

**Invitation for Public Comment on the List of Candidates for the
EPA Science Advisory Board (SAB)
Environmental Justice Technical Panel(s)**

August 24, 2011

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a Federal Register Notice (Vol. 76, No. 30, pp. 8366-67) published on February 14, 2011 that it was forming an expert panel under the auspices of the SAB to provide advice to EPA on technical issues related to Environmental Justice. The SAB Staff Office posted a list of potential candidates and sought public comment on April 8, 2011 (see <http://yosemite.epa.gov/sab/sabproduct.nsf/02ad90b136fc21ef85256eba00436459/0f7d1a0d7d15001b8525783000673ac3!OpenDocument&TableRow=2.1#2>). The SAB subsequently announced in a Federal Register Notice (Vol. 76, No. 107, pp. 32202-32203) published on June 3, 2011 soliciting additional candidates to review the Agency's environmental justice screening tool(s). The SAB Staff Office sought additional nominations of nationally and internationally recognized experts with experience and expertise in the following disciplines, especially as they relate to minorities, low-income, and other disproportionately affected populations: risk assessment (particularly comparative risk and risk ranking); decision analysis; economics and environmental science, specifically in drinking water and groundwater human health effects, particulate matter, ozone and toxic air pollutants (including diesel particulate matter); lead in paint, household dust and other locations, proximity to active and inactive hazardous waste sites, industrial and other facilities; and proximity to highways.

The SAB Staff Office has identified 13 additional candidates based on their relevant expertise and willingness to serve. **We hereby invite comments on the attached List of Additional Candidates for consideration by the SAB Staff Office in the formation of this Panel. Comments should be submitted to Dr. Suhair Shallal, Designated Federal Officer, no later than September 14, 2011. E-mailing comments (shallal.suhair@epa.gov) is the preferred mode of receipt. Please be advised that comments are subject to release under the Freedom of Information Act.**

The SAB Staff Office Director will make the final decision about who will serve on the Panel based on all relevant information. This will include a review of the confidential financial disclosure form (EPA Form 3110-48), relevant information gathered by staff, and public comments. For the SAB Staff Office, a balanced Panel is characterized by inclusion of candidates who possess the necessary domains of knowledge, the relevant scientific perspectives (which, among other factors, can be influenced by work history and affiliation), and the collective breadth of experience to adequately address the general charge. Specific criteria to be used in evaluating a candidate include: a) scientific and/or technical expertise, knowledge, and experience; b) availability and willingness to serve; c) absence of financial conflicts of interest; d) absence of appearance of a lack of impartiality; e) skills working in advisory committees and panels; and f) for the panel as a whole, diversity of scientific expertise and viewpoints.

List of Additional Candidates for the EJ Technical Panel

Clack, Herek

Illinois Institute of Technology

Dr. Herek Clack is an associate professor in the Department of Mechanical, Materials, and Aerospace Engineering at the Illinois Institute of Technology. Dr. Clack received his S.B. in Aeronautical and Astronautical Engineering from the Massachusetts Institute of Technology (1987) and his M.S. (1997) and Ph.D. (1998) in Mechanical Engineering from the University of California, Berkeley. Prior to joining the IIT faculty in 1999, Dr. Clack was an NRC Postdoctoral Fellow in residence at the National Institute of Standards and Technology in Gaithersburg, Maryland (1998-1999) and a Member of the Technical Staff at the Rocketdyne Division of Boeing Corporation (1987-1992). Dr. Clack teaches and conducts research in the areas of multiphase transport phenomena, centering on combustion, combustion emissions, and toxic air pollutants. Prof. Clack has served as a peer reviewer for numerous archival journals and on committees for various federal agencies and the National Research Council addressing topics ranging from evaluation of the impacts of changes to emissions regulations for power plants to the destruction of chemical weapons stockpiles.

English, Mary R.

University of Tennessee

Dr. Mary English is a Senior Fellow with the University of Tennessee's Institute for a Secure and Sustainable Environment (ISSE) and with the Energy and Environmental Policy Program of the Howard H. Baker Jr. Center for Public Policy. She retired in 2010 from ISSE. Over her 30 years with ISSE and its predecessor organization, the University of Tennessee's Energy, Environment and Resources Center, English did policy research and analysis on a wide range of energy and environmental issues, focusing especially on their social, regulatory, and ethical dimensions. Dr. English, a member of the Tennessee Air Pollution Control Board, has served on the Board on Environmental Studies and Toxicology and the Board on Radioactive Waste Management of the National Research Council (NRC), as well as on numerous NRC study committees. Ethical and analytical questions regarding distributional fairness have been a main theme in Dr. English's research. Her publications and reports targeted specifically to environmental justice include R.H. Socolow and M.R. English, "Living Ethically in a Greenhouse," a chapter in D.G. Arnold, ed., *The Ethics of Global Climate Change* (Cambridge University Press, 2011); M.R. English, "Environmental Risk and Justice," a chapter in T.L. McDaniels and M.J. Small, eds., *Risk Analysis and Society: Interdisciplinary Perspectives* (Cambridge University Press, 2004); and M.R. English with F.W. Wegmann, J.D. Everett, S. Shaw, and Y. Zhao, *Environmental Justice in Transportation Planning and Projects: A Desk Guide for Tennessee*, prepared for the Tennessee Department of Transportation in 2006-2007. She served from 1995 to 1998 on the U.S. Environmental Protection Agency's National Environmental Justice Advisory Council, where she was chair of its Health and Research Subcommittee. Dr. English holds a Ph.D. in Sociology from the University of Tennessee, an M.S. in Regional Planning from the University of Massachusetts, and a B.A. from Brown University.

Erraguntla, Neeraja

Texas Commission on Environmental Quality

Dr. Neeraja Erraguntla is a Senior Toxicologist at the Toxicology Division of the Texas Commission on Environmental Quality. She has a Ph.D. in toxicology from Louisiana State University, a M.S. in Agronomy, a M.Sc. in genetics and plant breeding and a B.Sc. in agriculture. Her core strengths are in human health risk assessment, toxicology, ozone, asthma, environmental justice issues, risk communication, and multi-media risk assessment evaluations (air, water, and soil). She serves as team leader for preparation of Development Support Documents which outline the procedures used to develop acute and chronic inhalation reference values and unit risk factors for specific chemicals. Dr. Erraguntla is the lead author on toxicity assessments for ethylene and inorganic arsenic. She has performed health effects reviews of ambient monitoring projects for many regions in Texas including Corpus Christi, Dallas, Midland, and Beaumont as well as preparing toxicological reports and participating in special projects. Neeraja manages and directs all technical and business aspects of multi-media (soil, groundwater, and air) study in Corpus Christi, Texas entitled the Hillcrest Community Environmental Investigation, a community located next to Corpus Christi refineries: (<http://www.tceq.texas.gov/toxicology/research/hillcrest.html>). She serves on USEPA's National Advisory Committee for Developing Acute Exposure Guideline Levels (AEGs) and is an adjunct professor in the Texas A&M School of Public Health. She is a full member of the Society of Toxicology.

Ferguson Gent, Janneane

Yale University

Dr. Gent's primary research focus is the effects of air pollution on childhood asthma. She is a co-investigator on studies specifically focused on exposure to traffic, a major source of air pollution in our region. These studies take advantage of the large data base of ambient air contaminants measured by the Environmental Protection Agency (EPA) at central monitoring sites. Using this information as well as data collected by the research team at the CPPEE inside and outside of study subjects' homes, Dr. Gent and her colleagues hope to contribute to the understanding of public health effects of short-term exposure to traffic-related air pollution. Dr. Gent has served as a consultant for the EPA reviewing literature on the effects of nitrogen dioxide and particles on health. Her work for the EPA contributes to the production of their Integrated Science Assessments for these pollutants. This in turn is an important step in the regulatory process that leads to the setting of the National Air Quality

Standards. Dr. Gent is also a co-investigator with Melinda Pettigrew, Ph.D., School of Public Health, Division of Epidemiology of Microbial Diseases, on a study of microbial interactions of pathogens involved in otitis media.

Finkel, Adam

UMDNJ - School of Public Health

From 2000 to 2003, Dr. Finkel was Regional Administrator for the U.S. Occupational Safety and Health Administration (OSHA) in Denver, Colorado, responsible for regulatory enforcement, compliance assistance, and outreach activities in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming. From 1995 to 2000, he was Director of Health Standards Programs at OSHA headquarters, and was responsible for promulgating and evaluating regulations to protect the nation's workers from chemical, radiological, and biological hazards. Dr. Finkel has published more than 35 articles on risk assessment and management in the scientific, legal, and popular literature, and was co-editor of the book *Worst Things First? The Debate over Risk-Based National Environmental Priorities* (Johns Hopkins Univ. Press, 1994). Dr. Finkel holds an Sc.D. in environmental health sciences from the Harvard School of Public Health, a master's degree in public policy from Harvard's John F. Kennedy School of Government, an A.B. in biology from Harvard College, and is a Certified Industrial Hygienist.

Fischbeck, Paul

Carnegie Mellon University

Dr. Paul S. Fischbeck is a Professor in the Department of Engineering and Public Policy and the Department of Social and Decision Sciences at Carnegie Mellon University, Pittsburgh, Pennsylvania. His general research involves normative and descriptive risk analysis. Past and current research includes the development of a risk index to prioritize inspections of offshore oil production platforms, an engineering and economic policy analysis of air pollution from international shipping, a large-scale probabilistic risk assessment of the space shuttle's tile protection system, and a geographic information system (GIS) designed to evaluate health risk, economic potential, environmental justice, and political factors of oil refineries and abandoned industrial sites using a variety of metrics. He is the Director of Carnegie Mellon's Center for the Study and Improvement of Regulation. Dr. Fischbeck is a graduate of the University of Virginia (BS in Architecture), the Naval Postgraduate School (MS in Operations Research and Systems Analysis), and Stanford University (Ph.D. in Industrial Engineering and Engineering Management). He has written extensively on various applications of decision and risk analysis methods and has won several awards from the Institute of Operations Research and Management Sciences (INFORMS). He has served on and/or chaired ten National Academy panels investigating such topics as the risks of engineered marine systems, terror attacks on US shipping, double hull tankers, and oil spills in the Aleutian Islands. He is also the co-founder of the Brownfield center at Carnegie Mellon, an interdisciplinary research group investigating ways to improve industrial site reuse. A 2002 book, *Improving Regulation* (RFF Press, co-edited with Scott Farrow), presents a dozen case studies of how to integrate insights from multiple disciplines to improve the regulatory process.

Graham, John D.

Indiana University

John D. Graham is Dean of the Indiana University School of Public and Environmental Affairs (Bloomington and Indianapolis), one of the largest public policy schools in the United States. He is the author of seven books and two hundred articles on health, safety and environmental issues. Dr. Graham founded and led the Harvard Center for Risk Analysis from 1990 to 2001. During that time, he was elected President of the Society for Risk Analysis, an international membership organization of 2,400 scientists and engineers. Dr. Graham reached out to risk analysts in Europe, China, Japan and Australia as he helped organize the first World Congress on Risk Analysis (Brussels, 2000). From 2001-2006 Dr. Graham served as the Senate-confirmed Administrator of the Office of Information and Regulatory Affairs, White House Office of Management and Budget. He chaired an interagency task force on automotive industry regulation. From March 2006 to July 2008 Dr. Graham was Dean of the Frederick Pardee RAND Graduate School at the RAND Corporation in Santa Monica, California. Dr. Graham's writings on environmental justice have made two general points. First, the role of poverty and race in the magnification of risk need to be considered separately. For example, with regard to the risks of pollution incurred near oil refineries and coke plants, disproportionate burdens are sometimes more related to poverty than race, and vice versa. Yet the environmental justice literature tends to treat these variables as if they are interchangeable. Second, there are promising approaches to risk trading that may empower low-income and minority communities to make their own decisions about which risks are most important to reduce. However, these risk-trading reforms will require more flexibility than many of our current environmental laws permit.

Hammitt, James K.

Harvard University

Dr. James K. Hammitt is Professor of Economics and Decision Sciences, Director of the Harvard Center for Risk Analysis, and visiting professor at the Toulouse School of Economics. His teaching and research concern the development and application of decision and risk analysis to health and environmental policy. Professor Hammitt studies the management of long-term environmental issues with important scientific uncertainties (such as global climate change and stratospheric-ozone depletion) and methods for measuring the value of health risks (including monetary and health-adjusted-life-year metrics). He holds degrees in applied mathematics and public policy from Harvard and worked at the RAND Corporation.

Jayanty, R.K.M.

RTI International and North Carolina State University

Dr. R.K.M. Jayanty is a Senior Fellow at RTI International, Research Triangle Park, North Carolina and an Adjunct Professor at North Carolina State University. He received his Ph.D. in Chemistry from the University of Bradford, England and a Masters in Environmental Pollution Control from the Pennsylvania State University. He has over 40 years of experience in the fields of atmospheric chemistry/environmental analytical chemistry including significant program management and technical experience with complex multimedia sampling and analysis and method development/evaluation programs related to air toxics and fine particulates in the atmosphere. He provides scientific leadership and direction, advises senior management at RTI on strategic planning and in new areas of research and leading edge science and serves on internal scientific review and advisory committees. Since 1999, he has been the Program Manager for the chemical speciation of PM_{2.5} filter samples collected in three nationwide monitoring network operations (CSN, CASTNET, and IMPROVE). Dr. Jayanty's innovations in measurement technology have been instrumental in advancing the scientific understanding of human exposure assessment and in developing pollution control policies to improve air quality and protect public health. Dr. Jayanty has also served on many peer review panels for EPA, NSF and DOE extramural grant programs, has served on a panel reviewing EPA's Centers of Excellence and has advised NASA on the selection of advanced indoor air monitoring systems to be used on the International Space Station for the determination of volatile organic compounds. He served as Governor's Scientific Advisory Board Member for the State of North Carolina Air Toxics and Odor Control Programs. He has been an Editorial Review Board member for the Journal of the Air & Waste Management Association (AWMA) since 1990. Dr. Jayanty is internationally recognized for his contributions to the field of atmospheric chemistry and has received many prestigious awards from professional societies including the American Chemical Society Award for Creative Advances in Environmental Science and Technology and the Frank Chambers Award for the Science and Art of Air Pollution Control from the AWMA. In 2010, he received the Lifetime Achievement Award in Environmental Practices from the Institute of Professional Environmental Practice.

Jerrett, Michael

University of California, Berkeley

Dr. Michael Jerrett is an Associate Professor in the Division of Environmental Health Sciences at the University of California, Berkeley. He holds a B.S. in Environment Resource Studies from Trent University (1986), and an M.A. in Political Science/Environmental Studies (1988) and a Ph.D. in Geography (1996) from University of Toronto. Dr. Jerrett also did PostDoctoral work at McMaster University in Environmental Health. Dr. Jerrett is an internationally recognized expert in Geographic Information Science for Exposure Assessment and Environmental Epidemiology. For the past 14 years, he has researched how to characterize population exposures to air pollution, what the social distribution of air pollution is among different groups (e.g., poor vs. wealthy), and how to assess the health effects from air pollution exposures. Dr. Jerrett has published widely cited papers in the fields of Exposure Assessment and Environmental Epidemiology in leading journals, including The New England Journal of Medicine, Lancet, Proceedings of the National Academy of Science of the United States of America, Circulation, American Journal of Respiratory and Critical Care Medicine, Environmental Health Perspectives, Environmental Science and Technology, Epidemiology, and the American Journal of Epidemiology. Over the past six years, he has also investigated the contribution of the built environment to sedentary lifestyles and obesity, and is now co-Principal Investigator on two major projects in this area of research funded by the National Cancer Institute. He recently co-wrote "Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects" published by the Health Effects Institute. This report is the most comprehensive and systematic review to date of the scientific literature on emissions, exposure, and health effects from traffic-related air pollution. The United States National Academy of Science recently recognized Dr. Jerrett's accomplishments by appointing him to the Committee on "Future of Human and Environmental Exposure Assessment in the 21st Century." Dr. Jerrett has also presented at the National Academy's Institute of Medicine on the topic of Environmental Justice.

Mohai, Paul

University of Michigan

Paul Mohai is a Professor in the School of Natural Resources and Environment and a Faculty Associate at the Institute for Social Research at the University of Michigan, Ann Arbor, where he teaches courses on Environmental Justice, Environmental Policy, and Environmental Public Opinion. He was an early and major contributor to the growing body of quantitative research examining the disproportionate environmental burdens in low income and people of color communities. A significant outcome of this early research was the organization of the historic 1990 "Michigan Conference on Race and the Incidence of Environmental Hazards" with colleague Dr. Bunyan Bryant. Professor Mohai also served on the National Advisory Committee to the First National People of Color Environmental Leadership Summit, and was a member in the early 1990s of the "Michigan Group" that advised the U.S. EPA on environmental justice policy. He is currently a member of EPA's National Environmental Justice Advisory Council (NEJAC) and the Michigan Department of Environmental Quality's Environmental Justice Working Group, which is developing an Environmental Justice Plan for the State of Michigan. His current research involves national level studies examining the causes of environmental disparities and the role environmental factors play in accounting for racial and socioeconomic disparities in health. He is also examining pollution burdens around public schools and the links between such burdens and student performance and health. He is the author or co-author of numerous publications on the subject of race and the environment, including "Race and the Incidence of Environmental Hazards" (co-authored with Dr. Bunyan Bryant);

“Environmental Justice”; Environmental Racism: Reviewing the Evidence”; “The Demographics of Dumping Revisited”; “Reassessing Racial and Socioeconomic Disparities in Environmental Justice Research”; and the 2007 United Church of Christ Report “Toxic Wastes and Race at Twenty” (co-authored with Drs. Robert Bullard, Robin Saha, and Beverly Wright).

Morgenstern, Richard

Resources for the Future

Richard Morgenstern's research focuses on the economic analysis of environmental issues with an emphasis on the costs, benefits, evaluation, and design of environmental policies, especially economic incentive measures. His analysis also focuses on climate change, including the design of cost-effective policies to reduce emissions in the United States and abroad. Immediately prior to joining RFF, Morgenstern was senior economic counselor to the undersecretary for global affairs at the U.S. Department of State, where he participated in negotiations for the Kyoto Protocol. Previously he served at the U.S. Environmental Protection Agency, where he acted as deputy administrator (1993); assistant administrator for policy, planning, and evaluation (1991-93); and director of the Office of Policy Analysis (1983-95). Formerly a tenured professor at the City University of New York, Morgenstern has taught recently at Oberlin College, the Wharton School of the University of Pennsylvania, Yeshiva University, and American University. He has served on expert committees of the National Academy of Sciences and as a consultant to various organizations.

Schwartz, Joel

Harvard University

Dr. Joel Schwartz is a professor in the departments of Environmental Health and Epidemiology at the Harvard School of Public Health, associate professor of medicine at Harvard Medical School, Director of the Harvard Center for Risk Analysis, member of the faculty of the environmental biostatistics program and the cardiovascular epidemiology program at the Harvard School of Public Health, and on the Steering Committee of the Harvard University Center for the Environment. He is a former member of the board of Councilors of the International Society for Environmental Epidemiology, and the Editorial Board of the American Journal of Respiratory and Critical Care Medicine. He has served on two National Academy of Sciences panels, on the Centers for Disease Control Advisory Committee on Preventing Childhood Lead Poisoning, on the EPA's SAB committee reviewing the lead uptake-biokinetic model and on the CASAC committee for Lead. He is currently the PI of NIH grants examining gene-environment interactions for the effects of air pollution and heavy metals, examining epigenetic changes from exposure to air pollutants and heavy metals, of the epidemiology component of a particulate matter research grant from EPA, and the PI of the Harvard subcontract of a CDC study looking at adaptation to climate change, an EPA STAR grant looking at vulnerability to climate change, and an NIH grant looking at physiologic responses to temperature and other weather parameters. He has been very active in GIS based exposure modeling for air pollution and temperature, with recent work on incorporating satellite remote sensing. He was a recipient of a John D. and Catherine T. MacArthur Fellowship.