



# FIRE WATCH

ONTARIO INDUSTRIAL FIRE PROTECTION ASSOCIATION

November 2006

## OIFPA TO CHAIR INDUSTRIAL FIRE LOSS COMMITTEE

Statistics show that fires in all building sectors are declining; however industry, by far, still has the highest percentage of fires and dollar loss per property of all sectors. For this reason, the Ontario Fire Marshal has requested the OIFPA to Chair a Task Group to look at how industrial fire losses can be reduced in the province.

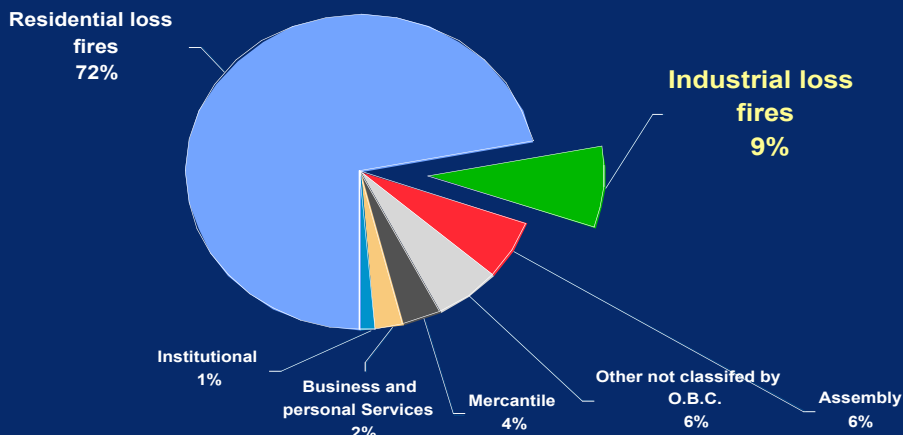
At the September 8, 2006 Fire Marshal's Public Fire Safety Council (FMPFSC) general meeting, your OIFPA representative made a request for volunteers from other fire safety affiliated organizations to join the Task Group. The following organizations offered to join the Task Group:

- Institute of Fire Engineers (IFE)
- Canadian Association of Fire Chiefs (CAFC)
- Ontario Municipal Fire Prevention Officers Association (OMFPOA)
- Fire Marshal's Public Fire Safety Council (FMPFSC)
- Canadian Automatic Sprinkler Association (CASA)
- Canadian Fire Alarm Association (CFAA)
- Insurance Bureau of Canada (IBC)
- Electrical Safety Authority (ESA)
- Workplace Safety & Insurance Board (WSIB)
- Canadian Standards Association (CSA)
- Underwriters Laboratories of Canada (ULC)
- Office of the Ontario Fire Marshal (OFM)

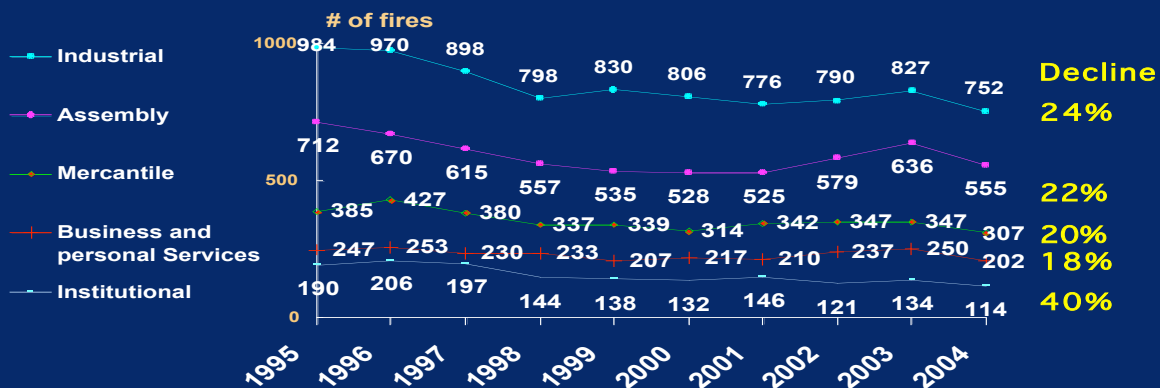
The objective of the committee will be to look at all aspects of fires in industry, including current trends, types of fires, origins, implementation of prevention programs, causation reporting methods, training, etc. The following charts provide statistics on data collected to-date:

## Ontario Fire loss Statistics Industrial

### 2000 to 2004 Ontario: Structure fires with loss by property class

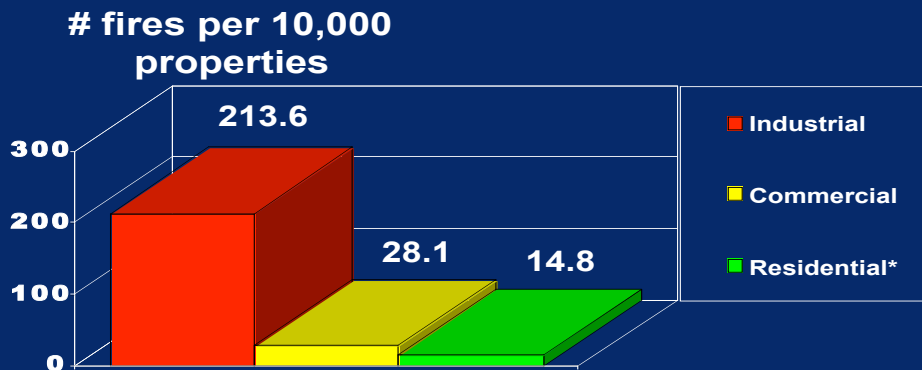


### 1995 to 2004 Ontario: Non residential Structure fires with loss by property class



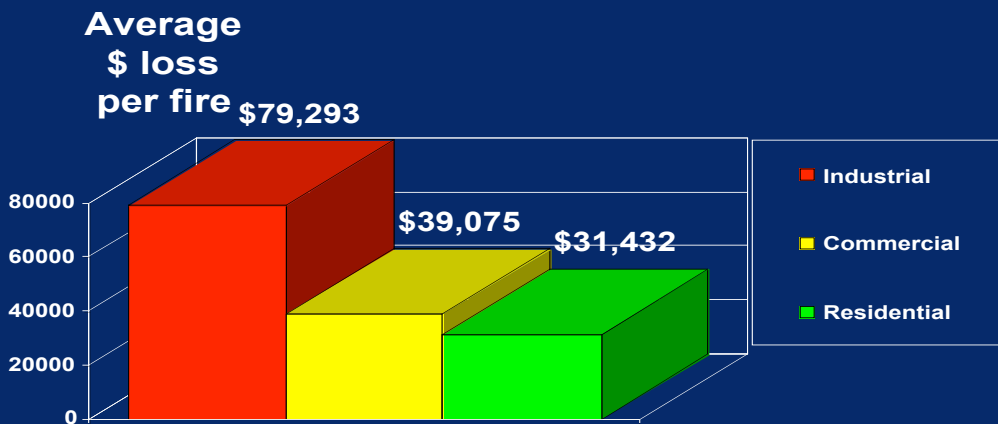
Includes all fires in preventable and arson fires (homicide and suicide)

### Fire Incidence Rate\* by Property Class 2004

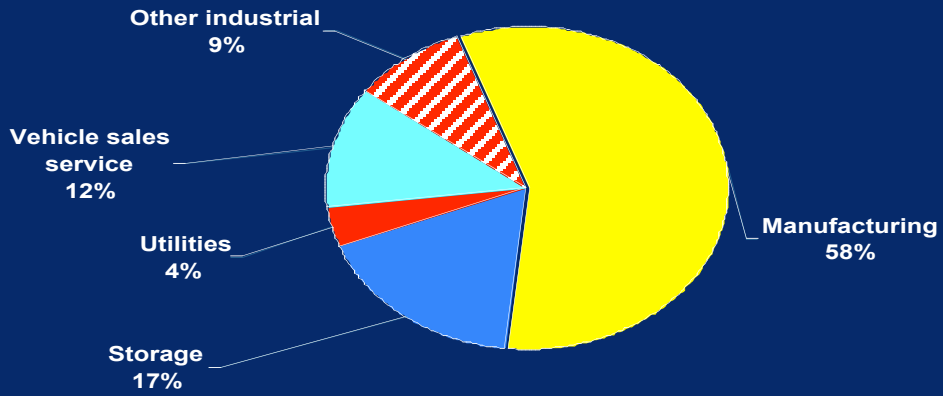


\* Residential fire ratio based on building, does not include a count of residential suites in apartment buildings.

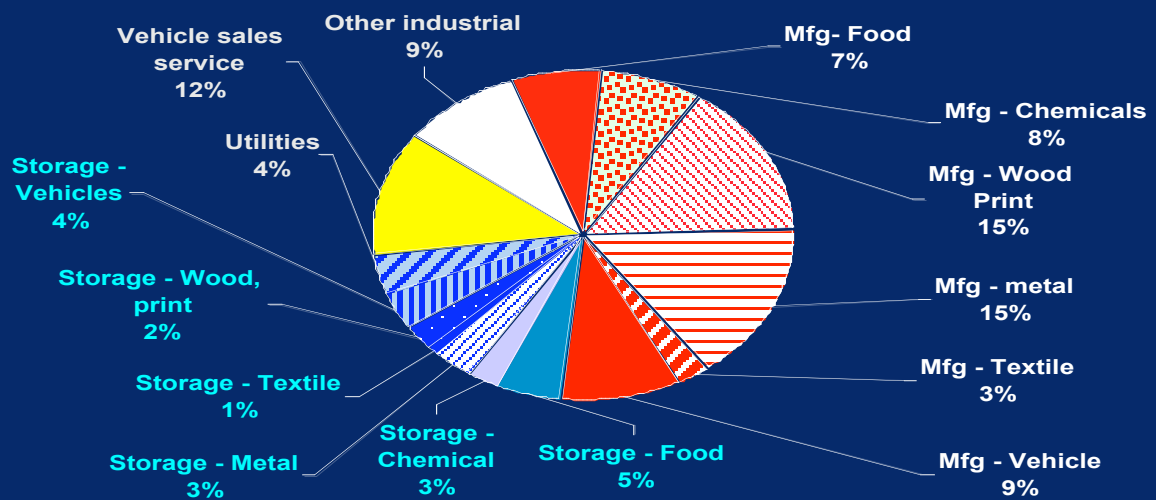
### Fire Average \$ loss by Property Class 2004



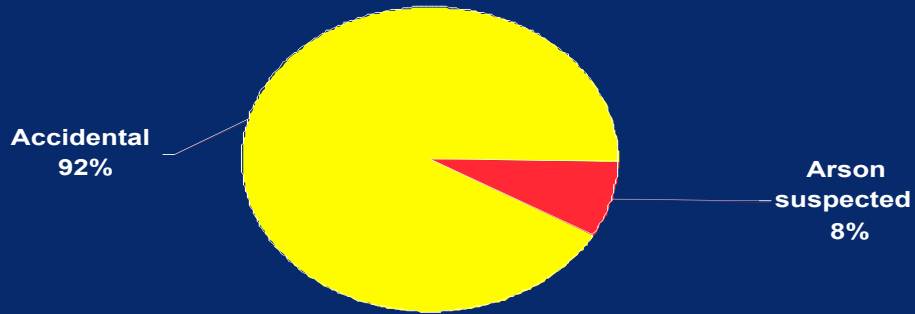
### 2000 to 2004 Ontario Industrial fires: What class of industry



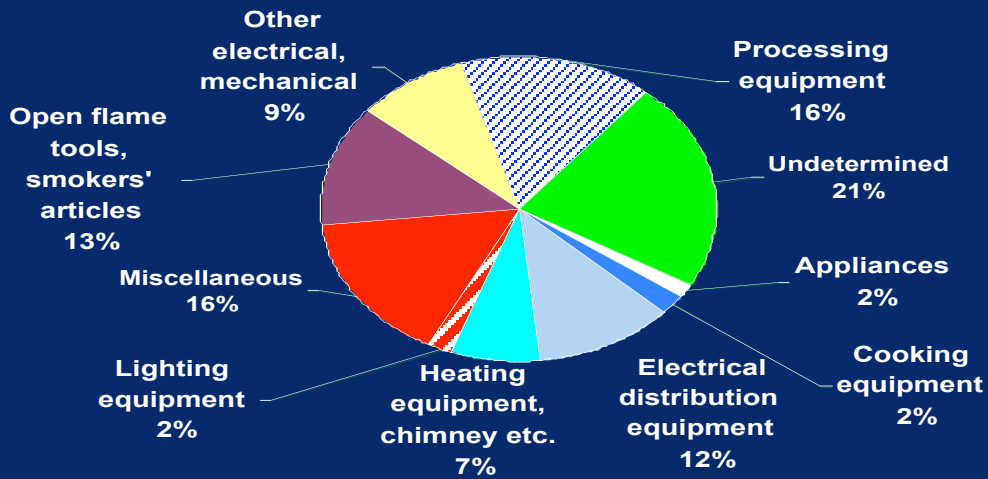
### 2000 to 2004 Ontario Industrial fires: What type of industry

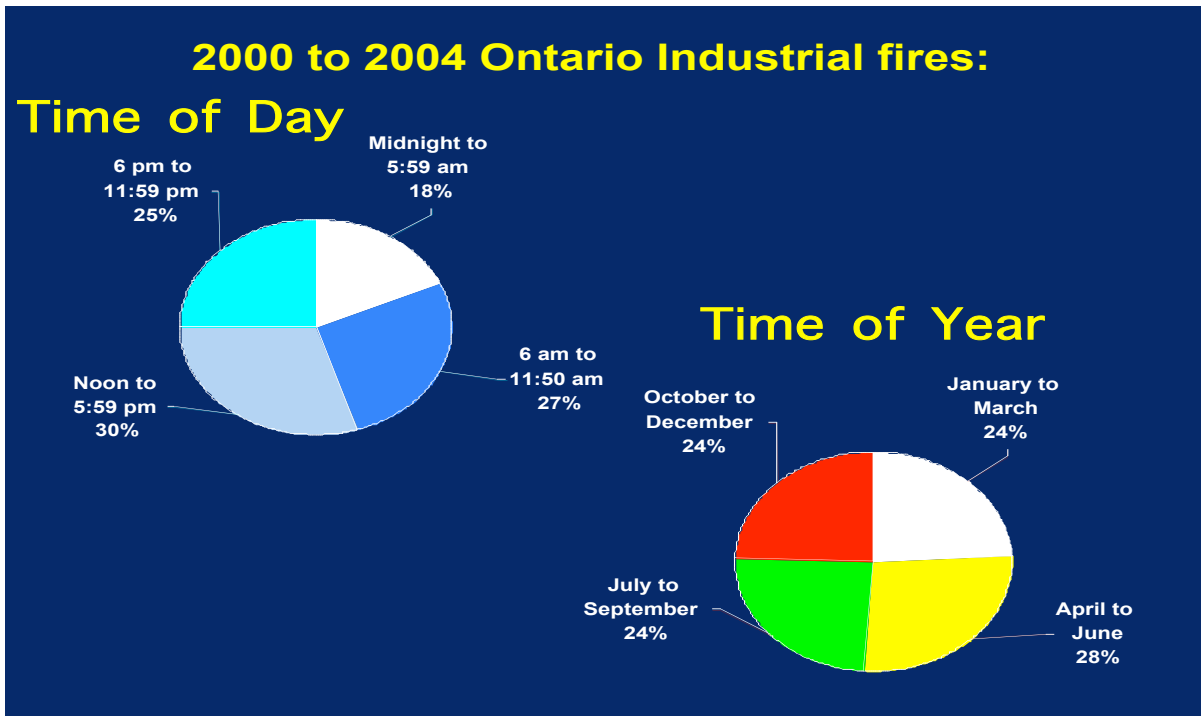


### 2000 to 2004 Ontario Industrial fires: Arson, Accidental



### 2000 to 2004 Ontario Industrial fires: Ignition Source





### 2005 Ontario Industrial fires:

6 fires with losses \$1 Million (subject to revision)

Industry type	Location	Year	Ignition Source	Loss
Plastics	Cobourg	2005	Lighters (open flame)	\$10,000,000
Elevator - Seed, Bean, Grain, etc.	Zorra	2005	Other Processing Equipment	\$5,000,000
Hydro Distribution Facility	Milton	2005	Transformer	\$4,000,000
Other Industrial	Cornwall	2005	Undetermined	\$3,000,000
Pulp/Paper Processing	Brantford City	2005	Undetermined	\$2,000,000
Gas Processing Plant	Huntsville	2005	Painting Equipment	\$1,500,000

The first meeting is scheduled for **November 24, 2006** at the Office of the Fire Marshal.

This is a great opportunity for our members and organization to bring forward their expertise while providing future guidance and education for our industry. If you would like more information or have any suggestions or background documentation that you think would assist the committee, please forward it to the OIFPA office.

George Fawcett

Ed. Note: These high losses still exist even with the reductions in losses from implementation of Part 4 “flammable and combustible liquids” of the OFC (see article on page \_)

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**TOOLS OF THE TRADE – T-SHIRTS**

Christmas is coming... great buy for someone you know in the “Fire” industry...  
\$25.00 and we will pay the shipping!!!

## A Note from the President.

Dear Members,

I am very sorry for taking so long to write to you all, but it has been a very busy and productive year. Firstly I would like to thank all of the members of the OIFPA for there had work and support this year. Without your commitment and constant support the association would not be as successful. Some of the events that occurred this year were; seminars on confined space and rescue. I would like to extend a big thanks to all those that participated in these seminars. Special thanks go to John Parish – Manager Emergency Services Municipal Health and Safety Association, for an outstanding and informative presentation; and also Derek Tessier- Grip Safety, for his informative presentation on high angle rescue.

As tradition of the association the 11<sup>th</sup> annual Golf Tournament took place at Granite Ridge, Milton. This was my first year in assisting in planning the event; I was very impressed with all of the member support. In addition I would like to thank all those friends of the association, for your participation and sponsorship support. The event was a success,

Although we have had a mostly successful year there have been some disappointments along the way. A seminar was to take place in October, but due to low participation and scheduling conflicts the event with guest speaker Julian Fantino was cancelled. This event was not easy to plan, as Mr. Fantino is a very busy individual. There was a large amount of is behind the scenes work that took place and for all those involved it was a great disappointment to cancel this event. I would like to thank all those involved; your hard work was not unnoticed. If you have any interest in holding a seminar in the future, please forward any information or questions to the office in Hamilton.

With the festive season quickly approaching I would like to wish all members, family and friends a very warm holiday season, and a prosperous 2007.

Roy Graham

President

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## **SPRINKLER PROTECTION OF MULTI-FAMILY RESIDENTIAL BUILDINGS**

**By Cyril W. Hare (President Cyril Hare & Associates Inc.)**

The 1995 edition of the National Building Code required that all residential buildings exceeding 3 storeys in building height be equipped with automatic sprinkler protection. The National Building Code is considered a model code and is used by the provinces and territories as the basis for their building codes. Ontario uses the National Building Code as a model for building construction, however Ontario through the Ministry of Housing, Buildings Branch, has chosen to modify the code. The 1995 edition of the Ontario Building Code is based upon the National Building Code 1995.

Some of the most significant differences between the Ontario Building Code and the National Building Code are the requirements for fire safety in residential buildings. The requirements for sprinkler protection in residential buildings have basically been deleted from the Ontario Building Code. Ontario is the only province that allows the construction of residential high-rise and low rise buildings without sprinkler protection. Ontario has experienced fires in high buildings such as 2 Forest Lane and The Inn on the Park in Toronto where there have been multiple fire deaths due to fires. People continue to die in residential fires throughout Ontario. These deaths could have been averted with sprinkler protection.

There are over 280 jurisdictions in North America that have sprinkler requirements for single-family residential properties. Some jurisdictions in Canada such as Vancouver have required all residential buildings including houses to be sprinklered. Since Vancouver adopted the requirements for sprinkler protection in residential buildings they not had a death due to fire in a sprinklered residential building. Scottsdale Arizona has had a sprinkler ordinance for over 20 years and has had similar results.

There has been an erroneous belief in many circles that sprinkler protection is not necessary since the fire department can respond, extinguish the fire and remove victims before a flashover can occur. Flashover is the point in a fire when all of the contents of a room have been ignited by the heat of a fire.

A number of tests have shown that it is virtually impossible for a fire department to respond in time. Tests and demonstrations by the Office of the Fire Marshal have shown that flashover can occur in as little as 3 minutes. This data has been confirmed by tests conducted by other agencies such as the National Fire Prevention Association.

In the case of high-rise buildings the time for response is far greater than for a single-family dwelling. The typical goal for fire department response for the first vehicle is 4 minutes travel time plus up to 2.5 minutes for dispatch and crew preparation time. The goal for assembly of the complete response is an additional 4 minutes. Once a fire vehicle arrives at a high-rise building the fire fighters must get to the fire. If the fire is on the upper floor of the building they must carry their equipment into the building and up to the fire floor. Where fire fighters elevators are provided they must place the elevators in emergency control, load the equipment into the elevator and travel up to the staging area. The crews usually stage at least two floors below the fire and advance up the stairs. Then they must connect to the standpipe system and advance the hose to the fire. It is not unusual to take up to 20 minutes to get a hose into operation. By that time any occupants of the suite will have perished and the occupants of the suites on the fire floor and the floors above have been in serious danger. These types of fires usually result in the need for 2 or 3 alarms. Only the larger fire departments in Ontario have the resources to assemble the 30 plus personnel that are need to conduct fire operations, rescue, ventilation, salvage, incident command, accountability, rapid intervention, logistics and rehabilitation. In sprinkler-protected buildings the fire is normally extinguished or under control when the fire department arrives. As a result the fire can be handled by a single alarm response. Thereby reducing the demand for fire department resources.

The 2005 edition of the National Building Code contains the same requirements for sprinkler protection that were contained in the 1995 edition. Ontario will be introducing the new Building Code regulations at the beginning of 2007. This new Ontario Building Code again has deleted the sprinkler protection requirements for residential buildings. There are new residential buildings being planned in Ontario that will be up to 50 storeys without sprinkler protection. Ontario is the only jurisdiction in Canada where these buildings could be constructed without this vital life safety equipment.

## NFPA 13 Adopts Code Language on Flexible Sprinkler Hose Fittings

October 25, 2006

Reprinted from Consulting-Specifying Engineer Magazine

For the first time, the National Fire Protection Association's *NFPA 13: Installation of Sprinkler Systems* includes code language that clarifies the use of flexible sprinkler hose fittings and provides applicable guidelines. The new language appears in the 2007 edition of *NFPA 13*.

This clarification is welcome news for engineers who want direction on specifying flexible fittings. Proponents argue that such fittings offer perfect aesthetic uniformity and flawless center-of-tile. They also say that the fittings are much easier to install and retrofit, and also meet IBC seismic code requirements without the need for oversized rings.

Although flexible fittings have been approved for use for some time by both UL and FM, the addition of code language in *NFPA 13* means that engineers and AHJ's now have clear guidelines that simplify the product submittal process. Previously, some AHJ's interpreted parts of the code to mean that flexible components could not be used pursuant to their installation instructions without being independently supported from the building structure. *NFPA 13* now states that flexible sprinkler hose fittings supported by a suspended ceiling do not have to be independently supported from the building and should be used in accordance with its listings, including installation instructions.

The NFPA 13 Hanging and Bracing Technical Committee reviewed hundreds of pages of engineering data, including product approval standards, testing data and full independent fire and building code reviews. For example, the Structural Engineering Earthquake Simulation Laboratory at SUNY, University at Buffalo, tested and certified FlexHead Industries' Flexible Sprinkler Hose Fittings against the International Code Council's (ICC) seismic qualification testing criteria. This testing marks the first time a sprinkler component has been seismically certified using test criteria accepted by the ICC. This is an important milestone, particularly because most states are enacting seismic code requirements that flexible components are especially suited to meet.

Field response has also been positive. "Considering the rigorous testing this product was subjected to, the mere listing of the product for use in fire protection systems is sufficient evidence of the acceptability of the product," observes Matthew J. Siska, P.E., Schirmer Engineering.

### UPCOMING SEMINARS....

Do you have a topic that you feel would be of interest to other members of the fire service / emergency response areas that should be addressed? Contact the OIFPA office at 905-527-0700 or [oifpa@interlynx.net](mailto:oifpa@interlynx.net) We could be overlooking an important topic that our members need to know more about...

**Thank you to the OIFP A Membership**

Congratulations on another successful Bill Beatty Memorial Golf Tournament.

The 2005 / 2006 recipients of the Bill Beatty Memorial award were Alessio Fagorzi and Ben Lauers. Doug Scale represented the OIFPA at Lambton College’s annual awards luncheon and presented cheques to both students in November 2005. Both of these students have committed themselves to the Fire Science Technology Program and are well deserving of your recognition and support.



The OIFPA should be commended for your tremendous member support of our Fire Science Technology Program, not only for your generous financial contribution, but also for your support of our Co-op program.

Lambton Students have completed Co-op terms working with municipal fire departments, fire protection system companies, fire safety supply firms, petrochemical companies, emergency response agencies and a variety of manufacturing companies. In addition to the benefits to the student, hiring a Fire Science Technology Program student is an excellent opportunity for scouting out fresh talent for future consideration and for taking care of those fire safety/maintenance tasks that are often overlooked. Anyone wishing to participate in our Co-op placement program is encouraged to contact Karen Hendra, Student Success Team at Lambton College, Sarnia, Ontario, 519-542-7751 ext. 3371.

Once again, thank you for your support and all of us at Lambton College wish you all the best in the coming year.

Sincerely,

**Tom Gibson**

Tom Gibson, Coordinator  
Fire Science Technology Program  
Lambton College



yes, this year tournament – **11<sup>th</sup> Annual Wm. Beatty Golf Tournament** was held at the Granite Ridge Golf & Country Club in Milton, September 23rd. It was a beautiful day and a wonderful course where 57 golfers turned out to have some fun and fellowship. It is because of these golfers (good and bad) that we are able to continue to support our future members of the fire service industry. We thank each of those attending, participants as a tee sponsor, and those donating of prizes ... without them this event would not continue to be a success.

Tee sponsors this year were – Lambton College, Office of the Fire Marshall, Esso Canada, Atlantic Packaging, North Safety Products, Novelis, Fire Monitoring of Canada, Res-Q-tech, Lakeshore Hydrant Services, Suncor, Bruce Power – Tiverton, Angus / Kidde, Draeger Canada, Corunna Fire Dept. , Dow Chemical, NRTC, and PepsiCo Foods.

**Longest Drive – Jim Hession, Acklands Grainger**  
**Low Net – Jeff Gray – Petro Canada**

**Closest to the Pin – Joe DiFilippo**  
**Low Gross – Rich Rattray – Petro Canada**

Congratulations to all as everyone are definitely a winner!!!!

Next year’s location to be determined.

**LAMBTON COLLEGE – FIRE SCIENCE TECHNOLOGY PROGRAM**

This program combines theory and hands-on applications to provide the students with the necessary job skills to perform entry-level duties in a variety of fire protection fields. Students in the Fire Science Technology program have successfully completed the Pre-Service Firefighter Education and Training program endorsed by the Ontario Fire Marshal. Lambton College’s extensive Fire and Emergency Response Training Centre’s training grounds allow the students to develop and maintain skills in Fire Suppression, Fire Protection and Hazardous Materials Response.

We are continuously looking for employers like you to provide opportunities that allow our students to put to work the theories they have learned in the classroom. This is a win-win situation for the student and the employer. As a potential Co-op Employer there are a number of **incentives and benefits for you** to consider:

- ÿ Tax Credits are available to cover some of your costs
- ÿ Co-op students are an ideal source of manpower to fill temporary human resource needs during staff leaves or for short-term projects
- ÿ Employing co-op students can reduce future recruiting costs—co-op employment aids in the vetting of students for future hiring of motivated and skilled employees
- ÿ Co-op students can help create a bridge between the employer and the student’s academic institution, and employers can provide valuable feedback about course curricula and content
- ÿ Employment of co-op students gives a supervisor the opportunity to mentor bright and enthusiastic students, as well as the chance to take part in the training of their future colleagues
- ÿ Infuse your workforce with a motivated, dedicated, positive student who has a passion for the fire service
- ÿ Co-op students can bring a fresh new perspective to a company



If budgetary concerns are the only thing preventing you from taking on a Fire Science co-op student, we have students who may even consider doing a **volunteer** co-op to gain valuable experience. WSIB Insurance would be provided for the students by the Ministry of Education at no cost to the company.

Thank you again for your ongoing support and I look forward to building a relationship with your company and Lambton College. If you would like more information or are interested in posting a Co-op opportunity please contact me.

Karen Hendra  
 Co-op and Career Consultant  
 Lambton College, Sarnia, ON  
 519-542-7751 x3371  
 karenhe@lambton.on.ca

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## LIFE SAFETY & PROPERTY PROTECTION IMPACT OF PART 4 OF THE ONTARIO FIRE CODE

The following article was prepared by Dr. Joshy Kallungal of the Office of the Fire Marshal. The article was forwarded by Dr. Kallungal to all organizations that were members of the Ontario Fire Code (OFC) Part 4 “Flammable and Combustible Liquids” Implementation Committee of which, the OIFPA was one.

The article provides an overview of the background behind the process of developing, adopting and implementing the regulation.

Since it’s enactment in 1997, the fire losses directly associated with flammable and combustible liquids have fallen significantly including:

- Fatalities have dropped from an average of eight to less than two per year,
- Injury rates have fallen from about 60 to 20 per year, and
- The total number of fires involving flammable or combustible liquids has from approximately 350 to 160 per year.

One other area the article touches on was the need for implementation training seminars. It is prudent to note that your OIFPA between the years of 1996 – 1998 provided approximately 8 technical presentations across the province ranging from Sarnia to Ottawa to Sudbury and various cities in between.

George Fawcett

(see insert )

### **New Legislation for Confined Space Rescue**

John Parish, Manager Emergency Services Municipal Health & Safety Association

In December 2005, the government passed several regulations that will update and strengthen protection for workers in confined spaces. The confined space requirements in four existing regulations – construction, health care, industrial and mining - under the *Occupational Health and Safety Act* (OHSA) have been enhanced to provide greater protection and consistency. A new stand-alone confined spaces regulation will cover most other workplaces that are not covered by the four existing regulations (the exception being farms).

Workplaces will have to meet the new requirements by **September 30, 2006**, which is the date they legally come into force.

Copies of the amended provisions, as well as the current requirements that apply until September 30, 2006, are available on line at [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca) under the OHSA. Changes were made to the provisions of the following regulations:

Construction Projects, Regulation 213/91;  
Industrial Establishments, Regulation 851; and

Health Care and Residential Facilities, Regulation 67/93;  
Mines and Mining Plants, Regulation 854.

The new regulation is titled Confined Spaces, Regulation 632/05.

## **ONTARIO HAS A NEW SMOKE ALARM LAW**

Ontario residents should be aware that a new smoke alarm law is being enforced as a result of changes to the Ontario Fire Code. It's mandatory for every household to have a working smoke alarm on every level of the home, including outside all sleeping areas.

With this new law in place, Ontarians need to purchase additional smoke alarm units if they live in a multi-storied home, and should take the time to inspect their existing smoke alarms.

As recommended by the National Fire Protection Association, all smoke alarms must be replaced every 10 years. If you're the least bit uncertain of the age of the alarm, replace it. Sensor technology has improved so significantly in recent years, an alarm upgrade provides you with improved protective features.

For homeowners, tenants and landlords, non-compliance with the law can result in a ticket for \$235 or a fine up to \$25,000.

Here are some useful tips from Kidde ([www.kiddecanada.com](http://www.kiddecanada.com)) when shopping for a new smoke alarm:

- Two different technologies exist to detect smoke: ionization and photoelectric. Own both kinds for complete protection.
- Tamperproof units with sealed batteries lasting 10 years are an ideal choice for landlords, since they require low maintenance and provide significant savings on batteries.
- When replacing "wired-in" alarms that are interconnected, make sure to purchase the same brand, otherwise the connection feature will not function.
- "Talking" alarms have been shown to wake sleeping children more effectively than regular units that just beep.

Welcome to the latest new members....(add to your mailing list)

Craig J. Anderson  
Safety/Emergency Response - Asst. F.C.  
Imperial Oil - Nanticoke Refinery  
Nanticoke  
Telephone: 519-587-7178  
Fax No. 519-587-7100

Mike Calderone  
Regional Sales Manager - Angus Fire  
Kidde Canada Inc.  
Markham  
Telephone: 905-470-0430 x 231  
Fax No. 905-470-0740

Herb MacAdam  
Emergency Response Co-ordinator  
Wescast Industries Inc.  
Wingham  
Telephone: 519-357-3450 ext 2423  
Fax No. 519-357-2486

Bob Carter  
Canadian Regional Sales Manager  
Hazard Control Technologies Inc.  
Ajax  
Telephone: 905 668 2522  
Fax No. 905 668-3122

Richard (Rich) Rattray  
Manager - Oakville Products Terminal  
Petro-Canada  
Oakville  
Telephone: 905-825-1748  
Fax No. 905-847-4080

Mario Mocerì  
Unit Chairperson  
Daimler Chrysler Industrial Security  
Windsor  
Telephone 519-973-2006  
Fax No. 519-259-4705

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Digest continued...

**In memoriam**

It is with much regret that we announce the deaths of the following members of the fire service in the past few months.

- Jim McCormack died April 24, 2006, after a lengthy illness.
- Donald Lyle Bush passed away May 13, 2006, at the age of 73 years. Donald served as a Fire Inspector for the Provincial Fire Commissioner's Office for

15 years, and was a volunteer fireman and former Fire Chief of the Claresholm Fire Department.

- Brian Monahan, who passed away on May 21, 2006, at the age of 57, was an active volunteer member of the Millet Fire Department for more than 40 years. He also served as the Municipal Secretary of the Town of Millet and was a Safety Codes Officer in Leduc County, and the County of Wetaskiwin.

- M.D. (Dixie) Shuttleworth passed away on June 12, 2006. He joined the Fire Commissioner's Office as an Inspector for the Peace River area in the mid-1950s, then moved to Edmonton as the Supervisor of the Inspection Section. Prior to retiring in the mid 1980s, he was promoted to Deputy Fire Commissioner.

- Darcy Moses, age 20, from Sturgeon Lake, died on July 2,

2006, due to a helicopter accident in the line of duty. He worked for Alberta Sustainable Resource Development in the Smokey Wildfire Management area.

- Dave Naar, age 35, from Niagara Falls, Ontario, a pilot for Remote Helicopters, died on July 11, 2006 when his helicopter crashed into the shoreline while scooping water from a lake about 100 kilometres northeast of Wabasca. 🇺🇸

TO: PETER

You were asking...?

# Q&As about Alberta's Safety Codes



Ray Ligenza and Ray Cox

## Questions about Alberta's Safety Codes?

If you have questions about Alberta's Safety Codes, contact Ray Cox or Ray Ligenza at 1-866-421-6929. Ray and Ray are technical advisors for Technical Services, Building and Fire Safety in the Public Safety Division of Alberta Municipal Affairs.

**Q. What are the certification requirements for self contained breathing apparatus (SCBA) in Alberta?**

**A.** The Occupational Health and Safety Code (Section 246) requires an employer to ensure that self-contained breathing apparatus is approved by the National Institute of Occupational Safety and Health (NIOSH). This requirement applies to fire departments as well.

Not only does the equipment have to meet the NIOSH certification on purchase, the certification must be maintained over the life of the equipment. This means following the manufacturer's maintenance and repair instructions. The SCBA's NIOSH certification may depend on having the equipment serviced by

recognized repair centres. If so, only those service centres certified by the manufacturer may be used. Contact the manufacturer for a listing.

There is no legislation mandating a fire department to follow NFPA standards, although they may be adopted by a fire department as internal standards.

**Q. How does a fire department ensure that its SCBA is NIOSH certified and that its certification is being maintained?**

**A.** A fire department should make sure that it is purchasing SCBA from recognized dealers. If you are unsure, a quick call to the manufacturer's representative will clarify whether the seller is recognized by the manufacturer, and if they are authorized to repair and service this equipment.

If you are purchasing used equipment, great care must be taken to review maintenance and service records to ensure the manufacturer's repair and service program has been followed and that you are getting equipment that is safe for your firefighters to use.

If you are purchasing used equipment through a dealer, make sure that the equipment has been serviced and checked over by a manufacturer's approved service centre. Again, a quick phone call to the manufacturer's representative will assist you in determining this. 🇺🇸

Please forward any questions you may have for "You Were Asking...?" to te-jay.thompson@gov.ab.ca. You don't need to have the answer, just the questions. We'll get our two resident experts, Ray and Ray, to provide the answers.

