

NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL

OPPORTUNITIES TO INVESTIGATE ENVIRONMENTAL HEALTH DISPARITIES THROUGH THE EPA OFFICE OF RESEARCH AND DEVELOPMENT'S NEWLY ORGANIZED, SUSTAINABILITY-DRIVEN RESEARCH PROGRAMS

CHARGE
MARCH 2012

Background

In early 2010 the EPA Administrator, Lisa Jackson announced seven priorities for the agency, one being "Expanding the Conversation on Environmentalism and Working for Environmental Justice." Three important steps followed: EPA's Science of Disproportionate Impacts Analysis Symposium in March 2010, an Environmental Justice (EJ) Regulatory Analysis Technical Workshop in June, 2010, and the development of Plan EJ 2014--a roadmap that will help EPA integrate EJ into the Agency's programs, policies, and activities. Within Plan EJ 2014, the Office of Research and Development (ORD) is leading the Science Implementation Plan, for which the stated goal is that within five years,

" . . . EPA will substantially support and conduct research that employs participatory principles and integrates social and physical sciences aimed at understanding and illuminating solutions to environmental and health inequalities among low income, minority, indigenous, underserved and overburdened populations and communities in the US."

Themes in the Science Implementation Plan were drawn from key recommendations put forth at the aforementioned Symposium and in a subsequent letter from an ad hoc group of EJ leaders. These themes speak directly to ORD's work as the scientific research arm of EPA to provide the solid underpinnings of science and technology for the Agency. For example, it was recommended that EPA:

- Create and institute a new scientific research approach to develop more holistic understanding of environment and health;
- Develop a plan to ensure incorporation of the concept of vulnerability, particularly its social and cultural aspects in the Agency's research agendas;
- Integrate perspectives from decision-makers such as community residents, community leaders, community-based NGOs and community health and environmental quality advocates in the development of EPA's scientific research agendas as well as in data collection, conduct of exposure/risk assessments and risk management decisions; and,
- Build capacities and skills among EPA/ORD staff and scientists to conduct research and other science related activities in equal partnership with impacted communities.

Concurrent with these developments has been a new "Path Forward" articulated for ORD by its prior Assistant Administrator (AA), Dr. Paul Anastas, and fully supported by the new Acting AA, Lek Kadeli. The Path Forward has laid a philosophical foundation for a structural change of ORD's fundamental research programs. The foundation has been set in "sustainability" as "true north," where sustainability is generally defined as meeting the needs of the present without compromising the ability of future generations to meet their needs. Seeking sustainable solutions requires systems thinking that analyzes options for balancing and optimizing economic, environmental, and societal objectives for the benefit of current and future generations. The structural change has been a realignment of ORD's research programs into six areas:

- Air, Climate, and Energy
- Chemical Safety for Sustainability
- Sustainable and Healthy Communities
- Safe and Sustainable Water Resources
- Human Health Risk Assessment
- Homeland Security Research

The first four of these research areas are newly integrated, transdisciplinary programs.

Furthermore, the National Research Council (NRC) recently released a report entitled “Sustainability and the U.S. EPA.” The aim of the report was to:

- Provide an operational framework for integrating sustainability as one of the key drivers within the regulatory responsibilities of EPA;
- Address how the existing framework rooted in the risk assessment/risk management paradigm can be integrated under the sustainability framework;
- Identify the scientific and analytical tools needed to support the framework; and,
- Identify the expertise needed to support the framework.

The NRC Committee indicated that “The sustainability mandate to consider social and equity factors can make EPA even more sensitive than it has been to populations that are disproportionately exposed to environmental risks,” and that “Sustainability can.... provide a logic and framework for considering environmental justice as part of every major decision.” However, exactly how scientific research rooted in sustainability can support environmental justice has yet to be fully understood.

The recent developments in Agency efforts with regard to EJ, recommendations from the Symposium, the Science Implementation Plan, and realignment of ORD’s research programs all converge on an opportunity to garner critical advice with respect to research programming and implementation. It is important at this stage to create mechanisms for public input into the ORD research agenda as it evolves, and to place environmental and health inequalities “on the table” so that they will be addressed by the EPA research enterprise.

The programs have been reviewed jointly by the Science Advisory Board (SAB) and Board of Scientific Counselors (BOSC). With regard to internal coordination amongst ORD researchers, the SAB/BOSC review indicated that “Directed Requests for Applications (RFAs) that require coordination or research projects across ORD research programs can provide an incentive to ensure coordination,” and furthermore that, “Cross-cutting issues that are a priority of the Administrator, such as environmental justice, should be explicitly identified, wherever appropriate, as part of such RFAs to foster coordination and advance the Administrator’s goals.”

Thus, ORD proposes that a Research Workgroup be established under the National Environmental Justice Advisory Committee (NEJAC) to advise the EPA Administrator and ORD in the area of scientific research, particularly as it applies to health impacts, environmental risks and differential exposures that directly relate to environmental justice. *The primary task of the working group will be to advise ORD on the research program implementation for all six programs.*

Charge

EPA requests advice from the NEJAC concerning ORD's research programs and the scientific foundation needed to address and prevent environmental inequities. ORD's research programs recognize that such inequities may result from varying conditions of and access to environmental resources, differential life-stages and other susceptibility factors.

EPA requests recommendations on the following questions:

- (1) What critical opportunities are there for informing actions that address and prevent environmental inequities through implementing these research programs? How can sustainability as an operational framework advance research in support of environmental justice?
- (2) How can ORD implement a community-inclusive, meaningful, and sustained participatory process in the development of EPA scientific research agendas? In order to strengthen the relevance and quality of its R&D enterprise, how can ORD most effectively work collaboratively with communities in the execution of its research programs (e.g., community-based participatory research)?
- (3) How can the outputs of ORD's research programs be customized to interface with local decision makers and disproportionately-impacted communities? How can ORD determine whether its research products and outputs are having a demonstrated impact with respect to addressing and preventing environmental inequities?
- (4) What criteria should ORD use to assess the impact of its research with respect to environmental justice, and EPA decision making?
- (5) What are the most critical skills, both technical and non-technical, that EPA research scientists will need to address environmental justice as part of each of the six programs?

In accomplishing this charge, EPA is requesting the following deliverables in order to inform the Fiscal Year 2014 planning process for ORD.

- Within 7 months, the NEJAC should provide an advice letter that outlines preliminary recommendations regarding Questions 1 through 5.
- Within 12 months, the NEJAC should provide a final report that contains a comprehensive analysis of its findings and recommendations for all of the above questions.