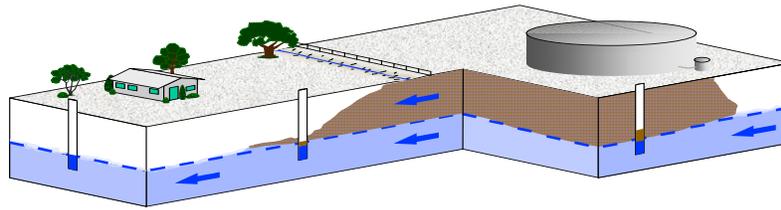


CONTAMINATED AND HAZARDOUS WASTE SITE MANAGEMENT

Theory, Practice & Outdoor Field Demonstrations



June 8-12, 2015
Toronto, Ontario, Canada

GOWen Environmental and the **International Association of Hydrogeologists** present *Contaminated and Hazardous Waste Site Management*, a comprehensive course that provides a solid theoretical and practical foundation in contaminated site management. The Course has been developed especially for individuals who manage, regulate, investigate, remediate, or are impacted by contaminated sites. Managing these sites is a multidisciplinary task, therefore, integrating several disciplines is necessary to efficiently and economically manage or make decisions regarding site issues.

Course Overview - Registration includes:

- **5 days** of in-depth discussions by **15 leading environmental**, soil, sediment and groundwater **experts** representing academia, consulting, and government from across North America. These experts will provide a comprehensive overview of hydrogeology and geochemical principles, site assessment procedures, risk assessment and risk management tools, remediation technologies, and management issues relating to contaminated and hazardous waste sites.
- **Networking Lunch at Outdoor Demonstration Day**
- **3 Evening optional computer based workshops** on computer modelling and environmental management support software. The workshops will incorporate established and innovative computer modelling and support software used in groundwater characterization and remediation; risk assessment; environmental decision support; and contaminated site management.
- **1,200 page notebook** and **downloadable online resource folder**.
- **1 half-day of hands-on technical demonstrations on Site Characterization and Remediation Technologies.**
- **4.7 Continuing Education Units (CEUs)**
- **Optional excursions to the CN Tower Observation Deck and Niagara Falls**

COMPARE THE CONTENT to other Courses --- COMPARE THE VALUE

No other Course of this kind gives a greater value for the registration fee.

The Only Contaminated Sites Management Course You Will Ever Need!

Introduction

Over the last 35 years, countries around the world have developed and implemented guidelines and standards for the **investigation, mitigation, and remediation of contaminated properties**. In all sectors of the economy, high profile contaminated sites, human health issues, litigation, and enormous cleanup costs have heightened the awareness of environmental issues relating to contaminated properties. Contaminated soil, sediment or groundwater in prime real estate and sensitive ecological locations has resulted in the loss of millions of dollars due to lack of development or ineffective management of these properties.

GOwen Environmental (www.contaminatedsite.com) was founded to provide **specialized and leading-edge environmental training** and networking through courses, conferences, and workshops. This Course was developed to provide a medium for the transfer of **unbiased information** and technology to clean up contaminated properties. The Course has evolved over the last eighteen years into an **internationally recognized solution-based training** program that brings together participants, regulators, consultants, and academics from across the globe.

International Association of Hydrogeologists (www.iah.org) is an international organisation for scientists, engineers and other professionals working in the fields of groundwater resource planning, management and protection. It was founded in 1956 and has grown, with the increasing social and environmental importance of groundwater, to a membership of more than 3,500 members in more than 135 countries.

Maxxam Analytics (www.maxxam.ca) has the most extensive network of laboratories and service centres throughout Canada, Maxxam provides comprehensive environmental analysis for soil, water and air contaminants. The data collected helps customers comply with environmental regulations and standards that protect human health and the natural environment.

The Course is firmly established as far as content and instruction. The Course is sponsored by one of the largest groundwater resource protection associations in the world. Over the last eighteen years, the Course has received support and sponsorship from major environmental associations world-wide. The instructors represent academia, government, and the private sector; all are leaders in their respective fields. This framework provides for an unbiased transfer of information that provides individuals who own, regulate, investigate, remediate or are impacted by contaminated properties with a solid theoretical and practical foundation in contaminated site management. The management of these sites is a multi-disciplinary task. This course integrates all the disciplines necessary to successfully, efficiently and economically manage or make decisions regarding these sites.

Course participants will receive theoretical and practical foundations, as well as important information regarding regulatory compliance aspects of contaminated site management. This knowledge will be coupled with a hands-on approach to understanding the tools and techniques for managing contaminated sites. Some experience is helpful, but not necessary, as the Course teaches basic principles before addressing more advanced topics.

Regardless of your level of expertise, the combination of information presented during this Course will not be found elsewhere and will provide you with the knowledge and confidence to effectively manage contaminated sites. **This Course will provide participants with the competitive edge required in this rapidly evolving field.**

This is also the only one week indoor-outdoor course being offered globally that covers all issues related to managing subsurface contamination, from theory to practice. **The Course's 15 instructors** are from academia, private industry, and government in North America and **are recognized as leading experts and teachers in their respective fields**. These instructors will provide students with access to a broad base of practical experience and an excellent opportunity to network with leading professionals.

As part of the education process, selected case histories of soil, sediment and groundwater investigations, remediation projects and risk assessments will be studied to further emphasize the practical aspects of each lecture topic. While a good number of 2-3 day short courses are offered on some aspects of contaminated site management, there are few one-week courses offering the opportunity for in-depth learning of a more complete range of issues. The extent of

recent developments in the science and technology of contaminated and hazardous waste site management is such that one would be required to attend many short courses in order to be brought up to speed. Our intensive one-week course, with additional workshops and outdoor demonstrations, is an attractive alternative for busy professionals.

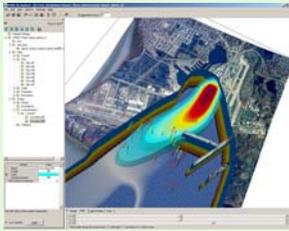
This week-long course allows for a half-day of outdoor seminars to demonstrate the various site characterization and remediation technologies currently being used on sites across North America today. Two optional evening seminars will provide the attendee with hands-on computer workshops to demonstrate the application of environmental decision support software, groundwater modeling and risk assessment modeling tools.

The majority of courses provide two or three instructors to cover an extensive array of topics in two days and charge the same amount for registration for two days as this course charges for five. The 15 instructors in this course, along with the many technology demonstrators, will provide students with a unique access to a very broad base of practical experience and an excellent opportunity to network with leading professionals.

This Course provides an unparalleled synthesis of technical information and applied knowledge in contaminated and hazardous waste site management.

Instructors and Course Topics

**Monday
June 8, 2015**



Course Offerings:

- *Overview of Contaminated and Hazardous Waste Site Management*
- *Principles of Contaminant Hydrogeology*
- *Environmental Forensics and Analytical Chemistry Requirements.*
- *Soil Chemistry of Hazardous Materials*
- *Practical Model Applications for Risk Assessment and Site Remediation*

Evening:

- *Groundwater Modeling*

Gareth Owen is the President of GOwen Environmental Limited and has spent the last 25 years training other environmental professionals in the discipline of contaminated and hazardous waste site management. Mr. Owen has managed more than 950 contaminated sites including site and risk assessments, remedial plan development and expedited site closures for sites contaminated with hydrocarbons, chlorinated solvents, heavy metals, and radioactive waste. He has provided technical and/or managerial support to clients on over 3,600 sites worldwide. He has managed and provided program and project support on contaminated site investigations and remediation for soil, water, and sediment in every jurisdiction and at every level of government in the provinces and territories of Canada, and advised private and public sector clients on similar issues worldwide. He has worked with and instructed most regulatory agencies in Canada responsible for contaminated and hazardous waste site management. His decision in 2001 to no longer participate in the investigation or the remediation of contaminated sites as a consultant or contractor, ensures the provision of sound and unbiased technical and managerial support to all his clients. It also ensures no conflict of interest with any environmental consulting or contracting firm providing contaminated site management services. Mr. Owen's principal responsibilities have included providing support to government agencies and multinational corporations in managing large and complex environmental programs and projects. His principal experience relates to contaminated site project management and closure as well as environmental program management. *Mr. Owen will provide a detailed overview of Contaminated and Hazardous Waste Site Management.*

Dr. Ken Howard, University of Toronto, is a certified and chartered hydrogeologist, with broad experience in all aspects of groundwater resource evaluation, management and protection. As Director of the Groundwater Research Group at the University of Toronto, he has worked on numerous applied projects in Canada, U.K., the West Indies, equatorial Africa and Australia. He has published over 50 articles on topics that range from numerical flow modeling and contaminant migration to environmental isotopes and borehole geophysics. Dr. Howard will cover the Principles of Hydrogeology and will provide an overview of scientific principles Monday evening. *After attending this lecture,*

the attendee will have an increased understanding of the physical and chemical processes that determine how contaminants are transported in the subsurface.

Bryan Chubb, B.Sc. C.Chem, has been with Maxxam since 1999 and is Vice President of Business Development for Environmental Services. He holds a B.Sc in Environmental Science from the University of Guelph and is a Chartered Chemist in the Province of Ontario. Bryan has extensive analytical environmental chemistry experience as it relates to environmental assessment, monitoring and remediation projects. He has worked with upstream and downstream oil and gas organizations and consulting firms to design environmental testing programs and provide interpretation of results. Bryan is a recognized expert in environmental forensics, where he is routinely consulted with for cases where multiple hydrocarbon release events are suspected. He leads Maxxam's Research and Development steering committee who engages with government, industry and consultants on emerging science and technology projects as it relates to the measurement and detection of contaminants of concern. Bryan is also a member of the Ontario and Alberta Laboratory Technical Advisory Groups who assists in development of analytical and sampling procedures to support regulation. Prior to joining Maxxam was an environmental consultant in both Ontario and the Northwest Territories. He also is on the Board for the Ontario Environmental Industry Association. *Bryan will lecture on Environmental Forensics and Analytical Chemistry Requirements.*

Dr. Kirk Scheckel is a Senior Research Soil Scientist with US EPA's National Risk Management Research Laboratory in Cincinnati, OH, USA. His research focus is solving fundamental issues regarding elemental speciation in soils, sediments, water, plants, and waste materials via advanced, molecular-level spectroscopic techniques coupled with macroscopic kinetic and thermodynamic laboratory studies and field research to elucidate reaction mechanisms that influence fate, transport, reactivity, mobility, bioavailability, and toxicity of elements in the natural environment leading to effective and economical remediation/use strategies.

Dr. Scheckel received his B.S. in Agronomy from Iowa State University and his Ph.D. in Environmental Soil Chemistry from the University of Delaware. He is a Fellow in both the Soil Science Society of America and the American Society of Agronomy. Kirk is also an adjunct faculty member at the Ohio State University. *He will lecture on Soil Chemistry of Hazardous Materials.*

Wayne Hesch, B.Sc. is the Senior Product Champion for Visual MODFLOW Flex at Schlumberger Water Services. Wayne completed his Bachelor of Science Degree at the University of Waterloo and the Environmental Engineering Program at Conestoga College. Wayne has taught courses on conceptual modeling, groundwater modeling and water quality data management for more than 7 years for public and private organizations around the world. *Wayne will lecture on Practical Model Application for Risk Assessment and Site Remediation. Participants of this lecture will have increased knowledge of model applications, model selection, and model development and evaluation. He will also be conducting the evening workshop on Groundwater Modelling.*

**Tuesday
June 9, 2015**



Course Offerings:

- *Site Characterization and Conceptual Model Development*
- *Soil and Groundwater Characterization Tools and Techniques*
- *Sediment Characterization Tools and Techniques*

Evening:

- *Environmental Data Management - EDGE*

Gareth Owen will lecture on site characterization with a focus on conceptual model development and the path and process of site characterization for closure, risk assessment and remediation.

Dr. Brewster Conant Jr., P.Geo.(Ontario) is a Research Assistant Professor in the Department of Earth and Environmental Sciences at the University of Waterloo and has over 25 years of experience in hydrogeology and environmental consulting. He received a B.Sc. in Geology-Physics/Mathematics from Brown University in 1984, and received a M.Sc. and Ph.D. in Earth Sciences at the University of Waterloo in 1991 and 2001, respectively. He has

designed, managed, and conducted hydrogeological investigations for: contaminated site assessments; water supply protection; landfill assessments; evaluating agricultural best management practices; remediation; litigation; regulatory negotiation; and modeling studies. General areas of research interest are in physical and contaminant hydrogeology and in field methods and instrumentation. His main area of expertise and interest is in interactions at the groundwater/surface water interface and the examination of flow, transport, and fate of contaminants passing through it. He has developed innovative field methods, instrumentation, and numerical techniques for assessing groundwater/surface-water interactions including the use of temperature as a tracer techniques, infrared thermography, direct-push methods, and diffusion samplers. He has been an invited speaker at international scientific meetings and co-taught several training courses for USEPA. *Dr. Conant will lecture on Subsurface Characterization Tools and Techniques with a focus on Soil and Groundwater Sampling.*

Dr. Paul Sibley is a Professor in the School of Environmental Sciences at the University of Guelph who specialises in the assessment of potentially contaminated environmental media (water, soils, and sediments). His current fields of research include sediment toxicology and risk assessment, invertebrate toxicology focusing on benthic invertebrate community assessments in streams and lakes, disturbance ecology and impacts of land use practices on aquatic-terrestrial interactions. In the field of sediment characterization, his relevant research experience includes: collecting and processing site-specific water, sediment and soil samples for physical, chemical, and biological characterisation; analysis and interpretation of water, sediment, and soil quality data from field surveys and risk assessments; and development of provincial and federal water and soil quality guidelines and objectives. He has worked with metals, petroleum hydrocarbons, pesticides, polyfluorinated compounds, pharmaceuticals and personal care products, and other priority substances. Dr. Sibley has extensive knowledge of the fate and effects of contaminants in both aquatic and terrestrial environments. *Dr. Sibley will present the Practical Considerations for Collection of Sediment Samples for Chemical and Biological Assessment. Participants in this lecture will gain an understanding of the practical and conceptual issues associated with and factors that might influence the collection, handling, storage, and transportation of potentially contaminated sediments.*

Alek Hage is the Product Manager of EarthSoft. EarthSoft's EQuIS software is the most widely used environmental data management software in the world. EarthSoft's large clients include SGS, Shell Oil, Dow Chemical, TransCanada, Teck, Barrick, CDM Smith, ERM, Arcadis, Golder Associates, 5 US EPA Regions, several US States, and thousands of other governments, industrials, and consultants/labs. *Alek will be conducting the Environmental Data Management Workshop*

**Wednesday
June 10, 2015**



Course Offerings (AM):

- *Overview of Human and Ecological Risk Assessment*
- *Health and Safety at Hazardous Waste Sites*

Afternoon:

- *Networking Lunch (inclusive with course)*
- *Outdoor Demonstrations of Contaminated Site Technology and Techniques*

Dr. Marie BenKinney is a Principal Scientist with Exponent Environmental Group (a multi-disciplinary consulting firm providing environmental science and engineering services). She is an ecotoxicologist with more than 25 years of experience specializing in ecological risk assessment. Dr. BenKinney has designed, directed, and contributed to numerous environmental programs ranging from small site-specific and product-specific assessments to large multimillion-dollar site assessments and product development programs. Her work frequently includes assisting in developing negotiation and litigation strategies, and representing clients in public presentations, technical meetings, and negotiation sessions. She was previously employed for 15 years at Mobil Oil Corporation, where she was responsible for environmental testing and consultation activities concerning product registration, product safety stewardship, facility environmental issues concerning water quality and effluent discharges, site assessments and ecological impact assessments, and spill prevention management. Dr. BenKinney is a technical expert in aquatic testing procedures, and in assessing the fate, exposure, and environmental effects of petroleum hydrocarbons. *Dr. BenKinney's lecture will provide an introduction to the underlying concepts and general approaches for Human Health and Ecological Risk Assessment (HERA). Participants of this lecture will gain an understanding of the role of HERA in contaminated site assessment and remediation, basic components of HERA, complexity of planning a HERA, identifying HERA objectives, basic approaches to toxicity and exposure assessments, receptor and risk characterization, and dealing with uncertainty in HERA.*

Randall Stegner is President of E-Education Associates Ltd. and is responsible for occupational health and safety training in the United States and in Canada. His background encompasses twenty years experience in environmental, health & safety services, including sixteen years experience as a trainer for USEPA, GZA GeoEnvironmental and Northeastern University. He has developed numerous training programs, including the 40 hour General Site Worker, the Environmental Sampling Course, and the Ozone Depleting Substances curriculum. Most recently, Randy was employed by Water Technology International Corporation on behalf of Environment Canada to develop and deliver a USEPA approved "National Environmental Safety Program" for public and private personnel across Canada. He maintains credentials as a Certified Safety Professional, Canadian Registered Safety Professional and a Professional Geologist. *Mr. Stegner will be discussing and demonstrating occupational health and safety issues for contaminated and hazardous waste sites.*

Outdoor demonstrations of site characterization and remediation technologies will be held at a location near the hotel from 12:30 p.m. to 4:30 p.m. Full-scale soil and groundwater remediation technologies, and drilling, geophysical, and sampling and analysis equipment will be demonstrated. The temperature in early June in Toronto ranges from 10-22 C. Attendees should have appropriate apparel, such as rain gear, casual work clothes, and good walking shoes. Cameras and camcorders are permitted.



**Thursday
June 11, 2015**



Course Offerings:

- *Soil Remediation Techniques and Technologies*
- *Groundwater Remediation Techniques and Technologies*
- *Sediment Remediation Techniques and Technologies*

Evening:

Environmental Chemistry Made Easy For Site Investigation & Remediation

Dr. David Reisman, currently a Senior Technical Advisor for CDM Smith, a full-service consulting, engineering, construction, and operations firm, and the previous Director, Engineering Technical Support Center, National Risk Management Research Laboratory, U. S. Environmental Protection Agency. Mr. Reisman worked for the U. S. Government from 1976-2012 with the National Park Service (Park Ranger), the National Institute for Occupational Safety and Health (Information Specialist), and in many positions with the Environmental Protection Agency (EPA). He served for several years as a Temporary Advisor to the World Health Organization (WHO) in Geneva, Switzerland, authored many environmental health criteria documents for both EPA and WHO, and published over 50 peer-reviewed journal articles, many in the area of remediation and mining influenced water treatment. David holds a Masters Degree in interdisciplinary environmental sciences from Miami University, and has completed additional graduate work in engineering at the University of Cincinnati. For over 15 years, David assisted in the development of risk assessment guidance for the EPA Office of Research & Development in the waste, ambient and drinking water and hazardous air pollutants areas. As Director of the EPA's Engineering Technical Support Center for almost 15 years, David worked on several hundred hazardous waste sites, conducted treatability and pilot technology studies, and assisted EPA regional personnel and contractors in site characterization, soil remediation, technology selection and treatability study design. David is the recipient of many Government awards and has received several medals for his outstanding work in supporting EPA's regional personnel. *Dr. Reisman will lecture on soil and sediment remediation technologies and techniques.*

Dr. David Jewett is the Director of the U.S. EPA's National Risk Management Research Laboratory, Ground Water and Ecosystems Restoration Division located in Ada, Oklahoma. Dr. Jewett leads a team of geochemists, environmental scientists, environmental engineers, hydrogeologists, microbiologists, and soil scientists conducting research and providing technical support related to site characterization and remedial technology development, evaluation, and implementation at hazardous waste sites in order to protect and restore ground water, surface water, and ecosystem resources. He is a hydrogeologist with over 30 years of site characterization and subsurface remediation experience in government, industry, and academia. His research interests include site characterization techniques, contaminant fate and transport, ground water flow and solute transport modeling, and ground water/surface water interactions. Dr. Jewett was a hydrologist specializing in applied research and technical support and the former Director of the U.S. EPA's Center for Subsurface Modeling Support before accepting the responsibilities as Chief of the Subsurface Remediation Branch. Dr. Jewett has a B.S. in geology from Syracuse University, a M.S in geology from The Wichita State University, and a Ph.D. in hydrology from the Department of Hydrology and Water Resources at The University of Arizona. Prior to joining the U.S. EPA, Dr. Jewett was on the faculty of the Department of Geology at Indiana University Purdue University Indianapolis. He also has several years experience as a hydrogeologist and project manager in the environmental remediation industry. *Dr. Jewett will lecture on groundwater remediation techniques and strategies through comparisons and case studies highlighting: Air Sparging; Dynamic Vapour Extraction; Flushing/Stripping; Source Removal; Bioremediation; Bioslurping; UV/Ozone/Hydrogen Peroxide Oxidation; Granular Activated Carbon Systems; Air Strippers; Oxygen Enhancement; Zero-Valent Iron (Funnel-and-Gate) and Physical and Hydraulic Containment.*

Jeff Daniel, P. Eng is a Principal and Senior Project Manager with Conestoga-Rovers & Associates. Mr. Daniel manages CRA's surface water and environmental design groups and surface water/sediment modeling group. Mr. Daniel has over 19 years of experience in the surface water and environmental fields. During his career, Mr. Daniel has focused on the investigation and cost-effective remediation of sediment projects of varying sizes, including a project in the central US where over 2 million tonnes of material has been removed; the Willow Run Creek Site in Michigan which involved the removal of approximately 370,000 cubic yards of contaminated sediments and surrounding impacted soil, and a sediment dredging design project on the Ottawa River which included dredging of over 225,000 CY of impacted sediment and dewatering using geotubes. Mr. Daniel is currently managing a major sediment assessment in West Virginia. Mr. Daniel has presented courses on sediment management and naturalized restoration in the United States and Canada. *Mr. Daniel will lecture on Sediment Remediation Technologies and Restoration Approaches.*

George (Bud) Ivey, is the President and Senior Remediation Specialist with Ivey International Inc.. He has over twenty-five years of environmental assessment and remediation experience, and has worked on more than 1,500 projects internationally. His background includes: Organic Chemistry, Geological Engineering, and has a Master's Certificate in Project Management. His education and the school of hard knocks have provided him with a good foundation for assessing and remediating many of today's environmental challenges. Among some of his more notable accomplishments include, several international patents, Environmental Business Journal (EBJ) Awards (2), North American Frost & Sullivan Award for Technology Innovation, Globe Award for Environmental Innovation & Application, R.F Weston Award Advances In Waste Management, and MISTIC Award for Environmental Excellence. He continues to conduct applied soil, solid waste, waste water, and groundwater research, and is currently working on several international remediation projects through a global distributor and business alliance network. *Mr. Ivey will be presenting Environmental Chemistry Made Easy For Site Investigation & Remediation evening lecture*

**Friday
June 12, 2015**

Course Offerings:

- *Contaminated Site Management*
- *Environmental Law Applicable to Contaminated Sites*
- *Guided Tour to Niagara Falls in the Afternoon for International Attendees*

Gareth Owen will lecture on contaminated site project management issues with a focus on remedial and risk management planning/costing and remedial optimization.

Harry Dahme is the Senior Partner in the Environmental Law Group of Gowlings in Toronto. Mr. Dahme has expertise in the full range of environmental law services. He has acted for a wide variety of clients in dealing with such matters as contaminated lands, in developing corporate environmental due diligence programs, obtaining environmental approvals and providing expert opinion in respect of environmental matters generally. *Mr. Dahme will lecture on Canadian Environmental law as well as basic legal principles related to contaminated property and environmental investigations.* After attending this lecture, the attendee will have increased knowledge of Canadian Environmental Law applicable to contaminated and hazardous waste site management and private sector liability for clean-up of contaminated sites.

Hotel Accommodations and Course Lecture Location

The course will be held at the Sheraton Centre Toronto Hotel (123 Queen Street West, Toronto, Ontario M5H 2M9) The Hotel is one of the largest CAA/AAA Four Diamond hotel located near all of Toronto's attractions and connected to the financial and entertainment districts by way of the PATH, a 16-mile underground network of shops and services. It is also steps away from the Eaton Centre, Bloor Yorkville shopping district, Mirvish Toronto theatres, world-class restaurants, art galleries and museums



A block of rooms has been reserved at a substantially reduced rate of \$195.00, below most corporate and government rates for a standard room. You must, however, make your reservation by EST 5 PM, **May 9, 2015**, and mention *GOwen Environmental*. The rate does not include applicable taxes and fees.

To make a reservation, please call 1.888.627. 7175, or visit <http://www.sheratontoronto.com/>



Optional Evening Workshops and Lectures



On **Monday evening**, optional computer modelling workshop will be held by Schlumberger Water Services to demonstrate the application of environmental decision support software, and groundwater and risk assessment modelling tools. Participants in these workshops will become familiar with the input parameters required to build and calibrate groundwater flow models. Participants will



be introduced to various graphical tools for evaluating well capture zones, determining preferred flow and contaminant migration pathways, and optimizing groundwater remediation systems.

On **Tuesday evening**, EarthSoft Inc. will discuss the Data Management Multiplier for Environmental Consultants on how EQuIS Data Gathering Engine (EDGE) provides higher quality data for better decision support and data analysis, and increasing productivity and efficiency.

On **Thursday evening**, Ivey International Inc. will have a session on Environmental Chemistry Made Easy For Site Investigation & Remediation.

Course Schedule

The course is offered in two sessions:

- The first session takes place from Monday, June 8 to Wednesday evening, June 10 after the Outdoor Demonstration Session.
- The second session takes place from Wednesday morning, June 10 to Friday afternoon, June 12.

On-site registration will occur Monday, June 8 at 07:30 - 08:30, for those individuals taking the first session or the entire course. For those attending the second session only, registration will be Wednesday, June 10 at 07:30.

The Course will meet daily from 8 a.m. to around 12 noon and from 1 to 5:30 p.m. with two breaks in the morning of 15 minutes and two breaks in the afternoon for 15 minutes. Friday will begin at 8:30 a.m. and end at 3:00 p.m. Optional evening workshops will be available on Monday, Tuesday and Thursday, from 7pm to 9pm.



Registration and Course Fee

Advanced registration is strongly advised. Due to the hands-on nature of this Course (demonstrations, workshops, and lectures), enrolment is limited and applications will be accepted on a first come first served basis. The Course has been filled to capacity the past seventeen years.

Please register **on-line through the Course Registration webpage** or **mail the downloaded application form** with a cheque or training authorization by **May 30, 2015**. For those requiring time to obtain authorization, we suggest faxing the same application form with payment to follow or registering online with a payment to follow option. Registered participants will receive confirmation of registration and information package.

Early Registration (payment received by May 8, 2015* EXTENDED)	<input type="checkbox"/> \$1,695 Canadian + \$220.35 (HST)
Member of Affiliated Organization or Association **	<input type="checkbox"/> \$1,695 Canadian + \$220.35 (HST)
Non-Member	<input type="checkbox"/> \$1,895 Canadian + \$246.35 (HST)
Group Rate (5 or more) / Remote Community	<input type="checkbox"/> \$1,595 Canadian + \$207.35 (HST)
Regulatory Agency Rate	<input type="checkbox"/> \$1,495 Canadian + \$194.35 (HST)
Previous Course Attendees (5 spaces available)	<input type="checkbox"/> \$895 Canadian + \$116.35 (HST)
For individuals who choose to take only one of the two sessions:	
Session Rate (1) or (2) (3 days)	<input type="checkbox"/> \$1,395 Canadian + \$181.35 (HST)

***Please contact us to determine if your Organization is affiliated with the Course*

The full fee is due **May 8, 2015**, for early registration and **May 30, 2015** for all other registration.

Cancellation for fees received before **May 8, 2015** will be fully refunded. Cancellation for fees received after May 8, 2015 will have 50% of the registration fee refunded. No refund will be provided for cancellation after May 20, 2015. Substitutions of course participants or deferred course attendance may be arranged.

The registration fee covers all course materials, all breaks, 1 networking lunch, use of computers and software in evening workshops, outdoor demonstration day and entry to the CN Tower and for international participants, optional trip to Niagara Falls

Course Materials

Students will receive over 1,200 pages of notes in an attractive binder and access to the online resource folder. In addition, they will receive a certificate of completion. It is recommended that course participants bring a knapsack or a carry-on bag to transport course materials.

Continuing Education Units (CEUs)

The allocation is 3 CEUs for the first session, 2.7 CEUs for the second and 4.7 CEUs for the entire course. The CEUs are accredited by the International Association for Continuing Education and Training (IACET).

Web and Resource Site

For more information on the course, please refer to the course and Contaminated and Hazardous Waste Site Resource Page located at
www.contaminatedsite.com

Contaminated & Hazardous Waste Site Management**- Theory, Practice & Outdoor Field Demonstrations****June 8-12, 2015****Sheraton Center Toronto Hotel**123 Queen Street West,
Toronto, Ontario M5H 2M9, Canada**GOWen Environmental Ltd.**Suite 966, 3044 Bloor Street West
Toronto, Ontario, Canada M8X 2Y8
Telephone: (416) 259-6911
E-mail: gowen@contaminatedsite.com

Last	First	Initial
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Job Title

Company/Organisation Name

Business Address

City	Province/State/Country	Postal or Zip Code
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Telephone

Email

Please help us process your application faster and more efficiently.

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Payment Method	
<input type="checkbox"/> Secured Online Registration Form at www.contaminatedsite.com under Registration or Call in Credit Card .	
<input type="checkbox"/> Cheque to follow – (please make cheques payable to GOWen Environmental Limited)	
<input type="checkbox"/> Purchase Order/Training Authorization to follow – (P.O. # _____ must be submitted with this form)	
How did you hear about the Course?	
<input type="checkbox"/> Colleague recommendation	<input type="checkbox"/> Newsletters
<input type="checkbox"/> Internet search engine	<input type="checkbox"/> Other:

Scan and Email: gowen@contaminatedsite.comThe full fee is due **May 8, 2015*** for Early Registration and **May 30, 2015** for all others, unless prior arrangements for invoicing have been made. Substitutions of course participant may be arranged.**EMAIL OR MAIL BACK TODAY!***Please contact us to determine if your Organization is affiliated with the Course or if they want to become an affiliate of the Course.*

Cleaning Up the Mess (Excerpt from ECO Canada - Newsletter)

The Canadian contaminated sites sector has grown quickly over the past few years, driven by a combination of regulatory and economic pressures. In 2008, ECO Canada's Contaminated Sites Report - When Supply Does Not Meet Demand - affirmed that between 2004 and 2019, the federal government would commit up to \$4 billion to clean up properties that it owns or that fall under federal responsibility. This includes more than 4,400 federal contaminated sites as well as 28,000 non-federal properties.

In conjunction with high profile cases such as the BP oil spill, these industry-wide changes have led to heightened awareness on issues relating to contaminated sites, encouraging countries around the world to develop and implement stricter guidelines and standards for the investigation, mitigation and remediation of contaminated sites. However, like most environmental work, the skills needed to clean up these sites are multidisciplinary and require a unique set of cross-sectoral competencies from employees.

There are a number of environmental training facilities currently operating in Canada, but GOWen ENVIRONMENTAL is the only facility in the world that offers a one week indoor-outdoor course covering all issues related to managing subsurface contamination, from theory to practice. The fifteen instructors leading the course come from all across North America with backgrounds in academia, private industry and government, and are recognized as leading experts and educators in their respective fields.

The course is a joint project between GOWen ENVIRONMENTAL, the Association for Environmental Health and Sciences and the International Association of Hydrogeologists and was founded to provide leading-edge environmental training and networking through courses, conferences and workshops. This year will mark the 16th anniversary of its annual Contaminated and Hazardous Waste Site Management Course, a comprehensive course that provides a solid theoretical and practical foundation in contaminated site management. The course integrates several different disciplines and has been developed specifically for individuals who manage, regulate, investigate, remediate or are impacted by contaminated sites.

Below is one comment of the many comments we have received about the course.

Subject: Great Course in Toronto !!

Please go to www.contaminatedsite.com to check-out the course coming-up in Toronto. This is truly a world-class course and this year it is held right in Canada! Perry Sarvas and Kip Hawley both attended and it was the best training they have ever had. This year looks even better! Feel free to call Perry or Kip if you want a participants perspective. I strongly recommend this course, especially for those who want some in-depth contaminated or hazardous waste site management training, contaminated site program or project management or risk-assessment. If you having been waiting a long time for training, I think you will be very pleased with this course.... fill-out your 15-11 form today since there is relatively little time to process your request!

Jim Gehrels
Groundwater Group Leader
Northern Region
Ministry of Environment & Energy

