



# The 4th Dimension

Association of Professional Engineers and Geoscientists of BC  
Victoria Branch Newsletter  
[www.apeg.bc.ca/vic](http://www.apeg.bc.ca/vic)

Professional Engineers  
and Geoscientists of BC  
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It is most gratifying to be your newsletter editor for a second year. The 2006-2007 membership of the Executive Committee is listed in the back page of this newsletter. On behalf of the current members, we welcome our new Chair Andy Jani. In addition, we like to express our deep appreciation to Sharlie Huffman who did a wonderful job as our past Chair, and Tom McLean who had for many years spent an enormous amount of time picking the best speakers for our monthly dinner meetings while at the same time was in charge of the Talbot Fund..... Harry Kwok PEng, Editor.

The September dinner meeting will be held at 5:30 pm on **Thursday, September 28 2006** in the Queenswood Room at the Cadboro Commons Building, University of Victoria. The presentations will be in two parts. Part I will be by **Stewart Irwin** and **Bob Sochowski**. Their talk focuses on the CAPITAL REGION DISTRICT CROSS CONNECTION CONTROL BYLAW (Bylaw #3337) approved on July 12, 2006. This bylaw was linked to an Order under Section 25 of the Drinking Water Protection Act issued by Dr. Richard Stanwick, Chief Medical Health Officer of the Vancouver Island Health Authority, directing the water suppliers within the Greater Victoria Drinking Water Supply System to prepare and complete a coordinated hazard prevention plan for their water systems. Dr. Stanwick stated that the conditions in the Order would be satisfied if the plan was formulated in the form of a single regulatory bylaw, namely a Cross Connection Control Bylaw adopted by the CRD, and that this bylaw contained provisions to identify, eliminate and prevent cross connections with the drinking water systems. Discussion will be on the issue of the drinking water system being contaminated from sources such as industrial processes, irrigation systems, or medical/dental operation if a pipe is incorrectly connected (cross-connected) between the contaminating source and the drinking water system. In Part II, **Stephen Salter PEng** of Farallon Consultants Ltd. speaks on the topic of "Treating Sewage as a Renewable Resource". This presentation touches on the issue of sewage treatment (linked to a July 21, 2006 directive from the Ministry of Environment to the Board of the Capital Region District). Mr. Salter will explain the differences behind primary and secondary levels of treatment as well as technologies used by cities around the globe to reclaim water, biofuels, and minerals in plants designed to recover resources from waste streams. In addition, he intends to highlight the environmental, social, and financial benefits of resource recovery and what are the costs. It is the goal of this presentation to wrap up with an interactive discussion of how the engineering community and the environmental NGOs can work together.

### Events Details

**When:** **Thursday, September 28, 2006:** Social at 5:30 pm; Dinner at 6:30 pm.

**Where:** **Queenswood Room**, Cadboro Commons Building, University of Victoria

For directions and maps to the University of Victoria, link to <http://www.uvic.ca/maps/index.html>.

To find out where Cadboro Commons Building is on campus, link to <http://www.uvic.ca/buildings/ucl.html>.

Parking is free of charge after 6:00 pm Monday through Friday and all day on Saturday.

Parking permits may be purchased during the day from vending machines located at most Campus Entrances; also there is a limited number of metered spaces available in Lot 1, which is located close to the building.

**Cost:** **Cost (dinner included except where noted):** Registered members and guests \$20.00 ea.; Students \$10.00 ea.; **Late registration:** \$25.00 ea.; Admission at the Door: \$30.00 ea.; Presentation-only \$5.00 ea. (dinner not included).

**RSVP:** Please register in advance via the telephone answering service at **721-8896** by **NOON Friday, September 22**. Provide the name of those who you are registering and your telephone number. Registration after **NOON Friday, September 22** but prior to **NOON, Monday, September 25** will be considered **Late registration**. If you register but can not attend, please call **477-0151** by **NOON** the day before the meeting and give notice of cancellation on the answering service (please note that the branch may have to pay for dinners that are not cancelled).

**You can also register on the web:** Visit <http://www.me.uvic.ca/APEG.htm> and register by **NOON Friday, September 22**. To complete the registration, please provide your name and phone number.

**Late registration** cost of \$25.00 ea. applies after **NOON Friday, September 22** and prior to **NOON, Monday, September 25**. Friends, Associates and partners are always welcome (pre-registration is recommended). If you cannot join us for dinner, please come and join us for the presentation.

### Upcoming Events

#### APEGBC, Victoria Branch

Victoria Branch dinner meetings are held the last Thursday night of every month from September to May excluding December. Meetings are usually held in the Cadboro Commons Building, University of Victoria and start at 5:30 p.m. The next dinner meeting is at Queenswood Room, Cadboro Commons Building, University of Victoria.

Everyone is welcome to attend the Branch Executive meetings held every month at the restaurant of the Cedar Hill Golf Course. The next meeting is scheduled for Wednesday October 4, 2006.

#### Events

- Sept.17-20 Water in the City. *Information:* [www.waterinthecityvictoria.ca](http://www.waterinthecityvictoria.ca).
- Sept.18-20 19<sup>th</sup> National Tunneling Conference. *Information:* [www.tunnelcanada.ca](http://www.tunnelcanada.ca).
- Sept.19-22 30<sup>th</sup> Biannual Pan American Convention of Engineers, Georgia Tech, Atlanta, Georgia.  
*Registration/information:* [www.upadi2006.com/index.shtml](http://www.upadi2006.com/index.shtml).
- Sept.20 Transport Canada: Workshop in Commuter Options. *Information:* [www.tc.oc.ca/programs/Environment/commuter/menu.htm](http://www.tc.oc.ca/programs/Environment/commuter/menu.htm).
- Sept.20 US-Canada Architectural/engineering Partnership Seminar. *Information:* [www.apeg.bc.ca/news/documents/ap.sem.pdf](http://www.apeg.bc.ca/news/documents/ap.sem.pdf).
- Sept.20 Project Management Job Fair sponsored by Project Management Institute. *Information:* Contact PMI at [programs@pmi.bc.ca](mailto:programs@pmi.bc.ca).
- Sept.25-29 International Pipeline Conference 2006. *Information:* [www.internationalPipelineConference.com](http://www.internationalPipelineConference.com).
- Oct.1-4 Sea to Sky Geotechnique. *Information:* [www.seato.skygeo.ca](http://www.seato.skygeo.ca).

## Speakers of the Month:

**Stewart Irwin** is the Senior Manager of the Water Quality Division of the CRD Water Services Department and is responsible for all aspects of drinking water quality in the Greater Victoria Drinking Water System which currently serves about 320,000 people. These responsibilities include establishing policies, procedures and plans for managing the quality of water in the watersheds and the source reservoirs, in the treatment plants, in the large transmission water mains, in the balancing reservoirs in the distribution system and in all of the municipally-operated drinking water distribution systems in Greater Victoria.

**Bob Sochowski** is the Cross Connection Control Officer of the Water Quality Division of the CRD Water Services Department and is responsible for backflow protection from cross contamination of drinking water in the Greater Victoria Drinking Water System. These responsibilities include coordinating the cross connection program by establishing policies, procedures and program plans for managing the cross connection control section, implement and maintain customer backflow records on new and existing construction, enforce current codes and standards relating water quality and develop community awareness and education programs within the drinking water distribution systems which currently serves about 320,000 people.

**Stephen Salter PEng**, graduated from UBC in 1982, and has held engineering and management positions with Babcock and Wilcox, Scott Paper, and TELUS before starting his management consulting firm. Stephen currently works with companies in North and South America helping clients find ways to pollute less, often through conservation or by recovering wasted resources. Stephen began working as a volunteer with the TBuck Suzuki Environmental Foundation and the Georgia Strait Alliance in 2004, after recognizing these groups seek not only to curb pollution, but also to offer solutions.

## APEGBC Annual Conference & AGM

APEGBC Annual Conference & AGM, Victoria Conference Centre, Victoria, October 12-14. For details: See *Innovation*, Journal of the Association of Professional Engineers and Geoscientists of BC, May/June 2006.

## Vacant Vice-chair Position

We like to report the departure of Cari Wells, our past Vice-chair, who has left Victoria to take up a position in Burnaby. Members of the Branch and the Executives are especially thankful of her many contributions and excellent services over the years. With Cari's departure, the Vice-chair position is now vacant and members are invited to submit their names or nominations. Names of the nominees should be sent to: Branch Chair: Andy Jani ([Andy.Jani@gov.bc.ca](mailto:Andy.Jani@gov.bc.ca)), or Branch Secretary: Marty Gordon ([Marty.Gordon@opusinternational.ca](mailto:Marty.Gordon@opusinternational.ca)) by October 2, 2006.

## Candidates for Election to Council in the Upcoming

We are delighted that Sharlie (Huffman) and Jan (Buermans) from our executive will be running for the positions of Vice President and Councilor in the upcoming elections of APEGBC. Do not forget to support your local representatives. For election details: See *Innovation*, Journal of the Association of Professional Engineers and Geoscientists of BC, May/June 2006.



**Sharlie Huffman PEng** for Vice President - Sharlie is currently a practicing engineer with the Ministry of Transportation. She graduated from UBC in Civil Engineering in 1981. As a provincial Bridge Seismic Engineer, she is responsible for bridge seismic standards and policies, and provides expertise for project specifications. She is involved in research partnerships with UBC and the Geological Survey of Canada, and is developing a structural instrumentation program for the Ministry. While she works out of Victoria, she spent 11 years in Prince George as the Ministry's Regional Bridge Engineer and is familiar with the challenges of practicing outside the major centres. Her concerns and detailed bibliography are listed in the APEGBC election review. She has served previously on Council (2000-2002) and is currently very involved at the Branch level, recently finishing her term as Chair

of the Victoria Branch. She is involved in Science Fairs, supporting the development of future engineers and geoscientists by judging at the University of Victoria Regionals both as the general duty judge and as a judge for the APEGBC Branch awards. She also administers the Ministry of Transportation awards for BC students at the Canada-wide competition.



**P J (Jan) Buermans PEng** for Councilor - Over the past three years it has been a pleasure to contribute to the Association as the branch representatives' chair and a delight to serve the committed and keen volunteers that make up this group. Today, I am honoured to ask you to let me further contribute by electing me to the position of Councilor. My objective is to make the Association better for the members and for society. We face a number of cross roads at present:

- The Ontario Provincial Government is intruding into the Association of Professional Engineers of Ontario (PEO)'s regulatory authority. In British Columbia, we need to continue our proactive efforts with the Act rewrite and to strengthen our relations with government. If we are not successful, we could face a reduction of our responsibilities and erosion of our influence and work opportunities.

- Our Association needs to communicate better with the members. We need to clarify the Association's role and increase the value of APEGBC to our membership. I would like to encourage councilors to present a uniform message at monthly Branch meetings and invite opportunities for dialog at these meetings.
- Training allows us to bring more value to our clients and society. It helps us evolve in a continuously changing world and become better practitioners. The Association needs to further encourage training in a cost effective way. More continued professional development needs to be facilitated outside the lower mainland.
- In an expanding global market place, the mobility of BC and other Canadian engineers and Geoscientists in North America and elsewhere is important. While in Canada our inter-association agreement works well, we need to push to improve the situation with our southern neighbours.

Our Association has made headway towards achieving a number of these objectives. My experiences within the Association and in my professional life will allow me to further pursue these responsibilities with enthusiasm and vigour. I look forward to continuing to contribute to the betterment of our profession within the Association and our society and I ask for your support in this election.

## Reader's Corner

We are adding a Reader's Corner to our newsletter. The intent is to foster a forum whereby members of the Victoria Branch may submit articles of interest to our readers, to provide feedback to events, and potentially to add substance to the newsletter. Submissions (limited to 250 words per article) should be sent to the editor: H. Kwok, Email: [hkwok@ece.uvic.ca](mailto:hkwok@ece.uvic.ca). The published articles will be unedited and reflect solely the opinions of the author(s). The newsletter holds no responsibility for the accuracy of such articles but will make effort to ensure the article contains no fraudulent information. Furthermore, the editor and the Executive Committee retain the exclusive right not to publish any article deemed unsuitable for publication in our newsletter (such articles will be returned to the respective author(s)).

### Sewage Treatment in Victoria

Until recently all those professional people who had studied our long outfalls had agreed with the pronouncement of Allen and Sharpe in the Canadian Institute of Civil Engineering Journal that ocean outfalls generally present fewer environmental problems than land based treatment. Dr. Bob Stewart, one of Canada's scientists with a international reputation and director of the Pat Bay Pacific Geoscience Centre came to Victoria specifically to explain why we did not need a sewage treatment plant.

Now the SETAC group, for a fee of \$600,000 have concluded that "...the benefits of treatment cannot be described or calculated with any precision. This observation does not mean that the benefits of treatment would be insignificant." Once you have mastered the double negative you realize this means they do not know if we need a treatment plant or not. They stated their belief that a referendum would now be approved, i.e. treatment would be popular. Our Minister of Environment has stated we must have treatment and quotes high levels of lead and mercury. However, the discharge of lead from the Annacis Island secondary plant is greater than either of our outfalls. I believe it is wrong to base a conclusion on what you don't know, wrong to consider what is popular, wrong to worry about toxicants without setting them in context and wrong not to seek the opinion of the Pat Bay Centre. As treatment would cost as much the Olympic construction at Whistler and have serious environmental disbenefits I urge members to write to the Minister if they agree with me.

**Contributor:** Ted Dew-Jones PEng, author of "Victoria's Sewage Circus". For information: Visit <http://nisoftware.com/sewage-circus>).

## What is new?

Not long ago we reported in the October 2005 Newsletter an attempt by a non-profit group called One Laptop Per Child (OLPC) to provide a personal laptop to every school child – particularly in the poorest part of the world. In the July issue of the Professional Journal of SPIE (Society of Photo-Optical Instrumentation Engineers), it reported that the \$100 Laptop to be sold to governments of technologically underdeveloped countries was anticipated to be launched in 2007. In May this year, the first working prototype of the laptop was debuted at the OLPC's Seven Countries Task Force Meeting. As Walter Bender, OLPC president of software and content said: "The biggest challenge is building a learning culture around the machine. There is not a one-size-fits-all solution – conditions vary too much from place to place. There is a one-size-fits-all epistemology, however: you learn through doing. The initial experience with the machine for both students and teachers will be one of create and share." Nicholas Negroponte, the MIT Media Lab chairman also commented: "Considerable work will be devoted to teachers. Not so much to have them learn what and how to teach the kids, but more in terms of their own self-confidence and comfort. Experience to-date, at a scale of about 50,000 machines, has been in Maine (USA). Many teachers in Maine – in 2002 – were apprehensive. Those same teachers today are near euphoric, in part because teaching has become so much more fun. Students are more engaged."

## Have Your Say!

Do you like our format? Do you have concerns or comments you like to voice? We love to hear from you and welcome any contributions to this newsletter, humorous or otherwise. The deadline for submissions to the next newsletter is Sept. 22, 2006. Please send them to Harry Kwok, University of Victoria at [hkwok@ece.uvic.ca](mailto:hkwok@ece.uvic.ca).

### Advertisements

While APEGBC – Victoria Branch is not in a position to endorse advertisements, we do provide them as a service to our members. The advertising rates are \$200 for eight continuous advertisements and \$30 for a single advertisement.

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