Expert Panel Bios

Dr. Michael Dourson, Toxicology Excellence for Risk Assessment, Cincinnati, Ohio, USA
Since 1995, Dr. Dourson has served as President for Toxicology Excellence for Risk Assessment (TERA). Dr. Dourson will Chair the Expert Panel and has over 30 years experience in toxicology, risk assessment and derivation of risk values. While with the US Environmental Protection Agency (EPA) he chaired the EPA's Reference Dose (RfD) Work Group, was a charter member of the US EPA's Risk Assessment Forum, and chief of the group that helped create the Integrated Risk Information System (IRIS). Dr. Dourson received his Ph.D. in toxicology from the University of Cincinnati and is a Diplomate of the American Board of Toxicology (DABT) and a Fellow of the Academy of Toxicological Sciences. He has served on or chaired many expert panels in the US EPA, Food and Drug Administration (FDA), National Sanitation Foundation International, and independent organizations. He served as President of the American Board of Toxicology and Secretary for the Society for Risk Analysis (SRA), and has published more than 100 papers on risk assessment methods.

Dr. Shai Ezra, Mekorot, Israel National Water Company Ltd, Tel Aviv, Israel
Dr. Ezra is the Director of the Water Security Department at the Water Quality Division of Mekorot. Dr Ezra's department is responsible for optimizing contaminant detection efficiency, and applying advanced online monitoring systems and response strategies in Mekorot's water systems. He is continually engaged in examining and developing state of the art technologies for early warning detection systems. Dr. Ezra received his Ph.D. and M.Sc. from the Geological and Environmental Sciences Department of Ben Gurion University of the Negev, Israel. Dr. Ezra has investigated water quality issues in water distribution systems and has lectured in environmental organic geochemistry. He has published on water contamination issues, including chemical transformation and degradation of organic contaminants in aquifers, and decontamination methods of water pipe systems after contamination events.

Dr. James Jacobus, Minnesota Department of Health, Saint Paul, Minnesota, USA
Dr. James Jacobus is a research scientist and risk assessor in the Health Risk Assessment Unit at the Minnesota Department of Health (MDH) in St. Paul Minnesota. Dr. Jacobus derives multi-duration health-based guidance for drinking water contaminants of special concern. In his position at MDH, Dr. Jacobus has authored or reviewed toxicological assessments on approximately 15 contaminants of emerging concern, evaluating the available toxicity data to derive drinking water guidance values for acute, subchronic and chronic durations and addressing different life stages. Dr. Jacobus has worked as an environmental scientist engaged in the remediation of leaking underground storage tanks and performed basic science research on the genotoxicity of semi-volatile polychlorinated biphenyls and the biological effects of ionizing radiation. He earned his doctorate in human toxicology from the University of Iowa, trained as an NIH T-32 postdoctoral fellow, and holds an adjunct faculty appointment at the University of Minnesota.

Dr. Stephen Roberts, University of Florida, Gainesville, Florida, USA

Dr. Steve Roberts is Director of the Center for Environmental & Human Toxicology at the University of Florida, and is a Professor in the College of Veterinary Medicine, College of Medicine, and the College of Public Health and Health Professions. He received his Ph.D. from the University of Utah, College of Medicine, and subsequently completed a National Institutes of Health (NIH) individual postdoctoral fellowship in pharmacokinetics at SUNY Buffalo. He has previously served on the faculties of the College of Pharmacy at the University of Cincinnati and the College of Medicine at the University of Arkansas for Medical Sciences. Dr. Roberts conducts research in a number of areas of toxicology, including mechanisms of toxicity, toxicokinetics, nanotoxicology, and risk assessment. His research has been funded by several federal agencies, including the National Institutes of Health (NIH), the U.S. Environmental Protection Agency (EPA), and the Department of Defense (DOD). Dr. Roberts currently serves as an advisor to the Florida Department of Environmental Protection and is on the Chemical Assessment Advisory Committee of the Science Advisory Board for the U.S. EPA.

Dr. Paul Rumsby, National Centre for Environmental Toxicology at WRc plc, United Kingdom

Dr. Paul Rumsby is a Principal Toxicologist and Technical Manager of the National Centre for Environmental Toxicology (NCET) at WRc plc (formerly the Water Research Centre), in Swindon, United Kingdom. He received his Ph.D. in biochemical pharmacology from the University of Dundee and is a European Registered Toxicologist (ERT). He serves as the project manager and overseeing scientist for a 24-hour toxicology advisory service and conducts scientific evaluations of data on occupational and environmental chemicals for risk assessment and drinking water monitoring studies on chemicals of regulatory importance. He has conducted reviews of toxicological data for human health risk assessments from drinking water contamination incidents and the setting of short-term guidance values. He has 25 years' laboratory research experience in molecular toxicology and cancer research and is an expert in mechanisms in toxicology including carcinogenesis, mutagenesis, neurotoxicity, and endocrine disruption. Dr. Rumsby has authored numerous peer-reviewed publications on drinking water contaminants.

Conflict of Interest Screening

To facilitate the evaluation of potential conflict of interest (actual and perceived) and bias situations for the peer review candidates, TERA identified a list of *potentially* affected or interested parties and sectors for this peer review. The candidates were asked to consider their financial and other relationships with these parties when completing the conflict of interest questions and to report any relationships they may have with these parties. The candidates were also questioned about current and past activities or interest for the list of chemicals involved.

Potentially Affected or Interested Parties:

- State of West Virginia
- Centers for Disease Control and Prevention
- Freedom Industries
- Eastman Chemical
- DOW Chemical [PPH (one of the chemicals in the Crude MCHM and spilled) is manufactured by DOW, although the source of PPH in the tank is not clear]
- West Virginia American Water
- American Water Works Service Company [Parent company of West Virginia American Water]
- Coal mining industry (including mining, processing, storage, and transport)

Expert Panel:

Michael Dourson is President of TERA. TERA conducts work under contract for government and private sector sponsors on chemicals and risk assessment issues. He has no conflicts of interest for this peer review.

Shai Ezra is the Director of the Water Security Department at the Water Quality Division of Mekorot. He participated in an Israeli delegation to West Virginia hosted by the WV National Guard in January of this year to learn about the spill situation. He has no conflicts of interest for this peer review.

James Jacobus is a research scientist and risk assessor in the Minnesota Department of Health. He has no conflicts of interest for this peer review.

Stephen Roberts is Director of the Center for Environmental & Human Toxicology at the University of Florida, and is a Professor in the College of Veterinary Medicine, College of Medicine, and the College of Public Health and Health Professions. He has no conflicts of interest for this peer review.

Paul Rumsby is a principal toxicologist and technical manager of the National Centre for Environmental Toxicology (NCET) at WRc plc (formerly the Water Research Centre. He has no conflicts of interest for this peer review.

Toxicology Excellence for Risk Assessment (TERA)

TERA evaluates the potential for conflict of interest for each potential new project. The following is a summary of information for this project that TERA is disclosing in the interests of transparency.

TERA has no current financial or other interest with any of the chemicals identified in the spill. In the past, TERA compiled toxicity data and a hazard summary on one of the chemicals, methanol, for the U.S. EPA and organized a letter peer review of methanol toxicology studies for the Methanol Institute. TERA currently has projects with Dow AgroSciences and Dow Corning (a subsidiary, and joint venture, respectively of Dow Chemical) to evaluate chemical toxicity for several chemicals that are not related to this project. TERA has done work in the past for Dow Chemical and Eastman Chemical on other chemical toxicity evaluations, but not on any of these chemicals. TERA assisted the State of West Virginia in organizing a peer panel to conduct a risk assessment and toxicology evaluation of Ammonium, perfluorooctanoate (PFOA) in 2002. None of these projects involved the spill chemicals and the projects are not related in any way to this peer review, and therefore there is no conflict of interest for this peer review or reason for TERA or Dr. Dourson not to be objective in this matter.