

# Innovative Remediation Solutions Workshop - Ontario Region

February 2 & 3, 2009, Toronto, ON  
89 Chestnut Street, University of Toronto

Innovative Canadian Remediation Solutions | Technology Vendor Presentations | Federal Updates | Case Studies | Mini-Trade Show | Breakout Sessions | Networking

## BIOGRAPHIES AND COMPANY PROFILES

Reception Sponsor:

*about*  
**REMEDIATION**

Supporting Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario FCSAP Interdepartmental Working Group



Government of Canada / Gouvernement du Canada

# Innovative Remediation Solutions Workshop - Ontario Region

February 2 & 3, 2009, Toronto, ON  
89 Chestnut Street, University of Toronto

Innovative Canadian Remediation Solutions | Technology Vendor Presentations | Federal Updates | Case Studies | Mini-Trade Show | Breakout Sessions | Networking

## Biographies

### Workshop Chairs

#### **Tammy Lomas-Jylha, VP Remediation and Brownfield Services, OCETA**

Tammy Lomas-Jylhä has more than 25 years of diversified public and private sector experience in the environmental industry. During the past 10 years, Tammy has taken a lead role in four main areas at OCETA: corporate marketing, education and outreach, clean technology sector services and remediation and brownfield redevelopment services.

As Vice President of Remediation and Brownfield Services, she manages aboutREMEDATION.com (Canada's leading information resource on site remediation and Brownfield redevelopment) and is involved in numerous initiatives related to brownfield redevelopment, remediation and clean technology. She also is an active member of the Canadian Brownfields Network where she acts as the Executive Director.

She has collaborated with all three levels of government and the private sector to encourage green remediation and innovative approaches for sustainable redevelopment, and increase awareness of the opportunities and best practices to improve commercial success in Canada's Clean Technology Industry.

#### **Kevin Jones, President and CEO, OCETA**

Kevin Jones has more than 20 years of diversified and broad based public and private sector experience in the areas of industrial energy conservation program design and delivery, marketing and communication, technology research and commercialization, environmental sustainability and project management.

Since 1999, Kevin has designed, marketed and managed programs to improve the energy, water and environmental performance of Ontario's industrial sector. He has conducted face-to-face meetings with 200 industrial companies on energy and water management and has been involved in the completion of 150 industrial plant assessments that have identified operational, best practice and clean technology improvements to reduce energy and water usage and greenhouse gas (GHG) emissions. Kevin has senior management responsibility to lead OCETA's delivery of the \$1 M Ontario Research Commercialization Program, to build customer and market acceptance of innovative environmental technology solutions.

Mr. Jones has an Executive MBA from Athabasca University, a Master of Science in Environmental Planning from the University of Toronto, and an Honours B.A. from McMaster University.

Reception Sponsor:

**about  
REMEDIATION**

Supporting  
Organization:



Lunch Sponsor:

**FCM** | Green Municipal Fund  
Fonds municipal vert

Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government of Canada  
Gouvernement du Canada

## Speakers (In Order of Agenda)

### **Shawn Michajluk, Head - Public Sector Unit, Environmental Protection Operations Division, Environment Canada**

Shawn Michajluk (mick-eye-luck) graduated from the University of Toronto as a chemical engineer. After working for 2 years on the Ontario Municipal/Industrial Strategy for Abatement program with the Ontario Ministry of the Environment, Shawn has been working in Environment Canada's Ontario regional office for over 16 years. His main focus was on water pollution and Great Lakes. Shawn has been working on contaminated sites since January 2008. In September of 2008, Shawn officially became the Head of the Public Sector unit dealing with contaminated sites, federal facilities and First Nations, and municipal wastewater.

### **Stephan Moushian, Manager, Risk Assessment & Environmental Remediation, Public Works and Government Services Canada**

Stephan Moushian, P.Eng. has been the Manager of Environmental Risk Assessments and Remediation Group of Public Works and Government Services Canada in Ontario Region for the last eight years. Prior to that, Stephan was a Senior Environmental Advisor for the Department of Fisheries and Oceans in Ottawa as well as for Indian and Northern Affairs Canada. Stephan has been involved in contaminated sites management and more specifically in the FCSAP program from its creation and over the years has managed several major federal contaminated sites projects all over Ontario.

### **Sebastien Yelle, Manager, Expertise in Sustainable Development Programs, Public Works and Government Services Canada**

Sebastien Yelle holds a Bachelor degree in Science from the University of Quebec in Montreal and a Masters degree in environment from Sherbrooke University. He started working for Public Works and Government Services Canada 11 years ago and has worked on the contaminated sites file since. He is the Quebec region contaminated sites coordinator for his department and he has worked on a number of remediation projects with several departments. Most recently, he has been working on national projects, including the Guidance and Orientation on the selection of treatment technologies (GOST) and other enabling tools for the contaminated sites community. He is currently working on the organization of workshops on the use of innovative technologies with the participation of federal custodians and the industry.

### **Charles Greer, Head - Environmental Microbiology, Biotechnology Research Institute (BRI), National Research Council of Canada**

Charles Greer is a principal research officer and group leader of the Environmental Microbiology group at the National Research Council of Canada's Biotechnology Research Institute in Montreal. He is an adjunct professor in the Department of Natural Resource Sciences of McGill University, and an associate editor for the Canadian Journal of Microbiology.

### **Zoltan Tompa, Director Applications, Sustainable Development Technology Canada**

As Director, Applications for SDTC, Zoltan Tompa interacts closely with sustainable-development technology developers throughout Canada, helping them understand the SDTC funding-application process and providing feedback and guidance on how to articulate their value propositions in clear and compelling ways. Zoltan brings to SDTC extensive experience in both technology management and financial services.

### **Lee Koy-Hong, CTO, A GEO Technology Inc.**

Koy-Hong Lee worked for over 15 years in biomedical corporations where he had handled over 50 different technological projects and products. For the last 12 years he has focused upon Technology Development. Besides bioremediation, other technology interests include electric stimulation for pain relief and mathematics in consumer behaviour. He holds a B.Sc., Biochemistry, from McGill and an MBA from Toronto.

### **Guy Lavoie, Project Director, Biogenie S.R.D.C. Inc.**

Mr. Guy Lavoie is a Project Director with Biogenie with over 16 years of experience in environmental investigation and site remediation. He has spent the last 11 years with Biogenie, supervising and managing large-scale remediation projects throughout North America. He has been involved with upstream oil companies in Alberta for the last 6 years, implementing temporary and permanent Biotreatment facilities.

Reception Sponsor:

*about*  
**REMEDIATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government of Canada  
Gouvernement du Canada

**Bruce M. Greenberg, President, Waterloo Environmental Biotechnology Inc.**

Dr. Bruce Greenberg earned his B.Sc. in Chemistry from the University of California, Berkeley in 1980. He earned his Ph.D. in Chemistry from University of Colorado, Boulder in 1985, with research on the molecular biology of the photosynthetic apparatus. From 1985 – 1988, Dr. Greenberg held an NIH Post-Doctoral Fellowship in the Department of Plant Science, Weizmann Institute of Science, Rehovot, Israel, where he performed research on plant responses to the environment. From 1988 to the present, Dr. Greenberg has been a Professor at the University of Waterloo in the Department of Biology. His research has continued to probe the impacts of the environment on plants, with active research on effects of contaminants on plants and the use of plants for phytoremediation of environmental contamination. In 2005, Dr. Greenberg founded Waterloo Environmental Biotechnology, Inc., a spin-off company from his research which specializes in phytoremediation. He has over 25 years of research experience in environmental biology and chemistry, and more than 150 publications.

**David Hill, Director of Operations, The Adventus Group**

David Hill, Director of Operations at Adventus, received a Master's degree in Civil Environmental Engineering from the University of Toronto, during which time he published and presented his work in the field of biological treatment of groundwater in fractured media. As a professional engineer in Ontario, Mr. Hill has been intensely involved in the development of the DARAMEND® and EHC® family of technologies. He has successfully managed numerous bench scale, pilot scale, and field scale projects and has presented many scientific papers based on those projects at conferences throughout North America.

**George (Bud) Ivey, President & Senior Remediation Specialist, Ivey International Inc.**

Mr. Ivey is the President and Senior Remediation Specialist with Ivey International Inc. He has over twenty two year's environmental experience, and has worked on more than 1200 projects internationally. His background includes Organic Chemistry, Geological Engineering, and a Master's Certification in Project Management. He holds several international patents; continues to conduct applied soil, solid waste, waste water, and groundwater research; and is currently working on several research and remediation projects around the world. Among some of his more recent accomplishments include:

- The 2007 Environmental Business Journal Technology Achievement (Bronze) Award;
- The 2006 North American Frost & Sullivan Award for Technology Innovation; and
- The 2006 Globe Award for Environmental Innovation and Application (March 31, 2006).

**Maureen Dooley, Northeast Region Manager, Regenesis**

Ms. Dooley has over twenty years experience in many aspects of environmental industry including project management, research and development, senior technical oversight, remedial design and laboratory management. She is responsible for managing both sales and technical support associated with Regenesis bioremediation and chemical oxidation products. Much of her career involved the development and implementation of bioremediation programs. The past 3 years focused on chemical oxidation applications at petroleum and chlorinated hydrocarbon sites. Prior experience includes the completion of numerous treatability studies designed to evaluate the biodegradation of a wide range of chemical constituents that include chlorinated solvents, petroleum hydrocarbons, explosives, aromatic hydrocarbons and pesticides.

**Darko Strajin, Regional Manager - Environmental Services, Trow Associates**

Mr. Strajin has over 20 years of consulting experience in the environmental and geotechnical fields. His areas of expertise include the management and assessment of contaminated sites and the design and implementation of innovative, cost-effective, in-situ remedial systems for impacted soil and groundwater. Darko has been instrumental in the remediation of numerous Brownfield sites throughout Toronto and his broad experience in engineering enables him to provide superior service to the environmental industry.

**Paul Wilson, Principal, Aeon Egmond Ltd.**

Paul Wilson, a principal of Aeon Egmond Ltd, is a professional engineer with over 20 years experience in environmental project management. He has developed on-site testing protocols for Aeon Egmond Ltd and other large corporations for field portable X-ray Fluorescence technology for the rapid detection and analysis of metals in soil and Ultraviolet Fluorescence technology for field screening of soil and groundwater for petroleum hydrocarbons and PAHs. His work also includes a wide variety of geoenvironmental projects including site assessments and remedial design and implementation.

Reception Sponsor:

*about*  
**REMEDIATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government of Canada  
Gouvernement du Canada

**Gordon Bures, Director of Remediation Services, Frac Rite Environmental Ltd.**

Gordon is a professional engineer and a Principal at Frac Rite Environmental Ltd. based in Calgary, Alberta. Gord earned a Bachelor of Science Degree in Geological Engineering at the University of Manitoba in 1985, and a Master of Environmental Engineering Degree at the University of Alberta in 1993. Gord is an experienced practitioner in the in situ design and implementation of remediation systems at contaminated sites. For the last 15 years he has specialized in the enhanced remediation of low permeability soils using soil hydraulic fracturing and amendment delivery techniques.

**John Vogan, President, EnviroMetal Technologies Inc.**

John Vogan (M. Sc., Earth Sciences, University of Waterloo) is President of EnviroMetal Technologies Inc. (ETI). He provides technical input in all aspects of ETI's iron permeable reactive barrier (PRB) applications. He has been a contributing author to several technical USEPA, USDOD, and other publications concerning PRB technology. He is also involved in the development and application of related iron-based technologies in the Adventus Group of companies, which ETI joined in 2004.

**Kevin Sharfe, President, Clean Earth Solutions Ltd.**

Kevin Sharfe is from Saskatoon where he worked as a commercial real estate development manager. His exposure to industry's call for environmentally prudent practices and remedial actions lead him to bioremediation. After moving to Toronto in 2003, he has worked on bioremediation projects involving residential, government, military and interests. Kevin graduated from the University of Saskatchewan with a Bachelor of Commerce and is the President of Clean Earth Solutions Ltd.

**Robert Focht, Environmental Program Manager, SAIC Canada**

Robert is a Professional Engineer and Professional Geoscientist with over 14 years experience in the environmental industry. He obtained both his B.A.Sc in Chemical Engineering and M.Sc. in Hydrogeology from the University of Waterloo. His experience includes environmental technology development, contaminated sites management, and decontamination of surfaces and sensitive equipment. Robert is SAIC Canada's Environmental Program manager. He is responsible for strategic planning, seeking new business opportunities, financial management and human resource management.

**Dr. Denis O'Carroll, Assistant Professor in Civil and Environmental Engineering, University of Western Ontario**

Dr. O'Carroll is an Assistant Professor in Civil and Environmental Engineering at the University of Western Ontario. Dr. O'Carroll completed his Ph.D. at the University of Michigan where he was awarded the 2004 Walter J. Weber, Jr. Student Prize. Upon completion of his Ph.D. Dr. O'Carroll completed one postdoctoral fellowship at the University of Michigan and was awarded a Government of Canada NSERC postdoctoral award to complete a postdoctoral fellowship at the University of Toronto. He was recently awarded the Province of Ontario 2007 Early Researcher Award for his work in the "Development of Nanomaterials and Hot Water Flooding for Enhanced Groundwater Remediation". The goal of this award is to attract and retain the best and brightest research talent in the Province of Ontario. Prior to completing his Ph.D. Dr. O'Carroll worked as a consultant engineer on a variety of environmental engineering projects and earned his P.Eng. Dr. O'Carroll has significant experience in laboratory studies developing innovative remediation schemes in addition to site remediation consulting experience. His work has investigated the utility of nanotechnology for contaminated site remediation, the impact of soil surface chemistry on NAPL migration and remediation and the utility of hot water flooding for NAPL remediation. He has ongoing research projects developing nanometals for contaminated site remediation and investigating the fate of carbon based nanoparticles in the environment. Finally Dr. O'Carroll is co-director of the RESTORE research centre (Research for Subsurface Transport and Remediation) at the University of Western Ontario. The RESTORE group has over 20 personnel developing innovative remediation technologies.

**Paul Gregory, Community Outreach, Federation of Canadian Municipalities (FCM)**

Paul is at the centre of one of the largest networks of municipal practitioners in Canada who are working on the issue of sustainable communities. While listening to the concerns of municipalities from across Canada, He has learned a great deal about the challenges municipalities face on the path to becoming sustainable communities and that its "sometimes easier said than done." For fourteen years Paul has been working with all levels of government, business and non-profit environmental organizations. Paul's involvement in the FCM's Green Municipal Fund gives him a birds eye view of projects across Canada that help municipalities focus on best practices for becoming a sustainable community. Paul provides municipalities with a broad range of skills and a breadth of knowledge in environmental sustainability issues.

Reception Sponsor:

*about*  
**REMEDIATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAR Interdepartmental Working Group



Government of Canada  
Gouvernement du Canada

# Company Profiles

## The Adventus Group / EnviroMetal Technologies Inc.

The Adventus Group (Adventus Americas and EnviroMetal Technologies) provides in-situ groundwater treatment technologies including EHC<sup>®</sup> injectable media for treatment of chlorinated solvents and heavy metals, injectable EHC<sup>®</sup>-O controlled release oxygen for aerobic bioremediation, and iron permeable reactive barrier (PRB) technology. Our DARAMEND<sup>®</sup> technology treats soils impacted by PAHs, pesticides, and explosives. RemOx-EC is suitable for treatment of DNAPLs associated with manufactured gas and wood preserving facilities, and ZVI-clay technology targets chlorinated solvent source zones.

John Vogan, M.Sc., President  
745 Bridge St. W., Suite 7, Waterloo, ON, Canada N2V 2G6  
Tel: 519-746-2204, ext. 249, Fax: 519-746-2209, E-mail: john.vogan@adventusgroup.com  
[www.eti.ca](http://www.eti.ca) / [www.adventusgroup.com](http://www.adventusgroup.com)

## A Geo Technology Inc.

Instead of using superbugs or streamed bacteria, we take a contaminated soil sample from the subject site then stimulate the indigenous soil microbes into expressing the inherent ability to breakdown hydrocarbon contaminants. Since 1997, through environmental consultants, we have successfully bioremediated, *in situ*, a number of sites, where the contaminants were in hard-to-reach situations, beneath buildings, or in fractured rocks.

Lee Koy-Hong  
Tel: 416-898-2829, E-mail: ageo@scientist.com

## Aeon Egmond Ltd.

Aeon Egmond Ltd (AEL) is a geoenvironmental and geotechnical engineering firm based out of Mississauga, Ontario. The AEL team uses more than 20 years of experience in the industry to incorporate new technologies with existing protocols and equipment to optimize their engineering approach and provide high quality project data at a lower cost.

6800 Kitimat Road, Unit 13, Mississauga, ON, Canada L5N 5M1  
Tel/Fax: 416-657-2367, Toll-Free: 1-800-267-4797, E-mail: info@aeonegmond.com  
[www.aeonegmond.com](http://www.aeonegmond.com)

## AGAT Laboratories

AGAT Laboratories is a full service laboratory and science company with operations worldwide. AGAT is comprised of nine divisions: (1) Rock Properties, (2) Oil Sands, (3) Geology and Petrology (4) Oil and Gas Chemistry, (5) Agricultural, (6) Tribology, and (7) Air Quality Monitoring. (8) Reservoir Engineering, (9) Environmental. AGAT provides Environmental Laboratory Services including soil, air, water analysis and occupational health monitoring.

3801 21st St. NE, Calgary, AB, Canada T2E 6T5  
Tel: 403-299-2000, Toll-Free: 1-800-661-7174, E-mail: opportunities@agatlabs.com  
[www.agatlabs.com](http://www.agatlabs.com)

## AIM Environmental Group

AIM Waste Management Inc. was incorporated in 1989 as a waste management firm with a focus on providing environmentally responsible disposal and recycling services to the construction industry. AIM Waste Management Inc. evolved into an environmental contracting firm in 1993 to AIM Environmental Group, which has grown through strategic partnerships with Maple Reinders Constructors Ltd. and others, including Komptech and VanKaathoven Group. AIM Environmental Group has recently formed a Joint Venture with BioSoil out of the Netherlands to bring their technology, experience and know-how to the Canadian market place. In-situ and ex-situ soil and water remediation, soil washing, Chemical Oxidation and barrier systems now round out our remediation product offerings. Approximately 85% of the jobs taken on are on a risk basis with guaranteed results for a fixed fee. AIM recently formed a partnership with Ground Effects Environmental from Regina, Saskatchewan to represent their equipment and processes in the Ontario market place.

Jim Skeoch  
400 Jones Road, Hamilton, ON, Canada L8E 5P4  
Tel: 905-560-0090, Mobile: 905-912-1017, E-mail: jskeoch@aimgroup.ca  
[www.aimgroup.ca](http://www.aimgroup.ca)

Reception Sponsor:

**about**  
**REMEDICATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government of Canada  
Gouvernement du Canada

## Biogenie S.R.D.C. Inc.

Biogénie S.R.D.C. Inc. is a subsidiary of EnGlobe Corp., a Canadian-based international company specializing in the management of organic waste streams and contaminated sites. Established since 1986 as a full-service contaminated soil and groundwater remediation solution provider, we have operating locations across Canada, in the provinces of Quebec, Alberta, and in the Canadian North.

4495 Wilfrid-Hamel Blvd., Suite 200, Quebec City, QC, Canada, G1P 2J7  
Tel.: 450-961-3535, Toll-Free: 866-961-3695, Fax: 450-961-0220, Email: [montreal@biogenie-env.com](mailto:montreal@biogenie-env.com)  
[www.biogenie-env.com](http://www.biogenie-env.com)

## Biotechnology Research Institute (BRI) / National Research Council of Canada (NRC)

The National Research Council (NRC) is a leader in the development of an innovative, knowledge-based economy for Canada through science and technology.

The Biotechnology Research Institute (BRI) is the largest NRC Institute in Canada dedicated to R&D in biotechnology. With more than 800 people, including NRC personnel, students, guest researchers and scientists, it works in three main research sectors: health, bioprocess and environment. NRC-BRI maintains strong links with industry and universities to generate benefits for Canada.

Charles Greer  
6100 Royalmount Ave., Montreal, QC, Canada. H4P 2R2  
Tel: 514-496-6182, Fax: 514-496-6265, E-mail: [charles.greer@cnrc-nrc.gc.ca](mailto:charles.greer@cnrc-nrc.gc.ca)  
[www.irb-bri.cnrc-nrc.gc.ca](http://www.irb-bri.cnrc-nrc.gc.ca)

## Canada Colors and Chemicals

Canada Colors & Chemicals is one of the largest independent distributors in Canada. We are a market leader and full service provider of over 5,000 commodity and specialty products, supplying businesses a wide variety of sectors including environmental and water treatment. Amongst the vendors we represent are Regenesis, Carus, and Ivey International who provide chemical oxidants, biostimulants, and surfactants for use in remediating contaminated soils and groundwater.

Leonard Chan  
80 Scarsdale Road, Don Mills, ON, Canada M3B 2R7  
Tel: 416-848-7692, Fax: 416-449-4269  
[www.canadacolors.com](http://www.canadacolors.com)

## Cement Association of Canada

The Cement Association of Canada (CAC) represents the Canadian cement producers – eight companies with clinker and cement manufacturing facilities, granulators, grinding facilities and cement terminals. We work with stakeholders to maintain a sustainable industry and promote the economic and environmental benefits of building with cement and concrete. One of the environmental benefits is achieved through solidification/stabilization (S/S) using Portland cement which can turn environmental liabilities into economic opportunities. S/S has been applied successfully at many brownfield areas in North America, allowing the treated soil to be reused safely at the site. This reduces the need to remove hazardous materials and to transport such materials through communities.

Teresa Sarkesian, Director, Business Development - Ontario Region  
1500 Don Mills Road, Suite 703, Toronto, ON, Canada M3B 3K4  
Tel: 416-449-3708, Fax: 416-449-9755  
[www.cement.ca](http://www.cement.ca)

## Chemco Inc.

Chemco Inc. is supplying products and services for the remediation of contaminated soil and groundwater using chemical oxidation and/or Enhanced Bioremediation. Chemco will provide technical support on these technologies by doing product selection and supply, logistics, laboratories analysis to determine the Natural Oxidant Demand and run treatability study, help with the injection design and provide Health and Safety staff training. We are the Exclusive Canadian distributor for the FMC Kloxur – Sodium Persulfate and Advanced Oxidation Technology unique catalysts.

124 Hambourg, Saint-Augustin-de-Desmaures, Quebec, G3A 0B3  
Tel: 418-953-3480, Toll-Free: 800-575-5422, Fax: 418-878-5323  
[www.chemco-inc.com](http://www.chemco-inc.com)

Reception Sponsor:

*about*  
**REMEDICATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government  
of Canada

Gouvernement  
du Canada

## Clean Earth Solutions Ltd.

Clean Earth Solutions Ltd. manufactures and distributes patented in situ solutions that enhance hydrocarbon remediation and bioremediation. Colloid and Cytokine technologies deliver practical solutions by complementing many remedial systems. A full line of environmentally safe industrial cleaners and degreasers are also available to address manufacturing and maintenance requirements. A team of microbiologists, chemists and remediation specialist balance environmental stewardship with pioneering technologies.

Kevin Sharfe, President  
178 Pennsylvania Ave. Unit 4 Concord, ON L4K 4B1  
Tel: 905-482-2149, Toll-Free: 1-866-885-2706, Fax: 416-913-1610, E-mail: [info@cleaneearthltd.com](mailto:info@cleaneearthltd.com)  
[www.CleanEarthLtd.com](http://www.CleanEarthLtd.com)

## Government of Canada – Federal Contaminated Sites Action Plan (FCSAP)

FCSAP was created following the 2004 federal budget commitment of \$3.5 billion in multi-year funding to address high-priority federal contaminated sites. The FCSAP program was approved in 2005 as a 15-year, cost-shared program whose aim is to support federal departments, agencies and consolidated Crown corporations (custodians) in reducing the risks to human health and the environment, on the contaminated sites for which they are responsible. The primary objective of this program is to address the risks that these sites pose to human health and the environment and to reduce the associated financial liability. The program has the complementary objectives of supporting other socio-economic outcomes, such as training and employment of Canadians and promotion of innovative technologies. Objectives include:

- Reduce human health risks and ecological risks at specific highest risk federal sites
- Reduce federal financial liability, or in the case of care and maintenance sites, prevent increases in federal financial liability related to known federal contaminated sites
- Increase public confidence in the overall management of federal contaminated sites and in the remediation/risk management of individual contaminated sites

[www.federalcontaminatedsites.gc.ca](http://www.federalcontaminatedsites.gc.ca)

## Federation of Canadian Municipalities' Green Municipal Fund

FCM's Green Municipal Fund™ (GMF) is a unique program that supports municipal initiatives across Canada that benefits the environment, local economies and quality of life. The Government of Canada endowed the Federation of Canadian Municipalities (FCM) with \$550 million to establish the Green Municipal Fund (GMF). The Fund is a long-term, sustainable source of grants and below-market loans for municipal governments and their partners. GMF grants and below-market loans directly support municipal initiatives, while GMF education and training services help municipal governments share expertise and strengthen their ability to set and surpass their sustainability goals.

24 rue Clarence Street, Ottawa, ON, Canada K1N 5P3  
Tel.: 613 907-6345, Fax: 613 244-1515  
[www.fcm.ca/gmf](http://www.fcm.ca/gmf)

## Frac Rite Environmental

Frac Rite™ is an environmental service company that provides soil hydraulic fracturing and injection services for significantly enhancing the remediation of contaminated sites. Our Hydraulic Fracturing technology improves the permeability and drainage of low permeability soils by creating a network of sand drainage layers which can be used for recovering or treating subsurface contaminants in situ. Soil fracturing and direct injection can also be used for emplacing biological or chemical treatment amendments to cost-effectively remediate contaminants with minimal site disturbance.

Gordon Bures, Director of Remediation Services  
5325 - 3rd Street S.E., Calgary, AB, Canada T2H 1J7  
Tel: 403-265-5533, Fax: 403-265-5648, [gbures@fracrite.ca](mailto:gbures@fracrite.ca)  
[www.fracrite.ca](http://www.fracrite.ca)

## GroundTech Solutions

GroundTech Solutions® is the exclusive distributor of Geoprobe® innovations in Canada. Geoprobe® Systems has developed real time data systems including the Membrane Interface Probe (MIP) which is the only commercially available technology for the detection of both chlorinated and non-chlorinated solvents in the subsurface, the Direct Image Soil Conductivity Probe for determining soil lithology, the HPT Probe (Hydraulic Profiling Tool) used to determine preferential pathways in the subsurface for the targeting of Injections of Remediation Materials in the soil and groundwater.

Reception Sponsor:

*about*  
**REMEDIATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government  
of Canada

Gouvernement  
du Canada

Sven Dean  
PO Box 1271, Postal Station K, Toronto, ON, Canada M4P 3E5  
Tel: 416-410-3130, Toll-Free: 1-877-877-1862, Fax: 416-410-1249, Email: [info@groundtechsolutions.com](mailto:info@groundtechsolutions.com)  
[www.groundtechsolutions.com](http://www.groundtechsolutions.com)

### Hazco Environmental Services

HAZCO is a leading provider of environmental solutions. HAZCO's comprehensive services are backed by strong corporate infrastructure, dedicated personnel, extensive experience and specialized equipment. Our proven track record has made us a preferred service provider to major Corporations and Government agencies. Our Treatment Systems division specializes in: In-situ Soil & Groundwater Remediation, Ex-situ Treatment, Water Treatment Systems, Off-Gas Treatment Systems, Mobile and Fixed Treatment Systems, and Rental and Pilot Systems

15 - 550 Trillium Drive, Kitchener, ON, Canada, N2R 1K3  
Tel: 519-741-7217, Toll-Free: 1-800-667-0444, Fax: 519-886-3078  
[www.hazco.com](http://www.hazco.com)

### IVEY International Inc.

Ivey International Inc. (Ivey) is an international award winning environmental technology company with a commitment to provide innovative products and services for the remediation of air, soil and/or groundwater for environmental consultants, environmental contractors and the oil and gas sector. Our technologies include Ivey-sol®, which selectively desorb contaminants, and Atomisol®, a new way to stabilize heavy metals in soils or sludge. The Ivey-sol products and processes have established a strong international reputation for remediation with significant time and cost savings. For more information, please visit our website or contact one of our distributors.

George A. Ivey, President and Senior Remediation Specialist  
PO Box 706, Campbell River, BC, Canada V9W 6J3  
Tel: 250-923-6326, Toll-Free: 1-800-246-2744, Fax: 250-923-0718, [buivey@iveyinternational.com](mailto:buivey@iveyinternational.com)  
[www.iveyinternational.com](http://www.iveyinternational.com)

### OCETA / aboutREMEDATION

OCETA is a private not-for-profit corporation that supports the commercialization and market acceptance of innovative technologies and environmental sustainable solutions through stakeholder consultation and the provision of business and technical services. As part of OCETA's brownfield and remediation service area, OCETA owns and operates [aboutREMEDATION.com](http://aboutREMEDATION.com), Canada's leading information resource on remediation and brownfield redevelopment. Users can access relevant information, tools, training and solutions to increase your knowledge; build capacity; and promote your projects, technologies, case studies and business services.

2070 Hadwen Rd. Ste. 201A, Mississauga, ON, Canada L5K 2C9  
Tel: 905-822-4133, Fax: 905-822-3558, E-mail: [oceta@oceta.on.ca](mailto:oceta@oceta.on.ca)  
[www.oceta.on.ca](http://www.oceta.on.ca) [www.aboutRemediation.com](http://www.aboutRemediation.com)

### Oxy Teknologies

Oxy Teknologies Inc. is a North American provider of innovative and definitive environmental solutions. OxyTek™ chemical oxidation technologies remediate hydrocarbons, chlorinated solvents, herbicides, pesticides, dioxins and PCBs in soil and groundwater. OxyTek™-ADT, is a proprietary stabilization system that renders high levels of lead, chrome, cadmium, arsenic and other heavy metals into non-leachable, safe forms. OxyTek™ products are particularly effective in difficult conditions where conventional remediation is too expensive or fail and are successful in harsh Canadian winter conditions saving stakeholders valuable time and money.

Dennis Owens  
P.O. Box 10, Markdale, ON, Canada N0C 1H0, or P.O. Box 681411, San Antonio, TX, USA 78268  
Tel: 1-8888-OXYTEK (869-9835), Fax: 905-460-1919, E-mail [dennisowens1@oxyteknologies.com](mailto:dennisowens1@oxyteknologies.com)  
[www.oxyteknologies.com](http://www.oxyteknologies.com)

### Purifics

Purifics is a knowledge based Multidiscipline Engineering firm that provides unique solutions to purify, condition and control water and air to achieve Economic and Environmental Advantage. Our toolbox of know how, experience and proprietary technologies enable us to design and manufacture solutions that support sustainable development. We focus on low life cycle cost, reducing complexity, eliminating waste and minimizing risk. Our product pedigree was initiated by

Reception Sponsor:

**about  
REMEDATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAR Interdepartmental Working Group



Government of Canada  
Gouvernement du Canada

solving difficult challenges for the nuclear industry. Purifics' integrated system solutions have been configured to meet the purification challenges in remediation, industrial, municipal, defence and energy sector applications since 1993.

Brian Butters  
340 Sovereign Road, London ON, Canada N6M 1A8  
Tel: 519-473-5788, Fax: 519-473-0934, info@Purifics.com  
[www.Purifics.com](http://www.Purifics.com)

### Quantum Murray LP

Quantum Murray LP's divisions, Murray Demolition, Quantum Environmental and Thomson Metals and Disposal, provide the strongest industrial decommissioning services offering in the nation. As Canada's leading decommissioning service provider, the Quantum Murray Group of Companies supports clients ranging from institutional and government to commercial and industrial sectors. With office across the nation and over 700 employees, we can offer a single specialized service or seamlessly execute any combination of demolition, scrap metal and salvage, remediation and waste management services. Combining staff expertise with the latest state-of-the-art technologies and equipment, Quantum Murray delivers a full spectrum of integrated services.

Michael Billowits  
1749 Woodward Drive, Ottawa, ON, Canada, K2C 0P9  
Tel: 613-820-9600, Fax: 613-820-9623  
[www.quantummurray.com](http://www.quantummurray.com)

### Regenesis

Over the past 14 years, Regenesis has established itself as the leader in advanced technologies for contaminated site remediation. Specializing in proven, low-cost enhanced bioremediation as well as advanced in-situ chemical oxidation, Regenesis' products have been applied on over 14,000 sites worldwide. Oxygen Release Compound (ORC®), Hydrogen Release Compound (HRC®), RegenOx™ and 3-D Microemulsion (3DMe™) are a few of the core technologies that Regenesis offers and supports in the global remediation marketplace.

Tel: 949-366-8000, Fax: 949-366-8090, E-mail: info@regenesis.com  
[www.regenesis.com](http://www.regenesis.com)

### SiREM

SiREM provides products and services in support of environmental remediation projects. SiREM's bioaugmentation culture, KB-1® has been applied at over 140 sites to enhance reductive dechlorination of chlorinated ethenes. SiREM maintains a state-of-the-art treatability laboratory equipped to conduct treatability studies to evaluate bioremediation, chemical oxidation, and zero valent iron technologies to treat chlorinated solvents and other recalcitrant compounds. SiREM also offers molecular genetic assays (Gene-Trac®) to quantify and characterize dechlorinating bacteria crucial to bioremediation success.

Sandra Dworatzek, Laboratory Manager  
130 Research Lane, Suite 2, Guelph, ON, N1G 5G3  
Tel: 519-822-2265, Toll Free: 1-866-251-1747, Fax: 519-822-3151, E-mail: sdworatzek@siremlab.com  
[www.siremlab.com](http://www.siremlab.com)

### Sustainable Development Technology Canada (SDTC)

Sustainable Development Technology Canada (SDTC) is a not-for-profit foundation that finances and supports the development and demonstration of clean technologies which provide solutions to issues of climate change, clean air, water quality and soil, and which deliver economic, environmental and health benefits to Canadians. SDTC's mission is to act as the primary catalyst in building a sustainable development technology infrastructure in Canada. We work closely with an ever-growing network of stakeholders and partners to build the capacity of Canadian clean-technology entrepreneurs, helping them form strategic relationships, formalize their business plans, and build a critical mass of sustainable development capability in Canada. SDTC operates two funds aimed at the development and demonstration of innovative technological solutions.

Zoltan Tompa, Director Applications  
45 O'Connor Street, Suite 1850, Ottawa, ON, Canada, K1P 1A4  
Tel: 613-234-6313, Fax: 613-234-0303, E-mail: info@sdtc.ca  
[www.sdtc.ca](http://www.sdtc.ca)

Reception Sponsor:

*about*  
**REMEDIATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government  
of Canada

Gouvernement  
du Canada

## SAIC Canada

Science Applications International Corporation (SAIC Canada) is a diversified, high technology, research and engineering company with offices in Ottawa, Calgary, Halifax, Regina and Vancouver. SAIC Canada is primarily dedicated to serving Canadian governments and businesses. Our Environmental Program offers a wide-range of environmental compliance, spill response, decontamination and contaminated site services. We are well positioned in the scientific, governmental and commercial environmental communities to bring the latest developments and applications to our clients.

Robert Foscht, Environmental Program Manager  
335 River Road, South, Ottawa, ON, Canada, K1A 0H3  
Tel: 613-563-7242, Fax: 613-991-1673, E-mail: robert.foscht@saiccanada.com  
[www.saiccanada.com](http://www.saiccanada.com)

## Solinst Canada Ltd.

Solinst Canada Ltd. manufactures high quality groundwater and surface water monitoring instrumentation. We offer a broad range of practical equipment used by hydrogeologists and hydrologists around the world. Our professional staff is dedicated to providing customer service, and leading-edge instruments designed for repeatable accuracy, ease-of-use, and durability. A feature in our product line is the Waterloo Emitter, which offers a low cost remediation option for contaminated groundwater

Tricia Lane, Technical Writer  
35 Todd Road, Georgetown, ON, Canada L7G 4R8  
Tel: 905-873-2255, Toll-Free: 1-800-661-2023, Fax: 905-873-1992, E-mail: instruments@solinst.com  
[www.solinst.com](http://www.solinst.com)

## TIGG Corporation

TIGG Corporation designs and fabricates systems to remove trace contaminants from air and water. At our 55,000 square foot manufacturing facility we manufacture more than 60 standard modular adsorbers which can be filled with a tailored media to meet your company's specific need. Our scope of supply can include pumps and blowers, pre-filters and mist eliminators, ductwork and piping modules. Combined with our ability to create rental and exchange programs, we've created a one-stop shopping resource to meet your purification challenge

Jeffrey Marmarelli, Business Development Manager  
1 Willow Avenue Oakdale, PA, USA, 15071  
Tel: 724-703-3020, Toll-Free: 1-800-925-0011, Fax: 724-703-3026, E-mail: jmarmarelli@tigg.com  
[www.tigg.com](http://www.tigg.com)

## Trow Associates

Founded in 1957, Trow Associates Inc. has been providing clients with a full range of consulting services; provided by a dedicated team of over 2,200 from more than 80 Canadian, US and International Locations. Trow provides consulting services in the fields of Environmental, Geotechnical, Building Engineering, Materials & Quality and Infrastructure. Trow's Environmental team specializes in Site Remediation, Risk Assessment, Air Quality, Due Diligence Services, Hydrogeology and Designated Substances & Hazardous Materials Assessments.

Darko Strajin  
1595 Clark Blvd., Brampton, ON, Canada,  
Tel: 905-793-9809, Fax: 905-793-0641, E-mail: darko.strajin@trow.com  
[www.trow.com](http://www.trow.com)

## Waterloo Environmental Biotechnology

Waterloo Environmental Biotechnology Inc was founded in 2005 as a joint venture among three biology professors at the University of Waterloo (Dr. Bruce Greenberg, Dr. Bernard Glick and Dr. Xiao-Dong Huang). We develop and implement scientifically sound integrated biotechnologies for remediation of contaminants. We specialize in phytoremediation of petroleum, PAHs, salt and metals. Our goal is to deliver unique cost effective solutions to environmental pollution problems. We have successfully done this at several contaminated sites.

Bruce Greenberg, President  
Tel: 519-888-4567, Fax: 519-746-2031, E-mail: greenber@uwaterloo.ca  
[www.waterlooenvironmentalbiotechnology.com](http://www.waterlooenvironmentalbiotechnology.com)

Reception Sponsor:

*about*  
**REMEDIATION**

Supporting  
Organization:



Lunch Sponsor:

**FCM** | Green Municipal Fund  
Fonds municipal vert

Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government of Canada  
Gouvernement du Canada

# Innovative Remediation Solutions Workshop - Ontario Region

February 2 & 3, 2009, Toronto, ON  
89 Chestnut Street, University of Toronto

## Mini-Trade Show

Featuring Exhibits and Posters from:

A Geo Technology Inc.  
The Adventus Group  
Aeon Egmond Ltd.  
AGAT Laboratories  
AIM Environmental Group  
Canada Colours and Chemicals  
Cement Association of Canada  
Chemco Inc.  
Clean Earth Solutions  
Federation of Canadian Municipalities'  
Green Municipal Fund  
Frac Rite Environmental  
GroundTech Solutions  
Hazco Environmental Services  
IVEY International Inc.  
Oxy Teknologies  
Purifics Ltd.  
Quantum Murray LP  
Regenesis  
SiREM  
Solinst Canada Ltd.  
TIGG Corporation

## Reception Sponsors:



## Supporting Organization:



## Lunch Sponsor:



## Break Sponsors:



## Presentations and Materials

All materials will be made available electronically following the workshop on the following Web site:

<http://www.oceta.on.ca/workshops/InnovativeRemediationSolutions/IRSWhome.htm>

Information on how to access the materials will be provided to delegates

Reception Sponsor:

*about*  
**REMEDICATION**

Supporting  
Organization:



Lunch Sponsor:



Break Sponsors:



Presented by OCETA in Collaboration with the Ontario  
FCSAP Interdepartmental Working Group



Government  
of Canada

Gouvernement  
du Canada