

U.S. Environmental Protection Agency Science Advisory Board Workgroup on Demolition and Disposal of Hurricane Debris

To expedite the development of advice on Hurricane Katrina related issues, the SAB Staff Office did not follow the usual shortlist process. Instead, it convened workgroups of technical experts drawn, as described in 70 FR 54046, from the U.S. EPA SAB, the Clean Air Scientific Advisory Committee, the Advisory Council on Clean Air Compliance Analysis (chartered advisory committees), their standing committees, subcommittees, and advisory panels. Workgroup members were invited to serve based on their scientific and technical expertise, knowledge, and experience; availability and willingness to serve; absence of financial conflicts of interest; and scientific credibility and impartiality.

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T. Taylor Eighmy

Taylor Eighmy is a Research Professor of Civil Engineering at the University of New Hampshire (UNH). He received his B.S. in Biology from Tufts University in 1980, his M.S. in Civil Engineering from UNH in 1983, and his Ph.D. in Engineering (Civil) from UNH in 1986. Dr. Eighmy directs the Environmental Research Group (ERG), an applied environmental engineering and environmental science research center at UNH. He also directs the Recycled Materials Resource Center (RMRC), a partnership with the Federal Highway Administration, to promote the wise use of recycled materials in highway construction. He presently serves on the Advisory Board of the New Hampshire Estuaries Project, a partnership between the New Hampshire Office of State Planning and the U.S. EPA's National Estuaries Program. He also serves on the National Steering Committee of the U.S. DOE's Combustion Byproduct Recycling Consortium. Formerly, he was appointed to and served on the New Hampshire Waste Management Council (1988-1995); the Council has solid and hazardous waste adjudicatory and rule making authority. He was a member of the International Ash Working Group (IAWG), sponsored by the International Energy Agency, and coauthored the treatise "Municipal Solid Waste Incinerator Residues" with his IAWG colleagues. He received the UNH Excellence in Research Award in 1997. He has research interests in recycled materials characterization and beneficial use, chemical speciation, environmental chemistry of leaching behavior, spectroscopic surface analysis, applied geochemistry, reactive barriers, and environmental microbiology. Dr. Eighmy's present research focus is on contaminant leaching and leaching modeling, use of surface spectroscopies to characterize surfaces where leaching first occurs, contaminant fate and transport in beneficial use scenarios within the highway environment, phosphate stabilization of wastes, use of phosphate-based reactive barriers (both permeable and impermeable) for waste containment, and geochemical and microbial characterization of microfracture surfaces in TCE-contaminated bedrock. His present research is supported by FHWA, NOAA, U.S. EPA, the European Union, and the private sector.

David T. Allen

David Allen is the Gertz Professor of Chemical Engineering and the Director of the Center for Energy and Environmental Resources at the University of Texas at Austin. His research interests lie in environmental reaction engineering, particularly issues related to air quality and pollution prevention. He is the author of four books and over 125 papers in these areas. The quality of his research has been recognized by the National Science Foundation (through the Presidential Young Investigator Award), the AT&T Foundation (through an Industrial Ecology Fellowship) and the American Institute of Chemical Engineers (through the Cecil Award for contributions to environmental engineering). Dr. Allen was a lead investigator in one of the largest and most successful air quality studies ever undertaken: the Texas Air Quality Study. His current research is focused on using the results from that study to provide a sound scientific basis for air quality management in Texas. In addition, Dr. Allen is actively involved in developing Green Engineering educational materials for the chemical engineering curriculum. His most recent effort is a textbook on design of chemical processes and products, jointly developed with the U.S. EPA. Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy.

Barry H. Dellinger

Barry Dellinger is the Patrick F. Taylor Chair of the Environmental Impact of Treatment of Hazardous Wastes and Professor of Chemistry at Louisiana State University. He is the Director of the LSU Intercollege Environmental Co-operative and the Acting Director of the Biodynamics Institute. Dr. Dellinger is a member of the US-EPA Science Advisory Board Environmental Engineering Committee. From 1981 to 1998, he was Group Leader of Environmental Sciences and Engineering at the University of Dayton where he also held a joint faculty appointment. From 1978-1981 he was a Senior Project Scientist at Northrop Services Inc. He was a post-doctoral fellow at the University of Pennsylvania from 1976-1978. He holds a Ph.D in Physical Chemistry from Florida State University and B.S. in Chemistry from the University of North Carolina at Chapel Hill. His research interests include origin and control of toxic combustion by-products, thermal treatment of hazardous wastes, pathways of formation of dioxins, gas-phase and surface catalyzed elementary reaction kinetics, and sources/health impacts of environmentally persistent free radicals. Dr. Dellinger is a recipient of the Charles A. Lindberg Certificate of Merit, the Engineering and Science Foundation Award for Outstanding Professional Achievement, the Wohleben-Hochwald Researcher of the Year Award, the Ohio General Assembly Award for Research Excellence, and co-recipient of numerous EPA STAR research awards.

Philip Hopke

Philip K. Hopke is the Bayard D. Clarkson distinguished professor at Clarkson University and the director of the Center for Air Resources Engineering and Science. Professor Hopke is the immediate past president of the American Association for Aerosol Research and was a member of the National Research Council's congressionally mandated Committee on Research Priorities for Airborne Particulate Matter and the Committee on Air Quality Management in the United States. He is a member of the National Research Council's U.S. Committee on Energy Futures and Air Pollution in Urban China and the United States. Professor Hopke received his B.S. in Chemistry from Trinity College (Hartford) and his M.A. and Ph.D. degrees in chemistry from Princeton University. After a post-doctoral appointment at M.I.T., he spent four years as an assistant professor at the State University College at Fredonia, NY. Dr. Hopke then joined the University of Illinois at Urbana-Champaign and subsequently came to Clarkson in 1989 as the Robert A. Plane Professor with a principal appointment in the Department of Chemistry. He has served as dean of the Graduate School, chair of the Department of Chemistry, and head of the Division of Chemical and Physical Sciences before he moved his principal appointment to the Department of Chemical Engineering in 2000.

Paul J. Lioy

Paul Lioy, Professor of Environmental and Community Medicine, UMDNJ-RWJMS, is the Director of the Exposure Measurement and Assessment Division, and he and Dr. P. Georgopoulos are Directors of the Center for Exposure and Risk Modeling. His expertise includes human exposure to environmental and occupational pollution, multi-media exposure issues for metals and pesticides, research on air pollution theory of exposure to dose relationships, and participation in study exposure and/or effects of pollution on human health in urban and non-urban areas, and controlled environments. He has over 180 peer reviewed papers, and has been and is a member of numerous editorial boards. Dr. Lioy is a member of the U.S. EPA Science Advisory Board, the National Research Council Committee on Particles, the Collegium Ramazzini, and International Joint Commission Air Quality Board for U. S. and Canada. He is President of the International Society of Exposure Analysis and was its 1998 recipient of the Wesolowski Award for Human Exposure Research.

Morton Lippman

Dr. Lippmann is a Professor of Environmental Medicine at the New York University (NYU) School of Medicine. He holds a Ph.D. (NYU, 1967) in Environmental Health Science, an S.M. (Harvard University, 1955) in Industrial Hygiene, and a B.Ch.E. (The Cooper Union, 1954) in Chemical Engineering. At NYU, he directs a research program on Human Exposure and Health Effects, and the EPA-supported Particulate Matter Health Effects Research Center. He has been the recipient of numerous awards for his research and contributions in aerosol science and pulmonary physiology, human exposure assessment and dosimetry, chemical transformations in the atmosphere, population studies of exposure-response relationships in occupational and community cohorts, and factors affecting the toxicity of airborne fibers. Much of this research has been focused on specific chemical agents, notably ozone, sulfuric acid, and asbestos. Dr. Lippmann is a past President of the International Society of Exposure Analysis (1994-1995), past Chairman of: the ACGIH (1982-1983); the EPA Science Advisory Board's Executive Committee (2000-2001); EPA's Advisory Committee on Indoor Air Quality and Total Human Exposure (1987-1993); and EPA's Clean Air Scientific Advisory Committee (1983-1987). He has also chaired and been a member of numerous National Research Council committees, including committees on the airliner cabin environment and the health of passengers and crew, synthetic vitreous fibers, measurement and control of respirable dust in mines, indoor pollutants, toxicity data elements, and in-vivo toxicity testing of complex mixtures. His publications include over 275 research and review papers in the scientific literature and two reference texts on environmental health science. He is currently the Director of the EPA-supported Particulate Matter Health Effects Research Center at NYU, and of an EPA-Cooperative Agreement with NYU on personal exposure of respiratory disease patients to particulate matter in ambient air.

Mark Rood

Mark J. Rood is a Professor of Environmental Engineering and Coordinator of the Environmental Engineering and Science Program in the Department of Civil and Environmental Engineering at University of Illinois (Urbana-Champaign). He received his B.S.E. degree in Environmental Engineering from Illinois Institute of Technology and his M.S.E. and Ph.D. degrees in Environmental Engineering from University of Washington. Professor Rood's research and teaching interests are in the areas of pollution prevention, physical-chemical treatment processes (adsorption, absorption, and plasma processes), aerosol optics and chemistry, and the characterization of ambient aerosols with respect to atmospheric chemistry and climate forcing. He has published over 60 peer-reviewed manuscripts, more than 100 conference proceedings and reports, and one patent. Professor Rood and his students have received more than 17 national awards from the Association of Environmental Engineering and Science Professors, Air and Waste Management Association, American Carbon Society, and American Chemical Society. His distinguished service is recognized with his past appointment as Treasurer and member of the Executive Board of the Association of Environmental Engineering and Science Professors, as an associate editor for the Journal of Air and Waste Management Association, and as the Editor-In-Chief of Journal of Environmental Engineering. Professor Rood's research has been supported by Department of Defense, National Science Foundation, National Oceanic and Atmospheric Administration, and Grainger Foundation.