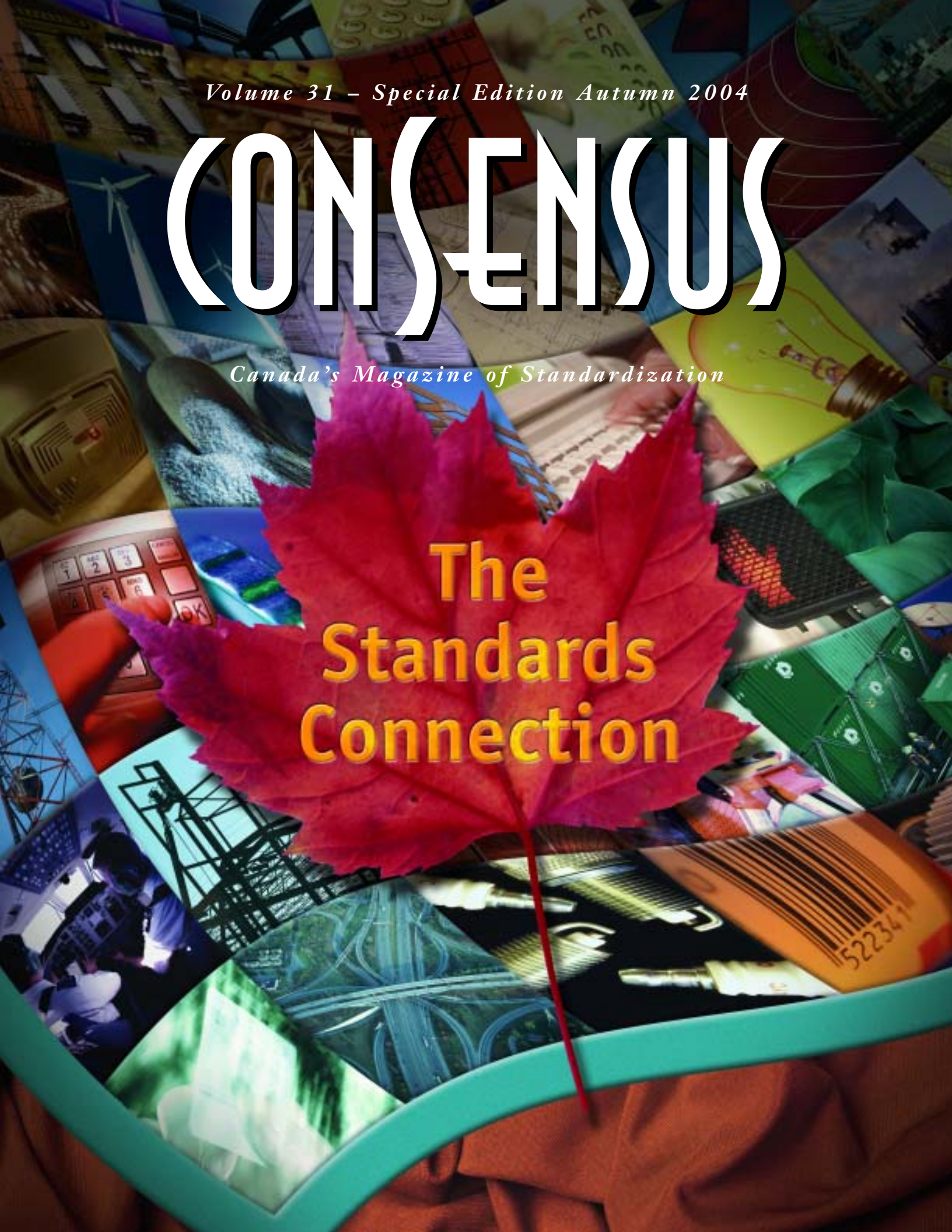


Volume 31 – Special Edition Autumn 2004

CONSENSUS

Canada's Magazine of Standardization

The
Standards
Connection





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WATER

AIR

BLOOD

TERRE

EAU

AIR

SANG

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The Standards Council is the federal Crown corporation with the mandate to promote efficient and effective voluntary standardization.

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ISSN 0380-1314

Please direct letters and comments to the editor of CONSENSUS, using the information above.



The Standards Council is the Canadian member of the International Organization for Standardization (ISO) and sponsor of the Canadian National Committee of the International Electrotechnical Commission (IEC).



Printed in Canada on recycled and recyclable paper



national
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World Standards Day



On October 14th the SCC joins the international community in celebrating the 35th World Standards Day.



Dear CONSENSUS Readers,

As many of you know, it has become the Standards Council's practice to pay tribute to World Standards Day by publishing a special edition of our Magazine on October 14.

This year, the stories that have been selected are intended to highlight the rich tapestry of Canada's National Standards System. Standardization is so intricately woven into the fabric of our everyday lives that we don't often stop to examine the individual threads that hold it together. It is our hope that in sharing these few examples with you, you may glimpse the diversity of the Canadian system and benefit from the lessons and experiences shared by its contributors.



We have much to celebrate in Canada! Our national experience is a rich mosaic made up of hundreds of thousands of standards and conformity assessment stitches. Collectively the pattern formed by those stitches is dependent on our National Standards System—the community of various people and organizations that strive to sustain it.

The 2004 World Standards Day theme, selected by our international colleagues (ISO, IEC and ITU) is: "Standards Connect the World". Emphasis is on the role that standardization plays in helping global citizens connect in areas spanning from health, safety and the environment, to international trade, corporate responsibility and economic sustainability. For our part, we wish to acknowledge the importance of those individual standards connections and their role in Canadian life.

It is with the intent of recognizing and celebrating the importance of standardization around the world that I wish you all, happy reading!

Sincerely,

Peter Clark
Executive Director



Examining Island Icons & Industries

Despite its size, Canada's smallest province is well known for its larger than life personalities and distinctive landscape. Anne of Green Gables – the feisty redhead from Avonlea – will always be PEI's most beloved fictional character. Running a close second is Bud the Spud, thanks to Maritime folk legend 'Stompin' Tom Connors and his ode to the Island:

*"Well, it's Bud the Spud, from the bright red mud,
Rollin' down the highway smilin',
The spuds are big on the back of Bud's rig,
They're from Prince Edward Island..."*¹

PEI's unofficial anthem not only highlights its reputation as an important potato producer, but also singles out another of the province's most distinctive characteristics – its rich red soil. A chemical reaction between oxygen and the high concentrations of iron-ore in the Island's soil are what give PEI dirt its rusty red colour. Iron-ore is just one of many minerals found in the Island's fertile soil. Part of the province's agricultural identity is the mineral and nutrient rich earth which is literally its foundation.

Although often overshadowed by the potato industry, PEI's livestock sector contributes significantly to the Island's economy. One of the keys to successful livestock farming is ensuring that the animal feed used in dairy, cattle, pork and sheep farming contains the right combination of minerals and other essential nutrients for optimal health and growth. Because locally grown feed can vary, farmers need to determine its nutritional value in order to make sound feeding decisions.

To assure the optimal combination of minerals, fat, protein, ash and moisture, farmers rely on testing by an accredited laboratory says Brian Douglas, director of the Agriculture Resource Division who jointly manages the Prince Edward Island Analytical Laboratory with the Department of Environment and Energy.

"From a feed perspective, informed decisions can produce economic benefits. Accurate results help farmers make the right decisions for their animal feeding programs," says Douglas.

The laboratory's scope of accreditation from the Standards Council of Canada includes feed testing as well as tests for microbiology and chemical analysis of water.²

"In today's world, you have to be able to prove that your results have credibility. One way to do that is through accreditation," adds Douglas.

Accreditation means the laboratory must meet and exceed recognized quality control standards. It provides parameters within which to operate and the assurance of a quality product. Each staff person must understand their role in the system and the important part they play in producing results.

"What accreditation does is make you examine how your lab operates from start to finish. It makes you document what you do. By having documentation, you know what is required to meet the required quality standards," says Douglas.

"It allows you to better plan for the future. You're aware of what you have, what you're doing and your limits."

From the documentation of standard methods and procedures to long-term planning, accreditation has allowed Prince Edward Island Analytical Laboratories to provide higher quality services – creating a win-win situation for the clients and lab staff and ensuring farmers make the appropriate feeding decisions. ■

¹ Written authorization to use lyrics from "Bud the Spud" were granted by A-C-T Records and Crown-Vetch Music through www.StompinTom.com

² The complete scope of accreditation for the PEI Analytical Laboratory for environmental testing (Accredited Laboratory No. 424) can be found at: <http://www.scc.ca/scopes/reg424-eng-e.pdf>



A revised CGSB standard provides new and improved industry symbols to help consumers clean and launder clothing safely. Hot off the press in December 2003, *Care labelling of textiles* (CAN/CGSB-86.1), reflects the current labelling practices of NAFTA (North American Free Trade Agreement).

Under NAFTA, member countries must make every effort to harmonize their labelling requirements to facilitate trade in textile and apparel goods. Recently, Canada along with the other countries on the NAFTA Subcommittee on Labelling of Textile and Apparel Goods agreed on a set of new common care symbols, which are harmonized with the U.S. and International Organization for Standardization (ISO) equivalents.

In the 2003 Canadian standard, five basic symbols identify care treatments for washing, bleaching, drying, ironing and professional cleaning. The symbols are in black and white, replacing the previous edition's "traffic-light" colours of green, amber and red.

The temperature of a treatment appears either in degrees Celsius or is defined by a series of dots (a hand iron symbol with one dot means the garment can be safely ironed at a temperature of 110°C). And bars help illustrate the severity of the treatment (one bar below a wash tub means the garment should be machine washed using a mild treatment).

Other symbols define techniques for professional cleaning, hand washing, and natural drying — dry flat, line dry, drip dry, dry in the shade.

To ensure that manufacturers select the correct care label, the standard specifies the criteria and recommended test methods for determining colourfastness, dimensional stability, effects of chlorine bleach, and maximum safe ironing-temperature. In addition, the standard ensures that using a recommended treatment will not cause damage such as shrinkage, staining and fraying.

The standard represents a consensus of the members of the CGSB Standards Committee on Care Labelling of Textiles. The committee is made up of various technical experts from the textile and clothing industry, testing facilities, government and consumer groups.

The project was sponsored by the Competition Bureau of Industry Canada, which oversees the application of the *Competition Act*, the *Consumer Packaging and Labelling Act*, and the *Textile Labelling Act*.

The new edition, available in both official languages, ensures that the care symbols and evaluation criteria used in Canada continue to be appropriate for today's marketplace. ■

By Patricia Dolban, Acting Manager, Standards Division, Canadian General Standards Board (CGSB)

Saluting Our *National Standard*



Since its launch in March 2000, the Canadian Standards Strategy (CSS) has provided direction and leadership on how to use standardization to best advance the social and economic well-being of Canadians in a global economy.

In 2004, an extensive consultation with National Standards System (NSS) stakeholders—including SCC Advisory Committees, consumers, accredited clients and government departments (federal & provincial / territorial)—is being coordinated by the Standards Council of Canada (SCC).

Renewal of the Strategy's 23 implementation proposals will culminate in the publication of an updated blueprint for standardization activities in Canada.

Look for the renewed Canadian Standards Strategy in 2005!

To learn more, visit www.scc.ca.



Whether it is flying high atop the Peace Tower on Parliament Hill or blowing in the ocean breeze of a naval vessel halfway around the world, the distinctive red and white flag with its eleven point maple leaf serves as a symbol for Canada and as a source of great national pride.

It is also an example of standardization at work.

While many Canadians are familiar with the political story behind Canada's flag, the history of its standardization is less well known.

Soon after it was proclaimed as Canada's National Flag in 1965, work began on what would be the first in a series of three flag standards that were approved as National Standards of Canada (for outdoor, indoor and one-time special use).

Although originally spearheaded by the Department of National Defence (DND), the responsibility for the flag standards was eventually handed over to the Canadian General Standards Board (CGSB), where it has remained ever since.

In the years that followed their development, the flag standards have been regularly reviewed by the National Flag Committee,¹ which is composed of 21 members representing government and industry. In December 2003, the Standards Council of Canada reaffirmed the latest amended version of the outdoor flag standard as a National Standard of Canada and the committee is already collecting data about processes to improve the strength and colourfastness of material used in the flag for its next periodic review .

The Committee's efforts have helped to ensure that the flags that fly from poles and wave from buildings are not only uniform in colour, proportion and dimension, but also that they can withstand the natural elements – sun, rain, snow and wind - that are also so much a part of our Canadian identity. ■

¹ *National Standards of Canada are required to be reviewed every five years, or earlier in some cases, by the Standards Development Organization responsible for their preparation.*



The Modern Mariners' Log - Canadian Technology Onboard



A decade ago, the Estonia ferry capsized into the Baltic Sea and sank off the Finnish coast, claiming more than 850 lives.

But unlike airline crash recovery efforts, where investigators are able to use the plane's black box to help determine the cause of the accident, the Estonia – and, for that matter, all other passenger and cargo vessels at the time – had no equivalent technology to assist in tracing possible reasons for a marine disaster.

Today, all passenger and large cargo ships must carry onboard voyage data recorders (VDRs), which like airline black boxes, can provide essential clues to the cause of an accident.

Canada, and particularly a Newfoundland company, has played a lead role in the development of both VDRs and the international standards that regulate their use.

Based in St. John's, Rutter Technologies Inc. is named after the "rutter" navigational log books that mariners historically carried on voyages. It was established in 1998 to design, manufacture and market VDRs and has since become the world's largest supplier of these devices.

Rutter's VDR features two components. A main

inboard unit - initially the size of a bar fridge, but reduced to the size of a beer cooler in its second-generation configuration - collects information about the vessel including its position, speed, course and radar displays. It also records radio communications as well as conversations (what the deck officer sees on radar) and commands on the bridge to and from the engine room and the rudder.

The second component is a rugged device called a capsule and shaped like a barbecue. Essentially the ship's memory, it sits outside above the bridge and stores all the incoming information. Should a ship go down, the capsule – like a black box on an aircraft – is the portion that would be retrieved to access the information stored on memory chips inside.

Rutter's VDR system also comes with software, which extracts data and downloads it over an Ethernet or local area network for playback in a multimedia environment complete with such visuals as the ship's navigation pattern.

As Rutter Technologies president and co-founder Byron Dawe explains, the company's VDR can be used not only in the event of a catastrophe, but is more often

relied on as a “management tool” to deal with minor incidents, such as pinpointing why a ship bumped against a dock or to provide a snapshot of a vessel’s seaworthiness as part of its regular maintenance.

“Our VDR can also be used as a security device,” says Dawe, an electrical engineer by training.

“You can put one of these devices on board and find out everything that was happening on the ship for the last 12 hours. Some luxury cruise ships that use our technology, like Holland America, are using our VDRs to record from 20 to 30 days for both management and security purposes.”

More than 400 ships carry Rutter VDRs – and, the company is hoping many more will follow suit now that the International Maritime Organization (IMO) requires that all passenger ships and large cargo vessels travelling through international waters carry some form of the device.

As he did with the creation of Rutter’s VDR, Dawe played a key role in the development of VDR standards that emerged from the Geneva-based International Electrotechnical Commission (IEC), and which the IMO has adopted.

As a member of the IEC’s Technical Committee on Maritime Navigation and Radio Communication Equipment and Systems (IEC/TC 80), Dawe participated in the Working Group on Shipborne Voyage Data Recorders (WG 11) that developed IEC 61996, which sets performance requirements for VDRs. The standard was published in July 2000.

However, Dawe’s involvement on WG 11 wasn’t a sure thing, according to Pieter Leenhouts, manager of the Canadian Coast Guard’s Integrated Navigation Information System, who chaired the Canadian subcommittee of the IEC/TC 80 from 1998 to 2003. He recounts that when the working group was created, Canada was not immediately able to participate because it only had observer status on the technical committee. Leenhouts quickly realized this would need to be changed.

“Rutter is the company that pushed the technology. We were very concerned that England dominated the working group and was pushing for a standard based on the VDR specifications of an English company. So we really had to up the ante and make sure we participated on this working group,” said Leenhouts.

To stress the importance of Canada having a voice on WG 11, Leenhouts gathered together presentations from 45 different Canadian technical and electronics agencies from the private and public sector. He made the pitch to the Standards Council – Canada’s official liaison with the IEC – and secured two positions as voting members on the working group. One went to Dawe, the other to Mike Poole, formerly with the Transportation Safety Board of Canada.

The high probability that VDR standards developed by

the IEC would become the basis for IMO’s international regulations made Canada’s involvement in the process even more consequential.

Says Leenhouts: “Once regulations are chiselled in stone, it’s very difficult to make any changes and that’s why having representation at the development stage is very important.”

The IMO now requires that IEC 61996 compliant VDRs be carried by all international passenger ships and ro-ro passenger ships (vessels such as ferries that carry passengers and cargo). The same regulation applies to cargo vessels weighing 3,000 gross tonnes or more and built on or after July 1, 2002. Depending on their weight, cargo ships have until July 1, 2010, to comply with the standards.

Canada, and particularly a Newfoundland company, has played a lead role in the development of both VDRs and the international standards that regulate their use.

By Dawe’s estimate, between 1,500 and 2,000 ships now have VDRs on board, but he guesses that at least another 15,000 to 20,000, will have to be retrofitted in order to accommodate the devices by decade’s end. And that doesn’t count the estimated 1,500 new ships built around the world every year – all of which creates tremendous opportunity for Rutter. It hopes to capture a 30 per cent market share beyond its current position estimated at between 20 and 25 per cent.

Dawe says the market for VDRs is just now starting to open up and he adds that it could get even larger, if all countries, including Canada, which regulate vessel traffic in their own waters, had domestic VDR requirements. ■





Lower Risk: More Game

Safety

Portrait provided and used with the permission of the Bureau de normalisation du Québec

Not that long ago, cars were not equipped with safety seat belts, homes didn't have smoke detectors and hockey players were not required to wear helmets. Today, there are many such products dedicated to protecting lives and improving safety, with standardization and certification playing a pivotal role in society's shift towards safer quality products.

10

In hockey and other team-based ice sports the risk of injury has always been high—sharp skates and frequent falls being part of the dangers. When players fall on the ice, their necks and especially the vessels that carry blood to the brain are particularly vulnerable. Without quick

and proper intervention, when a major artery is severed by the blade of an ice skate it can take less than a minute to end in fatality. Several neck-related accidents have resulted in serious injury and some even in the death of hockey players.

It was in January 1975, that a young goalie from Whitby, Ontario, Kim Crouch, suffered a deep cut in the neck during a Junior A match. He survived thanks to the timely and appropriate intervention of team trainer Joe Piccininni, a quick transfer to hospital where he remained for eight days, and a two-hour operation necessitating forty stitches. Kim's near fatal accident prompted his

father Ed Crouch, the Whitby fire chief, to take action. He developed a new protective device aimed at preventing similar accidents: the neck protector. Six weeks after his accident, Kim returned to the ice for an exhibition game wearing the prototype developed by his father. Five months later, the Crouch family started their business specializing in the production and sale of neck protectors. From that point on, some players in minor hockey leagues, mostly in Ontario, began wearing neck protectors on a voluntary basis.

In Quebec, the use of neck protectors was slower to catch on. From 1983 to 1986, media coverage of two tragic deaths and several cases of severe neck lacerations were insufficient to incite many players to voluntarily wear the neck protectors. Realizing that something needed to be done, in 1986, the *Fédération québécoise de hockey sur glace* made the use of neck protectors mandatory in minor hockey leagues.

In spite of these efforts, hockey players were still largely unmoved by the new regulation. Much of their reluctance however, vanished on March 22, 1989, when Buffalo Sabres goalie Clint Malarchuk suffered a serious neck injury during a televised game. Despite the large pool of blood he left on the ice, his trainer was able to save his life. Once again it took this near fatal tragedy for the perception of neck protectors to begin to shift from regulatory provision to necessity.

As a response to the rising public demand for better protection of hockey players, in March of 1986, the Bureau de normalisation du Québec (BNQ) established a standards development committee for neck protectors. Committee membership included manufacturers and users of hockey equipment as well as technical experts. The committee became a privileged forum for debate and communication among these different parties. It set down requirements for the preparation of a standard that would increase the safety of hockey and ringette players by decreasing the risk of neck injuries.

The BNQ standard was published in May 1990 and became a National Standard of Canada in September of that same year. Standard CAN/BNQ 9415-370 was the first standard in the world for neck protectors and remains the only such standard with a certification program for the recognition of conformity.

In 1992, the Government of Quebec revised its regulation for protective equipment used in ice hockey requiring that all hockey players wear neck protectors conforming to this standard. In September 1993, the Canadian Amateur Hockey Association (now Hockey Canada) and the association Ringette Canada also made it mandatory for minor league players throughout Canada to wear a neck protector certified according to the national standard developed by the BNQ. Speed Skating Canada has followed suit, requiring that indoor speed skaters wear neck protectors.

And who better to ensure that players wear the proper equipment than the referees, coaches and parents! Indeed, they can easily verify neck protector conformity to the BNQ standard by looking for the BNQ certification mark on the player's neck protector.

Kim's near fatal accident prompted his father Ed Crouch, the Whitby fire chief, to take action. He developed a new protective device aimed at preventing similar accidents: the neck protector.

As a result of one parent's determination, certified neck protectors for ice sports enthusiasts are now readily available. And with the help of the BNQ, Canada has a national standard to address this important public safety issue. The neck protector seems to have proven its worth - there are no reported cases that a player wearing one has sustained a fatal injury.

The family business of Kim Crouch Ltd. continues to manufacture neck protectors in Ontario. Meanwhile, the use of neck protectors in ice sports has become so widespread that multinational corporations now manufacture neck protectors certified in accordance with the standard CAN/BNQ 9415-370 in regions as far away as South America and Asia.

BNQ is currently coordinating work on a third edition of the standard, which is expected to be published in early 2005. ■

*Prepared by: Nicole Gagné, P.Eng. and Jim Ferrero, P.Eng.
BNQ – Standards Development*





“T aiga” – from the Russian word for a wooded area – is defined as “the coniferous forest lying between tundra and steppe” but for the more than 56,000 Aboriginals living in Canada’s North, it is much more. The Taiga is their traditional hunting and gathering ground and home to the many animal and plant species that have provided both physical and spiritual nourishment for centuries.

Located in Yellowknife, Northwest Territories, the Taiga Environmental Laboratory not only takes its name from this ecosystem, it is also working with its residents to ensure a healthy environment where traditional practices can be kept alive.

Part of the Renewable Resources and Environment division of the Department of Indian and Northern Affairs (DIAND), Taiga is the only laboratory north of sixty accredited by the Standards Council of Canada (SCC). Its scope of accreditation includes numerous biological and chemical tests for soil and water.¹

“Accreditation allows you to look at the processes, people and training. You can pinpoint non-conformances in the lab and target improvement,” says Shane Harnish, the laboratory’s Quality Assurance Officer.

The Taiga Lab plays an important role in various initiatives coordinated by the DIAND, aboriginal communities and local organizations that work to monitor and address the impacts of pollution and contaminants on this delicate ecosystem. Taiga provides testing to ensure that industrial development projects are aligned with environmental laws and regulations. The lab also supports the Northern Contaminant Program (NCP), which was created in 1991 to address concerns about increasing levels of contaminants present in the air, water, plants, animals and their impact on people.

Until a year ago, Northern communities relied on outside specialists to gather testing samples and interpret results. As part of efforts to

establish local expertise, Taiga now offers training in these areas. The delivery of two-week courses explaining how to collect samples in the field and how to interpret and analyze data is helping Northerners become more educated about and involved in efforts to monitor pollutants that could affect their health.

As Canada’s North continues to develop, Taiga and its partners must strive to adapt in order to help ensure a balance between economic and ecological needs. Harnish reports that the lab is currently taking the necessary steps to expand its scope of accreditation to meet new water and soil testing needs that will be generated as a result of the Mackenzie Gas Project, a network of over 1,200 kilometres of pipeline being laid in the Northwest Territories. The project, which will connect Arctic gas fields to the North American market, is expected to be operational by 2010.

“We know there will need to be testing in that field,” says Harnish. “We have clients asking about it.”

At Taiga analysts deal directly with assessors. Their confidence in the process grows as they see firsthand accreditation’s role in increasing productivity and getting things done efficiently. Along with creating a positive working environment and job security, accreditation – and an evolving quality assurance plan – is helping Taiga Environmental Laboratory keep Northern Canadians safe. ■

¹ The scope of accreditation for Taiga Environmental Laboratory (Accredited Laboratory No. 187) is available at <http://www.scc.ca/scopes/reg187-eng-e.pdf>



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From Fuses to Fire Trucks

What do fire trucks, fuses and clock radios all have in common?

It's a somewhat odd but startling connection!

Fuses don't have wheels, or ladders or flashing lights, and while the alarm feature on a clock radio is usually capable of waking us from slumber, it pales in comparison to the blare of a siren. Yet closer examination of these and many other products and devices that we use everyday reveals an important, but often overlooked similarity.

If you turn over your clock radio or look carefully at an electrical fuse you will likely find a mark or series of marks. And if you were to closely examine a fire truck, you would also find the same to be true.

Irrespective of their size, many products carry some type of certification mark. The mark serves as confirmation that the product has been tested by a specific organization and that it meets either—in part or as a whole—a specific standard for safety or quality.

The minimum performance requirements for fire fighting vehicles (including pumpers, water tank trucks,

ladder trucks, and aerial devices) are defined in a newly revised standard (CAN/ULC-S515-04) for automobile fire fighting apparatus. It is recommended that third-party certification of conformance to the standard be from an organization accredited by the Standards Council of Canada (SCC).

Apparatus manufacturers, fire chiefs, commissioners and insurance representatives, and other interested stakeholders are among the members of the Underwriters' Laboratories of Canada (ULC) to have reviewed and updated the existing standard, which was approved by the SCC as a National Standard of Canada in September 2004. The evaluation of fire insurance premium rates for municipalities will be dependant in part on their fire department's largest investment – the fire truck.

For those relying on public fire-protection equipment and systems, standardization plays a key role in ensuring the safety and quality of fire trucks carrying water, ladders and, more importantly, fire fighters. ■



The Business Banner that Signals *SUCCESS*

What can offer credible evidence of a world-class company and is flexible enough to apply to First Nations communities as well as hog farms? The answer is ISO's widely recognized management systems standards, in particular the ISO 9000 and ISO 14000 series. The importance, versatility and diversity of the application of these standards is quickly evident by looking at Canadian organizations that are benefiting from management systems registration.

The Making of Management Systems Success

After the revolution of 1789, the French Academy of Science was charged with designing a decimal-based system of measurement that could be used throughout the world. The resulting metric system made sense because there were direct relationships between units of length, weight and capacity. It remains the predominant system of measurement and is the worldwide standard for scientific measurement.

Two centuries later, the International Organization for Standardization (ISO) faced an equally daunting challenge: how to measure something much less tangible than length or volume — the effectiveness of a company's quality management system. The goal was to develop a system that would show the world that a company fulfills customers' quality requirements and applicable legislative requirements, while aiming to enhance customer satisfaction and continually improve in pursuit of these objectives. The idea was to develop an adaptable system that would apply to many different types of organizations.

It was a tall order. But in 1987, the organization introduced a series of quality management system standards called ISO 9000. A decade later they developed a series based on the same principles to measure a company's environmental management systems, the ISO 14000 family of standards.

Canada has played an important role in the development of both the ISO 9000 and ISO 14000 series and continues to be a key contributor to the maintenance and review of the standards, including the transition to ISO 9001:2000 in 2003 and the upcoming revision of the ISO 14000 series in 2005. The Canadian Standards Association (CSA) holds the secretariat for both the quality management and environmental management technical committees at ISO on behalf of the Standards Council of Canada (SCC).

Today, huge banners proclaiming registration can be seen on company buildings throughout the world. Some 610,000 organizations in 160 countries are registered to ISO 9001 or ISO 14001. ISO 9001 has become an

international reference for quality management requirements in business-to-business dealings, and ISO 14001 is well on its way to achieving as much, if not more, in enabling organizations to meet their environmental responsibilities.

Here in Canada, the SCC accredits registration bodies that register an organization's management systems. These international SCC-accredited registration bodies have demonstrated that they meet stringent recognized international requirements. In addition, they have shown that they possess the competence, impartiality and performance capability to evaluate the conformity of an organization's quality or environmental management systems, to international standards.¹

“Accreditation of management systems registration bodies by the Standards Council reflects an organization's dedication to the promotion of best practices and ensures it works to the highest standards possible,” says Pat Paladino, Director of Conformity Assessment at the SCC.

Quality management system standards do not offer specific quality indicators or describe ways of achieving them, since these may be different for every organization. Instead, they provide generic frameworks and general principles that can be applied to an organization of any size, in any industry.

ISO 9001:2000 helps an organization institutionalize the “quality” philosophy by supporting it with policies, procedures, records, technologies, resources and structures. This ensures that everyone is clear about who is responsible for doing what, when, how, why and where. It increases efficiency by ensuring that people are doing things correctly the first time. And as one company that implemented the systems to help with a difficult period of downsizing said: “They (management system standards) help preserve our corporate memory.”

It is no longer possible to talk about a “typical” registrant, as ISO 9000 series registrations are being pursued by all levels of government, not-for-profit organizations, schools and colleges and industries

¹ A full listing of SCC-accredited registration bodies is available on the Internet at: <http://www.scc.ca>

ranging from high technology firms to fire fighting equipment manufacturers.

National Steel Car of Hamilton, Ontario fits the traditional image of a large factory bearing the familiar ISO 9000 banner. But the list of registered organizations also includes: the Liquor Control Board of Ontario, the City of Fredericton, the Southern Alberta Institute of Technology, the Canadian Centre for Ethics in Sport, the Royal Canadian Mint and the Membertou First Nation near Sydney, Nova Scotia.

The ISO 14000 family of standards is primarily concerned with environmental management. This encompasses everything an organization does to minimize harmful effects on the environment caused by its activities. The aim of the standards is to help organizations continually improve environmental performance.

The profiles of ISO 14000 environmental management systems registrants are also surprising. A diamond mine in Snap Lake, NWT, a ski resort in British Columbia, and a Southern Ontario hospital, as well as forestry companies and hog producing operations provide a sampling of the

types of organizations that have achieved ISO 14000 registration. How's that for diversity?

The following are stories about a few of the many Canadian companies that have already benefited from registration to management systems standards.

Capturing employee knowledge

Succession planning was at the top of the agenda for the City of Fredericton when it decided to seek ISO 9001:2000 registration. "We have many career employees, who all started around the same time and are due to retire in the next five years. We wanted to capture some of the valuable knowledge," says Sheila McParland, Quality Manager for the New Brunswick capital with a population of 81,000.

While other municipalities, including the town of Ajax, Ontario, have registered parts of their organizations, the City of Fredericton is the first in the country to certify all of its city operations. This was no simple task as the municipality provides more than 150 services working under one umbrella. Many processes are interrelated and impact on the quality of municipal services.

It's only been a few months since the city achieved registration in May 2004, but already it has reaped benefits. "Internally, our documentation is up-to-date and easy to access. We're capturing knowledge, discussing our processes, and reducing risk, and service consistency and accountability has improved," says McParland. "And externally, registration has enhanced our credibility with partners including two local universities, the Chamber of Commerce and the business community and our own citizens." ■

Meeting stringent NAFTA requirements

Roland Boulanger & Co. Ltd., a leading Canadian manufacturer of high quality mouldings and wood components in the Quebec City area, has been registered to ISO 9000 for the past eight years, recently upgrading its registration to the ISO 9001:2000 standard.

More than one-third of the 400-employee company's market is in the U.S. But to do business there, wood products companies must account for wood sources and all wood used in production in order to meet American

ISO 9001

Northstar Electronics Inc, a manufacturer of advanced underwater sonar technologies, has been registered to ISO 9001:2000 since September 2003.

"It reflects Northstar's ongoing commitment to quality," says Howard Nash, Director, Defence and Aerospace Programs.

"By combining ISO standards and maximizing prudent manufacturing techniques, Northstar is able to offer a premium product, at a very competitive price to its customers".

The Royal Canadian Mint has been registered to ISO 9001:2000 since March 2000.

"This is a milestone achievement for the Mint," says Mint President Danielle Wetherup.

"It symbolizes the Mint's commitment to maintaining and improving our position in the global marketplace. Thanks to the dedication and tireless commitment of our staff, both our Winnipeg and Ottawa production facilities are now ISO registered industry leaders".



legal requirements regarding fair pricing under NAFTA. Thanks to the framework and discipline required by their ISO 9000 quality management system, Boulanger has never been cited for unfair pricing -- unlike some of its competitors. Continual improvement under ISO 9000 has placed Boulanger in a better position to compete both in Canada and the U.S., and to meet the challenges posed by U.S. trade regulations ■

Enhancing international credibility

The Liquor Control Board of Ontario (LCBO) is the world's largest single purchaser of alcohol with revenue that exceeds \$3 billion a year. It's also the first liquor authority to be registered to ISO 9001:2000.

"The fact that we are ISO registered definitely creates business in Canada, Europe and the United States," says Dr. George Soleas, Vice President, Quality Assurance. "Accreditation also adds to the social responsibility of LCBO. We're ensuring that every product is tested and tasted to ensure that it is of the highest quality and safe for the consumer," he adds. ■

Big business for a small native community

So how did a First Nations community with 1,000 members become developers and owners of Cape Breton's largest and most prestigious convention and meeting facility? The recently opened 47,000 square foot Membertou Trade and Commerce Centre boasts state-of-the-art amenities, a great hall that can accommodate 800, and the 140-seat Mescalero's Open-fire Grill steak house.

A large part of the band's business success is due to its registration to ISO 9001:2000 in January 2002. "ISO 9001:2000 compliance is a strategic and necessary component for ensuring that new indigenous economies, based on the pillars of sustainability, conservation, innovation and success, grow and thrive in today's marketplace," said Membertou CEO, Bernd Christmas at the cross-cultural ceremony that marked the Mi'kmaq community's registration.

The convention centre is by no means Membertou's only project. Over the last year they have created the new divisions of Membertou Geomatics Consultants (MGC), Membertou Advanced Solutions, servicing the IT sector, and Quality Management Services (QMS). Membertou is also working to expand its business opportunities within

ISO 14001

Toyota Canada has been registered to ISO 14001 since November 2001.

"Achieving our ISO 14001 goal was not an easy task, but everyone here is proud of the accomplishment. The environment has become one of the main considerations in our everyday operations," says Vince Moffat, Manager, Environmental Affairs.

"It is now second nature to check with the environmental office in all facets of our business to ensure conformance to our environmental management system".

Sun Peaks Resorts Corporation in British Columbia was registered to ISO 14001 in May 2004.

"Being the only ski resort in North America to be registered to ISO 14001 is a great accomplishment for Sun Peaks," says Sales and Manager Francis Argouin.

"It shows our commitment to the environment and our leadership in making sure that environmental best practices are followed daily by all our management and staff."

the field of environmental remediation (Sydney Tar Ponds clean up) and construction and management of commercial enterprises. ■

Achieving environmental assessment commitments

Snap Lake, a project of De Beers Canada Mining Inc., was the first mining project in the Northwest Territories to achieve ISO 14001 registration for its environmental management system (EMS). Snap Lake is De Beers' most advanced diamond project in Canada. It recently concluded the required environmental assessment review process and has since begun the pre-development phase for the underground diamond mine it has planned for the property, which is located 220 km northeast of Yellowknife.





Paving the Way for Online Healthcare

At one time, the sight of a doctor traveling for miles in a horse driven carriage to see an ailing patient was a common occurrence. These days, house calls are familiar only to those who watch black and white movies. Driven by technology, health care has undergone a dramatic transformation over the last century. Yet, despite these many advances, the management of health records and patient information in Canada has remained largely unchanged.

Until now.

Doctors' offices overflowing with paper files may soon become a thing of the past. In their place, health reformers are advocating the nationwide implementation of Electronic Health Records (EHR). An EHR is an electronic patient file, available only to health care professionals through a secure network, which brings together key medical history and records of care within the health system.

The transition to online records is expected to save lives and money by ensuring that medical professionals have access to complete health records and patient information when and where it is needed. Systems of this

type are already in use in many other countries and consultations about their use are taking place across Canada.

Alberta first to log-on

In October of 2003, the Government of Alberta implemented Canada's first province-wide EHR. Since then, more than 7,000 health care professionals have logged on to the online system of patient records. To date, \$65 million in provincial and national funding has been dedicated to the project, including individual grants to physicians to help them make the transition.

Dr. Harvey Sternberg, a family physician in Edmonton, took the necessary steps to link into the EHR when he moved his family practice to new facilities at the University of Alberta in December 2003.

"The Alberta EHR has given us a chance to do things we were not able to do before," says Sternberg.

"For example, I am now able to immediately view my patient's lab work. I can turn my monitor around in the examination room to review the results with my patient.

I can look up any lab result over the last two years and immediately spot trends or values that have improved or deteriorated. This kind of evaluation would have to have been done manually in the past, digging through all the paper lab test records. It has enabled me and my colleagues to make better decisions and provide better care.”

Doctors and nurses working in hospitals have also noted the lifesaving potential of the system in cases where patients arrive in the emergency room either unconscious or unable to respond to questions. With EHR in place, the patient’s file can be consulted immediately to check for any serious medical conditions or drug allergies before a treatment is determined. Pharmacists note that the system has also helped minimize potentially dangerous drug interactions as well as alleviating the age old problem of doctors’ illegible handwriting.

EHR definitely has many supporters in Alberta, but like many new technologies it comes with its own set of complications. In this case, the ultra-personal nature of health records has made concerns about maintaining security in the system paramount.

Navigating privacy potholes

“How safe is my personal information, who has access to the data, and how is it being protected from misuse?”

These are a few of the most common questions raised by both patients and health care professionals according to Brian Hamilton, Manager of Privacy and Security, Alberta Health and Wellness. He says these issues were front and centre throughout the design of the system.

To maintain patient confidentiality, access to the EHR network is restricted to registered health care providers. Each user in the system is assigned a unique identification number and an electronic tag – which allows them to access only information relevant to their jobs. For example, a pharmacist accessing the system sees only a patient’s pharmaceutical information. Although Albertans cannot opt out of having their files included in the system, in some cases extremely sensitive information can be masked from users.

Despite the high level of security built into the system, Hamilton acknowledges that computer technologies are not foolproof. At the same time, he says that EHR actually offers some security benefits over the current records system.

“In the paper world, a doctor, maybe the receptionist and the nurse would be looking at a record in a physician’s office. In the electronic world, portions of the record are now available to potentially thousands of people so you do have an increased risk there. On the other hand, in the electronic world we have logs for everybody’s use of the record so we can tell if someone has looked at a record inappropriately. We can tell if it has been modified. This is much more difficult to do with paper files,” says Hamilton.

A standard solution for steering information security

Among the tools being used to address system security and meet the strict patient privacy provisions in Alberta’s Health Information Act is a leading international standard for information security – ISO/IEC 17999:2001 Information technology, Code of practice for information security and policy.

The standard sets out guidelines for developing organizational security requirements and effective security management practices for any type of information that is collected and stored online. Published as an international standard in December 2000, ISO/IEC 17999 was adapted from a British national standard. 1

In the case of the Alberta EHR program, the IT security standard has not been implemented in its entirety, but Hamilton says they are aiming for full

“The Alberta EHR has given us a chance to do things we were not able to do before. ... It has enabled me and my colleagues to make better decisions and provide better care.”

– Dr. Harvey Sternberg

compliance by 2006. In the meantime, the Alberta government and its partners have used the standard as an important starting point for assessing the risks and threats within the system. Based on this analysis, some minimum security requirements have been identified for regional health authorities (which include: hospitals, continuing care facilities, community health services and public health programs) as well as individual doctors offices, and pharmacies prior to being given access to the EHR.

Hamilton says Alberta is also interested in the outcome of a Canadian-led initiative to develop an adaptation of the IT standard specifically for health care. The new standard would address the unique ethical issues involved with medical record keeping and use terminology that could be more easily understood by health care professionals. This work is being undertaken by a working group of the International Organization for Standardization’s (ISO) Technical Committee on Health Informatics (TC 215).



Standards for health records security and beyond

While standards have an important role to play in protecting the security of information and patient privacy, they will be equally important in other aspects of EHR as Canada continues to move in the direction of electronic record management. The Canada Health Infoway (CHI) is leading standards development work in this area.² Together with stakeholders, it has identified a number of areas for future standards development. To address these requirements, CHI has created an EHR Standards Steering Committee that includes stakeholders from all provinces and territories. The Standards Council of Canada has also accepted an invitation to participate.

The opportunities for standards in the changing health care environment are endless, agrees Marc-Andre Léger, an expert in the area of health informatics and an active participant in Canadian and international standards development work on IT security and privacy and, health informatics.

He says that as new information technologies are integrated into the health care system there will undoubtedly be increased needs for corresponding standards, but he notes that in many cases, instead of starting from scratch, Canadians will be able to use

international standards or adapt standards that were developed for these purposes by other countries.

The role of information technology in all aspects of health care will only continue to grow predicts Léger. As evidence, he points to the increasing number of doctors and nurses who are enrolling in graduate studies in the field of health informatics at Canadian universities. He adds that this mentality will be even more evident with the next generation of health professionals.

“Look at kids today,” says Léger. “Twelve and 13-year-olds already have so much IT expertise. Yet, they are not all going to go into IT. They will go into other fields, and some of them are going to become doctors and nurses.” ■

¹ ISO/IEC 17799:2000 was developed by the subcommittee on IT security (SC 27) of JTC1, a joint committee of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) that develops international IT standards.

² CHI is corporation that was created in response to a federal/provincial/territorial agreement in September 2000 on the need to accelerate the development of electronic health information systems. It invests in public and private sector initiatives in the area of health informatics. Website: <http://www.infoway-inforoute.ca/>

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Fuelling up for Glory in 2010

The 2010 Winter Olympic Games in Vancouver and Whistler, B.C. will enable the world's top skaters and skiers to demonstrate their talents in front of an international audience. At the same time, the Canadian hydrogen industry will be striving for a winning performance of its own.

When the world sets its sights on B.C. in five years time, an ambitious group of industry and government stakeholders are aiming to have a fleet of hydrogen powered vehicles at the ready to transport Olympic athletes and officials to Whistler and other Olympic venues in the lower mainland and on Vancouver Island.

To make this Olympic dream a reality, a network of hydrogen refuelling stations are being constructed along the main stretch of highway connecting these facilities. Fuel Cells Canada is the organization coordinating efforts to put the necessary infrastructure in place for this project, known as the Hydrogen Highway. The initiative is just one of numerous endeavours underway in Canada to increase awareness about hydrogen and fuel cell technologies.

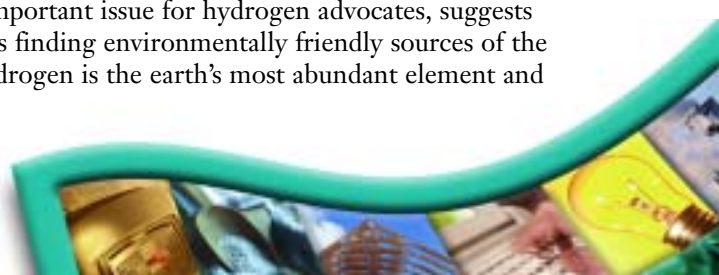
"We want to showcase the technology," says Alison Grigg, the project manager for the Hydrogen Highway. She describes the Olympic Games as a perfect

opportunity to demonstrate what Canada has done to put itself at the forefront of the development of hydrogen power and fuel cell technology.

The Hydrogen Highway will be highlighted during the Games, however it will be up and running well before the opening ceremonies and remain in use once all the athletes have headed home. The stations are part of ongoing efforts to encourage more drivers to switch to hydrogen-powered vehicles. So far, seven refuelling sites have been selected and work is either completed or ongoing on three of them.

Just as the sports facilities will be a heritage of the Games for future generations of athletes, the Hydrogen Highway will give the further development of the fuel cell industry a major boost. As well as showing that hydrogen-fuelled vehicles are viable, the Hydrogen Highway project is intended to highlight other potential uses for fuel cells. The refuelling stations will all feature demonstrations of some of the other potential uses for hydrogen, such as back-up power devices and generators for homes and offices.

An important issue for hydrogen advocates, suggests Grigg, is finding environmentally friendly sources of the gas. Hydrogen is the earth's most abundant element and



has many sources including: fossil fuels, biomass and renewable resources like solar and wind power and hydroelectricity. She also notes the ability to store unutilized electricity from power systems in hydrogen through electrolysis of water until it is needed to produce electricity. This plan will also be among the demonstrations on display at the Hydrogen Highway refuelling stations.

To get the Hydrogen Highway project off the ground, Prime Minister Paul Martin announced a \$1.1 million federal commitment over three years with additional monies going to other hydrogen related projects across Canada. The funding will be administered through the Canadian Transportation Fuel Cell Alliance (CTFCA), which includes fuel cell companies, vehicle manufacturers and government agencies with an interest in alternate fuels. The CTFCA was developed as part of the federal government's commitment to reducing greenhouse gas emissions and realizing its commitment to the Kyoto Protocol.

Just as the sports facilities will be a heritage of the Games for future generations of athletes, the Hydrogen Highway will give the further development of the fuel cell industry a major boost.

In addition to the Hydrogen Highway project in B.C., work has begun on a Hydrogen Village in the Greater Toronto Area. It will showcase various ways that hydrogen and fuel cells can generate electricity and reduce emissions. There is also a proposal under review to establish hydrogen refuelling stations between Montreal and Windsor along the 401, Canada's busiest stretch of highway.

Government funding is important says Grigg, but she emphasizes that the private sector has to do its share if it wants to realize the long-term goal of turning the entire venture into a commercial operation. As well as securing the funds necessary for this ambitious project, a great deal of behind the scenes work is necessary to pave the way for a successful demonstration in 2010. Among the challenges facing organizers of the Hydrogen Highway is ensuring that the refuelling stations meet strict provincial safety requirements.

Jeff Grant, a marketing analyst for Ballard Power Systems, - one of Canada's leaders in the Fuel Cell Industry and a partner in the Hydrogen Highway initiative - chairs the CTFCA Standards and Codes Working Group. Its mandate is to promote the

development and acceptance of national and international fuel cell and hydrogen systems standards in the areas of: storage, fuelling station configurations and locations, and fuelling interfaces with fuel cell vehicles. It also wants to make sure that these standards are referenced in both federal and provincial/territorial regulations.

"Right now, there are no explicit requirements for refuelling stations - no standard exists in British Columbia or elsewhere," says Grant.

He notes that there are some fire codes that were developed for industrial hydrogen operations but he says these do not reflect the safety issues for commercial fuel cell refuelling structures.

"One of the real issues we have is the overly restrictive separation distance requirement that is in some of the fire codes right now, which tells you how far you need to be away from the hydrogen supply. If we used the existing codes we couldn't retrofit petroleum stations for hydrogen," says Grant.

To rectify this, the working group is participating in the development of a hydrogen installation standard for the Canadian market with the Bureau de normalisation du Québec (BNQ).

It is composed of representatives from the hydrogen industry and the federal and provincial government. It includes Canadian members from technical committees at both the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), who are developing international standards for hydrogen technologies.

The working group is also involved in a number of other initiatives aimed at facilitating the demonstration of fuel cell technologies - which includes the extensive standardization work that has already been accomplished in the area of hydrogen technologies - both in Canada and around the world. One example is the creation of a virtual fuelling station which will not only allow visitors to explore the station in cyberspace but also to connect to related installation and product standards.

While the important role of standards in ensuring that fuel cell technologies are safe for use by the public may not be as visible as other elements of the Hydrogen Highway, it is one of many important components in ensuring the project's success. Just as Olympic athletes dedicate themselves to endless hours of physical training and mental preparation to realize their dreams, the Canadian hydrogen industry will be working intensively over the coming months and years to be ready for its two weeks in the international spotlight in 2010. ■

The Business banner

(continued from page 17)

Construction of a winter road that will allow for year-round access to the site is scheduled to begin in February 2005.

“The ISO 14001 standard helps us meet the commitment to environmental protection made in our Environmental Assessment Report,” says John McConnell, Vice-President, NWT Projects. “This will be a valuable tool for us through the construction, operation and eventual closure of a diamond mine at Snap Lake. It not only helps us in setting and reaching goals, but also helps us maintain reliable documentation of our work so that we can provide accurate reports to monitoring agencies and other interested groups.”

Efficiencies in the environmental assessment process are important, as it is typically both a lengthy and rigorous process. ■

Seeking efficiency, productivity and success

Puratone, a leading agribusiness company based in Niverville, Manitoba, has operations that encompass feed and hog production, animal health products, equipment and project management and various farm supplies.

As a company that markets itself based on the efficiency, productivity and success of its hog and poultry operations, it's no surprise that Puratone seeks to have the first hog barns registered to ISO 14001. “When it comes to environmental stewardship and animal welfare, our goal is not to merely comply, but to lead,” says the company in its most recent annual report.

According to Statistics Canada, Canada's hog industry was worth approximately \$3.32 billion in 2002 and currently consists of nearly 14.6 million hogs, making it one of Canada's most significant agricultural industries. In 2001, Canadian hog farmers invested an average of \$6,224 each on environmental improvements, compared to an average of \$1,091 invested by other farmers.

In addition to the generic ISO 14001 standard, the Canadian Standards Association (CSA) recently released the first environmental management standard aimed specifically at hog farms. The requirements of CAN/CSA Z771 are consistent with the principles outlined in ISO 14001, and require that potential and existing environmental impacts be identified and addressed. ■



The Standards Council of Canada congratulates the recipients of its 2004 SCC Awards:

Jean P. Carrière Award

Dr. D.J. Laurie Kennedy

Roy A. Phillips Award

George R. A. Weiss

Corporate Commitment Award

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David Goodyear

SCC Distinguished Service Award

Keith Rodel

McMahon Dedicated Service Award

Mike Bourassa

SCC Special Achievement Award

Committee on Information technology for learning, education and training CAC/JTC 1/SC 36

The dedication, commitment and remarkable work of these Canadians will be honoured in conjunction with the National Standards System Conference at a banquet on Tuesday, November 16, 2004 at The Palliser Hotel, in Calgary, Alberta.

These awards recognize outstanding individual and organizational contributions to voluntary standardization, accreditation and conformity assessment.

For additional information about the awards, as well as the 2004 recipients, visit www.scc.ca.

A hand is shown holding a green globe of the Earth. The hand and globe are set against a textured, light-colored background that resembles fabric or paper. The globe is rendered in shades of green, with a grid pattern overlaid on it. The hand is positioned as if cradling the globe. The overall image conveys a sense of care, responsibility, and environmental stewardship.

The Fabric of **SOCIAL RESPONSIBILITY**

When Linda Bowen was pregnant with her fifth son, she was given a set of organic cotton sheets as a gift. The avowed organic consumer loved their softness and began to search for affordable “green” clothing for her growing family.

“I was blown away by the negative environmental and social impact of manufacturing conventional cotton,” says Bowen. “I thought, I’ve got a child I’m bringing into this world, along with my older sons, and I wanted to teach them to think about what they put on their backs and in their mouths. I wanted to dress them in environmentally and socially responsible clothing.”

Not finding what she wanted, Bowen decided to start her own business. As President of Sage Creek Naturals of Sooke, BC, she now designs, manufactures and sells her own line of organic cotton clothing and exports 80 per cent of her goods to markets outside Canada.

24 Her search for a reputable organic cotton farm and manufacturing facility led her to India. Through diligent research and her affiliation with an organic trade association based in Europe, Bowen found a cooperative that works for Oxfam and Greenpeace.

“From the beginning, my goal was to have everybody win,” says Bowen. “The consumer would get an affordable organic product and the people working on the farm and in the factory would be treated with respect, as would their land. When I inspected the facility, I felt so good. It was an organic full circle from the seed planted in the earth, to the whole manufacturing process, and finally to the garment worn by a newborn.”

Bowen’s commitment to socially responsible business practices is becoming more widespread in the apparel industry as companies are beginning to realize the impact of good corporate citizenship on their bottom line.

Though CSR may be a hot trend right now, its impact on how corporations do business will have a lasting effect that can only have positive ramifications for consumers, workers and the health of the planet.

Denise Taschereau, Social and Environmental Responsibility Manager for Mountain Equipment Co-Op (MEC) suggests that the 1999 World Trade Organization meeting in Seattle was a turning point for consumers. “They began to think about where their stuff was coming from, who was making it and how it was manufactured.

Some really important messages became ingrained in our collective psyche. People want to feel good about what they're buying."

This kind of message was pervasive at a conference in Sweden held by the International Organization for Standardization (ISO) this past June. A green light was given to develop a far-reaching voluntary CSR standard by 2007. The standard will be written in plain language so that it is easy to understand and implement. A working group that will report directly to the ISO's Technical Management Board will start the painstaking process of defining terms of reference and operating processes in the Fall of 2004. The group will be co-chaired by a developed and developing country, a significant decision that underscores the importance of CSR standards for emerging nations, says Dr. Kernaghan Webb, Chief Research and Senior Legal Policy Advisor to the Canadian Office of Consumer Affairs, Industry Canada, and a member of ISO's Strategy Advisory Group tasked to look into CSR standards.

"Developing countries view ISO CSR standards as being a bridge for them to the world market," he says. "They will help their companies demonstrate responsible corporate governance to not only their own citizens but to the whole world. It's good for business."

Webb points out that a diverse set of stakeholders -- from the International Chamber of Commerce to labour and environmental organizations -- all supported the ISO's decision, demonstrating an across-the-board agreement that an ISO CSR standard could make a useful contribution, especially as it wouldn't override existing guidelines and conventions set by the International Labour Organization (ILO), SA8000, the Global Reporting Initiative, the OECD's Multinational Enterprise Guidelines or the United Nation's Human Rights Declaration and Global Compact. "The ISO advisory group made it very clear that any standard would enhance what has already been written," he says. "We didn't want to overshoot the bounds of what ISO was capable of doing while acknowledging that it has a very important contribution to make."

MEC's Taschereau applauds ISO's move to develop a CSR standard, saying it will be a good starting point for companies looking to develop their own definitions of accountability. "It'll be interesting to see what emerges," she says. "If there's something in it that could add value to what we're doing now, we'd definitely embrace it."

Indeed, MEC is internationally known for its commitment to CSR and good stewardship, something that comes naturally to the Co-op and its staff says Taschereau. "We're driven by our mission, mandate and values. CSR is something that has affected us since our inception. We have a strong commitment to our community. CSR is ingrained in the way we work and how we view ourselves. It's not a separate piece that

somebody has thought up along the way."

MEC's commitment to CSR is far-ranging and includes funding for environmental causes such as protecting endangered Canadian rivers, recycling batteries, encouraging employees to walk or take public transit to work, and constructing "green" stores that tread lightly on their building sites. It also has put in place a stringent code of conduct for both domestic and offshore suppliers.

"Our suppliers have to go through a rigorous and long process before we sign on," said MEC's Production Manager, Naomi Ozaki. "After an initial visit by a MEC representative, they have to pass a social and environmental audit. If there are issues out of that audit -- and there almost always are -- there are actions documented for the factory and they're sent back to them with a plan for remediation. We'll then do a follow-up to see if they've complied. In order to work with us, they must be open to unexpected visits by MEC staff and by our third party auditors. If they can't meet our standards even after we've worked with them to try and improve things, we'll let them go."

"From the beginning, my goal was to have everybody win. The consumer would get an affordable organic product and the people working on the farm and in the factory would be treated with respect, as would their land."

— Linda Bowen, President, Sage Creek Naturals

The move toward good corporate governance is not only to placate an increasingly savvy consumer, it's also the right thing to do, according to George Heller, President and CEO of the Hudson's Bay Company. "At the heart of these initiatives is the realization that we, as retailers, understand that through our order books, we can and must be a component in creating positive change," he said in a June 2003 speech to the UN Global Compact. "The choices we make have the potential to improve the working conditions of hundreds and thousands of people around the world -- a far greater return than simply establishing good business practices." ■





Testing the Limits of a Harsh Canadian Winter

Across Canada, more than five million tonnes of salt are poured onto roads every winter in the war on dangerous driving conditions caused by ice, snow and frigid temperatures. While this measure undoubtedly prevents numerous fatalities and injuries - our vehicles, infrastructure and the environment are casualties of the corrosive ice-melting agent.

Manitoba is renowned for its viciously cold winters. The Winnipeg-based Industrial Technology Centre (ITC) therefore seems a fitting location from which to launch a new corrosion testing service. ITC will be working in conjunction with the Vehicle Technology Centre to provide corrosion testing results to researchers examining the impact of road salt in order to come up with corrosion prevention solutions that will help limit the damage and related costs of road salt use.

ITC is a special operating agency of Manitoba's Department of Energy, Science and Technology with a mandate to promote economic development within the province. Its services include mechanical testing, calibration, engineering and a virtual reality centre. The ITC is accredited by the Standards Council of Canada (SCC) to provide a range of calibration and mechanical testing.¹

Meeting international laboratory requirements is important to ITC but it is by no means a new concept. June 2004 marked two decades since the lab was first accredited by the SCC. While ITC's scope of accreditation does not currently include this new area of testing, it is moving in that direction. As with most of the other testing services that it offers, corrosion testing will be based on internationally recognized requirements.

"We've done extensive research on standards to perform corrosion testing," says Stephen McKendry-Smith, Quality Assurance Manager of ITC. "We're taking a little extra care as we introduce this service because we have this heightened awareness of quality."

In addition to laboratory accreditation, the ITC applies the more broad-based principles of quality management to its organization. It has been operating in conformance with

ISO 9001:1994 requirements since 1999. In March 2004, it upgraded to ISO 9001:2000.

Commitment to this designation - and quality - has far-reaching implications for ITC operations.²

"One of the reasons we went for ISO 9001 is to bring the non-accredited services into the same kind of quality and control as our accredited services," says McKendry-Smith.

In a more competitive market, the combination of ISO registration by an accredited organization and laboratory accreditation has helped ITC get more business. The increased public awareness of quality management systems such as the ISO 9000 series, which emphasize traceability of results and accuracy in reporting, has been an important business asset for ITC.

"In 1984, many people didn't realize the benefits of accredited services. We give people what they need, and what they need is the right number," says McKendry-Smith.

In addition to the business benefits, he says the ongoing professional development with industry experts is another perk of accreditation. "Every two years, we get a leader in the testing field for a day or two who not only audits us, but gives us an opportunity to pick their brains," says McKendry-Smith. "It increases our level of knowledge and expertise." ■

¹ The full scope of laboratory accreditation for the Industrial Technology Centre Mechanical Testing and Calibration Laboratories (Accredited Laboratory No. 10) can be found at <http://www.scc.ca/scopes/reg010-eng-s.pdf>

² ITC was registered to ISO 9001:2000 by SCC-accredited registration body QMI (www.qmi.com), Certificate # 025220-01.

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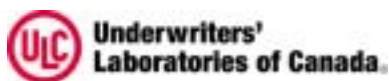
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