

## **Experts Selected by TERA to Peer Review TCEQ Hexavalent Chromium Section 4.2 Carcinogenic Potential - Developmental Support Document, May 2013**

TERA independently selected the following four experts to provide independent peer review of the TCEQ document. Each has been screened for conflict of interest. None of the selected experts has a conflict of interest with the review of this document.

### **Michael L. Dourson, Ph.D., D.A.B.T.**

Dr. Michael Dourson is the President of Toxicology Excellence for Risk Assessment (TERA). He has a PhD in toxicology from the University of Cincinnati and is a Diplomate of the American Board of Toxicology (ABT). He has lead TERA's development of partnerships among diverse groups to address chemicals of high visibility, such as formaldehyde, perchlorate, chloroform, and soluble nickel, and cooperative ventures such as the Voluntary Children's Chemical Exposure Program, the International Toxicity Estimates for Risk database (available at Toxnet), and the Alliance for Risk Assessment. He worked 15 years for EPA, holding several leadership roles and winning awards for joint efforts, such as the creation of EPA's Integrated Risk Information System. In 2003, he won the Society of Toxicology (SOT) Lehman award for major contributions that improve the scientific basis of risk assessment and in 2009 he won the International Society of Regulatory Toxicology and Pharmacology's International Achievement Award. He was also selected a Fellow for the Society for Risk Analysis (SRA) for substantial achievement in science relating to risk analysis and service to SRA and as a Fellow of the Academy of Toxicological Sciences. Dr. Dourson has co-published more than 100 papers on risk assessment methods, including methods for assessing risk in sensitive subgroups, on use of animal and human data in the assessment of risk, or on assessments for specific chemicals. He has also co-authored well over 100 government risk assessment documents, made over 100 invited presentations, and chaired well over 100 sessions at scientific meetings and independent peer reviews. He has been elected to multiple officer positions in the American Board of Toxicology, the Society of Toxicology (SOT), and the Society for Risk Analysis. He serves on EPA's Science Advisory Board, is vice chair of the NSF International Health Advisory Board, and serves on the editorial board of several journals.

### **David Gaylor, Ph.D.**

Dr. David Gaylor received a B.S. and M.S. degree in Statistics from Iowa State University and a Ph. D. in Statistics from North Carolina State University. Dr. Gaylor, whose expertise is in the fields of biometry, statistics, and health risk assessment, currently is an independent consultant. Previously, Dr. Gaylor retired from the National Center for Toxicological Research (NCTR), Food and Drug Administration (FDA), where he was the Director of the Biometry and Risk Assessment Division. In that

position, Dr. Gaylor developed experimental protocols and provided statistical analyses of experiments in carcinogenesis, teratogenesis, mutagenesis, and neurotoxicity, and developed techniques to advance the science of quantitative health risk assessment. Dr. Gaylor also serves as an Adjunct Professor of Statistics at the University of Arkansas for Medical Sciences. Dr. Gaylor is a Fellow of the American Statistical Association, the Society for Risk Analysis, and the Academy of Toxicological Sciences. Dr. Gaylor has served on more than 70 national and international work groups and committees on many aspects of biometry, toxicology, and risk assessment. He is currently a member of the editorial board of three professional journals: Human and Ecological Risk Assessment; Toxicology and Industrial Health; and Regulatory Toxicology and Pharmacology. Dr. Gaylor has authored or coauthored more than 160 journal articles, 25 book chapters, and made over 100 presentations at scientific meetings on bio-statistics and a wide range of health risk assessment issues. Many of Dr. Gaylor's publications address dose response assessment, bio-statistics, and quantitative risk assessment.

**M.E. (Bette) Meek, Ph.D., M.Sc**

Dr. Bette Meek is currently the Associate Director of Chemical Risk Assessment at the McLaughlin Centre for Population Health Risk Assessment, University of Ottawa, where she has recently completed an interchange assignment from Health Canada. She has extensive experience in the conduct and management of chemical risk assessments within the Government of Canada, having managed most recently, the program of health assessments of Existing Substances under the Canadian Environmental Protection Act (CEPA) and previously, those related to contaminants in drinking water and air. Experience on Existing Substances included the precedent setting mandate to consider priorities for assessment from amongst the 23, 000 substances on the Domestic Substances List. With colleagues within Canada and internationally, she has contributed to or led initiatives to increase transparency and efficiency in chemical risk assessment, having convened and participated in initiatives in this area for numerous organizations including the International Programme on Chemical Safety and the Organization for Economic Cooperation and Development. Areas of contribution have included the development of frameworks for weight of evidence analysis including mode of action, chemical specific adjustment factors, physiologically-based pharmacokinetic modeling, combined exposures and predictive modeling. She has also authored over 175 publications in the area of chemical risk assessment and received several awards for contribution in this domain. Dr. Meek has a background in toxicology receiving her M.Sc. in Toxicology (with distinction) from the University of Surrey, U.K. and her Ph.D. in risk assessment from the University of Utrecht, the Netherlands

**Kyle Steenland, Ph.D.**

Dr. Kyle Steenland is an environmental/occupational epidemiologist who is a professor in the Environmental Health Department at the Rollins School of Health, Emory University. He has been at Emory for 10 years and teaches advanced epidemiologic methods to students at the Rollins School of Public Health. Prior to working at Emory, he worked for 20 years at the National Institute for Occupational Safety and Health (NIOSH). Dr. Steenland has published over 100 first-authored articles in the field, and edited two textbooks. He has conducted a large number of cohort studies, including both mortality and cancer incidence studies (e.g., cohorts of workers exposed to dioxin, ethylene oxide, welding fumes, sulfuric acid mists, silica, diesel fumes, and polychlorinated biphenyls). He is currently conducting two large cohort studies of community residents and workers exposed to perfluorooctanoic acid (PFOA), and to lead. He has also published a number of studies on epidemiologic methods, including exposure-response analyses, adjustment for multiple comparisons, the effect of measurement error, and the attributable fraction.