New Grants:

1. Start Date: The start date for new awards is expected to be not later than February 1, 2010.

The period of performance cannot exceed 36 months from the date of award.

2. Period of Performance: The proposed performance period should include adequate time for such project components as the Institutional Review Board (IRB) process (if required), the recruitment of new staff and/or study participants, the development of new instrumentation or methods (e.g., analytical methods), and the fulfillment of applicable environmental requirements, all of which have been found to delay similar projects in the past. Applicants should also ensure that they include adequate time for any proposed assessment activities, including pre- and post-

construction assessments, and should generally consider the potential for delays associated with residential construction activities.

HUD encourages applicants to involve all partners in the pre-planning process. In particular, when multiple organizations are collaborating on a proposed project and each has an IRB approval requirement, this can lead to significant delays. In such situations HUD strongly encourages grantees to work with their partners to investigate other options such as designating a primary IRB for the project. For further guidance on this topic, see the Office for Human Research Protections (OHRP) website at <http://www.hhs.gov/ohrp>.

Period of performance extensions of up to 1 year for delays due to exceptional conditions beyond the grantee's control will be considered for approval by HUD in accordance with 24 CFR 84.25(e)(2) or 85.30(d)(2), as applicable, and the OHHLHC Program Guide. If approved, grantees will be eligible to receive a single extension of up to 12 months in length. Applicants are encouraged to plan studies with shorter performance periods than 36 months; however, when developing your schedule, you should consider the possibility that issues may arise that could cause delays.

C. Type of Award Instrument: Awards will be made as cooperative agreements. Anticipated substantial involvement by HUD staff in cooperative agreements may include, but will not be limited to:

1. Review and suggestion of amendments to the project design, including: project objectives; project implementation plan; field sampling plan; data collection methods; sample handling and preparation; sample and data analysis; and project evaluation.
2. Review and provision of technical recommendations in response to quarterly progress reports (e.g., amendments to project design based on preliminary results); and

3. Review and provision of technical recommendations on the final report, journal article(s), or other project-related reports or publications.

III. Eligibility Information:

A. Eligible Applicants: Academic and non-profit institutions located in the United States, state and units of general local government, and federally recognized Native American tribes are eligible under all existing authorizations. For-profit firms also are eligible; however, they are not allowed to earn a profit from the project. Federal agencies and individuals are not eligible to apply. The FY2009 **General Section** identifies threshold requirements that must be met for an organization to receive an award.

B Cost Sharing or Matching: Cost sharing or matching is not required. In rating applications, however, applicants will receive a higher score under Rating Factor 4 if evidence of significant resource leveraging is provided (for more information, please see Section V.A.2.d).

C. Other:

1. Threshold Requirements: To receive an award of funds from HUD, applicants must meet all the threshold requirements in the FY2009 **General Section** (for more information, please see Section III.C.2). These requirements apply to the applicant institution or organization, and not just an individual researcher or researchers. Applications that do not address the threshold requirements will not be reviewed.

2. DUNS Requirement: The DUNS number will be required before award to successful applicants. Prospective applicants that do not have an organizational DUNS number are encouraged to obtain one before applying, so that they can enter the number in block 8c of the Application for Federal Assistance, SF-424.

3. Central Contractor Registration (CCR) Requirement. Registering with the CCR, or performing the annual updating or renewing of the CCR registration, as discussed in Section IV.B.4.b(2) of the **General Section**, will be required before award to successful applicants. Prospective applicants that have not registered with the CCR are encouraged to do so before applying. (Prospective applicants which have not registered with the CCR and also do not have an organizational DUNS number should see Section IV.B.4.b(1) of the **General Section** for the minimum recommended period to wait after obtaining a DUNS number to register with the CCR.)

4. Program Requirements: In the event that an applicant is awarded a cooperative agreement under the Green and Healthy Homes Technical Studies Program, the following program requirements will apply and should be taken into consideration in the pre-planning process of the project. Additional information regarding program requirements can also be found in the FY2009 **General Section**.

a. Program Performance: Grantees shall take all reasonable steps to complete all activities within the approved period of performance. HUD reserves the right to terminate the cooperative agreement prior to the expiration of the period of performance, if the grantee fails to make reasonable progress in implementing the approved program of activities or fails to comply with the terms of the cooperative agreement.

b. Restricted Use of Funds: Green and Healthy Homes Technical Studies Program funds shall not replace existing resources dedicated to any ongoing project.

c. Community Participation: Grantees must incorporate meaningful community involvement into any project that requires a significant level of interaction with a community during implementation (e.g., projects being conducted within occupied dwellings or which involve

surveys of community residents). The term community refers to a variety of populations comprised of persons who have commonalities that can be identified (e.g., based on geographic location, ethnicity, health condition, common interests). Applicants should identify the community that is most relevant to their particular project. There are many different approaches to involving the community in the conception, design, and implementation of a project and the subsequent dissemination of findings. Examples include but are not limited to: establishing a structured approach to obtain community input and feedback (e.g., through a community advisory board); including one or more community-based organizations as project partners; employing community residents to recruit project participants and collect data; and enlisting the community in the dissemination of findings and translation of results into improved policies and/or practices. A discussion of community involvement in research involving housing-related health hazards can be found in Chapter 5 of the Institute of Medicine publication titled “Ethical Considerations for Research on Housing-Related Health Hazards Involving Children” (for more information on this report, please see Appendix B).

d. Human Research: Human research subjects will be protected from research risks in conformance with Federal Policy for the Protection of Human Subjects, required by HUD at 24 CFR 60.101, which incorporates the Department of Health and Human Services (DHHS) Protection of Human Subjects regulation at 45 CFR Part 46. For more information regarding this requirement and IRB Approval please see Section V.A.2.c(5).

e. Privacy:

(1) Submission of any information to databases (whether website, computer, paper, or other format) of addresses of housing units identified, treated or cleared under these studies is

subject to the protections of the Privacy Act of 1974, and shall not include any personal information that could identify any child affected.

(2) You must also comply with the Health Insurance Portability and Accountability Act of 1996 (HIPAA), if applicable. The Privacy Rule of HIPAA defines covered entities as those that transmit health information electronically (health care providers, health plans, etc.). Only those entities are required to protect that information under HIPAA. (Other requirements for confidentiality of personal data may apply.) This may be accomplished by obtaining authorization from the patient or parent, obtaining a waiver of authorization from an IRB or HIPAA Privacy Board, or de-identifying data. You should identify whether your proposal is subject to requirements of the HIPAA Privacy Rule and, if so, how you plan to address these requirements. Additional information on HIPAA and the Privacy Rule can be found at <http://www.hhs.gov/ocr/hipaa>. Additional information is also available at: <http://privacyruleandresearch.nih.gov/authorization.asp>. Grantees should also check to ensure they meet state and local privacy regulations.

f. Improving Access for Persons with Limited English Proficiency (LEP) or Disabilities: The institutions administering the grant must take reasonable steps to ensure meaningful access to programs for persons with disabilities and/or limited English proficiency because of their national origin. It particular, it is imperative that steps taken to incorporate community participation and comply with human research requirements are effective and accessible, and any disclosures of research procedures and results to human subjects must be clearly provided.

Information should be provided at community meetings and/or in one-on-one sessions with the research subjects. When possible, they should be provided by community organizations accustomed to working with the research subject population. If there are residents who are

limited English proficient (LEP), it is recommended that oral interpreters be provided at the meetings and/or written translations of vital documents be provided. HUD guidance on LEP may be obtained through <http://www.hud.gov/offices/fheo/promotingfh/lep.cfm>.

In all disclosure sessions, whether public or one-on-one, reasonable accommodation must also be provided, if necessary for persons with disabilities. This could include provision of information in alternative formats (e.g. Braille, sign, audio, large format) and accommodation for persons with mobility disabilities. Additional information about reasonable accommodation is available through <http://www.hud.gov/offices/fheo/library/huddojstatement.pdf>.

g. Data Collection and Provision: Grantees must collect, maintain, and provide to HUD the data necessary to document approaches used to: 1) measure housing-related health and safety hazards and occupant health and/or 2) evaluate the cost-benefit and/or cost-effectiveness of green building to reduce housing-related health and safety hazards and improve occupant health.

h. Laboratory Analysis for Lead: Residential paint, soil or dust samples to be analyzed for lead must be analyzed by a laboratory recognized by the U.S. Environmental Protection Agency's (EPA's) National Lead Laboratory Accreditation Program (NLLAP) (<http://www.epa.gov/lead/pubs/nllap.htm>) with the recognition under NLLAP applicable to the medium analyzed.

i. Laboratory Analysis for Mold: Samples to be analyzed for mold (fungi) must be submitted to a laboratory accredited by the Environmental Microbiological Laboratory Accreditation Program (EMLAP), administered by the American Industrial Hygiene Association (AIHA) Laboratory Accreditation Programs, LLC (http://www.aiha.org/llc_labaccred/programs_em.htm).

j. Standardized Dust Sampling Protocol and Quality Control Requirements: Grantees collecting samples of settled dust for environmental allergen analyses (e.g., cockroach, dust mite) will be

required to use a standard dust sampling protocol, unless there is a strong justification to use an alternate protocol. The HUD protocol can be found on the OHHLHC website under “Grantee Resources” at <http://www.hud.gov/offices/lead/hhi/hhts.cfm>. Grantees conducting these analyses will also be required to include quality control dust samples, provided by OHHLHC at no cost to the grantee, with the samples that are submitted for laboratory analyses. (For the purpose of budgeting laboratory costs, applicants should assume that 5 percent of total allergen dust samples will consist of Quality Control samples.)

k. Disclosure: All test results and other information in pre-1978 housing related to lead-based paint or lead-based paint hazards must be provided to the owner of the unit, together with a statement describing the owner’s legal duty to disclose the knowledge of lead-based paint and its hazards to tenants (before initial leasing, or before lease renewal with changes) and to buyers (before sale) (24 CFR Part 35, Subpart A). Disclosure of other identified housing-related health or safety hazards to the owner of the unit, for purposes of remediation, is encouraged but not required (unless it is separately required by Federal, state or local law or regulation).

l. Requirements for peer review of scientific data in accordance with the Office of Management and Budget Information Quality Guidelines: All HUD-sponsored research is subject to the OMB Final Information Quality Bulletin for Peer Review (70 FR 2664-2677, January 14, 2005) prior to its public dissemination. In accordance with paragraph II.2 of the Bulletin, HUD will not require further peer review conducted on information that has already been subjected to adequate peer review.

m. Regulatory Compliance: Grantees must comply with all relevant federal, state, and local regulations regarding exposure to and proper disposal of hazardous materials.

n. OSHA Compliance: The requirements of the Occupational Safety and Health Administration (OSHA) (e.g., 29 CFR Parts 1910 and/or 1926, as applicable) or the state or local occupational safety and health regulations, whichever are most stringent, must be met.

o. Nondiscrimination, Civil Rights, and Other Requirements: The institutions administering the grant must comply with all nondiscrimination and civil rights laws set forth in the FY2009

General Section (for more information, please see Section III.C.4 of the FY2009 **General Section**).

p. Economic Opportunities for Low and Very-Low Income Persons: Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) applies directly to grantees. The purpose of Section 3 is to ensure that new training, employment or contracting opportunities created during the grant will be directed to low- and very low-income persons residing in the target area and to the business concerns that employ these persons, to the greatest extent feasible. If grantees plan to hire any new employees or award contracts to carry out the grant, they must comply with the Section 3 requirements found at 24 CFR 135.32. Any contractor, subcontractor or sub-grantee receiving contracts under the grant totaling \$100,000 or more must comply with the Section 3 requirements for any new hiring or contracting opportunities under those contracts. Please refer to 24 CFR Part 135, Subparts B and E, and to Section III.C.4.c of the FY2009 **General Section**, for additional information.

q. Affirmatively Furthering Fair Housing: Applicants must follow the instructions in Section III.C.4.b of the FY2009 **General Section** regarding affirmatively furthering fair housing.

IV. Application and Submission Information:

A. Address to Request Application Package: Applications can be downloaded from the web at <http://www.hud.gov/offices/adm/grants/fundsavail.cfm>.

B. Content and Form of Application: Applications must contain the items listed in this section. An application abstract, rating factor responses, supporting materials, and standard forms are required elements of the application package and must meet the guidelines outlined below. Additional information may also be included *but is not required* and must also meet the guidelines outlined below.

1. Application Abstract: An abstract with the project title, the names and affiliations of all investigators, and a summary of the objectives, expected results, and study design (two-page maximum) must be included in the application. Information contained in the abstract will not be considered in the scoring of the application. Any information an applicant wishes to be considered must be provided under the appropriate rating factor response.
2. Rating Factor Responses: A narrative statement addressing the rating factors for award under this program must be included in the application (for more information regarding rating factor responses, please see Section V.A.2). The response to the rating factors should not exceed a total of 25 pages, single-sided, with a minimum 12-point font and a minimum margin width of 1-inch. *Any pages in excess of this limit will not be read.* Please number the pages of the project description/narrative statement and identify the text in accordance with each factor for award (Rating Factors 1 through 5). The points received for each rating factor will be based on the portion of the narrative statement that is submitted in response to that particular factor, supplemented by any appendices that are referenced in the narrative response to that rating factor. Supporting materials that are not referenced or discussed in the responses to the individual rating factors will not be considered.
3. Supporting Materials: All supporting materials required in response to the rating factors, as outlined in Section V.A.2, must be included with the application. This material includes, but is

not limited to resumes, letters of commitment, a budget narrative, and non-standard HUD forms.

Applicants must also provide a list of references cited in the responses to the rating factors.

Supporting materials will not be counted towards the Rating Factor Responses' 25-page limit.

All supporting materials must be submitted with the application according to the directions in the FY2009 **General Section**. The footer on the pages of these materials should identify the rating factor that they are supporting.

4. Additional Information: Additional information in support of the application may be included *but is not required*. This additional information must not exceed 20 pages. Any pages in excess of this limit will not be read. Do not include additional narrative information that is an extension of or expands upon any of the rating factor responses. Such narrative will not be considered.

Additional information must be submitted with the application according to the directions in the FY2009 **General Section**.

5. Forms: All forms as required by the FY2009 **General Section** and applicable to this program must be included in the application. Forms HUD-2991 (Certification of Consistency with the Consolidated Plan) and HUD-27061 (Race and Ethnicity Data) are not applicable to this program, and are thus not required to be included in the application. All other forms as required by the FY2009 **General Section** are applicable and must be included. Copies of these forms are available on line at <http://www.hud.gov/offices/adm/grants/fundsavail.cfm> and <http://www.hud.gov/offices/lead>.

6. Checklist: Applicants are encouraged to use the following checklist to ensure that all required materials have been prepared and submitted. You are not required to submit this checklist with your application.

a. *Application Abstract* (limited to 2 pages)

b. *Rating Factor Responses* (limited to 25 pages)

- (1) Capacity of the Applicant and Relevant Organizational Experience (22 points)
- (2) Need/Extent of the Problem (10 points)
- (3) Soundness of Approach (51 points)
- (4) Leveraging Resources (7 points)
- (5) Achieving Results and Program Evaluation (10 points)
- (6) Bonus Points (RC/EZ/EC-II) (2 points)

c. *Supporting Materials* (do not count towards 25-page limit)

(1) Resumes of Key Personnel (limited to 3 pages per resume; please do not include Social Security Numbers)

(2) Organizational Chart

(3) Form HUD-96012 (Capacity of the Applicant and Relevant Organizational Experience)

(4) List of References

(5) Form HUD-424-CBW (Budget Worksheet)

(6) Budget Narrative

(7) Form HUD-96015 (Leveraging Resources)

(8) Letters of Commitment (if applicable) - Should include language defining the activities to be performed, the contributions to be made, and the monetary value of each. NOTE: HUD recommends against including letters of support that do not commit services, materials, or funds; they will not add to the consideration of your application.

(9) Form HUD-96010 (Program Outcome Logic Model Form)

d. *Additional Information* (20 page limit) (*OPTIONAL*)

e. *Standard Forms*

- (1) Form SF-424 (Application for Federal Assistance)
- (2) Form SF-424 Supplement (Survey on Ensuring Equal Opportunities for Applicants) (to be completed by private nonprofit organizations only)
- (3) Form SF-LLL (Disclosure of Lobbying Activities, if applicable)
- (4) Form HUD-2880 (Applicant/Recipient Disclosure/Update Report)
- (5) Form HUD-2990 (Certification of Consistency with the RC/EZ/EC-II Strategic Plan, required only for applicants who are seeking these 2 bonus points)
- (6) Form HUD-2994-A (You Are Our Client! Grant Applicant Survey; optional)

C. Other Submission Requirements.

1. *Address for Submitting Applications.* Completed applications, as described below, must be emailed to OHHLHCNOFAREVIEW@HUD.gov
2. *Application Materials.* The application shall be submitted as one email (or more than one if necessary) with the narratives and forms attached as described in Appendix E, Procedures for Submitting Grant Applications by Email, of this NOFA.
3. *Submission Procedures.*
 - a. The procedures that apply to the submission of applications under this NOFA are described in Appendix E, Procedures for Submitting Grant Applications by Email. Please read that appendix carefully and completely, because failure to comply with the procedures may disqualify your application.
 - b. All emails must be received by 5:00 p.m. eastern time on or before the deadline date. Emails received after 5:00 p.m. eastern time on the deadline date will be considered late and not reviewed.

c. As with any email system, your email server, the Internet, or HUD's email server may experience overloads and/or other problems that may cause your email and/or the HUD acknowledgment to be delayed, rejected or lost. Although HUD's e-mail system has adequate capacity to handle the anticipated volume of application submission emails, HUD encourages applicants to submit applications far enough in advance of deadlines to receive confirmation that the application has been received and to take the necessary steps to resubmit in the event that an application email is not being received by HUD. HUD is not responsible for emails that do not arrive at HUD's email server in accordance with the application deadline identified in the NOFA.

d. Applications emailed to an address not designated for receipt of the application, which results in the application email box not receiving your application in accordance with the requirements for timely submission, will result in your application being considered late and not receiving funding consideration. HUD will not be responsible for directing emails to the application email box. Applications submitted by any means other than email to the application address (e.g., mail, shipping, personal delivery, or Internet posting (e.g., emailing to the application address a message containing the Internet address where the application has been uploaded using a file transfer protocol (FTP) or another posting method with the intention that HUD staff access the Internet to download the application)) will not be accepted for review and will not receive funding consideration.

D. Eligible Costs and Activities: The eligible costs under this grant program per 24 CFR 84.27 or 24 CFR 85.22, as applicable, include: (1) direct costs, (2) indirect costs, and (3) administrative costs. Explanations of costs are provided in applicable OMB Circulars (A-21 – Cost Principles

of Educational Institutions, A-87 – Cost Principles for State, Local, and Indian Tribal Governments, or A-122 – Cost Principles for Nonprofit Organizations) that can be accessed at the White House website, <http://www.whitehouse.gov/omb/circulars/index.html>. Applicants are strongly encouraged to refer to these documents and take particular note of the difference between indirect costs and administrative costs.

1. Direct Costs: Applicants should align proposed activities with the stated Green and Healthy Homes Technical Studies Program and Healthy Homes Program purpose, goals, objectives, and policy priority areas. There should be a demonstrable connection between proposed activities and the purpose of the grant.

a. Eligible Activities: Eligible activities may include, but are not limited to, the following:

(1) Sampling and analysis of VOCs, respirable particulates, and other air contaminants, pesticide residue, allergens and other substances in settled dust, mold, and/or other indicators of IEQ, following established protocols and procedures when possible. For more information regarding sampling and analysis requirements, please see Sections III.C.3.g–j.

(2) Development and implementation of methodologies for evaluating the health effects of residential green building on the health of occupants.

(3) Limited medical evaluations of residents or other program participants (e.g., spirometry) as required for the study (i.e., not medical treatment).

(4) Assessments of the effects of green building packages, specific green building features, and/or add-on practices on environmental and health outcomes.

(5) Collection of supporting data related to cost-benefit and/or cost-effective analyses. This data may include, but is not limited to: construction, energy, and health care costs.

(6) Cost-benefit and/or cost-effectiveness analyses.

(7) Third-party certifications, including but not limited to those enumerated in Section I.C.3.b.

(8) Carrying out limited, but necessary, architectural, engineering, and work specification development and other construction management services.

(9) Construction, rehabilitation, and remediation activities; see Section IV.D.1.b for relevant restrictions.

(10) Recruitment and enrollment of study participants. Targeted outreach and education programs may be conducted to help promote participation in the program. Reasonable incentives (financial or other incentives, including, but not limited to: coupons for video rentals, coupons for groceries, stipends for completion of surveys, child care, cleaning kits, etc.; of sizes small enough not to be unduly persuasive) may also be provided, but are subject to HUD approval.

(11) Carrying out temporary relocation of families and individuals while the remediation is conducted and until the time the affected unit can be reoccupied. See the FY2009 **General Section** and Section VI.B.8 of this NOFA for a discussion of regulations that apply to relocating families.

(12) Securing liability insurance for housing-related environmental health and safety hazard evaluation and control activities, if the scope of the insurance is restricted to work under this grant; otherwise, the insurance cost is either an indirect cost or an administrative cost, depending on the relationship of the insurance applicable for this grant to the applicant's overall insurance policy portfolio. See Sections IV.D.2 and IV.D.3 of this NOFA, regarding indirect costs and administrative costs, respectively.

b. Construction: Because the measurement and evaluation of the effects of green building on housing-related health and safety hazards and occupant health (rather than the production of

green housing) is the principal focus of the Green and Healthy Homes Technical Studies Program, the amount of grant funds used for construction activities may not exceed 50 percent of the total HUD funds awarded. Furthermore, no more than 25 percent of any funds used for construction activities may be spent for interventions intended for lead hazard evaluation or control.

2. Indirect Costs: Applicant organizations that have a federally negotiated indirect cost rate should use that rate and the appropriate base. The documentation will be verified during award negotiations. Organizations that do not have a federally negotiated rate schedule must obtain a rate from their cognizant federal agency; otherwise the organization will be required to obtain a negotiated rate through HUD. A detailed explanation of indirect costs is available in the applicable OMB circulars.

3. Administrative Costs: Administrative costs may not exceed 10 percent of the grant award. Administrative costs are the allowable, reasonable, and allocable direct and indirect costs related to the overall management of the awarded grant. A detailed explanation of administrative costs is available in the applicable OMB circulars.

4. Ineligible Costs and Activities: HUD will not fund the following ineligible activities:

- a. Purchase of real property.
- b. Purchase or lease of equipment having a per-unit cost in excess of \$5,000, unless prior written approval is obtained from HUD.
- c. Lead-based paint, healthy home hazard control, or green construction activities or related work that constitutes construction, reconstruction, repair or improvement (as referenced in Section 3(a)(4) of the Flood Disaster Protection Act of 1973 (42 U.S.C. 4001-4128)) of a

building or mobile home which is located in an area identified by the Federal Emergency Management Agency (FEMA) as having special flood hazards unless:

(1) The community in which the area is situated is participating in the National Flood Insurance Program in accordance with the applicable regulations (44 CFR Parts 59-79), or less than a year has passed since FEMA notification regarding these hazards; and

(2) Where the community is participating in the National Flood Insurance Program, flood insurance on the property is obtained in accordance with Section 102 (a) of the Flood Disaster Protection Act (42 U.S.C. 4012a(a)). Applicants are responsible for assuring that flood insurance is obtained and maintained for the appropriate amount and term.

d. Construction, rehabilitation, or lease of properties in the Coastal Barrier Resource System designated under the Coastal Barrier Resources Act (16 U.S.C. 3501).

e. Activities required in order to fulfill court orders, consent decrees, settlements, conciliation agreements, or other compliance agreements.

f. Medical treatment.

V. Application Review and Selection Information:

A. Criteria:

1. Threshold Requirements: Applications that meet all of the threshold requirements (for more information, please see Section III.C.1) will be eligible for review. These requirements apply to the applicant institution or organization, and not just an individual researcher or researchers. An application must receive a total score of at least 75 points to be considered for funding.

2. Rating Factors: Applications which have met the threshold requirements are reviewed and then scored based on the total number of points allocated for each of the five rating factors described in this section. These rating factors are weighted as indicated by the number of points

that are assigned to it. The maximum score that can be attained is 102 points, including a possible 2 bonus points. Applicants should be certain that each of these factors is adequately addressed in the narrative statement and accompanying materials.

a. Rating Factor 1: Capacity of the Applicant and Relevant Organizational Experience (22 points): This factor addresses the extent to which an applicant has the ability and organizational resources necessary to successfully implement the proposed activities in a timely manner. The rating of the application will take into account sub-grantees, consultants, contractors, and members of consortia that are firmly committed to the project (generally, "partner organizations"). In responding to this rating factor, applicants must address: organizational capacity and qualification, capability and qualification of key personnel, and past performance in managing similar projects. Applicants must also provide an organizational chart and resumes of key personnel, and complete and submit Form HUD-96012.

(1) Organizational Capacity and Qualification (4 points): This includes the number and type of staff to be dedicated to the project, all firmly committed partner organizations, and other agreements to provide resources. Applicants should explain how each entity will support the project and their corresponding qualifications. Applicants should also describe how all project participants will communicate. HUD will evaluate the extent to which the applicant has secured adequate resources and thoughtfully determined the roles and relationships among participants. HUD will also assess the qualifications of each participant organization to successfully fill their proposed project roles.

In responding to this rating factor, applicants must also provide a *project-specific* organizational chart, indicating the relationships among the various entities and staff involved in the project.

(2) Capability and Qualification of Key Personnel (10 points): Applicants must identify by name and position all key personnel. Key personnel must include a principal investigator and project manager. Other key personnel may include, but are not limited to, research assistants, statisticians, economists, and data managers. HUD will assess the qualifications of key personnel to carry out the proposed study as evidenced by academic and professional background, publications, and recent (within the past 10 years) research experience. Publications and/or research experience are considered relevant if they required the acquisition and use of knowledge and skills that can be applied in the planning and execution of the proposed study.

In responding to this rating factor, applicants must provide resumes for the principal investigator, project manager, and up to three additional key personnel. Each resume shall not exceed three pages, and is limited to information that is relevant in assessing the qualifications and experience of key personnel to conduct and/or manage the proposed technical studies. Please *do not* include the Social Security Numbers (SSN) of any staff members.

Applicants must also complete and submit Form HUD-96012 (Capacity of the Applicant and Relevant Organizational Experience).

(3) Past Performance in Managing Similar Projects (8 points): Applicants must list relevant, recent residential environmental health and safety and/or green building research projects with brief descriptions for each. Provide details about the nature of the projects, the funding organizations, and performance (e.g., timely completion, achievement of desired outcomes). These projects may include completed work, as well as work in progress. Applicants may list relevant projects conducted both by their own organization and/or their identified partner organizations. HUD will evaluate the demonstrated ability of the applicant and

partners to successfully manage various aspects (e.g., personnel management, data management, quality control, reporting) of a complex technical study, as well as overall success in completing projects on time and within budget.

If applicable, provide the number and title of any past OHHLHC grants and describe the outcomes of those grants and the applicant organization's performance in their implementation (e.g., whether they were completed on time and within budget). If an applicant has an active OHHLHC grant or cooperative agreement, please provide a description of the progress and outcomes achieved under that award. If an applicant has completed one or more HUD-funded Technical Studies grants, their performance will be evaluated in terms of achievements made under the previous grant(s). If an applicant has completed a previous HUD-funded Technical Studies grant but has not published the study results in a peer-reviewed scientific journal, explain why the results have not been published or submitted for publication.

b. Rating Factor 2: Need/Extent of the Problem (10 points): This factor addresses the extent to which there is a need for the applicant's proposed technical study. In responding to this rating factor, applicants must address: the need for the research, the contribution this study will make, and how the results of this study may be used in the future.

(1) Review of the Research Need (5 points): Provide a concise review of the research need that is addressed in the proposed study, and why it is a high priority with respect to the program. Provide a review of relevant published literature to ensure that proposed studies would build upon and would not duplicate work that has been completed. You are encouraged to review Appendix B and the resources cited therein as a start of this literature review. Applicants must identify which of the Green and Healthy Homes Technical Studies Program's stated objectives and specific areas of interest are addressed in the proposed study. For applicants that

are proposing to study a topic that is not a specific area of interest, it is particularly important to describe in detail how the proposed study is consistent with the overall objectives of the program.

You should also discuss the extent to which the Program's particular focus on low income households and sensitive populations is addressed by the proposed project. If the proposed study includes an assessment of health outcomes within a targeted community, include documented rates of illness or injury (if available) associated with the health outcome that you are assessing. Data should be provided for the specific geographic area(s) (e.g., local, regional, state level), depending upon availability.

(2) Significance and Practical Implications (5 points): You must discuss how the proposed project would significantly advance the current state of knowledge in your proposed study's focus area. You should make clear how your proposed study would effectively build upon the current body of knowledge, especially the peer-reviewed literature.

Applicants must also discuss the likely practical implications of study findings and how they could be put to future use in helping to ensure that the health benefits of green construction methods are maximized, particularly for low income housing.

c. Rating Factor 3: Soundness of Approach (51 points): This factor addresses the quality of the proposed technical study plan. In responding to this rating factor, applicants must address: the study design, policy priorities, the project management plan, quality assurance mechanisms, and the proposed budget. Applicants must also provide Form HUD-424-CBW and a budget narrative.

(1) Study Design (30 points):

(a) Overall Clarity and Thoroughness of Study Design (10 points; or 13 points, if Meaningful Community Involvement (subfactor (f)) is not applicable): Applicants must clearly and thoroughly describe the design of their proposed study and identify the major objectives. HUD will evaluate the soundness of the proposed study design, taking into account the overall approach to the design of the project as well as the feasibility of the proposed objectives and the likelihood that they will be achieved. The study should be presented as a logical sequence of steps or phases with individual tasks described for each phase. Identify any important “decision points” in the study plan. Applicants must also demonstrate that it is clearly feasible to complete the study within the proposed period of performance and successfully achieve project objectives. HUD has observed that studies can miss targeted performance timelines because of delays in the IRB approval process and unexpected difficulties with recruiting study participants. Projects assessing green construction could also be subject to construction delays. If applicable, describe actions that will be taken to minimize the possibility that the study would experience delays in these areas (e.g., understanding likely IRB requirements in advance, planning on additional avenues for recruitment of participants, evaluating projects that are unlikely to experience construction delays). Applicants must also include an organizational chart showing the organizational structure of implementation of this project (i.e., internal staff and external partner relationships for implementing this project, not their general organizational structure).

(b) Clarity and Appropriateness of Study Objectives (3 points): Study objectives must be clearly and succinctly stated and they must be consistent with overall study design. If possible, the study should be designed to address at least one testable hypothesis that is clearly stated.

(c) Soundness of Scientific Basis (7 points): Applicants will be evaluated on the soundness of the scientific basis of the study concept and design. You must demonstrate how the study reflects the current state of knowledge in your focus area through a concise and thorough discussion of the relevant scientific literature. In your discussion, you should identify key literature with respect to your proposed study; you should not replicate your discussion in response to Rating Factor 2, but may cite that discussion and supplement it, if necessary, by citing and discussing additional research literature pertaining to the study concept and design. The proposed study will be judged in part on the soundness of the underlying body of research upon which it is based (e.g., is it based upon well-understood or poorly-understood associations from previous epidemiological studies? environmental prevalence studies? intervention effectiveness studies?) and the clarity and soundness of your interpretation and summarization of this research base.

(d) Statistical Basis of Study Design (3 points): Describe the statistical basis for the study design and demonstrate that there would be adequate statistical power to test the stated hypotheses and achieve the study objectives.

(e) Data Management, Analysis, and Archiving (4 points): Provide a clear description of how study data will be captured and managed in a secure and safe manner, including a description of data archiving. Applicants must also provide a thorough but concise description of plans for data analysis. If there are several reasonable approaches to data analysis, describe the basis for selecting the proposed approach.

(f) Meaningful Community Involvement (3 points, or Not Applicable; depending on nature of the proposed research): If the applicant is proposing to conduct a study that includes a significant level of community interaction (e.g., studies involving participant recruitment, survey

research, environmental sampling of private or public property), describe a plan for meaningful involvement of the affected community in the proposed study. Define the community of interest with respect to your proposed study, and why and how the proposed approach to community involvement will make a meaningful contribution to the study and to the community.

(2) Policy Priorities (4 points maximum): Applicants must indicate if the proposed study will address any of the FY2009 policy priorities that are applicable to the Green and Healthy Homes Technical Studies Program (for more information regarding policy priorities, please see Section V.B.2 of the FY2009 **General Section**). Policy priorities that are applicable to the Green and Healthy Homes Technical Studies Program are: (a) Providing Full and Equal Access to Grass-Roots Faith-based and other Community-based Organizations in HUD Program Implementation (up to 1 point), (b) Participation of Minority-Serving Institutions in HUD Programs (up to 1 point), and (3) Promoting Energy Star and Green Development (up to 2 points; for specific requirements regarding this policy priority, please see Section V.2.f(1)(b) of the FY 2009 **General Section**). Applicants will receive up to the specified number of points for each of the applicable policy priorities that are adequately addressed in the application.

(3) Project Management Plan (5 points): Applicants must include a project management plan that provides a schedule for the clear and expeditious completion of the study's major objectives (i.e. work products and deliverables). This plan should include the tasks which are the interim activities or products that lead to the achievement of those objectives, with associated benchmarks and study milestones. If an application includes multiple organizations, identify the organization/person that has primary responsibility for completion of each of the major study tasks. The major objectives, tasks, and benchmarks/study milestones identified in the project

management plan should be consistent with those identified in the Logic Model (for more information, see Section V.A.2.e).

Plans must include the preparation of one or more articles for publication in peer-reviewed academic journals and submission of the draft(s) to the journal(s), after HUD acceptance. This final deliverable can be submitted to HUD during the agreed upon period of performance or during the 90-day closeout period following award expiration.

(4) Quality Assurance Mechanisms (5 points; or 7 points, if Human Research (subfactor (5)) is not applicable): Applicants must describe the quality assurance mechanisms that will be integrated into their project design to ensure the accuracy, validity and quality of the results. Applicants that receive awards will be required to submit a Quality Assurance Plan (QAP) to HUD. Applicants should plan for this and incorporate quality assurance activities in their project management plan. (The Office of Management and Budget paperwork approval for the Quality Assurance Plan template for this program is currently pending.)

Applicants must describe the major quality assurance mechanisms that are relevant for their proposed study. Examples of quality assurance mechanisms include, but are not limited to: procedures for selection of samples/sample sites, sample handling, use of quality control samples, validating the accuracy of instrumentation, measures to ensure accuracy during data management, staff training, and final validation of the dataset. If applicable, documents (e.g., government reports, peer-reviewed academic literature) that provide the basis for the quality assurance mechanisms should be cited.

For the collection of data using survey or other observational tools, describe the procedures that will be followed to ensure accurate data capture and transfer (e.g., transfer of

data from the field to a database). Also, describe any research done (or planned) to validate the instrument.

Finally, applicants must identify who will have primary responsibility for drafting and ensuring compliance with the QAP, and describe how it will be used during the implementation of the study. It is preferable that the person that ensures compliance with the QAP be separate and independent from the project. HUD will evaluate the thoroughness, clarity, and validity of the proposed quality assurance activities, and their appropriateness for ensuring the validity and quality of the data.

(5) Human Research (2 points or Not Applicable; depending on nature of the proposed research): If the proposed research involves human subjects (including the use of informed consent or other interaction with occupants), the applicant organization must provide proof (e.g., a letter signed by an appropriate official) that the research has been reviewed and approved (or deemed not to be a covered activity) by an IRB before activities can be initiated that require IRB approval. Before initiating such activities an organization must also provide the number for their assurance (i.e., an “institutional assurance”) that has been approved by the DHHS’s Office for Human Research Protections (OHRP).

Applicants do not have to provide proof of IRB approval with their application. However, if the applicant does not have IRB approval yet, it must address how it will obtain such approval. Describe how informed consent will be obtained (e.g., from the subjects, their parents or their guardians, as applicable) and discuss the steps that will be taken to ensure participants’ understanding of the elements of informed consent, such as the purposes, benefits and risks of the research. Describe how this information will be provided and how the consent will be collected. For example, describe your use of “plain language” forms, flyers and verbal scripts,

and how the applicant will work with families with limited English proficiency or primary languages other than English and with families including persons with disabilities. For additional information on what constitutes human subject research or how to obtain an institutional assurance see the OHRP website at <http://www.hhs.gov/ohrp/>. For additional information on human research subject disclosures see Section III.C.3.d.

(6) Budget Proposal (5 points): Applicants must submit a budget proposal, which thoroughly estimates all direct and indirect costs for eligible activities, and is presented in a clear and coherent format in accordance with the requirements listed in the FY2009 **General Section**. Applicants are also encouraged to review Section IV.D with regards to eligible and ineligible activities and funding restrictions.

In responding to this rating factor, applicants must complete and submit Form HUD-424-CBW. Using this form, applicants must thoroughly document all costs of the applicant and all partner organizations, including: sub-grantees, consultants, contractors, or others contributing resources to the project. A separate Form HUD-424-CBW must be provided for each partner organization that is proposed to receive more than 10 percent of the federal budget request.

Applicants must also submit a budget narrative, which describes and justifies all costs for each category on the HUD-424-CBW. Explain how each cost was calculated, including estimated unit prices and time periods. If incentive payments are proposed for participants, applicants should explain and justify the amounts. Indicate expenditures that will be made by partner organizations. Separate budget narratives must also be submitted for each partner organization that submits a separate HUD-424-CBW. The budget narrative is a supporting material and will not be counted toward the Rating Factor Responses' 25-page limit.

HUD will not rate applications based on the proposed cost. However, HUD will evaluate the proposed budget for the extent to which costs are reasonable, allowable, clearly justified, and consistent with the study design and project management plan. HUD is not required to approve or fund all proposed activities.

d. Rating Factor 4: Leveraging Resources (7 points): This factor addresses an applicant's ability to obtain other resources that can be combined with HUD's project funding to increase the effectiveness of the proposed study. Project proposals should demonstrate that the effectiveness of HUD's Green and Healthy Homes Technical Studies Program grant funds is being increased by securing other public and/or private resources or by structuring the project in a cost-effective manner, such as integrating the project into an existing study (either funded by HUD or another source) that will be concurrent with the proposed study. In responding to this rating factor, applicants must complete and submit Form HUD-96015 and provide evidence of leveraging.

Contributed resources must be shown to be specifically dedicated to and integrated into supporting study activities. Resources may include funding or in-kind contributions (such as direct labor, specialized facilities) allocated to the purpose(s) of your project. Staff and in-kind contributions should be assigned a monetary value. In assigning points for this factor, HUD will consider the significance of the leveraging in the context of the amount of federal funds that are being requested. Newly contributed resources, devoted to supporting proposed study activities will be fully credited. Resources included from previous work, previous data bases, or other concurrent work which would be completed regardless of this proposed study, will be valued at no more than 25 percent of the documented cost. Applicants proposing to contribute resources valued at 10 percent or more of the federal funds requested will receive points, with more points given for greater leveraging contributions.

In responding to this rating factor, applicants must complete and submit Form HUD-96015 (Leveraging Resources). This form must include all non-HUD resources contributed, including funding or in-kind contributions from the applicant organization. Information provided on this form should match information provided in the applicant's HUD-424-CBW.

Applicants must also provide evidence of leveraging by submitting: letters of firm commitment, memoranda of understanding, and/or agreements to participate from those entities identified as partners in the project efforts. Each document must include the organization's name, proposed level of commitment (*with monetary value*) and responsibilities as they relate to specific activities or tasks of the proposed program. The method(s) used to assign value to in-kind contributions must be provided. The commitment must also be signed by an official of the organization legally able to make commitments on behalf of the organization. Simple letters that only indicate support of the proposed study are not sufficient.

e. *Rating Factor 5: Achieving Results and Program Evaluation (10 points)*: This rating factor reflects HUD's goal to embrace high standards of ethics, management and accountability. It emphasizes HUD's commitment to ensuring that applicants keep promises made in their applications and assess their performance to ensure goals are met. In responding to this rating factor, applicants must develop a project evaluation plan to track performance, including a completed Logic Model and corresponding narrative.

For a proposed project to achieve results, expected outcomes and outputs must be clearly defined, and evaluation must take place to ensure that those outcomes and outputs are met. Outcomes are the ultimate objectives of a project, and outputs are the interim activities or products that lead to the achievement of those objectives. To track progress toward the outcomes and outputs, a project must be evaluated with performance measures. Performance measures

should be objectively quantifiable, and allow one to assess the degree of actual achievement against the expected outcomes and outputs.

In responding to this rating factor, applicants must provide a narrative to discuss their project evaluation plan, including identified project outcomes, outputs, and performance measures. Applicants should also identify important study milestones (e.g., the end of specific phases in a multiphase study, recruitment of study participants, developing a new analytical protocol), which should also be clearly indicated in the study timeline. If appropriate, an applicant may refer to the benchmarks and milestones identified in the management plan provided in response to Rating Factor 3, providing additional explanation, as necessary. Applicants should also identify potential obstacles in meeting study outcomes and outputs and related performance measures and discuss steps they would take to respond to these obstacles. Finally, applicants should describe how project evaluation information will be obtained, documented, and reported.

Applicants must also complete and submit the eLogic Model® Form HUD-96010 included with the download instructions found as part of the application at <http://www.hud.gov/offices/adm/grants/fundsavail.cfm> and <http://www.hud.gov/offices/lead>. Applicants must show their proposed project short-term, intermediate-term, long-term and final results. Instructions on the Logic Model are contained in the FY2009 **General Section** and in Tab 1 of the electronic form. The form features drop down menus from which to select and construct the Logic Model response relevant to your proposal.

HUD will evaluate this rating factor in accordance with the matrix provided in Attachment 1 of the FY2009 **General Section**. All proposed outcomes, outputs, and

performance measures should be realistic and consistent with the narrative provided in response to this and all other rating relevant rating factors.

f. Bonus Points (2 points): Applicants are eligible to receive up to two bonus points for projects located within federally designated Renewable Communities (RCs), Empowerment Zones (EZs), or Enterprise Communities (ECs) designated by USDA in round II (EC-IIs) (collectively referred to as RC/EZ/EC-IIs) and that the proposed activities will serve the residents of these communities. In order to be eligible for these bonus points, applicants must meet the requirements of the FY2009 **General Section** and submit a completed form HUD-2990. A complete listing of the RC/EZ/EC-IIs is available at <http://www.hud.gov/cr>. For more information, please see the FY2009 **General Section**.

B. Reviews and Selection Process:

1. Awards: After all applications have been reviewed, they will be ranked according to the total scores they received. Awards will then be made in rank order, within the limits of funding availability.

a. Partial Funding: In the selection process, HUD reserves the right to offer partial funding to any or all applicants. If an applicant is offered a reduced grant amount, they will have a maximum of 14 calendar days to accept such a reduced award. If the applicant fails to respond within the 14-day limit, they shall be considered to have declined the award.

2. Remaining Funds: Please see the FY2009 **General Section** for HUD's procedures if funds remain after all selections have been made.

3. Curing Deficiencies: Responses to technical deficiencies must be received by HUD within the time allocated. Responses shall be submitted to the e-mail address for submitting applications in Section IV.F.2.a of this NOFA, above.

C. Intergovernmental Review: This NOFA is excluded from the requirement of an Intergovernmental Review.

D. Funding Restrictions: The eligible costs under this grant program per 24 CFR 85.22 or 24 CFR 84.27, as applicable, include: (1) direct costs, (2) indirect costs, and (3) administrative costs. Explanations of costs are provided in applicable OMB Circulars (A-21 – Cost Principles of Educational Institutions, A-87 – Cost Principles for State, Local, and Indian Tribal Governments, or A-122 – Cost Principles for Nonprofit Organizations) that can be accessed at the White House website, <http://www.whitehouse.gov/omb/circulars/index.html>. Applicants are strongly encouraged to refer to these documents and take particular note of the difference between indirect costs and administrative costs. For more information regarding eligible costs, please see Section IV.D.

VI. Award Administration Information:

A. Award Notices:

1. **Notice of Award:** Applicants who have been selected for award will be notified by letter from the Office of Healthy Homes and Lead Hazard Control Grant Officer. The letter will state the program for which the application has been selected, the amount the applicant is eligible to receive, and the name of the Government Technical Representative (GTR). This letter is not an authorization to begin work or incur costs under the award. An executed cooperative agreement is the authorizing document.

HUD may require selected applicants to participate in negotiations to determine the specific terms of the cooperative agreement, budget, and Logic Model. If you accept the terms and conditions of the cooperative agreement, you must return your signed cooperative agreement by the date specified during negotiation. In cases where HUD cannot successfully conclude

negotiations with a selected applicant or a selected applicant fails to provide HUD with requested information, an award will not be made to that applicant. In this instance, HUD may offer an award, and proceed with negotiations with the next highest-ranking applicant. Applicants should note that, if they are selected for multiple OHHLHC awards, they must ensure that they have sufficient resources to provide the promised leveraging for the multiple awards. During negotiations, applicants selected for multiple awards will be required to provide alternative leveraged resources, if necessary, before the grant can be awarded. This is required in order to avoid committing duplicate leveraged resources to more than one OHHLHC grant.

Awardees will receive additional instructions on how to have the grant account entered into HUD's Line of Credit Control System (LOCCS). Other forms and program requirements will also be provided.

In accordance with OMB Circular A-133 (Audits of States, Local Governments and Non-Profit Organizations), grantees expending \$500,000 or more in Federal funds within a program or fiscal year must submit their completed audit-reporting package along with the Data Collection Form (SF-SAC) to the Single Audit Clearinghouse. The SF-SAC and instructions for submission of the completed audit-reporting package can be found at <http://harvester.census.gov/sac/>.

Debriefing: The applicant may request a debriefing. Applicants requesting to be debriefed must send a written or email request to: Christine Freeman, HUD Office of Healthy Homes and Lead Hazard Control, 451 Seventh Street SW (8236), Washington, DC 20410-3000, or OHHLHCNOFAreview@hud.gov. The FY2009 **General Section** provides the procedures applicants should follow for requesting a debriefing.

B. Administrative and National Policy Requirements:

1. Environmental Requirements:

a. Eligible Construction and Rehabilitation Activities: A Green and Healthy Homes Technical Studies grant award does not constitute approval of specific sites where activities that are subject to environmental review may be carried out. Recipients conducting eligible construction and rehabilitation activities must comply with 24 CFR Part 58, “Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities”. Recipients that are States, units of general local government or Indian tribes must carry out environmental review responsibilities as a responsible entity under Part 58. Where the recipient is not a State, unit of general local government or Indian tribe, a responsible entity, usually the unit of general local government or Indian tribe, must assume the environmental review responsibilities for construction or rehabilitation activities funded under this NOFA. Under 24 CFR 58.11, where the recipient is not a State, unit of general local government or Indian tribe, if a responsible entity objects to performing the environmental review, or the recipient objects to the responsible entity performing the environmental review, HUD may designate another responsible entity to perform the review or may perform the environmental review itself under the provisions of 24 CFR Part 50. In such cases, following grant award execution, HUD will be responsible for ensuring that any necessary environmental reviews are completed.

For all grants under this NOFA, recipients and other participants in the project are prohibited from undertaking, or committing or expending HUD or non-HUD funds (including HUD leveraged funds) on a project or activities under this NOFA (other than activities listed in 24 CFR 58.34, 58.35(b) or 58.22(f)) until the responsible entity completes an environmental review and the applicant submits and HUD approves a Request for the Release of Funds and the responsible entity’s environmental certification (both on form HUD-7015.15) or, in the case

where the recipient is not a State, unit of general local government or Indian tribe and HUD has determined to perform the environmental review under Part 50, HUD has completed the review and notified the grantee of its approval. The results of the environmental reviews may require that proposed activities be modified or proposed sites rejected. For Part 58 procedures, see <http://www.hud.gov/offices/cpd/environment/index.cfm>. For assistance, contact Karen Griego-West, the Office of Healthy Homes and Lead Hazard Control Program Environmental Control Officer at 213-534-2458 (this is not a toll free-number) or the HUD Environmental Review Officer in the HUD Field Office serving your area. If you are a hearing- or speech-impaired person, you may reach the telephone number via TTY by calling the toll-free Federal Relay Service at 1-800-877-8339. Recipients of a grant under these funded programs will be given additional guidance in these environmental responsibilities.

b. Other Activities: All other activities not related to construction and rehabilitation activities are categorically excluded under 24 CFR 58.34(a)(1), (3), and (9) and 24 CFR 50.19(b)(1), (3), and (9) from the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321) and are not subject to environmental review under the related laws and authorities.

2. Conducting Business in Accordance with HUD Core Values and Ethical Standards: If awarded assistance under this NOFA, prior to entering into a cooperative agreement with HUD, you will be required to submit a copy of your code of conduct and describe the methods you will use to ensure that all officers, employees, and agents of your organization are aware of your code of conduct. See the FY2009 **General Section** for information about conducting business in accordance with HUD's core values and ethical standards.

3. Participation in HUD-Sponsored Program Evaluation: See the FY2009 **General Section**.

4. HUD Reform Act of 1989: The provisions of the HUD Reform Act of 1989 that apply to this NOFA are explained in the FY2009 **General Section**.

5. Procurement of Recovered Materials: See the FY2009 **General Section** for information concerning this requirement.

6. Davis-Bacon wage rates: The Davis-Bacon prevailing wage rates do not apply to this program. However, if program funds are used in conjunction with other federal programs in which Davis-Bacon prevailing wage rates apply, then Davis-Bacon provisions would apply to the extent required under the other federal programs.

7. Relocation: The relocation requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA), as amended, and the implementing government wide regulations at 49 CFR Part 24, that cover any person (including individuals, businesses, and farms) displaced as a direct result of the acquisition, rehabilitation, or demolition of real property, apply to this grant program. If such persons are required to temporarily relocate for a project, the requirements of the URA regulations at 49 CFR 24.2(a)(9) must be met. HUD recommends you review these regulations when preparing your proposal. They can be downloaded from the Government Printing Office website at <http://www.gpoaccess.gov/cfr/index.html> by entering the regulatory citation in quotes without any spaces (e.g., “49CFR24.2”) in the Quick Search box. See Section III.C.4.e of the FY2009 **General Section** for additional information about relocation.

C. Reporting:

1. Post Award Reporting Requirements: Final budget and work plans are due 60 days after the start date.

2. Progress reporting: Progress reporting is required on a quarterly basis. For each reporting period, as part of the required report to HUD, a grant recipient must include a completed Logic Model (form HUD 96010), which identifies output and outcome achievements. Project benchmarks and milestones will be tracked using a benchmark spreadsheet that uses the benchmarks and milestones identified in the Logic Model form (HUD-96010) approved and incorporated into your award agreement. For specific reporting requirements, see policy guidance at <http://www.hud.gov/offices/lead/hhi/hhts.cfm>.
3. Racial and Ethnic Beneficiary Data: All grant recipients must comply with the reporting requirements of 24 CFR Part 1.6(b), implementing Title VI of the Civil Rights Act of 1964. If human research subjects are a part of a study funded under this program, racial and ethnic data must be collected and reported, using the Office of Management and Budget's Standards for the Collection of Racial and Ethnic Data as presented on Form HUD-27061, Racial and Ethnic Data Reporting Form (and instructions for its use), found on <http://www.hud.gov/offices/adm/hudclips/forms/files/27061.pdf>. Grantees conducting studies that do not involve human research subjects, such as those confined to the laboratory or certain types of environmental sampling, will not be required to submit Form-27061 to HUD.
4. Final report: The cooperative agreement will specify the requirements for final reporting (e.g., final technical report and final project benchmarks and milestones achieved against the proposed benchmarks and milestones in the Logic Model which was approved and incorporated into your cooperative agreement).
5. Draft scientific manuscript(s): Grantees will be required to complete a minimum of one draft manuscript for publication in a peer-reviewed journal.

6. **Section 3 Reporting:** All grant recipients must comply with the reporting requirements of Subpart E of 24 CFR Part 135 dealing with Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u). See Section III.C.4.c of the FY2009 **General Section** for additional information.

VII. Agency Contact(s): For questions related to the application download submission process, or to the e-mail application submission process, you may contact Christine Freeman at the Department of Housing and Urban Development; Office of Healthy Homes and Lead Hazard Control; 451 Seventh Street, SW, Room 8236; Washington, DC 20410-3000; or by telephone at 202-402-3257 (this is not a toll-free number), or by email at: OHHLHCNOFAreview@hud.gov. For programmatic questions, you may contact Dr. Peter J. Ashley at the address above, or by telephone at 202- 402-7595 (this is not a toll-free number); or via email at: Peter.J.Ashley@hud.gov. For administrative questions, you may contact Curtissa L. Coleman, Director, Grants Services Division, at the address above or by telephone at: 202- 402-7580 (this is not a toll-free number) or via email at: Curtissa.L.Coleman@hud.gov. If you are hearing or speech-impaired, you may reach the telephone numbers above via TTY by calling the toll-free Federal Relay Service at 800-877-8339.

VIII. Other Information:

A. Other Office of Healthy Homes and Lead Hazard Control Information: For additional general, technical, and grant program information pertaining to the Office of Healthy Homes and Lead Hazard Control, visit <http://www.hud.gov/offices/lead>.

B. Paperwork Reduction Act: The information collection requirements contained in this document have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-3520) and assigned OMB control number

2539-0015. In accordance with the Paperwork Reduction Act, HUD may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection displays a currently valid OMB control number. Public reporting burden for the collection of information is estimated to average 80 hours per respondent for the application and 16 hours to finalize the cooperative agreement. This includes the time for collecting, reviewing, and reporting the data for the application. This information will be used for grantee selection. The reporting burden for completion of the Quality Assurance Plan by applicants who are awarded a grant is estimated at 24 hours per grantee. Response to this request for information is required in order to receive the benefits to be derived.

C. Environmental: A Finding of No Significant Impact (FONSI) with respect to the environment has been made for this NOFA in accordance with HUD regulations at 24 CFR Part 50, which implement Section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)). The FONSI is available for public inspection between 8:00 AM and 5:00

PM weekdays in the Regulations Division, Office of General Counsel, Department of Housing and Urban Development, 451 Seventh Street, SW, Room 10276, Washington, DC 20410-0500. Due to security measures at the HUD Headquarters building, an advance appointment to review the FONSI must be scheduled by calling the Regulations Division at 202-708-3055 (this is not a toll-free number).

D. Appendices: Appendices A, B, C, D, and E to this NOFA are available for downloading with the application at <http://www.hud.gov/offices/adm/grants/fundsavail.cfm> and <http://www.hud.gov/offices/lead>.

Dated: 9/3/2009



Matthew Ammon,
Acting Director, Office of Healthy Homes
and Lead Hazard Control

[FR-5300-N-20]