UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



WASHINGTON, D.C. 20460

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THE ADMINISTRATOR

Mark Mitchell, M.D. Chairman, Vulnerable Populations Workgroup National Advisory Council for Environmental Policy and Technology Mitchell Environmental Health Associates P.O. Box 1421 Hartford, Connecticut 06143

Dear Dr. Mitchell:

I would like to thank you and the National Advisory Council for Environmental Policy and Technology for your February 15, 2012, advice letter on technologies for environmental-justice communities and other vulnerable populations. I commend the advisory council for developing such a thoughtful and practical set of recommendations for the types of technologies needed to help address the environmental problems facing these special populations. The supporting case studies provide valuable insights into real-world environmental-justice issues and the potential for technologies to better characterize and mitigate risks to human health and the environment.

In your letter, you recommended that the EPA develop appropriate detection, communication and solution technologies and deploy these technologies in partnership with communities. You also offered a number of recommendations for game-changing next steps, such as establishing a public-private task force to provide strategic advice to the EPA, reaching out to other federal agencies and communicating with communities about the progress on these activities.

I am pleased to report that the EPA is already implementing some of your recommendations. For example, the EPA is actively engaged in the rapidly evolving area of environmental sensors. The EPA in March 2012 sponsored a conference on low-cost, portable air-pollution sensors for use by individuals, organizations, researchers and government agencies. From community-based efforts in New York City and West Oakland, Calif., to updates from the European Union, the presentations covered groundbreaking developments for smartphone sensors, network sensors and social network-based datasharing and display technologies. The talks and small group discussions were highly interactive and have already resulted in new collaborations among leaders in the field. Several participants are developing an air-quality-sensing network that has attracted crowdsourced funding from many small contributors online.

Building on the momentum from this effort, the EPA plans to further investigate how we can promote collaboration and accelerate development and use of inexpensive, highly portable air-pollution sensors. A second workshop for the EPA regional offices and other interested groups, to be held in November 2012, will focus on current and emerging technologies for the near-source and fenceline monitoring of air pollutants.

The EPA's work on environmental sensors is part of a broader focus on fostering innovative research. The Office of Research and Development is testing open innovation, which uses crowdsourcing to find solutions to fill gaps in EPA science and technology needs. Additionally, a number of activities have been initiated to increase collaboration across scientific disciplines and create partnerships between scientists and practitioners, such as environmental-justice communities.

As noted in your letter, NACEPT's recommendations are consistent with the activities described in the "Science Tools" chapter of the EPA's *Plan EJ 2014*. One of these activities is the EPA's work with the National Environmental Justice Advisory Committee to establish a research workgroup that will provide advice on the EPA's environmental-justice-related research on health impacts, environmental risks and differential exposures that directly relate to environmental justice. The recommendations developed by NACEPT will be an invaluable resource for the NEJAC working group to consider in its deliberations. *Plan EJ 2014* also includes actions to promote community-based participatory research, encourage leveraging partnerships with other federal agencies on research to address environmental and health disparities, and strengthen the technical capacity of EPA scientists conducting research in partnership with impacted communities.

I am committed to ensuring that the EPA leads by example in expanding the conversation on environmental justice and taking actions to ensure that all Americans enjoy the same level of environmental protection. Environmental-justice communities and other vulnerable populations rely on the EPA to help address their needs. Providing tools that individuals, communities and organizations can use to effectively detect, monitor and assess pollutants is critically important. Clearly, the council's recommendations speak to these priorities and inform a number of EPA efforts now under way. In the months ahead, we will continue to explore additional ways in which the EPA can identify the potential for technologies to better inform environmental-justice communities and vulnerable populations.

Again, I thank you and the NACEPT members for your hard work on this important effort and your continued support of the EPA's mission to protect human health and the environment.

Sincerely, Lisa P. Jackson