

## DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-5415-N-16]

### Notice of Funding Availability (NOFA) for HUD's Fiscal Year (FY) 2010 Asthma Interventions in Public and Assisted Multifamily Housing

**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) 2010 Asthma Interventions in Public and Assisted Multifamily Housing Grant Program.

**SUMMARY:** This NOFA announces the availability of funding of approximately \$2.6 million for HUD's Asthma Interventions in Public and Assisted Multifamily Housing Grant Program for FY2010 to fund cooperative agreements to develop, implement, and evaluate multifaceted programs for the control of asthma among residents of federally assisted multifamily housing. The funding of HUD's FY2010 Asthma Interventions in Public and Assisted Multifamily Housing Grant Program is authorized by Omnibus Appropriations Act, 2010 (Pub. L. 111-117), approved December 16, 2009. HUD's FY2010 Notice of Funding Availability Policy Requirements and FY2010 **General Section** was posted to [www.Grants.gov](http://www.Grants.gov) on June 7, 2010. The web availability Notice was published at *75 Federal Register* 33323 on June 11, 2010. The FY2010 **General Section** established the threshold and other critical application submission requirements that affect this NOFA. Applicants for this assistance are, therefore, directed to review the FY2010 **General Section** prior to submitting an application.

**DATES:** The deadline for receipt of the application in Grants.gov is 11:59:59 PM eastern time **November 16, 2010**. Only one application will be accepted per project from any given organization under this grant program. If more than one application is received for the same project from an organization, the application that was timely received last by Grants.gov will be considered for funding. See the **General Section** regarding timely receipt requirements.

**FOR FURTHER INFORMATION CONTACT:** Questions regarding specific program requirements should be directed to the agency contact identified in Section VII of this program NOFA. Questions regarding the FY2010 **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 800-HUD-8929 (toll-free). Persons with hearing or speech impairments may access these numbers via TTY by calling the Federal Relay Service at 800-877-8339. The NOFA Information Center is open between the hours of 10:00 a.m. and 6:30 p.m. eastern time, Monday through Friday, except federal holidays.

#### OVERVIEW INFORMATION:

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

**B. Funding Opportunity Title:** Asthma Interventions in Public and Assisted Multifamily Housing.

**C. Announcement Type:** Initial announcement.

**D. Funding Opportunity Number:** FR-5415-N-16, OMB Paperwork Approval number is 2539-0015.

**E. Catalog of Federal Domestic Assistance (CFDA) Number(s):** 14.914, Asthma Interventions in Public and Assisted Multifamily Housing Grant Program.

**F. Application Receipt:**

1. **Deadline Date:** The application deadline is 11:59:59 PM eastern time **November 16, 2010**. **Applications must be received by Grants.gov** by no later than 11:59:59 p.m. eastern standard time on the application deadline. Please see the FY2010 **General Section** for instructions for timely receipt, including actions to take if the application is rejected. Applicants should carefully read the section titled “APPLICATION and SUBMISSION INFORMATION” in the FY2010 **General Section**, published at 75 *Federal Register* 33323 on June 11, 2010. This section contains information on using Adobe Reader, HUD’s timely receipt policies, and other application information.
2. Only one application for a specific project will be accepted from any given organization. If more than one application is received for the same project from an organization, the application that was timely received last by [Grants.gov](http://Grants.gov) will be considered for funding.
3. Applicants are strongly encouraged to submit their application early to [Grants.gov](http://Grants.gov). Please see the **General Section** for timely receipt requirements.

**G. Additional Overview Content Information:**

1. **Purpose:** To fund demonstration projects to improve asthma control among children and others currently residing in federally assisted multifamily housing developments that are administered by local public housing authorities (i.e., public housing) as well as privately owned multifamily housing that is subsidized by HUD (e.g. Project-based Section 8, section 202, and section 811 housing).
2. **Available funding:** HUD anticipates that approximately \$2.6 million will be available for the Asthma Intervention in Public and Assisted Multifamily Housing Grant Program as authorized under the Consolidated Appropriations Act, 2010 (Pub. L. 111-117), approved December 16, 2009.
3. **Anticipated awards:** Approximately 5-8 awards are anticipated under the FY2010 Asthma Interventions in Public and Assisted Multifamily Housing Grant Program, with each not to exceed \$600,000 for a maximum project period of three years, 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. Applications to supplement existing projects are eligible to compete with applications for new awards. 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.3.d).
7. **Limitations:** Each organization may submit one application for a specific project. If more than one application is received from an applicant for the same project, the application that was timely received last by Grants.gov will be considered for funding.
8. **Information on application:** Copies of the published NOFA and application forms may be downloaded from the Grants.gov website. Please carefully review the FY2010 **General Section** before submitting an application. See Section IV for important information regarding application submission.

## **FULL TEXT OF ANNOUNCEMENT:**

### **I. Funding Opportunity Description:**

**A. Purpose of the Program:** The overall purpose of the program is to demonstrate and evaluate cost effective interventions to improve asthma control among children and other residents of federally assisted multifamily housing.

### **B. Program Description:**

The Department of Housing and Urban Development’s Office of Healthy Homes and Lead Hazard Control (OHHLHC) is making available grant funds for activities to improve asthma control among asthmatic children and other residents of federally assisted multifamily housing. Multifamily housing refers to a residential property containing five or more dwelling units. HUD is specifically interested in funding projects in multifamily housing developments that are administered by local public housing authorities (i.e., public housing) or privately owned multifamily housing that is subsidized by HUD. HUD is targeting asthma because it is a common illness that disproportionately affects disadvantaged populations and multifaceted interventions (including actions to reduce exposure to environmental triggers) can be effective in improving asthma control.

Approximately 16.4 million Americans currently have asthma, including nearly 7 million children 18 years of age and younger. Asthma disproportionately affects minority and disadvantaged children, with prevalence rates in children of 15.5% among black non-Hispanic and 9.3% among Hispanic vs. 7.4% among white non-Hispanic children. Minority children also suffer a disproportionate burden in terms of disease severity; among children with asthma, black non-Hispanic children are twice as likely to be hospitalized and over four times more likely to die due to asthma than white children. (NHIS, 2008). Asthma is also more prevalent among children in low income households, with a prevalence of 11.4% in households with family income below the poverty threshold vs. 8.2% prevalence in households with ratio of family income to poverty threshold of 4.5 and above (NHIS, 2008).

Research has also documented higher rates of asthma among residents of federally assisted housing. For example, a random telephone survey of adults in Boston households living in public and other federally assisted housing reported that 19.2% currently had asthma compared to 9% of other city residents (Digenis-Bury et al., 2008). Researchers conducted a study in 26 randomly selected public elementary schools in New York City and reported that public housing households had the highest prevalence (21.8%) of a child diagnosed with asthma. According to the study, “residents of all types of private housing had lower odds of asthma than

children living in public housing. After adjusting for individual- and community-level demographic and economic factors, the relationship between housing type and childhood asthma persisted, with residents of private family homes having the lowest odds of current asthma when compared to residents of public housing” (Northridge et al., 2010).

A recent review of research was conducted by the U.S. Centers for Disease Control and Prevention’s Task Force on Community Preventive Services (available at: <http://www.thecommunityguide.org/asthma/multicomponent.html>). The Task Force “recommends the use of home-based multi-trigger, multi-component interventions with a housing related environmental focus for children and adolescents with asthma based on evidence of effectiveness in improving overall quality of life and productivity, specifically: decreasing asthma symptoms, and reducing the number of school days missed due to asthma.” The Task Force further concluded that there was insufficient evidence for the effectiveness of these interventions for adults with asthma.

The intent of this asthma grant program is to support the implementation of multi-component interventions with a housing-related environmental focus that improve asthma outcomes among residents. Applicants are expected to be innovative and form strategic partnerships that will help leverage the HUD funding and ensure project success (e.g., partnering with local clinics to ensure proper medical management and possibly provide access to asthma-related medical care data). Applicants are also strongly encouraged to form partnerships with one of the Center for Disease Control and Prevention’s (CDC’s) Asthma Control Program grantees (currently, 34 states, the District of Columbia, and Puerto Rico have active grants). The CDC grants fund health departments to conduct asthma surveillance, maintain and expand partnerships, implement statewide comprehensive asthma plans with their partners, implement interventions to reduce the burden of asthma, and develop and implement an evaluation plan (see: <http://www.cdc.gov/asthma/contacts/>). Another important source of partners and resources (e.g., outreach materials) is the Environmental Protection Agency’s “Communities in Action for Asthma Friendly Environments Online Network” (see: <http://www.epa.gov/asthma/>). Applicants are encouraged to partner with Public Housing Agencies (PHAs) or property managers who have adopted or are willing to adopt building-wide measures that improve indoor environmental quality (IEQ) such as establishing smoke-free buildings and adopting Integrated Pest Management (IPM) to control pests. HUD’s Office of Public and Indian Housing has published Notices that encourage PHAs to create smoke-free housing and to adopt IPM practices and HUD’s Office of Housing has published a Notice that encourages owners and management agents of housing receiving Multifamily Housing rental assistance to implement smoke-free housing policies.<sup>1</sup>

HUD is interested in funding projects that, if demonstrated to be effective, can be readily replicated in other federally assisted housing. As an example, the Newport, RI housing authority implemented an effective asthma intervention program in public housing and developed materials that are available online through the Rhode Island Department of Health

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<sup>1</sup> See the following Notices: Non-smoking Policies in Public Housing, PIH-2009-21, available at [http://portal.hud.gov/portal/page/portal/HUD/program\\_offices/administration/hudclips/notices/pih/files/09-21pihn.doc](http://portal.hud.gov/portal/page/portal/HUD/program_offices/administration/hudclips/notices/pih/files/09-21pihn.doc); Guidance on Integrated Pest Management (IPM), PIH-2009-15, originally issued as PIH-2007-12 at <http://www.hud.gov/offices/adm/hudclips/notices/pih/files/07-12PIH.doc>; and Optional Smoke-Free Housing Policy Implementation, H 2010-21, [http://portal.hud.gov/portal/page/portal/HUD/program\\_offices/administration/hudclips/notices/hsg/files/10-21hsgn.pdf](http://portal.hud.gov/portal/page/portal/HUD/program_offices/administration/hudclips/notices/hsg/files/10-21hsgn.pdf).

(see: <http://www.health.ri.gov/projects/healthyresidentshealthyhomes/index.php>). This work is consistent with HUD's new Departmental strategic plan that includes the following goal: "Utilize HUD assistance to improve health outcomes," (see [http://portal.hud.gov/portal/page/portal/HUD/program\\_offices/cfo/stratplan](http://portal.hud.gov/portal/page/portal/HUD/program_offices/cfo/stratplan)) as well as HUD's Healthy Homes Strategic Plan (see: [http://www.hud.gov/offices/lead/library/hhi/hh\\_strategic\\_plan.pdf](http://www.hud.gov/offices/lead/library/hhi/hh_strategic_plan.pdf)).

**C. Healthy Homes Program Goals and Objectives:** The Asthma Interventions in Public and Assisted Multifamily Housing Grant Program is issued as part of HUD's Healthy Homes Program (see related FY2010 NOFAs, specifically the Healthy Homes Technical Studies NOFA and the Healthy Homes Intervention Program NOFA).

1. The overall goals of the Healthy Homes Program is to:
  - a. Foster partnerships for implementing a healthy homes agenda;
  - b. Support strategic, focused research on links between housing and health and cost-effective methods to identify and address hazards;
  - c. Promote the incorporation of healthy homes principles into ongoing practices and programs; and,
  - d. Build sustainable local healthy homes programs.
2. The Healthy Homes Program approach.

The Healthy Homes Program departs from the more traditional approach of programs that address single hazards or conditions (e.g., radon, lead). HUD 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, low-income children.

In addition to deficiencies in basic housing conditions that may impact health, research has identified other more subtle health hazards in the residential environment (e.g., asthma triggers such as pest and pet allergens and mold, mycotoxins, volatile organic compounds, pesticide residues, etc.). While such hazards are often present at greater frequency or intensity in housing that is substandard (e.g., structural problems, lack of adequate heating and cooling, moisture infiltration, etc.), housing-related environmental health hazards may also exist in housing that is otherwise of adequate quality. Appendix A of this NOFA briefly describes the key housing-associated health and injury hazards HUD considers targets for healthy homes interventions. HUD has also developed resource papers on a number of topics of importance for the Healthy Homes Program, including a paper that focuses on the residential environment and asthma. These resource papers can be downloaded from <http://www.hud.gov/offices/lead/hhi/hhiresources.cfm>.

**D. Objectives of this NOFA:** The major objectives of this NOFA are to support:

1. Development and implementation of cost effective, replicable interventions and protocols for the control of asthma among residents of federally assisted, multifamily housing, particularly children;
2. Creation of sustainable programs and policies (i.e., program activities which continue after the end of the grant performance period) that reduce exposure to asthma triggers in the indoor environment (e.g., IPM, smoke-free housing, integration of this grant with local green and healthy homes initiatives, etc.); and

3. Evaluations of the effectiveness (including cost-effectiveness) of asthma control programs and interventions in improving the health of residents and their understanding of asthma management practices.

#### **E. Community Participation:**

It is important for program managers and 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 objectives, improving recruitment and retention of project participants, improving participants' involvement in and understanding of a project, improving ongoing communication between researchers or project implementers and the affected community, and more effectively disseminating project findings. HUD encourages applicants to incorporate these aspects of meaningful community participation, including minority residents, residents with disabilities, and their advocates, where applicable, in project design and implementation.

**F. Authority:** The Asthma Interventions in Public and Assisted Multifamily Housing Grant 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). Fiscal Year 2010 funds for this program are authorized under the Consolidated Appropriations Act, 2010 (Pub. L. 111-117), approved December 16, 2009.

## **II. Award Information:**

#### **A. Funding Available:**

Approximately \$2.6 million in FY2010 and prior year funds are available for Asthma Interventions in Public and Assisted Multifamily Housing. 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.3 of this NOFA. Projects will be funded at a maximum level of \$600,000 for a maximum project period of three years. Approximately 5 to 8 awards are anticipated. Applications for amounts larger than the applicable maximum amount or for a longer period of performance than allowed in Section II.B will be deemed ineligible.

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

The start date for new cooperative agreement awards is expected to be not later than December 1, 2010. The period of performance cannot exceed 36 months from the date of award. The proposed performance period should include adequate time for such project components as the Institutional Review Board process, if required, and the recruitment of project participants. Period of performance extensions 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 Office of Healthy Homes and Lead Hazard Control (OHHLHC) Program Guide. If requested and determined to be appropriate and subsequently approved by OHHLHC, grantees will be eligible to receive a single extension of up to 12 months in length. Applicants can plan projects with performance periods shorter 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 suggest revisions to the project design, including: project objectives and work plan elements including project implementation and evaluation.
2. Review and provide technical recommendations in response to quarterly progress reports (e.g., amendments to project design based on preliminary results).
3. Review and provide recommendations on the final project report.

### **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. Applications to supplement existing projects are eligible to compete with applications for new awards. Federal agencies are not eligible to submit applications. The FY2010 **General Section** identifies threshold requirements that must be met for an organization to receive an award. Individuals are not eligible to apply.

#### **B. Cost Sharing or Matching:**

Cost sharing or matching is not required. In rating your application, however, you will receive a higher score under Rating Factor 4 if you provide evidence of significant resource leveraging.

#### **C. Other:**

1. Threshold Requirements Applicable to All Applicants: Applications that do not address the threshold items in paragraphs a and b will not be reviewed.
  - a. To receive an award of funds from HUD, you must meet all the threshold requirements in the FY2010 **General Section** (see Section III.C.2 of the FY2010 **General Section**).
  - b. To receive an award of funds from HUD, you must identify the following in your response to Rating Factor 2 (Need and Extent of the Problem) and in your abstract: the target area of your intervention, the target age group, and the current asthma prevalence among the target age group in the community your target area is in (in this context, this is the smallest geographic area including your target area for which reliable data are available) and, in at least your response to Rating Factor 2, cite documentary support for the prevalence value. The target age group must include children (i.e., less than 18 years of age), but may also include other age groups. You must provide evidence that the prevalence of current asthma in your target area is greater than the national average for the age group that you are targeting, based on data from the 2007 NHIS (9.1% for those under 18 (if you are targeting just children), or 7.7% for all ages (if you are not targeting by age, or are targeting children plus one or more other age groups), Summary data from the 2007 NHIS are available at: <http://www.cdc.gov/asthma/nhis/07/table4-1.htm>.
  - c. A minimum score of 75 points is required for consideration for award.

## 2. Program Requirements:

The Asthma Interventions in Public and Assisted Multifamily Housing Grant Program has the following requirements:

- 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. Regulatory Compliance: Grantees must comply with all relevant federal, state, and local regulations regarding exposure to and proper disposal of hazardous materials as well as other applicable regulations, such as those dealing with civil rights.
- c. Asthma Education: Any asthma education must be conducted by a Certified Asthma Educator as designated by the National Asthma Educator Certification Board, or have comparable qualifications.
- d. Laboratory Analysis for Mold: Samples to be analyzed for mold (fungi) must be submitted to a laboratory accredited through the Environmental Microbiological Laboratory Accreditation Program (EMLAP), administered by the American Industrial Hygiene Association (AIHA).
- e. Human Research: Human research subjects shall be protected from research risks in conformance with the Department of Health and Human Services (DHHS) Protection of Human Subjects regulation at 45 CFR part 46.
- f. 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, shall be met.
- g. Civil Rights: The institutions administering the grant, their sub-grantees, lead research personnel, etc. must comply with all civil rights laws set forth in the FY2010 **General Section** (see Section III.C.5 of the FY2010 **General Section**).
- h. Disclosure: Disclosure of all environmental test results and other information related to asthma triggers within the residence to the resident is required. However, disclosure to the owner or manager of the housing unit (if not violating any federal, state or local privacy act requirements) for purposes of seeking treatment or remediation of the unit, is encouraged but not required.
- i. Privacy: Submission of any information to databases (whether website, computer, paper, or other format) of addresses of housing units identified, treated or cleared under this project is subject to the protections of the Privacy Act of 1974, and shall not include any personal information that could identify any person affected. You should also check to ensure you meet state and local privacy regulations.
- j. Community involvement: Applicants must incorporate meaningful community involvement, including minority residents, residents with disabilities, and their advocates 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, etc). 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” (see Appendix B for more information on this report).

k. Economic Opportunities for Low- and Very Low-Income Persons (Section 3): Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. § 1701u) applies directly to the grantee. The purpose of Section 3 is to ensure that new training, employment or contracting opportunities created during the grant will, to the greatest extent feasible, be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low- and very low-income persons in the area in which the project is located. If the grantee plans to hire any new employees or award contracts to carry out the grant, it 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 also comply with the Section 3 requirements for any new training, hiring or sub-contracting opportunities provided under those contracts. Please refer to 24 CFR part 135, subparts B and E, and to Section III.C.5.d of the **General Section**, for additional information.

l. Standardized Dust Sampling Protocol and Quality Control Requirements: Grantees collecting samples of settled dust from participant homes for environmental allergen analyses (e.g., cockroach, dust mite, etc.) will be required to use a standard dust sampling protocol, unless there is a strong justification to use an alternate protocol (e.g., the study involves the development of an alternative sampling method). 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, you should assume that 5 percent of your total allergen dust samples will consist of Quality Control samples.

m. Information quality: 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.

n. Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency (LEP)”: The institutions administering the grant must comply with Executive Order 13166 (see Section III.C.5.c of the FY2010 **General Section**).

o. Allowable Costs and Activities: For each kind of organization, a set of Federal principles determines allowable costs. Allowable costs shall be in accordance with the cost principles applicable to the organization incurring the costs. Specifically, see [2 CFR 220](#) - Cost Principles for Educational Institutions, [2 CFR 225](#) - Cost Principles for State, Local, and Indian Tribal Governments, or [2 CFR 230](#) - Cost Principles for Nonprofit Organizations. (OMB relocated its cost principles Circulars A-21, regarding educational institutions, A-87, regarding governments,

and A-122, regarding nonprofits, to title 2 of the Code of Federal Regulations; the regulations supersede the circulars (70 *Federal Register* 51880, 51910, and 51927, respectively, August 31, 2005).) Allowable costs include the following:

(1) Development of appropriately scaled, flexible, cost-effective and efficient assessment and intervention strategies. Applicants should use or adapt existing assessment instruments where possible rather than focusing on development of new instruments. Applicants should also use proven, evidence-based intervention protocols unless a project objective is to test novel protocols.

(2) Developing and administering training to housing staff (e.g., maintenance workers, management, etc.) and residents on effective, environmentally-focused strategies to improve asthma outcomes. HUD's primary interest is in the development and demonstration of effective and replicable environmentally focused strategies to improve asthma control in low income, federally assisted multifamily housing.

(3) Conducting sampling and analysis for residential allergens and other asthma triggers (e.g., nitrogen dioxide, environmental tobacco smoke) following established protocols and procedures when possible. Samples to be analyzed for mold must be submitted to a laboratory accredited in the Environmental Microbiological Laboratory Accreditation Program (EMLAP), administered by the American Industrial Hygiene Association (AIHA) Laboratory Accreditation Programs, LLC (<http://www.aihaaccreditedlabs.org/Pages/default.aspx>). Applicants are discouraged from routinely collecting and analyzing environmental samples unless this is a necessary component of project evaluation.

(4) Carrying out necessary architectural, engineering and work specification development and other construction management services in support of the hazard assessment and intervention activities.

(5) Remediating existing residential environmental health and safety hazards and addressing conditions that could cause these hazards to recur. Pest control funded under this NOFA must be conducted using IPM. See, for example, the *Healthy Housing Reference Manual* (HUD/Centers for Disease Control and Prevention (CDC), 2006) and the CDC's IPM web page, <http://www.cdc.gov/nceh/ehs/Topics/VectorControl.htm>. Any pest management contractors funded through this NOFA must have a current certification indicative of proficiency in implementing IPM, including QualityPro Green, GreenShield, and EcoWise.

(6) Purchasing supplies to perform healthy housing remediation, to include environmentally-safe or low-toxicity cleaning supplies and pest control supplies.

(7) Providing 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). Use of these incentives is subject to approval by HUD. Their purpose shall be to encourage recruitment and retention of households for the entire project period, and to encourage participation in educational and training activities and other program-related functions.

(8) Supporting data collection, analysis, and evaluation of project activities. As a condition of the receipt of financial assistance under this NOFA, all successful applicants will be required to cooperate with HUD staff and contractors who are performing any HUD-funded research and evaluation studies.

p. Other Allowable Costs:

(1) Purchasing or leasing home assessment or remediation equipment that costs under \$5,000.

(2) Conducting targeted outreach, affirmative marketing, or education programs that help promote participation in the program and further the goal of protecting children from environmentally induced illnesses or injury in the home environment. This includes offering educational materials in languages that are common in the community other than English. For assistance, applicants should consult Section III.C.5.c of the **General Section** and the Department's *Final Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons* ("HUD's LEP Guidance") (72 FR 2732, January 22, 2007). This guide is available, along with more information, at <http://www.hud.gov/offices/fheo/promotingfh/lep.cfm>. Upon request, this also would include making materials available in alternate formats to persons with disabilities (e.g. Braille, audio, and large type).

(3) Providing resources to build local capacity for healthy housing, such as delivery of training developed for HUD and the CDC at the Healthy Homes Training Center (<http://www.healthyhomestraining.org>) and other state-of-the-art training programs, and promotion of the integration of this grant program with housing rehabilitation, property maintenance, and weatherization programs.

#### **IV. Application and Submission Information:**

If you are interested in applying for funding under this program, please review carefully the following information.

##### **A. Address To Request Application Package:**

Applications can be downloaded from the web at:

[http://www.Grants.gov/applicants/apply\\_for\\_grants.jsp](http://www.Grants.gov/applicants/apply_for_grants.jsp). All applications must be submitted electronically (except if a waiver to the electronic submission requirement has been granted; see section IV.F of this NOFA). The information required to submit an application is contained in the program section of this NOFA and the **General Section**. Grants.gov provides customer support information on its website at <http://www.Grants.gov/contactus/contactus.jsp>. Applicants having difficulty accessing the application and instructions or having technical problems can receive customer support from Grants.gov by calling 800-518-GRANTS (this is a toll-free number) or by sending an email to [support@Grants.gov](mailto:support@Grants.gov). The Grants.gov Help Desk can be reached twenty-four hours per day, seven days per week, except federal holidays. HUD recommends calling the Help Desk rather than emailing, because determining the basis for the problem may take some conversation with the Grants.gov Support Customer Service Representative.

##### **B. Content and Form of Application Submission:**

1. **Applicant Data:** Your application must contain the items listed in this section. These items include the standard forms contained in the FY2010 **General Section** that are applicable to this funding announcement (collectively referred to as the "standard forms"). You will find these forms in the Application download and the Instructions Download for this NOFA at [http://www.Grants.gov/applicants/apply\\_for\\_grants.jsp](http://www.Grants.gov/applicants/apply_for_grants.jsp). The required items are:

a. **Application Abstract:** An abstract with the project title, the names and affiliations of all key personnel, a summary narrative specifying the target area, target age group, the current asthma prevalence among the target age group in the target area, the objectives, expected results, and project design (one page maximum) must be included in the proposal. Information contained in

the abstract will not be considered in the evaluation and scoring of your application. Any information you wish to be considered should be provided under the appropriate rating factor response.

b. All forms required by this NOFA are listed in the Checklist in Section IV.B.1.h, below.

c. Materials Submitted: A project description/narrative statement addressing the rating factors for award under this program. The narrative statement must be identified in accordance with each factor for award (Rating Factors 1 through 5).

d. Number the pages of your narrative statement: The project description or narrative must be included in the responses to the rating factors. The response to the rating factors should be formatted to not exceed a total of 20 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.** The points you receive for each rating factor will be based on the portion of your narrative statement that you submit in response to that particular factor, supplemented by any appendices that are referenced in your narrative response to the rating factor. Supporting materials that are not referenced or discussed in your responses to the individual rating factors will not be considered. Additional materials (e.g., appendices) must be submitted with your application according to the directions in the FY2010 **General Section**. The footer on the pages of these materials should identify the rating factor that they are supporting.

e. Supporting Materials: Include the resumes of the principal investigator and other key personnel and other materials that are needed in your response to the rating factors (e.g., organizational chart, letters of commitment, a list of references cited in your responses to the rating factors). 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. This information will not be counted towards the Rating Factors narrative 20-page limit.

f. Additional Information: Submit other optional information provided in support of your application following the directions in the FY2010 **General Section**. These additional optional materials 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 your rating factor responses. Such narrative will not be considered. HUD will not accept application addenda after the deadline unless HUD has specifically asked the applicant for a correction to a technical deficiency in the application. Responses to technical deficiencies must be received by HUD within the time allocated to cure the deficiency and must be submitted by facsimile to the number in the **General Section** and using the HUD96011\_Facsimile\_Transmittal form as the cover sheet to the faxed material, unless you have been granted a waiver to the electronic submission via Grants.gov. If you have been granted a waiver, the waiver approval letter will indicate how technical cures, if needed, must be submitted. Faxing the cure to the technical deficiency using the form HUD96011, permits HUD to align the cure documents to the application in our system. The request for a technical cure will also contain instructions for when the cure must be received by the Department and other pertinent information.

g. Budget: Include a total budget with supporting cost justification (i.e., narrative) up to four pages, which will cover all budget categories of the federal grant request. This information will not be counted towards the Rating Factors narrative 20-page limit. Use the budget format discussed in Rating Factor 3, Section V.A.3.c, below. In completing the budget forms and justification, you should address the following elements:

(1) Direct Labor costs, including all full- and part-time staff required for the planning and implementation phases of the project. These costs should be based on full-time equivalent (FTE) or hours per year (hours/year) (i.e., one FTE equals 2,080 hours/year);

(2) Allowance trips to HUD Headquarters in Washington, DC, for the first and last year of your grant, planning initial trip for two people. The first trip may occur shortly after grant award for a stay of two or three days, depending on your location, and the remaining trip (for one person) will have a stay of one or two days, depending on your location;

(3) A separate budget proposal for each sub-recipient receiving more than 10 percent of the total federal budget request;

(4) Indirect Cost Rates: 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.

#### h. Checklist for Applicants:

(1) **Applicant Abstract** (limited to 1 page)

(2) **Rating Factor Responses** (Total narrative response limited to 20 pages.)

(a) Capacity of the Applicant and Relevant Organizational Experience (22 points)

(b) Need and Extent of the Problem (12 points)

(c) Soundness of Approach (46 points)

(d) Leveraging Resources (10 points)

(e) Achieving Results and Program Evaluation (10 points)

(f) Bonus Points (RC/EZ/EC-II) (2 points)

(3) **Required materials in response to rating factors:** (Does not count towards 20-page limit)

(a) Resumes of Key Personnel (limited to 3 pages per resume – please do not include Social Security Numbers on Resumes)

(b) Organizational Chart

(c) Letters of Commitment (if applicable) - Letters of commitment 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.

(4) **Optional material in support of the Rating Factors (20 page limit):**

(5) **Required Forms and Budget Material:**

(a) SF424\_Application\_for\_Federal\_Assistance

(b) HUD424CBW\_Budget\_Worksheet

(c) Budget narrative

(d) HUD96010\_Program\_Outcome\_Logic\_Model

(e) SF424\_Supplement\_Survey\_on\_Ensuring\_Equal\_Opportunities\_for\_Applicants ("Faith Based EEO Survey (SF-424 SUPP)") (to be completed by private nonprofit organizations only)

(f) SFLLL (Disclosure of Lobbying Activities, if applicable)

(g) HUD2880\_Applicant\_Recipient\_Disclosure\_Update\_Report (HUD Applicant Recipient Disclosure Report)

(h) HUD2990\_Certification\_of\_Consistency\_with\_the\_RC\_EZ\_ECII\_Strategic\_Plan (required only for applicants who are seeking these 2 bonus points)

(i) HUD2991\_Certificate\_of\_Consistency\_with\_the\_Consolidated\_Plan

- (j) HUD96012\_Capacity\_of\_the\_Applicant\_and\_Relevant\_Organizational\_Experience
- (k) HUD96015\_Leveraging\_Resources
- (l) HUD27061\_Racial\_and\_Ethnic\_Data

### **C. Submission Dates and Timely Receipt Requirements:**

Electronic applications must be received by Grants.gov on or before 11:59:59 PM eastern time on the application deadline date, **November 16, 2010**. Refer to the **General Section** for submission requirements. Please allow time for this process to ensure that you meet the timely receipt requirements. Please see the FY2010 **General Section** for instructions for timely receipt, including actions to take if the application is rejected. Applicants should carefully read the section titled “INSTRUCTIONS ON HOW TO DOWNLOAD AN APPLICATION PACKAGE AND APPLICATION INSTRUCTIONS” in the FY2010 **General Section**. This section contains information on using Adobe Reader, HUD’s timely receipt policies, and other application information.

### **D. Intergovernmental Review:**

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

### **E. Funding Restrictions:**

1. Administrative Costs: There is a 10 percent maximum allowance for administrative costs. Detailed explanations of indirect and administrative costs are provided in applicable OMB regulations ([2 CFR 220](#) - Cost Principles for Educational Institutions, [2 CFR 225](#) - Cost Principles for State, Local, and Indian Tribal Governments, or [2 CFR 230](#) - Cost Principles for Nonprofit Organizations) that can be accessed through the hotlinks above, or at the Electronic Code of Federal Regulations website, <http://ecfr.gpoaccess.gov/>.
2. Indirect Costs: Please see [http://portal.hud.gov/portal/page/portal/HUD/program\\_offices/administration/grants/training/odg\\_motrainingfor](http://portal.hud.gov/portal/page/portal/HUD/program_offices/administration/grants/training/odg_motrainingfor) information on the Indirect Cost requirements.
3. Purchase of Real Property: The purchase of real property is not an allowable cost under this program.
4. Purchase or Lease of Equipment: The purchase or lease of equipment having a per unit cost in excess of \$5,000 is not an allowable cost, unless prior written approval is obtained from HUD.
5. Medical treatment: Medical treatment costs are not allowable under this program.
6. Profit: For-profit institutions are not allowed to earn a profit.
7. You must comply with the Coastal Barrier Resources Act (16 U.S.C. § 3501).
8. You may not conduct residential hazard control 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:
  - a. 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
  - b. 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)). You are responsible for assuring that flood insurance is obtained and maintained for the appropriate amount and term.

9. Construction activities: The amount of HUD Asthma Interventions in Public and Assisted Multifamily Housing Grant Program funds used for construction activities may not exceed 20% of the total HUD funds awarded. Furthermore, the majority of any funds dedicated to Healthy Homes construction activities shall be spent for interventions not intended for lead hazard control.

10. 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, the insurance cost is a direct cost; 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.E.1 and IV.E.2 of this NOFA, regarding administrative costs and indirect costs, respectively.

11. Restricted Use of Funds: HUD Asthma Interventions in Public and Assisted Multifamily Housing funds shall not be used to replace existing resources dedicated to any ongoing project.

#### **F. Other Submission Requirements:**

Applicants are required to submit applications electronically via the website

[http://www.Grants.gov/applicants/apply\\_for\\_grants.jsp](http://www.Grants.gov/applicants/apply_for_grants.jsp). See section IV of the **General Section** for additional information on the electronic process requirement and, in particular, section IV.F.3 of the **General Section** on how to request a waiver from the requirement if necessary.

Applicants must submit their waiver requests, including the justification, in writing using email.

Waiver requests must be submitted no later than 15 days prior to the application deadline date and must be submitted to: [OHHLHCNOFAreview@HUD.gov](mailto:OHHLHCNOFAreview@HUD.gov).

Paper applications will not be accepted from applicants that have not been granted a waiver to the electronic application requirement. If an applicant is granted a waiver, the approval notice will provide instructions for submission. **All applications in paper format must be received by HUD at or before 3:59:59 PM eastern time on the application deadline date.** HUD will not receive applications that arrive when the OHHLHC office or HUD's Weaver Building is closed for any reason, anticipated or not. See the FY2010 **General Section** for detailed submission and timely receipt instructions.

#### **V. Application Review Information:**

##### **A. Criteria:**

1. Threshold Requirements: Applications that meet all of the threshold requirements will be eligible to be scored and ranked, based on the total number of points allocated for each of the rating factors described in Section V.A.3 of this NOFA. Your application must receive a total score of at least 75 points to be considered for funding.

2. Award Factors: Cooperative agreements will be awarded on a competitive basis following evaluation of all proposals according to the rating factors described below in this NOFA. Each of the five factors is 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 project description and accompanying materials. To the extent feasible, include all of the needed information within your response to each rating factor. If your response to a particular rating

factor cites information provided in your response to another rating factor, clearly indicate where the information is located so that the reviewer can easily locate it.

### 3. Rating Factors:

**a. Rating Factor 1: Capacity of the Applicant and Relevant Organizational Experience (22 points):** This factor addresses your organizational capacity, as well as that of your partner organizations, sub-grantees, sub-contractors, etc., to successfully implement your proposed project in a timely manner. HUD encourages the formation of a consortium of health, environmental, and housing programs to increase the effectiveness of the Asthma Intervention in Multifamily Public and Assisted Housing grant. Applicants should investigate opportunities to partner with one of CDC's Asthma Control Program grantees (see: <http://www.cdc.gov/asthma/nacp.htm>) and organizations that provide medical care to the residents of the targeted housing (e.g., federally funded clinics). Applicants and partner organizations, with experience in performing asthma control interventions, education and evaluation will receive more points than those that are experienced only in performing asthma control outreach or public education and evaluation activities. In general, applicants that can demonstrate partnerships that cover key areas of expertise and which are expected to contribute significantly to the success and impact of the proposed project will receive more points under subfactor V.3.a.2 of this rating factor, with points also awarded specifically for demonstrated partnerships with a CDC Asthma Control Program grantee (see V.3.a.3). In rating this factor, HUD will consider the three items listed below.

(1) Capability and Qualifications of Key Personnel (8 points): HUD will assess the qualifications of key personnel to carry out the proposed project as evidenced by academic background and relevant professional experience. Describe the knowledge and experience of the proposed overall project director and day-to-day project manager in planning and managing similar, interdisciplinary programs, especially those involving housing, public health, or environmental activities. Include information on your project support staff, their experience with housing and/or health programs, percentage commitment to the project, and position titles. You must clearly indicate the time commitments for the day-to-day project manager and the project director and describe why they are appropriate for the project. Resumes of up to 3 pages each for up to three key personnel and a clearly delineated organizational chart for the proposed project (including all partner organizations), must be included in your application submission. Position descriptions or job announcements (including salary range, percent of time commitment, percentage of time covered by cooperative agreement funds) for unfilled positions, must be included for any key positions that are currently vacant or contingent upon an award. Successful applicants must hire all key staff positions identified in the proposal as vacant or required in the award agreement within 120 days of award. Please **do not** include the Social Security Numbers (SSN) of any staff members. Applicants must also complete and submit Form HUD96012\_Capacity\_of\_the\_Applicant\_and\_Relevant\_Organizational\_Experience.

(2) Organizational Capacity and Qualifications (6 points): Describe the qualification of your organization to implement the proposed project and how other principal components of your organization will participate in, or support, your project. Include names and descriptions of the experience and qualifications of partner organizations and contractors. Applicants should explain how each entity will support the project. This includes a description of the number and type of staff to be dedicated to the project for each organization and other agreements to provide



resources. HUD will evaluate the extent to which the applicant has secured adequate resources, can demonstrate key partnerships, and thoughtfully determined the roles and relationships among participants. 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.

(3) Partnership With a CDC Asthma Control Program Grantee (3 points): To receive points under this sub factor, applicants must demonstrate through MOUs or commitment letters, a partnership with a current CDC Asthma Control Program grantee for the purpose of implementing the proposed project.

(4) Past Performance in Managing Similar Projects (4 points): Applicants must list relevant, recent residential environmental health intervention and evaluation projects with brief descriptions for each. Provide brief 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, etc.) of a complex project, 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 grants, their performance will be evaluated in terms of achievements made under the previous grant(s).

**b. Rating Factor 2: Need and Extent of the Problem (12 points)**: This factor addresses the strength of the demonstrated need for the asthma intervention project in the target area as well as the appropriateness of the housing for participation in the project. This factor also addresses the likelihood that the proposed project will result in replicable models as well as the sustainability of program components.

(1) Target Area for Proposed Activities (7 points). Identify the target area for your proposed activities. You must also identify the target age group (i.e., children (< 18 years old) or all ages), and the current asthma prevalence among the target age group in the community your target area is in (in this context, this is the smallest geographic area including your target area for which reliable data are available). You must provide evidence that the prevalence of current asthma in your target area and age group is greater than the national average for that age group based on the 2007 NHIS (9.1% for those under 18 (if you are targeting just children), or 7.7% for all ages (if you are not targeting by age, or are targeting children plus one or more other age groups). Summary data for the prevalence of current asthma from the 2007 NHIS are available at: <http://www.cdc.gov/asthma/nhis/07/table4-1.htm>. The scoring of your application for this subfactor with respect to the prevalence of current asthma will be based on the ratio of the target population prevalence to the respective national prevalence for the target age group (note that the ratio must be greater than 1). Your demonstration of need should also include a discussion of the major environmental asthma triggers demonstrated to be in housing in your target area (e.g., pest infestation, environmental tobacco smoke). The appropriateness of targeting project activities in

specific housing can also be demonstrated by factors such as commitment from management, demonstrated interest of residents, the proximity of medical providers that are project partners, and the ability to leverage current activities such as existing IPM or smoke-free housing programs.

(2) Creating Replicable Models for Asthma Intervention in Multifamily Housing (5 points): You should describe how your proposed project is expected to produce replicable models or tools that could be more broadly applied to improve asthma outcomes among residents of other low income, multifamily housing. Describe how components of your project are likely to be readily adopted and applied by other housing programs, including, the degree to which they will result in methods that are practical and effective. You should also describe how your proposed project would improve our understanding of effective strategies for asthma control in these environments. You will receive the most points for this subfactor if you identify how your project will help improve our current knowledge of effective asthma intervention practices in areas such as project design/partnering, identifying high risk communities, housing assessment, housing intervention, education and outreach, and project sustainability.

**c. Rating Factor 3: Soundness of Approach (46 Points):**

(1) Approach for Implementing the Project: For FY2010, this program seeks to fund projects that will effectively apply and build upon knowledge gained to date, demonstrate cost-effective approaches to improve asthma control, and develop sustainable, replicable approaches to improve asthma control in residents of federally assisted, multifamily housing developments that are administered by local public housing authorities (i.e., public housing) as well as privately owned multifamily housing that is subsidized by HUD. For additional information on projects completed and assessment tools developed, see Appendix C, Resources for Designing and Implementing Healthy Homes Projects.

(a) Overall Clarity and Thoroughness of Project Plan (6 Points): Clearly and thoroughly describe your approach to implementing your proposed project. In particular describe the methods that will be used to reduce exposure to environmental asthma triggers, improving medical management, and provide needed education and training. Include summary information about the project plan, such as the estimated numbers of clients to be contacted and enrolled, units to be assessed, units to receive intervention, and individuals or groups that will be reached through education or outreach activities, and training. The primary focus of the program should not be solely to change resident behavior through education and/or outreach. Further, applicants should consider whether projects for which a major focus is providing residents with supplies (e.g., cleaning materials) without performing an actual home intervention is likely to be effective. You are expected to include an evaluation component to assess intervention effectiveness (e.g., reduction in frequency and severity of asthmatic episodes, reduced need for acute medical care, reduction in missed school or work days, and reduced exposure to environmental triggers). Your evaluation component should include a formalized structure to address the effectiveness of your project's approach and its implementation. A pertinent example of an outline of an evaluation plan is provided in the CDC's "Learning & Growing through Evaluation: State Asthma Program Evaluation Guide," included in the CDC asthma website mentioned in section I.B of this NOFA, in that guide's Appendix F, "Individual Evaluation Plan Outline

([http://www.cdc.gov/asthma/program\\_eval/AppendixF\\_Evaluation\\_Plan\\_Outline.doc](http://www.cdc.gov/asthma/program_eval/AppendixF_Evaluation_Plan_Outline.doc)). In conducting your evaluation, you should use standardized data collection instruments, such as

those listed in Appendix C. HUD encourages grantees to publish evaluation results in a scientific or professional journal to facilitate the distribution of project findings.

(b) Community Involvement, Education, and Training (5 points):

(i) Because the projects funded through this NOFA are expected to include a significant level of community interaction, you should describe your plan for meaningful involvement of the target community in your proposed project. There are many different approaches for 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 (such as involving a resident organization), including one or more community-based organizations from your target community as project partners, training and employing residents to recruit project participants and to conduct education and outreach activities, 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,” at <http://www.iom.edu/cms/12552/26004/29871.aspx>.

(ii) Community Education, Outreach and Capacity Building/Training: Describe your proposed methods for conducting targeted education, outreach and training. These should include education, training, and outreach programs that support your work plan and are culturally sensitive and targeted appropriately. They should be especially directed to those families that are least likely to get the benefits of this program without special targeting and outreach. This would include minority families as well as those who need to be reached by alternative formats and LEP families. Provide information about specific educational/outreach activities and a description of the intended audience (e.g., residents, maintenance workers, housing management).

(iii) Discuss whether you will produce your own outreach materials or use materials already developed by federal, state, or local agencies or other organizations. HUD strongly encourages the use or adaptation of existing materials. Outreach materials should be available upon request in alternative formats for persons with disabilities including materials in Braille, audio, and large type. For more information on outreach requirements related to disabled persons, see 24CFR 8.6, which require that appropriate steps be taken to ensure effective communication with disabled persons. For assistance in providing materials in languages other than English that are common in the community, see Section III.C.5.c. of the FY2010 **General Section** and HUD’s Limited English Proficiency (LEP) Guidance at <http://www.hud.gov/offices/fheo/promotingfh/lep.cfm>.

(iv) Discuss whether the asthma intervention training programs will be expanded to include other public housing agencies or providers of privately owned low income housing.

(c) Institutional Review Boards and the Health Insurance Portability and Accountability Act (HIPAA) (2 Points): In conformance with the Department of Health and Human Services (DHHS) regulation at 45 CFR Part 46, if you conduct research that involves human subjects, your organization must provide proof (e.g., a letter signed by an appropriate official) that the project has been reviewed and approved by an Institutional Review Board (IRB) before you can initiate activities that require IRB approval. You must also provide the number for your organization’s assurance (i.e., an “institutional assurance”) that has been approved by the DHHS’ Office for Human Research Protections (OHRP). For additional information on what constitutes

human subject research (please note that this is broadly defined) or how to obtain an institutional assurance see the OHRP website at <http://www.hhs.gov/ohrp/>. Although you do not have to provide proof of IRB approval with your application, you should address how and when you will obtain such approval. If appropriate, describe how you will obtain informed consent (e.g., from the subjects, or their parents or their guardians, as applicable) and discuss the steps you will take to help ensure participants' understanding of the elements of informed consent, such as the purposes, benefits and risks of the project. 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, if applicable, and how you plan to work with families with LEP, (as defined at <http://www.hud.gov/offices/fheo/promotingfh/lep.cfm>) or primary languages other than English, and with families, including persons with disabilities. You must also comply with the 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 the data. Since your proposal is subject to requirements of the HIPAA Privacy Rule, describe how you plan to address these requirements. Additional information on HIPAA and the Privacy Rule can be found at <http://www.hhs.gov/ocr/privacy/>. Additional information is also available at: <http://privacyruleandresearch.nih.gov/authorization.asp>.

(d) Staff and Partner Training and Capacity Building (3 points): Provide detailed information regarding how program staff and, as applicable, partnering organizations will be trained in the disciplines needed to successfully implement your project (e.g., resident education, assessments, interventions and project evaluation). Include an outline of training curricula, a description of qualifications of trainers, and describe how individuals or groups to be trained will be selected. In general, applicants should use or adapt relevant training materials (e.g., those developed for HUD and CDC by the Healthy Homes Training Center (<http://www.healthyhomestraining.org>)). If new training materials will be developed, the applicant should provide a justification for the need to develop new materials.

You should also address the extent to which your intervention project (or important project components) could be sustained in the absence of continued federal funding. HUD is interested in having funds awarded through this NOFA used to establish sustainable systems and practices, to the extent feasible.

(e) Economic Opportunity (2 points): Explain how you will provide newly created employment, training, and contracting opportunities to Section 3 residents and Section 3 businesses within the target area, in compliance with Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. § 1701u) and HUD's implementing rules at 24 CFR Part 135. Describe how you will accomplish Section 3 requirements by identifying the number of new jobs, contracts, and training opportunities that your project will generate; strategies for targeting Section 3 residents and businesses for said economic opportunities, the schedule for delivering said training for low- and very low-income persons living within your jurisdiction, and how trained individuals will be linked to new employment opportunities with covered developers and /or contractors, and how efforts will be made to ensure that 10 percent of the total dollar amount of construction contracts will be awarded to businesses owned by and/or employing low and very low-income persons living within your jurisdiction. Note that, while

contractors, subcontractors or sub-grantees receiving contracts under the grant totaling less than \$100,000 need not meet the Section 3 requirements as a regulatory mandate (see section III.C.2.1 of this NOFA), all grantees that receive awards exceeding \$200,000 are required to comply with Section 3 (see Section III.C.5.d of the **General Section** for more information on Section 3 requirements).

(f) Recruitment and Enrollment (4 Points):

(i) Describe how you will identify, prioritize, and enroll households for program participation, and further describe your plan for recruiting and enrolling project participants and how you will monitor enrollment and recruitment status and implement measures identified to sustain enrollment and recruitment. Discuss possible recruitment problems and describe measures you will take to sustain recruitment and enrollment, and incentives you may provide to retain participants throughout the period of performance of the cooperative agreement.

(ii) Applicants must follow the instructions regarding affirmatively furthering fair housing below. In addition, your narrative for this rating sub-factor must describe how your proposed activities further at least one of the following objectives: (1) help overcome any impediments to fair housing choice related to the assisted program or activity itself; (2) promote racially, ethnically, and socioeconomically diverse communities; or (3) promote housing-related opportunities that overcome the effects of past discrimination because of race, color, national origin, religion, sex, disability, and family status. Describe your proposed methods to reach high-risk groups and communities, as well as vulnerable populations. An applicant must address:

- Affirmatively furthering fair housing by marketing the program to those least likely to apply based on race, color, sex, family status, national origin, religion, or disability and selecting units in a manner that effectively furthers fair housing;
- Providing materials in alternative formats or providing other means of communication for persons with disabilities; and
- Providing materials in languages other than English for individuals with limited English proficiency and their families.

In determining how to address affirmatively furthering fair housing, applicants are encouraged to refer to data from the Analysis of Impediments to Fair Housing Choice (AI) produced by the local jurisdiction in which your program activities are to occur, as discussed in Section III.C.5.b of the **General Section**.

(g) Unit Assessments and Medical Referrals (4 Points):

(i) Describe the assessment tools your project will employ to evaluate and establish baseline data for housing units and buildings, and to assess the asthma control status of the occupant(s). These tools include questionnaires, visual assessment protocols, and protocols for environmental sampling and analysis (if needed). When conducting assessments of individual units, you are encouraged to take the opportunity to also identify conditions that represent injury hazards to vulnerable populations such as children and seniors (e.g., lack of secure storage for poisons, fall hazards for seniors).

(ii) If you are planning to conduct dust sampling for allergen analyses as part of your unit assessment plans, you should judiciously select the allergens that you will test for to avoid unnecessary expenditures on data that could be of little value. If possible, the allergen(s) that are targeted should reflect your knowledge of the housing stock (e.g., cockroach infestation is common in older, low income, multifamily housing) and if known, the sensitivities of the individual(s) in a specific household.

(iii) Describe the process to be followed for referring asthmatic individuals for medical case management, if necessary. Describe the organizations that will be involved in this process, and their prior experience providing case management to the target population(s).

(h) Asthma Control Interventions (6 Points):

(i) HUD anticipates that it will be important to perform interventions at both the building level (e.g., IPM, smoke-free) and the individual unit level. Describe your intervention strategy including steps and phases that will be employed. Include a justification for the sequence of your steps/phases and how they will be implemented. Although your interventions are expected to focus on improving asthma control, you should also describe plans to address any injury hazards that are identified during the home assessment. Describe your process for developing work specifications for conducting the selected environmental interventions (if needed). You will receive the most points for this subfactor if you successfully demonstrate how your project will help improve current knowledge of effective and practical interventions.

(ii) Describe why your interventions would be considered cost effective (i.e., similar or less costly than other commonly-used approaches to achieve improved asthma control). Describe how you will track the cost of interventions to allow for the calculation of an average cost per unit and for estimation of the cost of hazard-specific interventions (e.g., IPM).

(iii) Discuss your process to select and obtain contractors for conducting evaluation and/or interventions (if needed), and provide details about the competitive bidding process. Include what type of contractors you will target, and the training you will provide to them, if necessary and how you will ensure that they meet the Fair Housing Threshold and will affirmatively further fair housing during the research process.

(i) Quality Assurance (QA) Activities (3 Points): Successful applicants that are collecting housing, demographic, medical or environmental data must ensure the quality and integrity of the data. Describe the elements of your project that will integrate QA activities into the project design and applicable activities such as visual assessments, environmental assessments and data management. You must also discuss the use of validated questionnaires and assessment tools (see Appendix C), data collection, data management (e.g., ensuring the accuracy of data entry), statistical analysis, staff training and monitoring. Your description will be evaluated relative to its thoroughness, level of detail, and appropriateness for ensuring the validity and quality of the data. If funded, you will be asked to develop a brief Quality Assurance Plan that incorporates these elements.

(j) Approach for Managing the Project (5 points): Considering your project goals and objectives, describe how you will manage the project. Provide information on the general management approach including a Management Plan that:

(i) Incorporates appropriate project objectives, major tasks/activities, responsible entities, performance goals, and the process that you will utilize to assign, track and monitor the performance of major tasks and activities. All major activities necessary to complete the proposed project, such as recruitment, unit assessment, enrollment, intervention, training, education and outreach, and project evaluation (including follow up visits), must be included.

(ii) Provides a schedule of milestones and deliverables for the completion of major tasks and activities, and the delivery of interim and final products. The major tasks and benchmarks/deliverables identified in the management plan should be consistent with those identified in the Logic Model (see description under Rating Factor 5).

(iii) Discusses coordination with sub-recipients, partners and staff. Document how you propose to coordinate with and monitor project partners, including frequency of meetings, on-site

inspections and submission of formal monthly or quarterly reports. Discuss your communication and coordination with partners, including partner responsibilities, meeting frequency, etc.

(k) **Budget Justification (2 points)**: Your proposed budget will be evaluated for the extent to which it is reasonable, clearly justified, and consistent with the project management plan and intended use of project funds. HUD is not required to approve or fund all proposed activities. Your detailed budget must be submitted using Form HUD424CBW. An electronic copy is available in the application download at: [http://www.Grants.gov/applicants/apply\\_for\\_grants.jsp](http://www.Grants.gov/applicants/apply_for_grants.jsp). You must thoroughly document and justify all budget categories and costs and all major tasks for yourself, sub-recipients, partners, major subcontractors, joint venture participants, or others contributing resources to the project. Include a narrative (4-page maximum) that describes clearly and in detail your budgeted costs for each required program element (major task) included in your overall plan. Include a separate, detailed budget (i.e., using HUD424CBW form) for any sub-grantee proposed to receive more than 10 percent of the total federal budget request.

(l) **HUD's Departmental Policy Priorities (4 Points)**: Indicate if your proposed study will address any of the FY 2010 policy priorities that are applicable to this NOFA (see the **General Section** for additional details regarding these policy priorities). You will receive two points under Rating Factor 3(l) for each of the applicable FY 2010 policy priorities that are found in the **General Section** and applicable to this NOFA that are adequately addressed in your application. Policy priorities that are applicable to this NOFA are: (1) **Using Housing as a Platform for Improving Other Outcomes**; and (2) **Capacity Building and Knowledge Sharing**. Please reference the **General Section** to see how these policy priorities should be discussed and presented in order to receive these points.

(i) **Using Housing as a Platform for Improving Other Outcomes (2 points)**. To receive the full points under this policy priority an applicant must respond to at least one of the activities listed below and explain how success will be measured during the grant performance period:

(A) Activities

- Coordination with medical care providers will result in improved medical management for asthma and possibly for other health conditions.
- Formation of strategic partnerships with practitioners that will commit to applying successful protocols to improve asthma control in residents of federally assisted multifamily housing.
- Project-related activities will result in reduced exposure to environmental asthma triggers and this is expected to be maintained following project completion (i.e., as a result of the adoption of new practices and/or policies).

(B) Measures of success:

- Demonstration of improved asthma control among the project's target population.
- Demonstrated commitments by project partners to adopt successful practices to improve asthma control among individuals with asthma in the target population.
- Partner organizations commit to applying project findings in a manner that will improve health outcomes in the populations that they serve.
- Improved medical care to project participants as a result of referrals to medical care providers during project implementation.

For this policy priority, applicants must identify the target populations to be served, the baseline from which improvements are to be measured, the anticipated impact outcome(s) and

related activity, and measurements to be used to gauge the positive change to be achieved by their project. Applicants will be expected to report progress in meeting the expected goals.

(ii) Capacity Building and Knowledge Sharing (2 points). Applicants requesting the policy priority points must demonstrate the proposed direct impact their project can have in advancing practices to improving asthma control among residents of multifamily housing. Applicants must identify the outputs and outcomes their projects are expected to achieve related to capacity building and knowledge sharing, as well as the outcome measures they will report on. To receive the full points under this policy priority an applicant must respond to at least one of the activities listed below and explain how success will be measured during the grant performance period:

(A) Activities

- Implementation of a dissemination plan for project results and effective practices.
- Presentation of project findings at academic and/or professional conferences.
- Training providers of housing for low income households on effective practices to improve asthma control.

(B) Measures of success:

- Adoption of effective practices for improving asthma control by multifamily housing providers following project completion.
- Presentation of project findings at two or more appropriate academic and/or professional conferences.
- Publication of project findings in one or more scientific or professional journals.

**d. Rating Factor 4: Leveraging Resources (10 Points):**

Applicants are expected to leverage HUD funds through strategic partnering with organizations that are conducting related work (e.g., asthma surveillance, education and outreach, local clinics) and have an interest in improving asthma control among disadvantaged populations.

This factor addresses your ability to obtain other resources that can be combined with HUD's funding to increase the effectiveness of the proposed study. Your proposal should demonstrate that the effectiveness of HUD's grant funds is being increased by securing other resources or by structuring the project in a cost-effective manner through coordination with existing activities. 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 you are requesting. Applicants must propose to contribute resources valued 1% or more of the federal funds requested to receive points. In awarding points, fractional percentages will be rounded down to whole number percentages, and will not be rounded up (e.g., an application providing 5.99% leveraged resources will be treated as 4% and receive 6 points).



Leveraged Amount as Percent of Total Budget	Maximum Points
0%	0
1% to 3%	3
4% to 6%	6
7% to 9%	9
10% or more	10

Leveraging from a partner or from outside your organization must be documented with letters of firm commitment, memoranda of understanding, and/or agreements to participate including the monetary value of the contribution. Each document must include the organization's name, proposed level of commitment (with estimated monetary value) and responsibilities as they relate to specific activities or tasks of your proposed program. The commitment letter must also be signed and dated on or after the announcement of this NOFA by an official of the organization legally able to make commitments on behalf of the organization. Simple letters that only indicate support for the proposal, project, or applicant are not sufficient and are discouraged; they will not be used in rating the application. In responding to this rating factor, you must complete and submit Form HUD96015\_Leveraging\_Resource, which is in the Instructions Download for this funding opportunity at [www.Grants.gov](http://www.Grants.gov).

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 you are requesting. 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% of their documented cost.

Applicants should make sure that their submittal regarding leveraging is identified and is internally consistent in all the required places: (i.e., forms SF424, 424CBW (budget), HUD96015 and signed documentation). If for some reason you are not able to include your leveraging in the budget forms, please provide an explanation as part of your response to this rating factor.

**e. Rating Factor 5: Achieving Results and Program Evaluation (10 points):**

This factor is based on the Logic Model and how it reflects your project activities. It emphasizes HUD's commitment to ensuring that applicants keep promises made in their applications and assess their performance to ensure that performance goals are met. In your response to this rating factor, you are to discuss the performance goals for your project and specific outcome measure results. Discuss the specific methods you will use to measure progress towards your goals, track and report results of assessments and interventions, and evaluate the efficacy and cost-effectiveness of interventions. Efficacy should be measured by improvements in health outcomes, with improvement in environmental measures also of interest. You should also identify milestones that are critical to achieving project objectives (e.g., developing questionnaires or protocols, hiring staff, recruitment of participants, IRB approval and/or HIPAA Authorization, if applicable). Also identify benchmarks that you will use to track the progress of your project, and identify project deliverables. You should focus particular attention on

providing details on the project outputs and outcomes that you will capture. While project outputs (e.g., homes assessed, individuals trained) are important for helping you and HUD to track the progress of your proposed project, the capture of health (and possibly environmental) outcomes is of the greatest importance. Outcome measures should follow logically from your project goals and activities. You should provide a description of how these outputs and outcomes will be measured. Assessment of asthma control status does not necessarily require medical testing, but may be assessed using standard questionnaires or other instruments (see Appendix C for examples of standardized instruments). You should also consider evaluating how your intervention could affect quality of life measures for caregivers and those with asthma. To help ensure the quality and utility of project evaluations, HUD encourages applicants to consider teaming with experienced evaluators when developing your project (e.g., faculty at local colleges/universities) and conducting your evaluation.

In addition, you should describe how you will collect the data necessary to estimate the monetary costs and benefits of your proposed asthma intervention project. Examples of benefits include reduction in medical care utilization and improved quality of life. HUD believes that it is important to widely disseminate the findings of projects funded through asthma intervention grants so that other programs can benefit from these findings. This can also help identify “best practices” for the design and implementation of asthma intervention programs as well as ineffective approaches. Provide a discussion of your plan to disseminate the findings of your asthma intervention program (e.g., posting information on the web, presentation at public meetings and publication in journals). Applicants that provide a credible plan for promptly disseminating (e.g., in a professional or scientific journal) will receive the most points for this subfactor. In evaluating Rating Factor 5, HUD will consider how you have described the benefits and outcome measures of your program. You must submit the Logic Model, Form HUD96010. HUD is using an electronic Logic Model with drop down menus from which you can select needs, activities, and outcomes appropriate to your program. See the earlier discussion as well as the FY2010 **General Section** for detailed information on use of the Logic Model. Applicants must submit the eLogic Model<sup>®</sup>, form HUD96010 provided. Do not cut and paste responses into the Logic model or convert the file to PDF format. HUD is requiring grantees to use program-specific questions to self-evaluate the management and performance of their program. Training on HUD’s Logic Model will be provided via satellite broadcast. HUD will evaluate the Logic Model submitted based upon this rating factor and the Logic Model Assessment Matrix found in Appendix B of the FY2010 **General Section**.

**f. Bonus Points: RC/EZ/EC-II (2 points):** Applicants are eligible to receive 2 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 which will serve the residents of these communities (see the FY2010 **General Section**). In order to be eligible for the bonus points, applicants must submit a completed Form HUD2990 signed by the appropriate official of the RC/EZ/EC-II.

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

1. Corrections to Deficient Applications: If your application is found to have curable technical deficiencies, you will be notified on the procedures to follow to cure the identified deficiencies.
2. Rating and Ranking: Awards will be made in rank order for the Asthma Intervention in Multifamily Housing grant program applications, 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 you are offered a reduced grant amount, you will have a maximum of 14 calendar days to accept such a reduced award. If you fail to respond within the 14-day limit, you shall be considered to have declined the award.
- b. **Remaining Funds:** See the FY2010 **General Section** for HUD's procedures if funds remain after all selections have been made.

## **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 that all the selected applicants participate in negotiations to determine the specific terms of the cooperative agreement, budget, and Logic Model. HUD may also request supporting documentation for salaries and prices of materials and equipment. Having a DUNS number and active registration in the Central Contractor Registration (even for applicants provided a waiver to electronic application submission via Grants.gov) is a requirement for award. 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 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 address can be obtained from their website. The SF-SAC can be downloaded at <http://harvester.census.gov/sac/>. Award notices may also include requirements for sub-award reporting in compliance with the requirements of the Federal Financial Assistance Accountability and Transparency Act of 2006. (Pub. L. 109-282) (Transparency Act) and Section 872 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Pub. L. 110-417), referred to as "Section 872".

2. **Debriefing:** The FY2010 **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:

(1) A FY2010 Asthma Intervention in Multifamily Housing Grant Program 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. When HUD performs the review itself, following grant award execution, HUD will be responsible for ensuring that any necessary environmental reviews are completed. See paragraph (2) below for additional assistance.

(2) For all cooperative agreements 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 HUD7015.15) or, in the case where the recipient is not a State, unit of general local government or Indian tribe and HUD has decided 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 Environmental 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 800-877-8339. Recipients of a grant under these funded programs will be given additional guidance in these environmental responsibilities.

b. All other activities not related to construction and rehabilitation activities are categorically excluded under 24 CFR 50.19 (b)(1), (3), (5), (8), (9) and (13) 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 FY2010 **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 FY2010 **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 FY2010 **General Section**.
5. Procurement of Recovered Materials: See the FY2010 **General Section** for information concerning this requirement.
6. Davis-Bacon wage rates: The Davis-Bacon wage requirements 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.

### **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 (HUD96010), 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 (HUD96010) approved and incorporated into your award agreement. For specific reporting requirements, see policy guidance at: <http://www.hud.gov/offices/lead/>.
3. Racial and Ethnic Beneficiary Data: HUD requires grantees to collect racial and ethnic beneficiary data for this program. You must use the Office of Management and Budget's Standards for the Collection of Racial and Ethnic Data as presented on Form HUD27061\_Racial\_and\_Ethnic\_Data\_Reporting\_Form (and instructions for its use), found on <http://www.hud.gov/offices/adm/hudclips/forms/files/27061.pdf>.
4. Tangible Personal Property Report: Grant recipients who purchase equipment in excess of \$5,000 apiece must complete the OMB's annual Tangible Personal Property Report, if and after that report receives OMB approval under the Paperwork Reduction Act of 1995 (see *75 Federal Register* 14441-14442; March 25, 2010). This report has four components: the Annual Report, the Final (Award Closeout) Report, and the Disposition Report/Request, and, if needed, the Supplemental Sheet (see [http://www.whitehouse.gov/omb/grants\\_standard\\_report\\_forms/](http://www.whitehouse.gov/omb/grants_standard_report_forms/)). Generally, the average estimated time to complete each of these components is 0.5 hours; it is likely to be less for this grant program.
5. Section 3: All grant recipients must comply with reporting and record-keeping requirements for Section 3 of the Housing and Urban Development Act of 1968, 12 U.S.C. § 1701u (Economic Opportunities for Low- and Very Low-Income Persons in Connection with Assisted Projects). Those requirements can be found at 24 CFR part 135, subpart E.
6. Subaward and Integrity Reporting in compliance with statutory and Office of Management and Budget requirements as specified in the grant agreement.
7. 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).

### **VII. Agency Contact(s):**

For programmatic questions on the Asthma Intervention in Public and Assisted Multifamily Housing grant program, you may contact Dr. J. Kofi Berko, Jr., Office of Healthy

Homes and Lead Hazard Control, at 202-402-7696 (this is not a toll-free number) or via email at [j.Kofi.Berko@HUD.gov](mailto:j.Kofi.Berko@HUD.gov). For grants administrative questions, you may contact Ms. Curtissa L. Coleman, Office of Healthy Homes and Lead Hazard Control, at telephone 202-402-7580 (this is not a toll-free number) or via email at [Curtissa.L.Coleman@HUD.gov](mailto:Curtissa.L.Coleman@HUD.gov). If you are a hearing- or speech-impaired person, you may reach the above telephone numbers through 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 a.m. and 5 p.m. 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). Hearing- or speech-challenged individuals may access this number through TTY by calling the toll-free Federal Relay Service at 800-877-8339.

**D. Appendices:** Appendices A, B and C to this NOFA are available for downloading with the application at <http://www.Grants.gov>.

Dated: 31 Aug 10

  
Jon L. Gant, Director  
Office of Healthy Homes and Lead Hazard Control

**FY 2010 Asthma Interventions in Public and Assisted Multifamily Housing  
Notice of Funding Availability**

**APPENDIX A – Key Residential Health and Injury Hazards**

The following briefly describes the residential health and injury hazards HUD considers key targets for intervention:

Allergens and asthma: In 2005, the CDC estimated that over 22.2 million Americans have asthma with an associated annual cost of more than \$13 billion. Asthma is now recognized as the leading cause of school and work absences, emergency room visits, and hospitalizations. For sensitized children, exposure to antigens from dust mites, certain pets, and cockroaches has been associated with more severe asthma. There is a preponderance of evidence showing a dose-response relationship between exposure and prevalence of asthma and allergies; some evidence also indicates that exposure to antigens early in life may predispose or hasten the onset of allergies and asthma. Dust mites have been identified as the largest trigger for asthma and allergies. A recently published study of children with atopic (allergic) asthma from seven major U.S. cities reported that over half of the children were allergic to cockroach and dust mite allergen (approximately 70% and 63%, respectively), with approximately 50% of the children allergic to mold (Morgan et al. 2004). Significant fractions of children also tested positive for allergy to cat, rodent and dog allergens. This is consistent with other studies that have found that cockroach tends to be the dominant allergen among asthmatic children living in the inner-city, whereas allergy to dust mite allergens appears to dominate among children living in most suburban environments. While children are the population most at risk for developing asthma, there is a growing need to address the onset of new cases in older adults, and to examine how their risk factors might differ from those of children (Selgrade et al. 2006).

Interventions known to have beneficial effects include the installation of impervious mattress and pillow covers, which can reduce allergen exposure by 90 percent. Other dust mite control measures include dehumidification, laundering bedding in hot water, specialized cleaning (dry steam or use of a HEPA vacuum), and removal of carpets and other materials that accumulate dust and are difficult to clean (e.g., dust sinks). Providing residents with education and instruction on cleaning with repeat visits by outreach workers has been shown to result in significant reduction in levels of dust mite and cockroach allergens in floor dust (Takaro et al. 2004; Morgan et al. 2004). For these same studies, researchers also reported significant reductions in asthma symptoms among children living in the intervention group when compared to the control group. A recent meta-analysis found that dust control interventions can also have a preventative effect. Based on five longitudinal studies, the researchers reported an approximately twenty percent decrease in risk of physician-diagnosed asthma for individuals in homes with dust control interventions, compared to those in control homes (Russell et al. 2007).

In a HUD-supported study, asthmatic children living in homes in which nontrivial mold growth was identified, were randomized into two groups, with one group receiving interventions to address the residential mold/moisture problems. The remediation group showed statistically significant reductions in symptom days, symptom score, and acute care visits (Kercsmar et al. 2006). The mean cost of home interventions was \$3,458 per home, including the cost of addressing lead-based paint hazards.

Asbestos: Asbestos is a mineral fiber that has been used commonly in a variety of building construction materials and household products for insulation and as a fire-retardant. The Environmental Protection Agency (EPA) and the Consumer Product Safety Commission (CPSC) have banned most asbestos products. Manufacturers have also voluntarily limited uses of asbestos. Today, asbestos is most commonly found in older homes in pipe and furnace insulation materials, asbestos shingles, millboard, textured paints and other coating materials, and floor tiles. Elevated concentrations of airborne asbestos can occur when asbestos-containing materials (ACMs) are disturbed by cutting, sanding or other remodeling activities. Improper attempts to remove these materials can release asbestos fibers into the air in homes, increasing asbestos levels and endangering the people living in those homes. The most dangerous asbestos fibers are too small to be visible. After they are inhaled, they can remain and accumulate in the lungs. Asbestos can cause lung cancer, mesothelioma (a cancer of the chest and abdominal linings), and asbestosis (irreversible lung scarring that can be fatal). Most people with asbestos-related diseases were exposed to elevated concentrations on the job; some developed disease from exposure to clothing and equipment brought home from job sites. As with radon, dose-response extrapolations suggest that lower level exposures, as may occur when asbestos-containing building materials deteriorate or are disturbed, may also cause cancer.

Intact asbestos-containing materials are not a hazard; they should be monitored for damage or deterioration and isolated if possible. Repair of damaged or deteriorating ACMs usually involves either sealing (encapsulation) or covering (enclosure) it. Repair is usually cheaper than removal, but it may make later removal of asbestos more difficult and costly. Repairs should only be done by a trained professional certified to handle asbestos safely and can cost from a few hundred to a few thousand dollars; removal can be more expensive.

Combustion products of heating and cooking appliances: Burning of oil, natural gas, kerosene, and wood for heating or cooking purposes can release a variety of combustion products of health concern. Depending upon the fuel, these may include carbon monoxide (a chemical asphyxiant), oxides of nitrogen (respiratory irritants), polycyclic aromatic hydrocarbons (e.g., the carcinogen benzo[a]pyrene), and airborne particulate matter (respiratory irritants). Exposure to carbon monoxide, an odorless gas, can be fatal. Nitrogen dioxide can irritate or damage the respiratory tract, and sulfur dioxide can irritate the eyes, nose and respiratory tract. Improper venting and poor maintenance of heating systems and cooking appliances can dramatically increase exposure to combustion products. As the principles of “green” construction and rehabilitation become more popular, and homes become increasingly airtight to improve energy efficiency, there are concerns about potential indoor air quality trade-offs (Selgrade et al. 2006).

Experts recommend having combustion heating systems inspected by a trained professional every year to identify blocked openings to flues and chimneys, cracked or disconnected flue pipes, dirty filters, rust or cracks in the heat exchanger, soot or creosote build-up, and exhaust or gas odors. Installing a carbon monoxide detector is also recommended; however, such a detector will not detect other combustion by-products.

Insect and Rodent pests: The observed association between exposure to cockroach antigen and asthma severity has already been noted above. In addition, cockroaches may act as vehicles to contaminate environmental surfaces with certain pathogenic organisms. Rodents can transmit a number of communicable diseases to humans, either through bites, arthropod vectors,



or exposure to aerosolized excreta. In addition, humans can become sensitized to proteins in rodent urine, dander and saliva. Such sensitization may contribute to asthma severity among sensitized individuals. Insect and rodent infestation is frequently associated with substandard housing that makes it difficult to eliminate. Treatment of rodent and insect infestations often includes the use of toxic pesticides that may present hazards to occupants (see below). Integrated pest management (IPM) for rodents and cockroaches is the recommended control strategy because it minimizes the use of toxic pesticides and instead emphasizes environmental controls such as elimination of harborages, and removing access to food and water.

Lead-based paint and its hazards: Exposure to lead, especially from deteriorating lead-based paint, remains one of the most important and best-studied of the household environmental hazards to children. Although blood lead levels (BLLs) have fallen nationally, a large reservoir of lead remains in housing. Recent results from CDC's Fourth National Health and Nutrition Examination Survey (NHANES 2002) demonstrate that the national geometric mean blood lead concentration of children aged 1-5 years has decreased from 2.3  $\mu\text{g/dL}$  in 1991 to 1.6  $\mu\text{g/dL}$  in the period 1999-2002 (CDC 2005). During the 1999-2002 survey period, children aged 1-5 years had the highest prevalence of elevated BLLs (1.6%), so that approximately 310,000 children aged 1-5 years remained at risk for exposure to harmful lead levels. Overall, by race/ethnicity, non-Hispanic blacks and Mexican Americans had higher percentages of elevated BLLs (1.4% and 1.5%, respectively) than non-Hispanic whites (0.5%). Among subpopulations, non-Hispanic blacks aged 1-5 years and aged  $\geq 60$  years had the highest prevalence of elevated BLLs (3.1% and 3.4%, respectively). As BLLs have dropped over the years, recent analyses have examined the relationship between relatively low blood lead concentrations ( $<10 \mu\text{g/dL}$ ) and cognitive functioning in representative samples of U.S. children and adolescents, and have found evidence that suggests that deficits in cognitive and academic skills associated with lead exposure have no threshold (Lanphear et al., 2000; Canfield et al. 2003). These findings clearly support the importance of primary prevention with respect to childhood lead exposure.

Despite dramatic reductions in blood lead levels over the past 15 years, lead poisoning continues to be a significant health risk for young children. Based on results from the HUD- and NIEHS-funded National Survey of Lead and Allergens in Housing (Jacobs et al., 2002), it is estimated that approximately 40 percent of housing units (38 million) in the United States contain lead-based paint. It is further estimated that 25 percent of the nation's housing stock (24 million housing units) have one or more significant lead-based paint hazards (i.e., deteriorated lead-based paint, lead-contaminated dust, or lead-contaminated soil). 1.2 million housing units were found to pose the highest risk of lead poisoning because they housed low-income families with children under six years of age.

Among HUD grantees, lead hazard control (LHC) costs tend to range from \$500 to \$15,000 per unit, with an median cost of \$5,960. Corrective measures include paint stabilization, enclosure and removal of certain building components coated with lead paint, cleanup and "clearance testing," which ensures the unit is safe for young children. In addition, acute injuries to children have been well documented, most notably in instances involving sanding or stripping of lead-based paint or visible deterioration of lead-based painted residential building components combined with children who exhibit pica tendencies.

Evaluation of lead hazard control interventions conducted by recipients of HUD's lead hazard control grants found that interventions were effective in significantly reducing pre-intervention dust-lead levels on floors and window surfaces up to six years following

intervention (Wilson et al. 2006). More intensive treatments were found to significantly reduce dust lead loadings on window sills and troughs compared to lower level treatments, however, no significant differences in dust-lead loadings on floors were reported.

Mold and moisture: An analysis of several pulmonary disease studies estimates that 25 percent of airways disease, and 60 percent of interstitial lung disease may be associated with moisture in the home or work environment. Moisture is a precursor to the growth of mold and other biological agents, which is also associated with respiratory symptoms. An investigation of a cluster of pulmonary hemosiderosis (PH) cases in infants showed PH was associated with a history of recent water damage to homes and with levels of the mold *Stachybotrys atra* (SA) in air and cultured surface samples. Associations between exposure to SA and "sick building" symptoms in adults have also been observed. Other related toxigenic fungi have been found in association with SA-associated illness and could play a role. For sensitive individuals, exposure to a wide variety of common molds may also aggravate asthma. A recent review by an expert committee convened by the Institute of Medicine found sufficient evidence for an association between exposure to mold and other agents in damp indoor environments and asthma symptoms in sensitized persons, upper respiratory tract symptoms, cough, and wheeze (IOM 2004). The committee also found limited or suggestive evidence for an association between damp indoor environments and the development of asthma. Addressing mold problems in housing requires coordination among the medical, public health, microbiological, housing, and building science communities.

The cost of mold/moisture-related intervention work (e.g., IPM, clean and tune furnace, remove debris, vent clothes dryer, cover dirt floor with impermeable vapor barrier) is a few hundred dollars, unless major modification of the ventilation system is needed. For example, in Cleveland, mold interventions, including repairs to ventilation systems and basement flooring, in the most heavily contaminated homes range from \$500 to \$5,000, with some costs also being dedicated to LHC simultaneously through its lead and asthma program.

Pesticide residues: According to the EPA, 75 percent of U.S. households used at least one pesticide product indoors during the past year. Products used most often are insecticides and disinfectants. Another study suggests that 80 percent of most people's exposure to pesticides occurs indoors and that measurable levels of up to a dozen pesticides have been found in the air inside homes. The amount of pesticides found in homes appears to be greater than can be explained by recent pesticide use in those households; other possible sources include contaminated soil or dust that migrates in from outside, stored pesticide containers, and household surfaces that collect and then release the pesticides. Pesticides used in and around the home include products to control insects (insecticides), termites (termiteicides), rodents (rodenticides), molds and fungi (fungicides), and microbes (disinfectants). In 2005, the American Association of Poison Control Centers reported that some 1.6 million children were involved in common household pesticide poisonings or exposures (AAPCC 2005). In households with children under five years of age, almost half stored at least one pesticide product within the reach of children. Exposure to high levels of cyclodiene pesticides, commonly associated with misapplication, has produced various symptoms, including headaches, dizziness, muscle twitching, weakness, tingling sensations, and nausea. In addition, the EPA is concerned

that cyclodienes might cause long-term damage to the liver and the central nervous system, as well as an increased risk of cancer.

There are available data on hazard evaluation methods and remediation effectiveness regarding pesticide residues in the home environment.

Radon progeny: The National Academy of Sciences estimates that approximately 15,000 cases of lung cancer per year are related to radon exposure. Epidemiologic studies of miners exposed to high levels of radon in inhaled air have defined the dose response relation for radon-induced lung cancer at high exposure levels. Extrapolation of these data has been used to estimate the excess risk of lung cancer attributable to exposure to radon gas at the lower levels found in homes. These estimates indicate that radon gas is an important cause of lung cancer deaths in the U.S. Excessive exposures are typically related to home ventilation, structural integrity and location.

Radon measurement and remediation methods are well developed, and the EPA recommends that every home be measured for radon. EPA estimates that materials and labor costs for radon reduction in an existing home are \$800-\$2,500. Including radon resistant techniques in new home construction costs \$350-\$500, and can save up to \$65 annually in energy costs, according to the EPA.

Take-home hazards from work/hobbies and work at home: When the clothing, hair, skin, or shoes of workers become contaminated with hazardous materials in the workplace, such contaminants may inadvertently be carried to the home environment and/or an automobile. Such "take-home" exposures have been demonstrated, for example, in homes of lead-exposed workers. In addition, certain hobbies or workplaces located in the home may provide an especially great risk of household contamination.

Control methods include storing and laundering work clothes separately, and showering and changing clothes before leaving work or immediately after arriving home. Once a home becomes contaminated, cleaning floors and contact surfaces and replacing furnishings may be necessary to reduce exposures.

Unintentional injuries/fire: Unintentional injury is now the leading cause of death and disability among children younger than 15 years of age. In 1997, nearly 7 million persons in the U.S. were disabled for at least one full day by unintentional injuries received at home. A recent HUD-supported study of deaths among US children and adolescents from 1985 to 1997 found that an average of 2,822 unintentional deaths occurred annually from residential injuries (Nagaraja et al., 2005). The highest death rates were attributable to fires, submersion or suffocation, and poisoning. Black children were two times more likely to die from residential injuries than white children. The elderly are also at an elevated risk for residential injuries. Home visitation protocols have been shown to be effective in reducing exposure to injury hazards. The "add-on" cost of injury prevention measures, when combined with other housing interventions are estimated at about \$100 per unit. This includes the cost of some injury prevention devices (e.g., smoke alarms, electrical socket covers, etc.).

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**APPENDIX B -- Relevant Publications and Guidelines**

To secure any of the documents listed, call the telephone number provided. If you are a hearing-or speech-impaired person, you may reach the telephone numbers through TTY by calling the toll-free Federal Relay Service at 800-877-8339. A number of these references are provided on HUD's CD, "Residential Lead Desktop Reference, 3<sup>rd</sup> Edition." This CD can be obtained at no charge by calling the National Lead Information Clearinghouse's (NLIC's) toll free number, 800-424-LEAD. Several of these references can be downloaded from the Internet without charge from the HUD Office of Healthy Homes and Lead Hazard Control's Internet site, [www.hud.gov/offices/lead](http://www.hud.gov/offices/lead).

**REGULATIONS:**

1. Worker Protection: Occupational Safety and Health Administration (OSHA) publications listed below can be purchased by calling either OSHA Regulations at 202-693-1888 (OSHA Regulations) (this is not a toll-free number) or the Government Printing Office (GPO) at 202-512-1800 (this is not a toll-free number). OSHA standards and other publications can be downloaded or purchased (as applicable) from OSHA's publication web page, <http://www.osha.gov/pls/publications/pubindex.list>. A broad range of information on construction and other worker protection requirements and guidelines is available from OSHA's home page, <http://www.osha.gov/> and from <http://www.osha.gov/SLTC/lead/>.
2. Waste Disposal. A copy of the EPA regulations at 40 CFR parts 260-268 can be purchased by calling 800-424-9346, or, from the Washington, DC, metropolitan area, 703-412-9810 (this is not a toll-free number). The regulations can also be downloaded without charge from the EPA website at <http://www.epa.gov/lead/pubs/fslbp.htm>.
3. Lead.
  - (a) Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities; Final Rule: 40 CFR part 745 (EPA) (Lead Hazard Standards, Work Practice Standards, EPA and State Certification and Accreditation Programs for those engaged in lead-based paint activities) can be purchased by calling the Toxic Substances Control Act (TSCA) Assistance Service at 202-554-1404 (this is not a toll-free number). The rule and guidance can be downloaded from the Internet without charge at <http://www.epa.gov/lead/pubs/leadcert.htm>.
  - (b) Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance; Final Rule: 24 CFR part 35, subparts B through R, published September 15, 1999 (64 FR 50201) (HUD) can be purchased by calling the NLIC's toll-free number (800-424-LEAD) or downloaded without charge from the HUD website at <http://www.hud.gov/offices/lead/library/enforcement/LSHRFinal21June04.pdf>.
  - (c) Requirements for Disclosure of Information Concerning Lead-Based Paint in Housing, 24 CFR Part 35, Subpart A (HUD, Lead-Based Paint Disclosure Rule) by calling the NLIC's toll-free number (800-424-LEAD). The rule, guidance, pamphlet and disclosure formats

can be downloaded from the HUD website at

[http://www.hud.gov/offices/lead/library/enforcement/24CFR35\\_SubpartA.pdf](http://www.hud.gov/offices/lead/library/enforcement/24CFR35_SubpartA.pdf).

(d) U.S. Environmental Protection Agency. Lead; Identification of Dangerous Levels of Lead; Final Rule at 66 FR 1205-1240 (January 5, 2001). This rule and guidance can be obtained without charge by calling the NLIC's toll-free number (800-424-LEAD) or by calling the TSCA Assistance Service at: 202-554-1404 (this is not a toll-free number). The rule and guidance can be downloaded from the EPA website at <http://www.epa.gov/lead/pubs/leadhaz.htm>.

(e) U.S. Environmental Protection Agency. Lead; Renovation, Repair, and Painting Program; Final Rule at 73 FR 21692- 21769 (April 22, 2008). As of April 22, 2010, the rule will be fully implemented. This rule and guidance can be obtained without charge by calling the NLIC's toll-free number (800-424-LEAD) or by calling the TSCA Assistance Service at: 202-554-1404 (this is not a toll-free number). The rule and guidance can be downloaded from the EPA website at <http://www.epa.gov/lead/pubs/renovation.htm>.

### **GUIDELINES:**

1. *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*; HUD. The Guidelines can be downloaded from the HUD website without charge at <http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm>.

2. Preventing Lead Poisoning in Young Children; Centers for Disease Control, August, 2005. These guidelines can be obtained without charge by calling the CDC toll free number at 888-232-6789. The guidelines can also be downloaded from <http://www.cdc.gov/nceh/lead/publications/PrevLeadPoisoning.pdf>.

3. Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials, November 1997; Centers for Disease Control and Prevention (CDC). These guidelines can be obtained without charge by calling the CDC toll free number at 888-232-6789 or they can be downloaded from <http://www.cdc.gov/nceh/lead/guide/guide97.htm>.

### **REPORTS :**

#### **Lead**

1. Putting the Pieces Together: Controlling Lead Hazards in the Nation's Housing, (Summary and Full Report); HUD, July 1995. A copy of this summary and report can be purchased by calling 800-245-2691 toll free or downloaded from [http://www.cdc.gov/nceh/lead/guide/1997/pdf/p1\\_12.pdf](http://www.cdc.gov/nceh/lead/guide/1997/pdf/p1_12.pdf).

2. President's Task Force on Environmental Health Risks and Safety Risks to Children. *Asthma and The Environment: An Action Plan to Protect Children*. Washington, DC 1999.

3. *Preventing Lead Poisoning in Young Children*, A Statement by the Centers for Disease Control and Prevention, Atlanta, GA, August, 2005. Can be downloaded from the Internet without charge at <http://www.cdc.gov/nceh/lead/publications/prevleadpoisoning.pdf>.

### Healthy Homes

1. Healthy Housing Reference Manual; HUD/CDC, 2006. A copy of this manual can be downloaded from the CDC website without charge at [www.cdc.gov/healthyplaces/healthyhomes.htm](http://www.cdc.gov/healthyplaces/healthyhomes.htm).
2. The Healthy Homes Initiative: A Preliminary Plan (Summary and Full Report); HUD, July 1995. A copy of this summary and report can be downloaded from the HUD website without charge at [www.hud.gov/offices/lead](http://www.hud.gov/offices/lead).
3. Institute of Medicine. *Damp Indoor Spaces and Health*. The National Academies Press. Washington, D.C. 2004.
4. Institute of Medicine. *Indoor Allergens. Assessing and Controlling Adverse Health Effects*. The National Academies Press. Washington, D.C. 1993.
5. National Research Council and the Institute of Medicine. *Ethical Considerations for Research on Housing-Related Health Hazards Involving Children*. The National Academies Press. Washington, D.C. 2005.
6. Natural Resources Defense Council. *Our Children at Risk*. Washington, D.C. 1997. Can be ordered from the Internet from [www.nrdc.org](http://www.nrdc.org).
7. Pleis Jr., Lucas JW, Ward BW. *Summary health statistics for U.S .adults: National Health Interview Survey, 2008*. National Center for Health Statistics. Vital Health Stat 10(242). 2009.
8. Bloom B, Cohen RA, Freeman G. *Summary health statistics for U.S. children: National Health Interview Survey, 2008*. National Center for Health Statistics. Vital Health Stat 10(244). 2009.

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**APPENDIX C: Resources for Designing and Implementing Healthy Homes Projects**

HUD encourages applicants to incorporate the following elements in 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.

For each activity that you incorporate, you will need to collect standardized data, as applicable to your project. These data may include pre- and post-intervention information (e.g., environmental sampling, housing conditions, educational or training information, and health outcome data).

HUD strongly encourages applicants to use data collection instruments that have been used extensively in the field and subjected to validation. You must also keep detailed records of costs associated with project activities to quantify the cost effectiveness of desired outcomes.

Examples of data collection instruments and sources of best practices include:

**1) Asthma and Other Respiratory Hazards**

The “Home Environmental Checklist” and specific protocols used by Public Health – Seattle & King County at: [www.metrokc.gov/health/asthma/healthyhomes/](http://www.metrokc.gov/health/asthma/healthyhomes/).

The environmental assessment survey for asthma/respiratory health developed for use in public housing (may also be appropriate for general multifamily housing) by the “Healthy Public Housing Initiative” at: [www.hsph.harvard.edu/hphi/surveytraining.HTM](http://www.hsph.harvard.edu/hphi/surveytraining.HTM)

The American Academy of Pediatrics (AAP) instrument for assessing childhood asthma, available from AAP at: [www.aap.org/research/instrumentoutcome.htm](http://www.aap.org/research/instrumentoutcome.htm).

The National Healthy Homes Training Center and Network “Pediatric Environmental Home Assessment (PEHA)” instrument designed for public health and visiting nurses, available at: <http://www.healthyhomestraining.org/Nurse/PEHA.htm>.

EPA’s Indoor Environments Division-sponsored Asthma Health Outcomes Project (AHOP), which identified the common components of effective asthma intervention programs, available at: [http://cmcd.sph.umich.edu/assets/files/final\\_AHOP\\_report.pdf](http://cmcd.sph.umich.edu/assets/files/final_AHOP_report.pdf).

The EPA-sponsored Communities in Action for Asthma-Friendly Environments (CAAFE), a forum for exchanging asthma intervention program best practices through a peer to peer online network, which includes change concepts to evaluate asthma program progress, available at: [www.asthmacommunitynetwork.org](http://www.asthmacommunitynetwork.org)

## 2) Home Injury Hazard Assessment

The healthy home checklist that includes a childhood (and elderly) injury assessment instrument, on the OHHLHC's web site under "Healthy Homes Program Resources" at: [www.hud.gov/offices/lead/hhi/hhiresources.cfm](http://www.hud.gov/offices/lead/hhi/hhiresources.cfm).

The results of the National Council on Aging's "Creative Practices in Home Safety Assessment and Home Modification Study" highlights injury assessment and intervention programs for the elderly, available at: [www.healthyagingprograms.org/resources/Creative\\_Practices-Home\\_Safety\\_Report.pdf](http://www.healthyagingprograms.org/resources/Creative_Practices-Home_Safety_Report.pdf).

## 3) Mold and Moisture Assessment and Intervention

The mold and moisture assessment tool developed by the Cuyahoga County Department of Development is available on the OHHLHC's web site under "Technical resource materials" at: [www.hud.gov/offices/lead/hhi/hhiresources.cfm](http://www.hud.gov/offices/lead/hhi/hhiresources.cfm).

The "Home Moisture Audit" is available from Environmental Health Watch at: [www.ehw.org/Healthy\\_House/HH\\_Moist\\_Audit.htm](http://www.ehw.org/Healthy_House/HH_Moist_Audit.htm).

The tested mold and moisture home interventions available from Environmental Health Watch at: [www.ehw.org/Healthy\\_House/HH\\_UMMPSummary.htm](http://www.ehw.org/Healthy_House/HH_UMMPSummary.htm).

EPA's "A Brief Guide to Mold, Moisture, and Your Home" EPA 402-K-02-003, 2002  
Available: <http://www.epa.gov/mold/moldguide.html>; and  
<http://www.epa.gov/mold/pdfs/moldguide.pdf>  
Also available in Spanish: [http://www.epa.gov/mold/pdfs/moldguide\\_sp.pdf](http://www.epa.gov/mold/pdfs/moldguide_sp.pdf)

The WHO Guidelines for Indoor Air Quality: Dampness and Mould;  
ISBN 798 92 890 4168 3, 2009, available from: Publications; WHO Regional Office for Europe;  
Scherfigsvej 8; DK-2100 Copenhagen O, Denmark; or  
<http://www.euro.who.int/document/E92645.pdf>

*Recognition, Evaluation, and Control of Indoor Mold*, Edited by Bradley Prezant, Donald M. Weekes, and J. David Miller; Product ID: 2008; IMOM08-679; ISBN: 978-1-931504-91-1  
American Industrial Hygiene Association, 2700 Prosperity Ave., Suite 250, Fairfax, VA 22031  
[https://webportal.aiha.org/Purchase/ProductDetail.aspx?Product\\_code=a736ed35-e059-df11-ba2b-005056810034](https://webportal.aiha.org/Purchase/ProductDetail.aspx?Product_code=a736ed35-e059-df11-ba2b-005056810034)

#### **4) Integrated Pest Management (IPM)**

Guidance on IPM interventions is available from the U.S. Environmental Protection Agency's web site at [www.epa.gov/oppfead1/Publications/Cit\\_Guide/citguide.pdf](http://www.epa.gov/oppfead1/Publications/Cit_Guide/citguide.pdf), and related web pages.

*Northeastern IPM Center's [Integrated Pest Management for Multifamily Housing](http://www.stoppests.org/);*  
<http://www.stoppests.org/>

USDA's National Institute of Food and Agriculture;  
<http://www.csrees.usda.gov/nea/pest/pest.cfm>