

**RFA 23-2: ASSESSING CHANGES IN EXPOSURES AND HEALTH OUTCOMES IN HISTORICALLY MARGINALIZED AND ENVIRONMENTALLY OVERBURDENED COMMUNITIES FROM AIR QUALITY ACTIONS, PROGRAMS, OR OTHER INTERVENTIONS****INTRODUCTION**

The Health Effects Institute (HEI) is seeking to fund studies that assess the effects of actions, programs, or other interventions on ambient or indoor air quality, exposure, health outcomes, or all the above in historically marginalized and environmentally overburdened urban or rural communities (hereafter referred to as “historically marginalized communities”) in the United States. Areas of interest include actions, programs, or other interventions at the national, regional, tribal, state, or local level that have affected or have the potential to affect ambient or indoor air quality in historically marginalized communities. Request for Applications (RFA) 23-2 is modeled after HEI’s long history of funding accountability research to assess the effects of air quality actions on health outcomes. This RFA has been developed by the HEI Environmental Justice Oversight Panel with input from the HEI Environmental Justice Advisory Council. The Oversight Panel will be solely responsible for selecting proposals and overseeing studies selected for funding.

**BACKGROUND AND RATIONALE**Environmental Justice Regulatory Actions

It has been well established that low-income communities and communities that are racially segregated and historically marginalized in the United States experience a disproportionate burden of environmental pollutants and other social stressors (Liu et al. 2021; Miranda et al. 2011; Morello-Frosch et al. 2011). Recently, two federal actions have been issued to address environmental inequities. First, Executive Order No. 14008 (2021) requires agencies to integrate achieving environmental justice into their missions and created the White House Environmental Justice Interagency Council within the Executive Office of the President. Second, Executive Order No. 14096 (2023) defines environmental justice to include income, race, color, national origin, tribal affiliation, or disability and defines a whole-of-government approach in partnership with state, tribal, territorial, and local governments and community organizations, businesses, and members of the public to advance environmental justice. Furthermore, there has been a recent, unprecedented commitment by government agencies and environmental groups to address environmental justice by reducing environmental exposure and health inequities rooted in historical factors through new policies, regulatory actions, and other short- and long-term interventions. Specifically, funds from the Infrastructure Investment and Jobs Act and the Inflation Reduction Act are explicitly aimed at advancing environmental justice and reducing air pollution in “disadvantaged communities.”

Other actions, such as those associated with climate change, housing, energy transition, and transportation, might also affect ambient and indoor concentrations in these communities and address some of the inequities they experience. Such actions could also exacerbate disparities, and this result is equally important to understand. The expansion in government focus and allocation of resources begs the question of how to identify those actions, programs, or other interventions that are most effective at reducing the disparities.

### Accountability Research

Over the past two decades, HEI has funded an extensive program of [accountability research](#) to assess the effectiveness of regulatory actions, programs, or other interventions to reduce air pollution and improve public health. Interest in this type of research has grown given the costs of tightening air pollution regulations. Although the air quality and public health benefits have been predicted to outweigh the regulatory costs substantially, the US Environmental Protection Agency (EPA) has estimated that the cost of air pollution control from 1970 to 1990 has cost more than \$500 billion (USEPA 1997). As such, policymakers, legislators, industry representatives, and EPA continually seek to document to what extent past regulatory efforts have reduced air pollution and whether they have consequently yielded measurable improvements in public health.

Accordingly, HEI accountability studies typically compare air quality or population health before and after the implementation of an air quality action, program, or other intervention. HEI Communication 14 (van Erp and Cohen 2009), Communication 15 (Health Effects Institute 2010), and various other publications by HEI and others (Burns et al 2020; Henschel et al 2012; Hubbell 2012; Pope 2012; van Erp et al 2012; Boogaard et al 2017; Henneman et al 2017; Rich 2017) have summarized the results of accountability research, the challenges encountered, the lessons learned, and have provided directions for future research. A key challenge in accountability studies is to disentangle policy-related changes in air pollution and health from other time-varying factors and potential confounders that influence air quality or health. Another key challenge is a lack of statistical power because the observed improvements in air quality are relatively small, or the population affected by the intervention is small (see e.g., Boogaard et al 2017).

Given the considerable government resources that are being and will be spent on addressing inequities, focused research is needed to understand whether measures taken to improve air quality have been realized equitably across the population, and which actions have been the most effective. Additionally, the need to evaluate actions, programs, and other interventions to address inequities was underscored by participants from academia, community organizations, industry, government, and non-governmental organizations (NGOs) at a Fall 2022 HEI-hosted [workshop](#) on *New Science to Inform Environmental Justice*. This workshop helped to inform the development of this RFA. Applying HEI's traditional approach to accountability research should provide valuable insight to inform future actions.

## OBJECTIVES

Overall, ***the objective is to fund studies that evaluate actions, programs, or other interventions in the United States at the national, regional, tribal, state, or local level that have affected or have the potential to affect ambient or indoor air quality, exposure, health outcomes, or all the above in historically marginalized communities.*** Areas of interest include the following:

(1) Studies that evaluate ***past or current*** actions, programs, other interventions at the national, regional, tribal, state, or local level that were specifically designed and implemented to reduce exposures to ambient or indoor air pollutants and improve health ***in historically marginalized communities.***

(2) Studies that evaluate ***past or current*** actions, programs, or other interventions at the national, regional, tribal, state, or local level that were specifically designed and implemented to reduce exposures to ambient or indoor air pollutants and improve health ***in the general population*** that might have benefited historically marginalized communities, had an inequitable distribution of benefits among communities, or worsened conditions in historically marginalized communities (e.g., have had unintended consequences).

(3) Studies that evaluate ***proposed*** actions, programs, or other interventions at the national, regional, tribal, state, or local level that are being designed to reduce exposures to ambient or indoor air pollutants and improve health ***in historically marginalized communities.*** Studies should be designed to directly inform development and implementation of the proposed action under study.

(4) Studies that evaluate ***past, current, or proposed*** actions, programs, or other interventions at the national, regional, tribal, state, or local level that were or are designed or implemented to achieve goals ***other than decreasing air pollution exposures but indirectly affect ambient or indoor air quality in the general population or in historically marginalized populations.***

Proposals submitted to RFA 23-2 are expected to evaluate whether a particular action, program, or other intervention has or has not been (or could be) effective in reducing exposures, improving health, or both in historically marginalized communities, or whether it has had unintended consequences, including situations where historically marginalized communities have not shared equally in the environmental and public health benefits. All studies will evaluate the actions in relation to changes in air quality, exposure, health, or all the above in historically marginalized communities.

Epidemiologic and exposure studies that fall under objectives 1, 2, or 4 can be prospective or retrospective and examine changes in relation to past or current actions, programs, or other interventions. Studies evaluating proposed actions under objectives 3 or 4 can be designed as

Health impact assessments<sup>1</sup> (HIAs) or similar. These studies should ideally collect necessary baseline health and air quality data and propose data collection protocols that would be followed during the implementation of the action, program, or other intervention to enable future evaluation of the effects of the action. Examples of actions that indirectly affect ambient or indoor air quality under objective 4 include policies related to climate change mitigation or adaptation, actions to increase residential greenspace, or clean mobility programs aimed at reducing greenhouse gas emissions.

HEI specifically seeks proposals for studies that directly link research to past, recent, or proposed actions, programs, or other interventions. Studies that evaluate the effects of general improvements in air quality or characterize exposure disparities without any formal relationship to specific actions, programs, or other interventions will not be considered responsive.

### **STUDY DURATION AND BUDGET GUIDELINES**

Between \$2 and \$3 million will be available for this RFA to fund up to three studies (maximum study budget \$800,000). The duration of studies funded under the RFA can be up to 2 years with the possible exception of prospective studies of long-term air quality actions that can be extended to 3 years with proper justification. For proposed actions evaluated under objectives 3 or 4, a prospective study can also be designed in stages to capture both baseline conditions and changes after implementation of the action; however, the proposal should identify a clear set of deliverables for each stage.

### **CRITICAL STUDY DESIGN CONSIDERATIONS**

Geographic scope. This RFA will consider actions, programs, or other interventions (*hereafter collectively referred to as “action”*) only in the United States.

Study populations. Applicants can identify study populations using the following methods:

- ✓ Using definitions in regulatory actions (e.g., [Executive Order No. 13985](#) (2021) definition of underserved and disadvantaged communities).

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<sup>1</sup> The National Research Council (NRC) states that a Health Impact Assessment “has been defined in various ways but essentially is a structured process that uses scientific data, professional expertise, and stakeholder input to identify and evaluate public-health consequences of proposals and suggests actions that could be taken to minimize adverse health impacts and optimize beneficial ones.” (National Research Council 2011, Page 3).

- ✓ Using publicly available tools for identifying disadvantaged or environmental justice communities (e.g., EPA's [EJScreen](#), the White House Council on Environmental Quality's [Climate and Economic Justice Screening Tool](#), the Centers for Disease Control and Prevention's (CDC) [Environmental Justice Index](#), CDC and Agency for Toxic Substances and Disease Registry's [Social Vulnerability Index](#), US Department of Transportation's [Equitable Transportation Community Explorer](#), or US Department of Energy's [Energy Justice Mapping Tool](#), or similar other tools).
- ✓ Defining the characteristics of the population that you plan to study and describing why those population characteristics are responsive to this solicitation.

Selection of a study population should be based on an expectation of substantial changes in exposure for the group and should include, where appropriate, proper control groups or reference populations who are not expected to experience changes in air quality or exposures from the action.

Analytical methods. For research designed to assess improved air quality or health for marginalized populations, applicants should propose appropriate traditional statistical methods or novel methods, including counterfactual, difference-in-difference, causal, spatial analytic, or spatiotemporal methods. Because model selection can affect the outcome, sensitivity analyses of the key modeling choices should be included. Investigators can incorporate novel epidemiologic and statistical methods for estimating exposures or health effects of air quality actions and compare results to more traditional approaches as a component of their study. Investigators can also propose HIAs to evaluate proposed actions (Yuen and Payne-Sturges 2013). HIAs must incorporate the minimum elements and practice standards (Bever et al. 2022; National Research Council 2011). For research designed to assess changes in inequality within a specific region, applicants can propose health or exposure benefits analyses using environmental inequality indicators (Harper et al. 2013; Levy et al. 2006; Sheriff and Maguire 2020).

Baseline for action. Investigators should document the baseline (i.e., before implementation of the action) air quality and health conditions, if being evaluated. For local air quality actions, investigators of both prospective and retrospective studies would benefit from connecting with communities and government entities to obtain data collected before the action. Applicants can consider using scenario approaches that compare conditions after an intervention with predicted conditions under a “counterfactual” scenario (i.e., model of what would have happened without the intervention). Investigations of proposed actions are encouraged to collect baseline data.

Concurrent environmental and socioeconomic changes and potential confounding. Investigators should account for environmental, economic, or other factors that change during the same time-period as the action that could affect exposure to air pollution and public health and thereby confound the estimation of effects of the action.

Mediation. Regulatory interventions to improve air quality could result in changes of behavior within target populations that might in turn affect health. Researchers are encouraged to specify and investigate the potential different pathways through which the air quality action affects exposure or health.

Cumulative impacts. Although the focus of the study should be air quality, exposures, health outcomes, or all the above, investigators should endeavor to measure and document changes in other stressors from the built, natural, socioeconomic, and political environments that could be affected by the action. For example, non-chemical stressors, such as heat, noise, and access to greenspace, might be affected by the action and contribute to changes in health outcomes.

Exposure estimation. Studies that are proposing to estimate exposure should include air pollutants that can affect health (e.g., criteria air pollutants regulated under the National Ambient Air Quality Standards [NAAQS], including particulate matter [PM], and hazardous air pollutants [HAPs]). They should use appropriate spatiotemporal exposure assessment methods suitable to estimate changes in exposure related to the air quality action. Studies can rely on data from existing ground-based monitoring networks, satellite data, or previous and future measurement campaigns to collect monitoring data. If measurement campaigns are proposed, studies should preferably use standardized sampling methods, such as those established by EPA. Regions and communities that are the focus of this solicitation might have insufficient density or number of monitors to capture small-scale variation of air pollution, particularly for evaluations of local interventions. Investigators are encouraged to determine whether the community with which they are working is a recipient of recent grants to conduct air quality monitoring and to incorporate those data into their investigations. Studies with indoor air quality monitoring can incorporate personal air sampling into the exposure estimation.

Health outcomes of interest. This RFA does not focus on specific health outcomes. However, applicants choosing to investigate health outcomes should give a clear rationale regarding the choice of health outcomes in relation to the research questions being addressed and the relevance of such questions for policy. Preference will be given to health outcomes that are well-justified by the concerns of the communities included in the study for which there are documented health disparities and for which evidence of an association with air pollution has been reasonably well-established.

Precision and statistical power. Proposals should present detailed estimates of the predicted air quality changes of the regulatory action and show sufficient power to detect health effects (i.e., a large enough air quality improvement to expect a detectable change in health status that can be attributed to the intervention) or to detect changes in inequalities between population subgroups. To that end, applicants should conduct a formal power calculation and conduct simulations, where appropriate, to inform study design. Applicants should discuss the expected precision and statistical power in detail.

Community engagement. For this RFA, community engagement is strongly encouraged. Community engagement has many different meanings, can be conducted through a variety of actions, and can broaden the impact of studies (see Box 1 below for one example of how community engagement can be defined and examples of community engagement activities). Engagement is encouraged with the community undergoing the action (e.g., actions at the local, regional, or tribal level) or with state or national environmental justice coalitions (e.g., actions at the state or national level). Investigators must include a community engagement plan if community engagement is part of the application (see [application instructions](#) for details).

### Box 1. Community Engagement

The National Institutes of Health (NIH) defines community engagement as “...the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the wellbeing of those people.” Community engagement can be implemented on a continuum of community involvement in the research, ranging from outreach to shared leadership. (Clinical Translational Science Awards Consortium, Community Engagement Key Function Committee Task Force on the Principles of Community Engagement 2011).

The National Science Foundation (2022) provides the following examples of community engagement activities:

- Holding roundtables and community meetings as well as conducting surveys to understand community member needs and concerns, and to develop and refine the research.
- Incorporating communities into processes for identifying key issues, planning and implementing projects, decision making, and evaluating outcomes.
- Providing data, facilities, resources, and expertise instrumental to the project.
- Conceiving of and supporting research demonstrations, experimentation, proofs of concept, or pilot projects.
- Participating in “living labs” where technological and social advances are staged iteratively through pilot studies in communities.
- Assisting in planning and implementation of evaluations of proposed research, including helping to define or create metrics and support data collection and/or interpretation within the community context.
- Public participation and engagement in research and data collection, including crowdsourcing.

Community stakeholders may include some or all the following: residents, neighborhood or community groups, nonprofit or philanthropic organizations, businesses, and municipal organizations such as libraries, public works departments, health and social services agencies, and schools. In addition, stakeholder engagement may leverage partnerships with regional stakeholders, including local, county, and state governments and departments as well as regional cooperative initiatives.

Sources:

Clinical Translational Science Awards Consortium, Community Engagement Key Function Committee Task Force on the Principles of Community Engagement. 2011. Principles of Community Engagement (2nd edition). NIH Publication no. 11-7782. Washington, DC: Department of Health and Human Services.

National Science Foundation Smart and Connected Communities (NSF 22-529) Program Webinar. 2022. Available at: <https://new.nsf.gov/events/smart-connected-communities-nsf-22-529-program>.

Translatability. Many air quality interventions at the local level aim to mitigate the sources of environmental health risk specific to a given community. Investigators who wish to evaluate the effect of an intervention at the community level should focus on interventions that can inform nationwide or statewide policy. In interpreting results, investigators should evaluate the influence of contextual factors (e.g., population demographics, local policies, historical context, and environmental and social stressors) on exposure or health outcomes to address the application of the findings to other communities.

Research implications and future directions. Investigators should consider why the chosen action is important to assess and what they hope to learn from their study. Investigators should describe how the findings from their study could advance our scientific understanding of how air quality actions could reduce or exacerbate environmental health disparities, how the study could benefit the study population and community of interest and inform policy decisions.

Translation and dissemination of methods and results. HEI expects researchers to develop plans for access to data and methods. Any methods developed under this RFA should be useful to other researchers with training in exposure science, epidemiology, or statistics.

Researchers should provide a Research Translation and Dissemination Plan for providing education and outreach to various sectors, such as community members and policymakers (see [application instructions](#) for details). The research translation and dissemination plan should outline how and to whom results will be communicated, including dissemination beyond academic presentations and publications where possible. The plan should include the insights (e.g., intended and unintended effects) and decision-making applications that the findings can provide as well as the limitations, uncertainties, and the factors (e.g., built, natural, socioeconomic, and political) captured or not captured in the research. Applicants should include specific recommendations for policymakers that allow them to increase the policy's efficacy. For studies that collect new data at the local level, applicants should propose community outreach and engagement plans tailored to the communities targeted by the action.

## **RESEARCH TEAM**

The research team should include members who have a broad range of knowledge necessary to conduct the proposed research. It may include those who have expertise in policy making, environmental justice, air pollutant emissions and control technologies, air modeling and monitoring, community engagement, social science, exposure assessment, epidemiology, and statistics. For studies evaluating the efficacy of local interventions, the research team should include members of the community where that intervention is taking place. For studies evaluating proposed actions, the research team would ideally include members of the organization or agency responsible for designing the action.

The Principal Investigator (PI) must be an expert in their area of expertise with a track record of producing high-quality and objective research published in the peer-reviewed scientific literature. The PI should be affiliated with an established research organization and demonstrate experience in successfully leading a multidisciplinary team of scientists. The team's technical proposal ideally will be informed by engagement with experts who represent multiple sectors (e.g., academia, communities, regulatory and public health agencies, industry, and non-governmental organizations) and will include them in research as appropriate. The full team can include the PI, their immediate team (other faculty, research scientists, post docs, students, and technicians), co-investigators, or collaborator(s) at other institutions, community members, and consultants.

HEI strongly encourages applicants to diversify their research teams by including individuals from groups that are underrepresented in environmental exposure and health research and, to the



extent appropriate given the study locations, be attuned to and knowledgeable about the communities in which the studies are taking place. For this purpose, HEI has adopted the National Institutes of Health (NIH) definition of underrepresented populations in the U.S. Biomedical, Clinical, Behavioral and Social Sciences Research Enterprise.<sup>2</sup>

Invited full applications must include an organizational chart that clearly identifies each team member, their affiliation and role in the research, and lines of communication among team members and the PI who oversees the research and coordinates its successful completion.

If the study requires access to a physical site or data managed by other groups, the team should demonstrate access, for example, by including letters of support from site owners or data managers in the proposal. The study team should have access to or be able to purchase or rent facilities, equipment, instrumentation, or cloud computing services needed to support the proposed research and have prior experience with preparing and implementing quality assurance plans.

### **DATA MANAGEMENT, PRESERVATION, AND ACCESS**

Providing access to data is an important element in ensuring scientific credibility and is particularly valuable when studies are of regulatory interest. It is the policy of HEI to ensure access is provided expeditiously to data for studies that it has funded and to provide those data in a manner that facilitates review and verification of the work while protecting confidentiality and self-determination of any participants or communities involved in the study and respecting the intellectual interests of contributors to the original work. Please refer [here](#) for the HEI Policy on the Provision of Access to Data Underlying HEI-Funded Studies.

Applicants selected to submit full applications will be expected to include a data management plan with an explicit description of how data are owned and shared. Where data are provided by a third party, a process for other investigators to obtain and work with the data should be outlined.

### **REFERENCES**

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<sup>2</sup> NIH's definition of underrepresented populations includes individuals from racial and ethnic groups underrepresented in health-related sciences on a national basis, individuals with disabilities who are defined as those with a physical or mental impairment that substantially limits one or more major life activities, and individuals from disadvantaged backgrounds, recognizing that women from these three backgrounds face particular challenges at the graduate level and beyond in scientific fields (Source: <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-031.html>).

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## RFA 23-2: APPLICATION PROCESS AND DEADLINES

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The submission and review of applications for RFA 23-2 will entail a two-stage process.

- Investigators should submit **a Preliminary Application by September 29, 2023**. HEI's Environmental Justice (EJ) Oversight Panel will discuss the preliminary applications and invite up to 10 investigators to submit a full application. Decisions will be provided by early November.
- Invited investigators should submit **a Full Application by February 16, 2024**. Full applications will be reviewed by the EJ Oversight Panel and external reviewers if necessary. Applicants will be notified about the funding decision by late April 2024.

### PRELIMINARY APPLICATION

Applicants should submit a brief Preliminary Application that provides the following information: title, abstract, scientific rationale, a brief description of the study aims, design and methods, anticipated results, and community engagement plan, if applicable. The Preliminary Application should also briefly discuss the applicant's qualifications and include a biographical sketch for each co-investigator (maximum two pages per person). The Preliminary Application should include Letters of Collaboration from community partners if a higher level of community engagement is indicated. An estimated total budget and study duration should be provided. No detailed budget forms are needed at this stage.

The preliminary application should not exceed **5 pages** (excluding references and biosketches) using the [form provided](#) on the HEI website. Applications that include community engagement should have a community engagement plan (an additional ½-page) at the preliminary stage. Please note that the required font size is 11 point with 1-inch margins.

### Submission and Deadline

Submit preliminary applications electronically to [funding@healtheffects.org](mailto:funding@healtheffects.org) no later than **September 29, 2023**. HEI will acknowledge receipt of the application. Questions regarding the applications should be directed to Dr. Anna Rosofsky ([arosofsky@healtheffects.org](mailto:arosofsky@healtheffects.org)). A webinar with a Q&A session for potential applicants will be held on **August 14, 2023**. Register [here](#).

### FULL APPLICATION

Invited full applications should provide in detail the study aims, design, rationale, methods, and statistical analyses. If data from other studies are going to be used, information on the type of data available (including the period, location, and frequency of when the measurements were taken) and quality assurance should be included. Investigators should also discuss whether they will need to obtain IRB approval. Where applicable, a letter from the investigator who owns the data should be submitted and state their willingness to share the data with the applicant and with HEI, if requested (see [HEI Policy on the Provision of Access to Data Underlying HEI-funded Studies](#)). In addition, the full application should include a plan for data sharing and accessibility at the end of the study.

Investigators invited to submit a full application should use forms F-1 to F-12 and consult the [Instructions for Completing the Application](#). Application forms can be downloaded from <https://www.healtheffects.org/research/funding>. Please note that the required font size is 11 point with 1-inch margins. Form F-12 is separated from the rest of the application upon receipt. The data are kept confidential and not considered for funding decisions; HEI strongly appreciates completion of this form to track diversity of applications and funded investigators in an effort to continue to invest in and expand HEI's investment into diversity, equity, and inclusion (DEI) efforts as part of its [2020 commitment](#). The application forms should be converted into a PDF before submitting.

### **Deadline for Full Applications**

Invited Full Applications should be submitted to [funding@healtheffects.org](mailto:funding@healtheffects.org) no later than **February 9, 2024**. The application should be in PDF format with a maximum file size of 20 MB. HEI will acknowledge receipt of the application.

Full applications without prior submission of a preliminary application and invitation from the Oversight Panel will not be considered.

## RFA 23-1: EVALUATION PROCESS FOR APPLICATIONS

### REVIEW PROCESS AND EVALUATION CRITERIA

Applications will be evaluated by HEI's Environmental Justice (EJ) Oversight Panel and external reviewers, as needed. The review is intended to ensure that studies funded constitute a coherent program and address the objectives of the Institute. The EJ Oversight Panel makes recommendations regarding funding of studies to the Institute's Board of Directors, which makes the final decision.

Each preliminary and full application will be scored on six criteria. For each criterion, a 1-5 scale (with 1 being exceptional and 5 being poor) will be used. The overall impact score will be a weighted average of Criteria 1 through 6. Relevant aspects of community engagement will be considered under each criterion for applications where community engagement is indicated. The EJ Oversight Panel will review the applications using the following criteria and weights:

- 1. Relevance** to the objectives of the RFA. The research is designed to be useful to communities, government officials, industry, or other stakeholders and broadly applicable to other populations, regions, states, tribes, regulatory climates, and time. Studies evaluating proposed actions (under objectives 3 or 4) propose timelines and designs that align directly with a proposed action, program, or intervention. (25%)
- 2. Scientific merit** with respect to study design, data collection and analysis methods, modeling approaches, data evaluation, and overall quality assurance. (25%)
- 3. Experience, competence, and diversity of the research team**, including principal investigator, scientific staff, and collaborating investigators. If the application includes partnership with a community-based organization, community partners are expected to be included as part of the research team. The research team should demonstrate a clear track record of environmental justice research, community engagement, and community relationships. Allocation of adequate effort to each team member should allow for successful implementation of the proposed research and stakeholder engagement. (10%)
- 4. Adequacy of facilities**, including (1) access to study sites, instrumentation, and relevant data sets; and (2) adequacy and validity of facilities to implement the proposed research. (10%)
- 5. Reasonableness of the proposed budget.** Community partnerships and community engagement should be reflected in the proposed budget if they are part of the application. (5%)
- 6. Well-developed plan for research translation to inform decision-making.** The plan clearly describes how and to whom results will be shared, as well as decision-making applications for communities, government officials, industry, or other stakeholders. (25%)

## **CONFLICTS OF INTEREST**

[HEI's procedures for conflicts of interest](#) are similar to the guidelines set forth by NIH. Members of HEI's sponsor community are excluded from participating in RFA development, applying for support, application review, and funding decisions.

A conflict occurs when the reviewer is named on the application in a major professional role; the reviewer (or close family member) would receive a direct financial benefit if the application is funded; the PI or others on the application with a major role are from the reviewer's institution or institutional component (e.g., department); during the past three years, the reviewer has been a collaborator (e.g., published with the PI) or has had other professional relationships (e.g., served as a mentor) with any person on the application who has a major role; the application includes a letter of support or reference letter from the reviewer; or the reviewer is identified as having an advisory role for the project under review. In addition, HEI Staff screen reviewers for potential conflicts of interest with other applicants who have submitted a proposal under the same RFA.

For HEI EJ Oversight Panel members who will serve as the reviewers of these applications, it might not be possible in some situations to avoid all possible conflicts of interest as outlined above. In such cases, Oversight Panel members who have a conflict of interest will not be assigned to review the application(s) in question and will be asked to leave the room during the discussion of those application(s). They will also not score or vote on the application(s) at issue and refrain from commenting on them during the overall discussion and from all deliberations regarding recommendation of applications for funding. If several Oversight Panel members are recused from the overall discussion of applications for such reasons, HEI will invite external reviewers to join the Oversight Panel to fill in the missing expertise.

This peer review system relies on the professionalism of each Oversight Panel member or external reviewer, if needed, to declare to HEI the existence of any real or apparent conflict of interest. If a person feels unable to provide objective advice for any other reason, they are expected to recuse themselves from the review of the application(s) at issue.