

2011 President's Report – Holiday Edition

Time flies when you are having fun and that is exactly how 2011 has been for the Environmental Managers Association. The Holidays are approaching and with that, I look back and think of all that I am grateful for. And what comes to mind is... the **EMA Board Members!** You are a strong and enthusiastic team. I am so thankful for all your hard work and support. This is a great time to reflect on all the accomplishments over the last year and what makes the EMA a great organization to be a part of.

Membership has its benefits! We encourage members to showcase their companies through sponsorship opportunities and the quarterly newsletter. This advertising will reach over 1000 environmental professionals in BC and educate them on your successes and triumphs in the Industry.

This year we have had some memorable events with a focus on promoting education within our industry. Our Board leaped into 2011 with January's Legal Update speaker session that was followed by a networking mixer. It was the perfect combination of highly acclaimed lawyers informing us on hot topic cases and legal tips on how to make improve the quality and management of your projects. The learning didn't stop there as we stepped right into our most successful Annual Workshop: "Managing Moving Targets: Evolving Legislation & Migrating Contamination". With enlightening

speakers from the industrial, consulting, regulatory and legal sectors, and demonstrations in our tradeshow area, over 80 delegates and exhibitors came out for the day to share knowledge, incite discussion and answer members' questions. The March Technology session introduced us to a compact electrolytic oil separation process as well as a report on the holistic approach to



— *Marcia Moulton*
President of EMA of BC

dealing with acid mine drainage at the former Britannia Mine site. The April session focused on the "Impacts of Electrical Power Generation: Old and New". It merged the wisdom of senior professionals with the spirited nature of the younger generation to converse on the social license to operate a natural gas fired power plant and how to manage urban organic waste.

May brought an interesting discussion by acclaimed keynote speaker, Dr. Don Manivic. He spoke on the technologies needed for the sustainability of feeding the world's now 7 billion people in the face of decreasing Phosphate Rock deposits. This moving presentation was the perfect prescription to elect motivated EMA Board Members to our team at the Annual General Meeting. In June members enjoyed a tour of the Britannia Mine and EPCOR Water treatment plant that had been presented at BCIT in March. A September tour of the Annacis Island Wastewater Treatment Plant provided a direct view of the operations. Our Annual July Golf Tournament kept the good times alive in the sunshine at Country Meadows Golf Course. Our members were greeted at the 18th hole by the acclaimed Jazz band "Swing 2 Beat" and our many featured sponsors hosted a great dinner and provided everyone with prizes. In October, several papers presented by member firms at the recently concluded Remtech Conference in Alberta were presented locally.

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Upcoming Events

January 2012	February 2012	March 2012	April 2012	May 2012
Legal Update Session January 19 th	Annual EMA Workshop: Regulatory Roundup and Tradeshaw February 16 th	Members Poster Session and Q&A March 22 nd	Burrard Inlet Boat Tour – Date TBA	Annual General Meeting
Membership Renewal Kickoff			Review of Submissions for the EMA Awards	Executive Board Elections
Call for Nominations – EMA Awards				

Sponsorship Opportunities are available for the upcoming EMA of BC Events—see <http://www.emaofbc.com> for details.

Membership with the EMA of BC

Annual corporate memberships with the EMA of BC run from April 1st to March 31st each year. This year's current memberships will expire March 31, 2012. If you are not a current member and still want to take advantage of the upcoming scheduled events, a reduced rate of \$300 + HST is still available. Visit www.emaofbc.com and purchase your membership online.

We sometimes hear this question from new members:

“I don't understand how to get the most value from our EMA Membership?”

The value of a corporate membership in the EMA of BC simply cannot be overstated. Our mission is Education and Professional Development in the field of environmental regulations, science, technology and management. A corporate membership entitles **all employees** of your organization to participate and benefit from the

monthly speaker sessions, on site tours, and project overviews presented primarily by our members themselves.

Compared to the cost of a Professional Development Hours (PDH) from a single 8 hour course costing \$1000 or more **per attendee**, consider instead the EMA option of a single annual corporate membership for approximately half the price – to accumulate a wide range of PDH credits of their preference over an entire year. This value can be achieved by multiple attendees within a member firm who are pursuing professional development. As an example, two attendees at only half of the sessions could have an equivalent value of up to \$1500 in PDH credits alone, not to mention the credits available from paper presentations, submission of newsletter articles, and by directors in board participation and committee work.

In addition to the educational credits which is so valuable to maintaining your staff professional standing, corporate members have the opportunity to showcase their knowledge, experience and capabilities before a select audience

of environmental managers, by presenting at speaker sessions, guiding tours of facilities, sponsoring events, nominating projects for awards, and by advertising in our publications.

Our volunteer board of directors is very active in planning and organizing activities—a board position provides an opportunity for someone in your firm to get to know other colleagues in the environmental industry in the pursuit of worthwhile common goals.

We need your membership because your annual dues in combination with your colleagues support our not for profit activities, our scholarships, the costs of venues, website, post presentation refreshments, publishing, and the administrative communication and management of the Association.

Please join us now, and begin taking advantage of these benefits this month!



Annacis Island Wastewater Treatment Plant Tour September 2011

For the September EMA of BC session, members were treated to a tour of the Annacis Island Wastewater Treatment Plant in Delta. Special thanks goes to Leonard Potter, a Wastewater Treatment Plant Operator, for being our tour guide!

The Annacis Island Wastewater Treatment Plant was built in 1975 on a 51 hectare site and has gone through multiple expansions since. The plant is designed to provide both primary (solids) and secondary (dissolved organics) treatment to municipal wastewater before it is discharged to the Fraser River. In its current configuration the plant:

- Treats wastewater from over 1 million people in the surrounding communities.
- Has an average flow of 580 million litres per day.
- Can provide full secondary treatment with a peak flow of 966 million litres per day.

- Produces 120 tonnes of Class A (99.999% pathogen-free) biosolids daily.
- Produces an average of 45,000 m³ of digester gas which is used for heat and power.
- Can generate 3,216 kW of electricity and 3,700 kW of heat through co-generation.

Our tour took us into the heart of the treatment plant where Leonard explained the treatment processes. The main steps involved in wastewater treatment include:

- Screening and aeration to remove debris and grit.
- Primary settling to remove 60-70% of suspended solids.
- Skimming to remove greases, oils, and floatable materials.
- Sludge thickening to remove water for improvement of digestion.

- High temperature digestion to convert organics to high quality biosolids.
- Trickle filters to utilize bacteria to remove dissolved organics.
- Secondary settling to remove biological materials.
- De-watering using centrifuges and polymer to increase solid content to 20-35%.
- Chlorination (and de-chlorination) of treated water prior to discharge to the Fraser River.

The scale of the operations is surprising, but necessary to treat the amount of wastewater produced by Metro Vancouver citizens. The main pumps, at 1,200 horsepower each, are the size of small elephants! The plant occupies a site equivalent in size to 86 Canadian football fields (not those puny American ones!) and the cavernous underground tunnels are large enough to drive trucks through.

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— Francisco Perello of Keystone, presenting “Water Neutrality, Challenges and Opportunities” at the November 2011 Speaker Session on Water Management.

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We completed our 2011 journey with a note-worthy speaker session on Water Management which explained the challenges we face with managing our potable, industrial and recreational water resources.

Did you miss a tour or a session this past year? Don’t you worry—because the EMA of BC’s 2012 plans include an even greater slate of events that promote and support the educational enrichment of environmental professionals within our region. The EMA also continues to give back to the community by sponsoring a student in Environmental Protection program at Kwantlen Polytechnic University and by donating to a local non-profit organization involved in environmental stewardship.

Looking ahead to 2012, plan to attend the first events of the new year including

the January Legal Update session and the annual February Regulatory Round Up Workshop with an emphasis on Contaminated Sites. We are still accepting delegates, exhibitors and sponsors.

Take advantage of all the EMA of BC has to offer. Membership renewal starts in 2012. Contact info@emaofbc.com for more information.

On behalf of the EMA Board, we thank you all for your support and participation this year. We wish you and your families a Happy Holiday season. We look forward to seeing you all in the New Year.

Best Wishes!

Marcia Moulton, B.Sc.
President of EMA of BC

What’s new on the Information Systems front?

The EMA is currently working on initiatives to improve our web presence and enhance our ability to engage with members and the community at large. The Information Systems committee includes tech savvy board members Carlos DaPonte, Patrick Novak, and Geoff Wickstrom. Some exciting recent developments include:

- A newly designed EMA of BC Website which was championed by Carlos DaPonte.
- Updating to web software to use WordPress which is a blog based platform. This new tool is key to allow for more timely updates, news and events.
- A new logo is also in store for the EMA. The design process was managed through a crowd-sourcing website competition where 41 logo designs were submitted by graphic design experts worldwide. A new image was chosen through collaborative input from the board members through an online voting process.

These new features will allow for a fresh new look and feel to the EMA’s website and will be launched soon. Keep an eye out at: www.emaofbc.com



(“Annacis Tour” continued from page 3)

One of the by-products of municipal wastewater treatment is biosolids. Metro Vancouver has successfully turned a waste into a usable product. Through proper treatment and de-watering of the solids, they are virtually pathogen-free and high in nutrients. While not suitable for vegetable gardens, the biosolids are often used for land rehabilitation of mine sites, as a fertilizer for forest re-growth and ranches, and for landscaping soil.

Another by-product is digester gas, which is about 64% methane, generated during the treatment process and collected from several points in the treatment process. This methane is burned in boilers and special engines to generate heat and electricity utilized in plant operations. The generated electricity meets about 40% of the plant’s daily demand and provides emergency power in the event of BC Hydro power outage.

Lastly, odour control is a big job at the Annacis Island plant. To minimize the impact on the surrounding community, foul air is collected and treated through

chemical and biological means. The result is a significant reduction in the concentration of odourous compounds and happier neighbours.

A sincere thank you from the EMA of BC to Metro Vancouver and everyone

at the Annacis Island Wastewater Treatment Plant for the great educational tour!

Missed the tour? Regularly check the EMA of BC website for future tours and educational sessions.

EMA of BC’s 2012 Workshop – Call for Abstracts

The Annual Workshop is scheduled for February 16th, 2012 and we are currently extending and invitation to submit abstracts related to:

- Sustainable Remediation
- Legal issues related to Contaminated Sites
- Contaminated Sites Assessment and Remediation
- Mine Closure & Reclamation
- Industry case studies related to the above topics

Abstract submission deadline: December 16th, 2011 to resha.sabti@exova.com

This event draws a large audience each year and is a premium opportunity to learn, share and collaborate amongst professionals within the environmental industry. Save the date in your calendar and register early to take advantage of the early bird rate.

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*Happy Holidays and a
Happy New Year to
all the EMA of BC
Members!*