President's Message

Asbestos Mining in Canada Now History!

The news (eg reference 1) that newly elected Quebec Premier Pauline Marois cancelled a $58 million dollar loan to the Jeffrey mine appears to have dealt a death blow to the last of the Canadian asbestos producers. Finally, the embarrassment of Canadian exports of asbestos to second and third world economies, where thousands of workers are over exposed, is over. The owners of the Jeffrey mine admitted in October (reference 2) that the mine seems to be closed for good, due to inability to secure the loan. They also stated that with the loan, 425 direct and 1000 indirect jobs would have been secured. Federal Industry Minister Christian Paradis, who has been a staunch defender of the Quebec asbestos industry, announced $50 million to help affected communities diversify their economies. So by my simple math, closing down the asbestos industry actually saved the taxpayers $8 million. I know there are other costs, mostly affecting individuals in the mining towns of Quebec, but the risks of contracting asbestos related disease from working as a chrysotile miner seem more costly to me than the economic burden created. I still believe it is a win-win for all Canadians!

Now if only we could do something to reduce our asbestos-product imports? Newsworthy in the last few months was CBC’s story on asbestos brake pads being imported and used here (reference 3), without any labelling to indicate that they contain asbestos. A private member’s bill was promptly proposed in the Ontario legislature to require proper labelling. Now that Premier McGuinty has prorogued parliament, this means this bill will die before it is even debated.

So in this case, two steps forward, one step back!

Reference 1

Reference 2
http://www.montrealgazette.com/news/Quebec+asbestos+mine+reopen+president+says/7370998/story.html#ixzz29f54VKUM

Reference 3

Paul Bozek, CIH ROH

President’s Message

Asbestos Mining in Canada Now History!

The news (eg reference 1) that newly elected Quebec Premier Pauline Marois cancelled a $58 million dollar loan to the Jeffrey mine appears to have dealt a death blow to the last of the Canadian asbestos producers. Finally, the embarrassment of Canadian exports of asbestos to second and third world economies, where thousands of workers are over exposed, is over. The owners of the Jeffrey mine admitted in October (reference 2) that the mine seems to be closed for good, due to inability to secure the loan. They also stated that with the loan, 425 direct and 1000 indirect jobs would have been secured. Federal Industry Minister Christian Paradis, who has been a staunch defender of the Quebec asbestos industry, announced $50 million to help affected communities diversify their economies. So by my simple math, closing down the asbestos industry actually saved the taxpayers $8 million. I know there are other costs, mostly affecting individuals in the mining towns of Quebec, but the risks of contracting asbestos related disease from working as a chrysotile miner seem more costly to me than the economic burden created. I still believe it is a win-win for all Canadians!

Now if only we could do something to reduce our asbestos-product imports? Newsworthy in the last few months was CBC’s story on asbestos brake pads being imported and used here (reference 3), without any labelling to indicate that they contain asbestos. A private member’s bill was promptly proposed in the Ontario legislature to require proper labelling. Now that Premier McGuinty has prorogued parliament, this means this bill will die before it is even debated.

So in this case, two steps forward, one step back!

Reference 1

Reference 2
http://www.montrealgazette.com/news/Quebec+asbestos+mine+reopen+president+says/7370998/story.html#ixzz29f54VKUM

Reference 3

Paul Bozek, CIH ROH
OH Forum is published quarterly by the Occupational Hygiene Association of Ontario, and distributed free of charge to all members.

Deadlines for articles and advertising are as follows:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>10th of January</td>
</tr>
<tr>
<td>May</td>
<td>10th of April</td>
</tr>
<tr>
<td>August</td>
<td>10th of July</td>
</tr>
<tr>
<td>November</td>
<td>10th of October</td>
</tr>
</tbody>
</table>

Enquiries or suggestions should be directed to:

Editor - OH Forum
c/o OHAO
6519-B Mississauga Road
Mississauga, Ontario L5N 1A6
Tel: (905) 567-7196
Fax: (905) 567-7191
www.ohao.org

Mission Statement

To advance the profession of occupational hygiene and to serve the interests of our members by:

- sponsoring professional development and training;
- promoting public and legal recognition;
- developing partnerships with stakeholders;
- providing public education;
- fostering communication and networking.

rev. May 2010
Editor’s Message
Christine Sidhom, MSc (A), CRSP

Welcome to the Fall issue of the OH Forum. It is always a pleasure for me to read the articles submitted and a great way to keep up to date.

I want to thank our column editors and contributors for continuing to keep us informed on new issues in occupational hygiene and health and safety, sharing case studies or some of their knowledge, and updating us on the activities of our association. If you would like to submit an article, we welcome submissions and look forward to hearing from you.

Happy reading.

Christine Sidhom, MSc (A), CIH, CRSP

Nominations for the 2012 Hugh Nelson Award of Excellence Now Open

The Hugh Nelson Award of Excellence in Occupational Hygiene may be presented annually to an individual who has worked or is working as an occupational hygiene professional in a full-time capacity. The recipient of the award will receive a cash award and a plaque.

All nominations must be received no later than Friday, December 7, 2012. The award will be presented at the OHAO Annual General Meeting on Wednesday, March 21, 2013. For more information visit the OHAO website at www.ohao.org.

Will You Be Attending the AIHce in Montreal?

The Board of Directors has confirmed that OHAO will be present at the tradeshow at AIHCE 2013 Montreal, sharing a booth location with CRBOH. This will give our members a chance to connect with the OHAO Board of Directors and other members, since not everyone can make it to the Symposia in Toronto, but may be able to get to Montreal next May. It will also be a way for non-OHAO members who are Ontario based hygienists attending this event to get to know the reasons they might want to join OHAO.

It's Your Job Video Contest

(Editor’s comment-taken from Canada News Centre News Releases September 10, 2012)

As part of a commitment made at the 2011 meeting to directly engage youth about their workplace safety and rights, the Federal, provincial and territorial labour ministers have jointly launched a national social media video contest. The “It’s Your Job!” contest aims to raise awareness by challenging secondary school students and young people from 18 to 24 years of age to create videos demonstrating the importance of workplace safety and rights. For more information on the contest, including rules and prizes, please visit www.youtube.com/yourjobvotretravail or www.labour.gc.ca.
Observations on the Recommendations of the Provincial Advisory Group on Marijuana Grow Operations and Crystal Methamphetamine Laboratories

E.A. Sullivan, PhD, CIH, ROH, CChem

The goals of the Provincial Advisory Group on Marijuana Grow Operations (PAG) were “to integrate the efforts of stakeholders to eradicate marijuana grow-ops and clandestine drug laboratories and to ensure safe and comprehensive remediation of property before re-occupancy”; the latter issue impacts occupational hygienists. A Draft Marijuana Grow Operations Environmental Assessment & Abatement Protocol was released in January, 2010 but the Recommendations (July, 2010) have received little attention.

**Issue #1: Recommendation to designate marijuana grow-ops and clandestine drug laboratories collectively as “clandestine drug operations”**

Originally an Ontario Police Association proposal, it was not adopted by legislators into the 2005 amendment of the Municipal Act; only grow-ops were specified. Although there might be common safety hazards encountered initially by first responders, a collective definition is inappropriate for occupational hygiene purposes because drug laboratories and grow-ops involve fundamentally different operations and materials. PAG also desires regulatory alignment with the federal Controlled Drug and Substances Act. There the focus is law enforcement regarding controlled substances but occupational hygienists address control of ancillary agents mainly outside the legislation: mould, chemical reactants, solvents, fertilizers and pesticides.

**Issue #2: Recommendation to classify problem buildings as “unsafe”**

The stated intent is to facilitate “warrantless entry” onto private property presumed immediately dangerous. Extension of intrusive police powers is always contentious. Also, after immediate safety hazards have been eliminated, problem premises can no longer be automatically presumed dangerous. The Municipal Act (s.431.1) obligates local officials to determine by inspection whether premises are unsafe; presumption of immediate danger carries significant implications and due process must be predicated on valid evidence.

**Issue #3: Recommendation to list problem premises on land title registry**

Realtors assert that disclosure of former grow-ops or drug laboratories using the Land Title System will “mitigate risks to consumers”. Curiously, floods and leaks apparently do not warrant title listing, even though damage could be worse than from grow-ops. If damage has been effectively remediated or is insignificant, health and property concerns are unfounded. Occupational hygiene expertise could allay realty and insurance industry concerns but is underutilized; title listing would perpetuate this marginalization.

**Issue #4: Recommendation to create a regulation for remediation**

PAG considers that regulation is necessary because of acknowledged province-wide inconsistencies in [formulating and implementing] official guidelines and “a best practice/guideline does not have the force of law that a regulation provides”. However, with no professional consensus even on guidelines, there is no credible foundation for regulation. As an example of regulation, the Texas Mold Assessment and Remediation Rules include licensing/registration and specific insurance requirements for remediation companies and individual contractors, workers, technicians, analysts, training providers and "mold assessment consultants". Alternatively, legislation could simply recognize occupational hygienists – who already possess appropriate certification.
– to assess remediation requirements and verify satisfactory completion.

**Issue #5: Recommendation to inspect grow-ops licensed under the federal Marihuana Medical Access Regulations**

Licensed producers of medical marijuana must comply with all applicable codes but these are not always observed. This recommendation would have local authorities perform inspections not done federally for the more than 15,000 licensed growers of medical marijuana in Canada and probably several thousand in Ontario. Paradoxically, licensed grow-ops, sometimes with 75 or more plants, are presumed capable of safe operation with no title listing (because of medical confidentiality), yet illicit (even minimal-scale) grow-ops would be automatically deemed unsafe, trigger extensive (and destructive) intervention and require title listing.

Recommendations remain under provincial consideration; a private member’s bill covering some of the issues was introduced in November, 2010 but only received First Reading. Health Canada is independently pursuing medical marijuana regulatory reform. The PAG recommendations are directed towards law enforcement, consumer (rety) protection and health & safety of first responders; some of the proposals will fetter occupational hygiene investigations and be at variance with realistic risk assessments.

**References**


(Online references accessed September 19, 2012)

---

**Call for Nominations**

As we near the end of a very eventful 2012, the work begins for the OHAN Nominations Committee and its charge of looking for some eligible members interested in serving on the Board of Directors of the Association. The call for nominations will be distributed to members the first week of December, with a nomination deadline of January 21st, 2013.

This spring, at our AGM, we will be electing three members to the 2013-2014 Board of Directors; President Elect, and two Directors. Please consider becoming involved in the operation of your association by standing for a position on next years’ Board of Directors. We encourage members to fill out the nomination form by the deadline, which indicates their willingness to serve.

The time commitment is not overwhelming, requiring five Board meetings in Mississauga (2 to 3 hours in length) and the AGM. Board members are each assigned one of the board rep positions on the Association’s various committees, (i.e. membership, program, newsletter, public affairs, etc). The terms of office, eligibility criteria and position duties are on the website main page (http://www.ohao.org/) under Board of Directors.

Please contact Jamie Prince, Nominations Committee Chair at jamie.prince@gm.com with questions or completed nomination forms.
Noisy News

—Column Editor—
Alberto Behar, P.Eng, CIH
A. Behar Noise Control

Hearing Loss Prevention Management: A New CSA Standard

No one doubts the need and the usefulness of a hearing loss prevention (formerly called hearing conservation) program in the workplace. Also, the essential elements of such a program are well known, since they are the same as with any other hazard management program, such as respiratory protection, confined space or asbestos management. So, what’s so special about this one that CSA has been involved for the past 18 or so months in developing it?

Well, the same question can be asked regarding many standards prepared by not only the CSA, but many other standard organizations. The answer to that question is “uniformity”, i.e. the need to have one document that can be used across the country by law-makers, municipalities, industries, etc. The need was sufficient that the OSH Committee of the Canadian Association of Administrators of Labour Legislation (CAALL-OSH), who are senior representatives of the OHS regulatory authorities across Canada, asked CSA to develop the standard and provided funding for this work. After all, occupational hearing loss is the number one occupational illness globally and in North America and a very significant source of workers compensation claims

Subcommittee 5 (SC5) of the CSA S304 Technical Committee on Hearing Conservation is writing this standard. Among its members there are representative of institutions across the country, including members of industry, hearing protector manufacturers and even distinguished members from the USA and Australia. Among the material used as references are documents from NIOSH, OSHA, ANSI, Australian Standards, etc.

The first draft of the document is quite advanced and SC5, under the chairmanship of Jeffrey Goldberg (Protectear), expects to have it completed by February 2013. Currently, the volunteer writing group is meeting every two weeks to complete the draft document.

Managing OHS & E

—Column Editor—
Ray Ilson, MEng, CIH, CRSP, CRPA (R)
Dalhousie University

Improvements in EHS regulation in Ontario

With the US election issues in our midst, basic differences in approaches to economic and social issues are again being raised in the public arena. A coincidental side-light to this is the opening of the movie “Atlas Shrugged (2)” in the near future. Ayn Rand’s ideals of personal objectivism and rational self-interest, as opposed to simple greed, emphasize rewarding effort and ability. Rand, and political conservatives, believe that reducing regulation, both labour and environmental, and lessening social support systems ultimately result in increased economic and societal benefits for the greater good. Resources are re-directed from the support of unproductive government regulation and social welfare, with decreased taxation and regulation resulting in increased investment, economic growth, higher employment rates and increased wealth for all.

Over-regulation does increase operational costs, reduces profits, affects negotiations and worker benefits and, if negotiations are unsuccessful, may result in business closure. For small businesses and startups, over-regulation presents a barrier to business entry and therefore lower competition, the growth of monopolies and the resulting higher costs of goods and services for everyone. Over-reaching environmental policies are seen to be restrictive to business development and to have supported the replacement of productive energy resources by questionable and costlier sources.

The US government is increasingly reviewing existing/historic regulations with the intention of eliminating overbearing/unnecessary regulations. American studies indicate that regulations imposed on manufacturing create approximately a 20% cost burden which is not borne by their international competition, resulting in slow to negative growth and ever increasing unemployment challenges to prospective employees, particularly recent graduates.
Has this contributed to the creation and support of the “Occupy” movement, the 99% etc? Are regulatory controls, and their associated costs, resulting in a lack of employment and career opportunities? Is the problem increased by the prevailing attitude of collusion between large corporations and governments? After all, corporate representatives, in a variety of formats, sit on government committees, lobby groups etc. The CSA, for example, invites industry experts, generally from the larger institutions/corporations to participate in the development of standards, which are often referenced by government regulation. Personally, I very much appreciate the efforts of the CSA but I’m not 25 years old and unemployed, while facing tens of thousands of dollars of unpaid student loans.

What does this imply in terms of Canada’s health, safety and environmental regulations and the costs associated with them? What is the current approach of our regulatory authorities to what appear to be growing employer and societal demands for lower taxation and less government intrusion into the personal lives and workplaces? Many Canadians feel that they are taking home an increasingly smaller percentage of their earned income and paying higher tax rates on all goods and services, so this is an increasing topic of workplace discussion.

We simply don’t have time or space here to adequately and fairly address the issues, but let’s open the door. Many of us have experience working with regulatory authorities from federal and provincial Ministries and, to a lesser degree, municipal authorities. For several years, the Canadian Nuclear Safety Commission, through their consultative process on regulatory development and public outreach programs, has sought to improve their relations with those subject to the regulation of radiation devices and nuclear substances. Similarly, the Public Health Agency of Canada and the Canadian Food Inspection Agency are increasingly meeting with the public and employers in open discussions related to planned regulation.

Provincially, the Ontario Ministry of Labour has historically set standards and regulations directed at those employers who, sometimes purposefully, mistreat and put workers at risk. Can the regulatory system in Ontario continue to provide this protection for all workers without damaging the productivity and profitability which attracts increased investment in productive ventures?

I think that we have considerable evidence of the direction of the current Ministry through Bill 160 and the creation of the Chief Prevention Officer and Health and Safety Council. The Ontario Regulator’s Code of Practice promotes a risk-based and consistent approach to the “regulated”. The stated intention is to provide healthy and safe work environments while allowing organizations to concentrate on their businesses, within the regulatory requirements, and to generate economic growth. In the Code’s discussion of activities, compliance with “health, safety, environmental, resource and fiscal legislation and polices” is a priority. In noting areas of responsibility, the first listed is “health and safety of workers”.

It is important to note that the recent improvements by the Ontario Ministry of Labour reinforce the vision of the Ham report of the 1970’s. Ham’s basic recommendations were reliance on the IRS, over the enforcement by government and the three basic rights of employees – the right to know, to participate and to refuse unsafe work.

To accomplish this, changing regulatory requirements must consider today’s economic conditions, be evidence-based and directed to demonstrated risks. Improved data collection will provide this direction, so performance metrics are to be developed by the Ministry to track workplaces and sectors, particularly emerging higher risk areas. Higher risk areas include the “underground economy” and the increasing number of younger, non-English speaking and part-time workers, many in significant need of employment regardless of the risks. As these employers tend to be small businesses, increasing administrative penalties may be used to address these concerns directly. As well, there will be an increased emphasis on training and education, of workers and supervisors. Such education will be extended further than presently into the high schools, colleges and universities, trade schools and apprenticeships. There is also the intention to recognize and provide incentives for employers and the sharing of best practices. These models may be particularly useful in providing guidance to small businesses.

So, we have reason to be optimistic about the future as our regulators modernize and prioritize their activities in support of what we all feel is our most important goal - the health and safety of our workplaces.
Closure of the Gentilly-2 Nuclear Generating Station

The Quebec government has decided that the Gentilly-2 Nuclear Power Plant will shutdown at the end of December 2012. ‘G2’ is a 640 MWe CANDU-6 plant that began commercial operations in 1982. The CANDU-6 design was based on the Pickering NGS and G2 is one of the original four ‘second generation’ CANDU-6 plants, the others being Pt Lepreau in New Brunswick, Embalse in Argentina and Wolsong-1 in South Korea. These four were followed by a further 8 ‘third generation’ plants in South Korea, Romania and China. The CANDU-6 has now evolved into the ‘3+ generation’ EC-6 design which is one of the reactor designs being considered for construction at the Darlington site.

The CANDU-6 reactor has 380 zirconium-niobium alloy pressure tubes that form part of the pressure boundary which encloses the fuel and the heavy water of the primary heat transport system. The annulus gas (nitrogen at Pickering but carbon dioxide in later designs) separates the pressure tubes from the calandria tubes which form part of the boundary of the moderator system. The pressure tubes have a finite lifetime equivalent to 25 years of normal operation and the G2 pressure tubes are approaching the end of their design life.

Zirconium alloys are widely used in nuclear reactors due to the low neutron absorption cross-section of zirconium but three mechanisms limit the lifetime of reactor components manufactured from zirconium alloys:

- Embrittlement and swelling due to the formation of zirconium-hydrides;
- Stress-free axial growth under fast neutron irradiation which affects all anisotropic crystalline materials including zirconium alloys; and
- Creep under physical & thermal stress.

Embrittlement can lead to pressure tube rupture, which occurred at Pickering Unit 2 in August 1983, but this problem has been controlled in later designs. Axial growth causes the length of the pressure tubes to increase, but creep can cause the increase of the tube diameter which changes the coolant flow through and around the fuel bundles. A CANDU-6 fuel bundle consists of 37 fuel pencils (uranium dioxide fuel pellets sealed inside a zircaloy-2 sheath) separated by spacers to allow coolant to flow between the pencils. Eventually, the growth of the tube diameter allows coolant to flow around, rather than through, the bundles leading to increased temperature in the inner fuel pencils, drying of the fuel sheath and fuel failure.

Pressure tubes can be replaced, as has been done at Pickering and Bruce, but the Quebec government has decided against this, presumably because Quebec generates large surpluses of hydroelectric power from the James Bay projects. Instead, Gentilly-2 will permanently shutdown at the end of December. The first step of decommissioning will be removing the 4560 fuel bundles, which weigh approximately 50 kg each, from the core and transferring them to the used fuel storage bays. Nearly 750 Mg of heavy water, which can sell for as much as $600 per liter, will be drained from the moderator and the primary heat transport (PHT) system and a chemical decontamination of the PHT system will likely be performed. Chemical decontamination involves flushing the system with mixtures of corrosives such as nitric acid, oxalic acid or sodium hydroxide, oxidizing agents (e.g.: potassium permanganate) and chelating agents (e.g.: EDTA) to remove the oxide layers that have accumulated on the inner surfaces of piping and vessels. It is expected that the G2 PHT system may contain up to 1000 kg of iron oxides and other corrosion products which may include over 10 TBq of cobalt-60 (half-life of 5.27 years), iron-55 (2.73 years), manganese-54 (312 days), cerium-144 (285 days) and other radioisotopes. This activity would be captured on ion exchange columns which would initially emit dangerously high radiation fields but the activity would decay to harmless levels in a few decades.

The used fuel will remain in the used fuel storage bays for at least six years since the decay of short-lived fission products generates enough heat to melt the zircaloy sheath of the pencils in the first couple of years after the fuel is removed from the reactor. After it cools, the used fuel will be transferred to dry storage in concrete canisters and eventually removed for disposal. The current plan is for the reactor and other nuclear system to be maintained
in storage for approximately 30 years. This allows the radiation fields generated by cobalt-60 and other activation products to decay before final decommissioning begins. The future plans for the site have not been announced.

The Pickering site is expected to be the next one to be shutdown. Two reactors (Units 2 & 3) were shutdown in 1997 and never restarted. The other six are scheduled to be shutdown in 2020 and their decommissioning is expected to follow the same general plan as Gentilly-2.

A new study published by the IRSST was conducted in response to joint requests to identify gloves that afford adequate needlestick protection. Needlestick injury is a hazard faced by a growing number of workers. In addition to other hazard-reduction strategies, including administrative measures, protective clothing, especially needlestick-resistant gloves, must be made available to these workers.

The objective of this study was to continue the work on puncture resistance begun in an earlier project and to develop a test method for characterizing needlestick resistance. Preliminary work was also done to assess puncture resistance that takes the effect of the hand wearing the glove into consideration.

The study confirmed that needlesticks are different from punctures by standard probes, with respect both to fracture mechanism and force levels measured. While puncture by standard probes is governed by the maximum rate of strain of the material, needlesticks include a large measure of cutting and friction because of the cutting edge at the tip of the needle.

The influence of needle characteristics (dimensional tolerances, wear, diameter, tip angle and number of facets), test material properties (thickness, type and hardness) and experimental conditions (probe velocity, angle of attack, temperature and humidity) on the force measuring needlestick resistance was studied for a series of materials representative of different types of protective gloves. The report includes recommendations regarding the best gloves to use for a given purpose.

To download the report, visit: http://www.irsst.qc.ca/en/-irsst-publication-needlestick-resistance-of-protective-gloves-development-of-a-test-method-r-753.html


Did You Know?

That the OHAO Website features exclusive OHAO members only access to TLVs and BEIs documentation? Visit today at www.ohao.org
The OHAO PDC and Symposium took place at the Toronto Congress Centre on October 24 and October 25th. The PDC was organized by the Public Affairs & Education Committee chaired by Altaira Hildebrand and the Symposium was organized by the Program Committee chaired by Nancy Wilk. The subject matter covered during the October 24 PDC was Legionella Risk Reduction. On October 25, the variety of occupational hygiene topics covered, in addition to the exhibitors and the opportunities for networking during the breaks provided for a full Symposium day.

The first presentation after the president's welcome message was on the CSA Standard Z1003: Psychological health and safety in the workplace, published in fall 2012. The purpose of this voluntary standard is to prevent psychological harm and to promote psychological health. Elizabeth Rankin, project manager with CSA spoke about developing the standard, the consultation period, which brought 866 comments, and whose review eventually led to the final product. Of note is that the CSA is making this standard available for free for 5 years on their website. In addition, Ms. Rankin indicated that a great resource was http://guardingmindsatwork.ca/ which is a workplace guide to psychological health and safety.

Dr Tony Muc provided an overview of non-ionizing radiation, the electromagnetic spectrum (wavelengths and frequencies), the "fuzzy boundaries" between the types of radiations, and effects on matter (reflection, refraction, absorption and scattering). The take home message was to prioritize where the health effects might be, to look at the wavelength of the radiation of concern and the size of the human body or target.

Dr. Magdalena Havas from Trent University also presented on this topic. Dr. Havas brought awareness about electromagnetic hygiene reminding participants that “We are more and more surrounded by electromagnetic radiation from various sources such as WiFi, to cellular telephones, Bluetooth technology, Smart meters, and microwaves. In the home and work (and school) environments, we are constantly exposed to microwave radiation.”

Todd Irick updated the attendees on GHS (Global Harmonization System). The goal of GHS is to have consistency throughout the world on how hazards are communicated between and for consumers, workers, (including transporters), and emergency responders. The new classes, categories, pictograms, signal words were reviewed. OSHA in the U.S. implementing GHS this year. In Canada, it will be “WHMIS after GHS”. The Hazardous Product Act and the Controlled Product Regulations will have to be revised, and then will have to be published in Gazette I and Gazette II before implementation. There is no date set for implementation; however, the guidance document on GHS can be downloaded from the Health Canada website (http://www.hc-sc.gc.ca/ahc-asc/intactiv/ghs-sgh/index-eng.php). Mr. Irick later also presented a case study of a large scale remediation.

Michele Oliver From the University of Guelph spoke about whole body vibration, white toe syndrome, and specific cases of selecting and evaluating anti-vibration seating for industrial vehicles. The entry points for whole body vibration are the feet, the seat and the back rest. Each body part has a resonant frequency making it susceptible for injury and in the cases of the whole body vibration it is the neck and the spine that are vulnerable. Dr. Oliver also mentioned that posture does play a role in the effect of vibration on the body.

The first provincial Chief Prevention Officer, George Gritziotis, was the keynote speaker. He spoke of the Prevention Council as part of Bill 160, the Prevention Organization, the transition of some functions from the WSIB to the Ministry of Labour, and Priorities. The priorities included

- Supporting small businesses
- Addressing vulnerable workers
- Working with high hazard industries
- Developing an integrated delivery model
- Increasing capacity to address the needs of clients

Mr. Gritziotis reminded participants that since October 1, it is mandatory for workplaces to post the Prevention Starts Here posters. He also mentioned the “It’s your job” provincial safety video contest for young workers that is being advertised.

Lydia Renton and Paul Bozek provided the updates from ABIH and CRBOH respectively, encouraging participants to become certified or registered, and this ended the very full and informative day.
OHAO President Paul Bozek

Lydia Renton provides an update from the ABIH

Keynote Speaker and Chief Prevention Officer, George Gritziotis

Todd Irick presented on GHS and provided a case study

Dr. Tony Muc speaks about non-ionizing radiation

Dr. Magda Havas was invited to speak on WIFI and Electromagnetic Hygiene

Dr. Michele Oliver presenting on whole body vibration.
Hygiene Crossword

Carl Woychuk, BSc, MHSc, ROH, CIH, GroupEHS

Occupational Hygiene Games

Across
1. Light you shouldn’t point at others
3. German scholar who described OH issues in mining in 1556
5. It's heavy metal dude!
10. Fit the work to the worker
11. Generic guideline
12. With reference to very many
14. Spread throughout the body
15. Was solid then a gas but not now

Down
2. Show me what you’re doing
3. Pins under the microscope
4. Pontiac fever
6. Evaluate this because dose is too invasive
7. time ... average
8. Close or far from the source
9. Sounds a lot like a hollowed-out block
13. When caused by the "IAQ tube" don't pull the fire alarm
14. Standard temperature and pressure

Answers are on the website on the OH Forum page