

July 22, 1999

BIOGRAPHIES

Technical Steering Committee

Murray Dixon is a Toxicity Assessment Scientist with the Ministry of the Environment. He holds his Honours B.Sc. and his M.Sc in Botany, both from the University of Toronto. He has been with the Ministry of the Environment for 13 years. He has studied a wide range of contaminants during his tenure at MOE, including in-depth experiments into the effects of arsenic on plants.

Scott W. Fleming is Senior Toxicologist within the Standards Development Branch of the Ontario Ministry of the Environment. He obtained his graduate degree from the University of Toronto in 1985, where his research studies were in the field of neurotoxicology. Mr. Fleming is a recognized Canadian expert in the fields of toxicology and human health risk assessment of environmental contaminants. He has conducted a number of large-scale community health risk studies within the province of Ontario and co-author of the Ministry's Guidance on Site Specific Risk Assessment for Contaminated Sites. His award-winning work on development of environmental standards for lead formed the scientific basis for the tough new standards on this substance in Ontario. In addition, he has developed environmental and occupational exposure limits for a variety of toxic substances and has published numerous scientific reports and learned articles.

Mr. Glen Hudgin is currently Director of Public Health Inspection for the Hastings and Prince Edward Counties Health Unit. He was born in Picton, Ontario. He is a Canada Certified Public Health Inspector. He earned his Bachelor's Degree in Environmental Health from Ryerson Polytechnical University. He was first employed as a Student Public Health Inspector in the Picton Office of the Hastings and Prince Edward Counties Health Unit. He carried out one of the first bacteriological water quality studies of the Bay of Quinte in 1970. Previously, Mr. Hudgin was employed as a District Public Health Inspector for the city of North York Health Department. When there, he carried out a bacteriological study of the North York segments of the Don River, Humber River and Black Creek.

Dr. Michael A. McGuigan, MD, MBA is an Associate Professor of Pediatrics, Pharmacology, and Health Administration in the Faculty of Medicine at the University of Toronto. A graduate of McGill University medical school, he finished his post-graduate training in clinical pharmacology and toxicology at Harvard University's Children's Hospital in Boston and was certified as a medical toxicologist by the American Board of Medical Toxicology. In 1980, Dr. McGuigan assumed the position of Medical Director of the Ontario Regional Poison Information Centre at

The Hospital for Sick Children in Toronto. He is past-President of the American Academy of Clinical Toxicology and current President of the Canadian Association of Poison Control Centres.

Dr. Lynn Noseworthy has been a Medical Officer of Health since 1991 at the Hastings and Prince Edward Counties Health Unit. She completed her Doctor of Medicine Degree in 1979 at Memorial University of Newfoundland. In 1987, Noseworthy went on to complete her Master of Health Science Degree in Community Health and Epidemiology at the University of Toronto.

Jim Ritter is the Ontario Ministry of the Environment's Project Manager and Operations Engineer for the Deloro Mine Site Rehabilitation Project. He started his career working for the Federal Department of National Defence and has also held positions with the Ministry of Labour, the Industrial Health & Safety Branch and private industry. A Civil Engineer and a Canadian Registered Safety Professional, Mr. Ritter has been working on mine rehabilitation efforts in Deloro since 1992.

Arthur Scott is an expert in radon and radioactivity who currently works with the Ontario Ministry of Labour's Radiation Protection Service. Prior to joining the Ministry, Mr. Scott directed field research on radon for the U.S. Environmental Protection Agency and oversaw radiation cleanup programs in Elliot Lake, Ontario and Uranium City, Saskatchewan for Canada's Atomic Energy Control Board. He earned his M.A. in Physics and M.Sc. in Radiation Biology and Radiation Physics at the University of London.

Dr. Lesbia F. Smith, M.D. is a senior medical consultant with the Ontario Ministry of Health's public health branch and an assistant professor at the University of Toronto's Department of Public Health Sciences. She specializes in environmental health and toxicology.

Adam C. Socha is Senior Advisor, Toxicology at the Standards Development Branch for the Ontario Ministry of the Environment. He has served as a toxicologist and technical manager with the MOE for over 12 years, specializing in human toxicology and the environmental behaviour of contaminants. Mr. Socha received his B.Sc. degree in pharmacology from the University of Toronto in 1983 and his M.Sc. degree in toxicology and physiology from the Ontario Veterinary College, University of Guelph in 1986. He is a member of the Society of Environmental Toxicology & Chemistry and the Society of Toxicology of Canada.

Consulting and Analytical Expertise

CH2M Gore & Storrie Limited is an employee-owned, Canadian-controlled corporation formed in 1995 through the merger of CH2M HILL Engineering Ltd. and Gore & Storrie Limited, both recognized leaders in the field of environmental engineering. With the combined resources of more than 300 employees Canada-wide, CG&S offers a complete range of environmental services and technologies to our clients across Canada and in the global market. The CG&S team of engineers, planners, hydrogeologists, scientists, and technical specialists is committed to providing environmental consulting services in all aspects of water, wastewater, and waste management for public and private sector clients. Our dedication to safeguarding the environment and being responsive to the increasingly specialized needs of our clients remains the cornerstone of our success.

Goss Gilroy Inc. is a privately-owned Canadian company established in 1981 to provide quality management consulting services to private and public sector organizations. We provide our clients with services and technical expertise in the areas of surveys and statistical consulting, project and program evaluation, market research, information technology, and comprehensive and internal audits. The technical strength of our firm's professional staff is augmented by operational and management experience gained from working closely with industry and government. Our projects cover subject areas including health, environment, natural resource management, industry, agriculture, technology transfer, research and development, employment, and regional economic development.

Cantox Environmental Inc. is a science-based consulting firm specializing in providing expert advice to clients on toxicology issues related to human health, the environment and regulatory affairs. Our scientific staff, in five offices across Canada and the United States, includes more than 50 professionals with experience that encompasses diverse areas of human and aquatic toxicology, environmental fate and modelling, human health and environmental risk assessment, and risk communication. We have been providing a full range of consulting services to industry, government, trade associations, scientific organizations, financial institutions, and the legal profession for more than 15 years.

SENES Consultants Limited is a wholly-owned Canadian company that provides specialty services on a broad spectrum of projects that typically involve provision of expert advice on specific environmental issues; preparation of environmental and ecological risk assessments; site investigations; environmental audits; low-level radioactive and hazardous waste investigations and design of applicable management systems; assessment and cost-benefit analysis of environmental control technologies; preparation of facility audits and development of environmental quality management systems; aquatic ecosystem assessment and management; atmospheric chemistry, monitoring, and dispersion modelling; and various aspects of mining including environmental impact assessments, development of decommissioning plans, and assessment of acid mine drainage. We provide services to regulatory agencies from all levels of government as well as to private sector companies, industrial associations, and public organizations.

External Peer Reviewers

Dr. Charles Abernathy is a toxicologist for the U.S Environmental Protection Agency's Office of Water. He has carried out extensive scientific research on behalf of the Veterans Administration Medical Center in Washington D.C. for more than 10 years. The author of more than 70 scientific articles in professional journals, Dr. Abernathy holds a M.Sc. from the University of Kentucky and a Ph.D. from North Carolina State University. He also received postdoctoral training in pesticide toxicology at the University of California, Berkeley.

Dr. Henry S. Caplan is the Head of Physics and Engineering Physics at the University of Saskatchewan. In addition to being published in more than 100 academic journals and abstracts, Dr. Caplan is recognized as an expert in the analysis of radiation hazards and mitigating procedures for mine workers and the environment. He received his B.Sc. in Experimental Physics and a Ph.D. in Nuclear Physics from the University of Glasgow.

Dr. Willard Chappell is a Physics Professor at the University of Colorado. The founder and Director of the Center for Environmental Sciences at the University of Colorado between 1979 and 1989, he is the co-chair and principal organizer for the Society of Environmental Geochemistry International Conferences on Arsenic Exposure and Health Effects. Dr. Chappell holds a Ph.D in Physics from the University of Colorado.

Mark J. Gardiner is the Technical Supervisor of the Port Hope Field Services Office (PHFSO) of the Low-Level Radioactive Waste Management Office (LLRWMO). In this capacity he oversees environmental monitoring, site characterization and project planning services for PHFSO activities within the mandate of the LLRWMO in Canada. Mr. Gardiner has been with the LLRWMO for over 10 years, specializing in environmental monitoring program development, environmental investigation/remediation planning and facility licensing. He is currently acting as a technical advisor to Natural Resources Canada in the development of a long-term management plan for historic low-level radioactive wastes in the Port Hope area. Mr. Gardiner received his B.Sc. in Physical Chemistry from Trent University.

Raymond E. "Buck" Grissom, Jr., Ph.D. is a senior toxicologist at the Agency for Toxic Substances and Disease Registry, U.S. Department of Health and Human Services, in Atlanta, Georgia. He provides primary peer review and analysis of health consultations written by staff at the ATSDR. He is responsible for providing expert toxicological and technical advice and appropriate recommendations about potential health impacts resulting from emergency and non-emergency situations involving the release or potential release of hazardous substances. He prepares written health consultations for ATSDR headquarters, regional field personnel, and other government agencies (federal, state, and local). He represents ATSDR at conferences, public meetings, and meetings with representatives of other federal agencies, state and local agencies. His other responsibilities include writing manuscripts for publication, and reviewing, evaluating, and critiquing the work of other environmental and health science professionals.

Dr. Grissom is a graduate of North Carolina State University at Raleigh, North Carolina. He is a member of the American Association for the Advancement of Science, Sigma Xi, Society of

Toxicology, the Southeast Chapter of Society of Toxicology, and the Gamma Sigma Delta Honor Society.

Dr. Chris Le is an Associate Professor with the University of Alberta's Department of Public Health Sciences whose expertise includes ultrasensitive assays for DNA damage and environmental contaminants; chemical speciation of trace elements; the exposure and health effects of arsenic; and biomarkers.

Dave McLaughlin is an adjunct professor at the University of Toronto's Faculty of Forestry and an Investigations Co-ordinator with the Ontario Ministry of the Environment's Phytotoxicology and Soil Standards Section. He has 21 years experience in environmental investigations and has published numerous reports and scientific papers on environmental contaminants in soil and the effects of pollution on plants and forest ecosystems. Mr. McLaughlin earned his B.Sc. and M.Sc. in Forestry from the University of Toronto.

Dr. Bliss Tracy has been a research scientist with Health Canada since 1978. He received his B.Sc. from the University of New Brunswick and his Ph.D. in nuclear physics from McMaster University. Mr. Tracy's recent work includes projects related to radionuclide monitoring for the Comprehensive Test Ban Treaty and to preparations under the Federal Government's Nuclear Emergency Plan.