

Impasse continues over building code changes

By KAREN HAWTHORNE

PEO and the Ministry of Municipal Affairs and Housing (MMAH) remain at an impasse over amendments in the *Building Code Act* that prohibit anyone from engaging in design activities associated with submissions for permit applications, unless they have qualified by passing examinations on the code. PEO maintains that this legislation is an unwarranted imposition for those already regulated and that including engineers in Bill 124 reduces public clarity.

Both parties are still in discussions to resolve the issue, but time is running out: The qualification and registration requirements for building designers—including engineers—under Regulation 305/03 of the *Building Code Statute Law Amendment Act* come into effect on January 1, 2006.

PEO maintains that the new regulation imposes redundant requirements on licensed designers who are already regulated under public statutes such as the *Professional Engineers Act* (PEA), and introduces overlapping regulation on professional engineering practice.

PEO Council is in full support of taking legal action against the government if required.

“Fundamentally, if our profession accepts that any government ministry, other than the Ministry of the Attorney General, which administers our Act, can set up competence regulations for professional engineers already regulated for competence under the *Professional Engineers Act*, we are accepting the potential death-knell for the Canadian institution of self-regulation of professions,” stated PEO President-elect Patrick Quinn, P.Eng., in a letter to MMAH Minister John Gerretsen on September 15.

Quinn continued: “The regulation and maintenance of the standards of our profession are on the way to irrelevance. In effect, PEO would be relegated to initial licensing, while others would test for specific areas of competence and regulate these areas. This fragmenting of responsibility, particularly in the present instance, is detri-

mental to our profession and not in the best interests of the public.”

PEO’s CEO/Registrar Kim Allen, P.Eng., stated to Gerretsen in a September 16 letter: “If allowed to stand, this legislation will set in motion a precedent to regulate the already regulated professions. Such action sends the unfair message to the public that the existing self-regulatory public statutes are ineffective in providing the requisite public protection and accountability established well over 80 years and prior to what the *Ontario Building Code Act* (OBCA) now purports to provide.”

The Large Municipalities Chief Building Officials Group (LMCBO) says the MMAH qualification scheme is warranted. “Municipal building departments that scrutinize the work of architects and engineers

Clayton Ruby, LLB, the lawyer representing PEO in this matter, wrote to AMO President Roger Anderson on October 18 to address these statements and demand a retraction: “Neither of these statements is true,” his letter stated. “The City of Toronto issues approximately 36,000 building permits each year. Last year, when Bill 124 was not in force, only one complaint was filed with PEO in relation to a building code issue.”

While at press deadline the government remained unprepared to exempt professional engineers, it remained open to PEO establishing a mutually acceptable system to test engineers on the code.

The Ontario Association of Architects (OAA) established a parallel qualification system for its members last spring, an option

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— Patrick Quinn, P.Eng., PEO President-elect

encounter submissions daily which are incomplete and/or contain numerous building code errors,” stated LMCBO Chair Ann Borooah, chief building official, City of Toronto, in letters to Gerretsen and Attorney General Michael Bryant.

Meanwhile, the Association of Municipalities of Ontario (AMO) distributed an “alert” on October 3 regarding the *Building Code Statute Law Amendment Act, 2002*, stating that exempting professional engineers from the application of Bill 124 “could result in greater incidence of errors in building permit submissions.”

The alert also states that municipal building officials have “long reported a significant incidence of errors in building permit submissions prepared by architects and professional engineers.”

PEO Council has emphatically rejected. Since then, the OAA has sought to reopen the subject with the government, saying it adopted its parallel system under the pressure of the previous July 1, 2005 deadline for Reg. 305/03 to take effect, but remains convinced that full exemption for licensed architects would better serve the public.

PEO met with representatives of the MMAH and the office of the attorney general on October 14 in an attempt to hammer out a solution, and had thought it had reached unanimous consensus on the principles for moving forward. But the details of a mutually beneficial solution have proven elusive.

Look for the latest developments to be posted to the PEO website at www.peo.on.ca/registration/Building_Regulation_Registration_Program.htm.

Green light for full-scale government liaison program

By KAREN HAWTHORNE

A new PEO Government Liaison Program is underway following the success of a six-month pilot that began last January and included the regulator's first Engineering for Ontarians Day at Queen's Park on June 6.

At its January meeting, PEO Council had approved the government relations and public communications pilot, designed to respond to concerns about recent provincial government initiatives that appeared to conflict with PEO's self-regulatory authority under the *Professional Engineers Act* (PEA). These included the Ministry of Municipal Affairs and Housing's Bill 124/Regulation 305 legislation in the *Ontario Building Code* area, and the Ministry of the Environment's Bill 56, covering aspects of Brownfields site remediation. When PEO had discussed its con-

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In January, Council also approved engaging government communications consultants Brown & Cohen Communications & Public Affairs Inc. to work with PEO during the pilot.

A highlight of the pilot was the Queen's Park event, which attracted legislators from the three major political parties, PEO Council members and staff, and as many as 50 PEO members who have volunteered to be spokespeople in communicating with government. The attorney general also attended.

Other highlights of the pilot included training sessions for the PEO spokespeople from across the province, meetings with politicians and political staff in various ministries, and PEO chapter events where government leaders attended to speak to members and present licence certificates to new professional engineers.

Based on the pilot's success, Council charged an Executive Committee working group with integrating a more permanent government liaison program into PEO operations, incorporating the existing network of regions and chapters to deliver the regulator's messages across the province.

In September, representatives of all 38 PEO chapters discussed a local presence mobilization plan at the five regular Regional Congress meetings. The plan outlines steps to connect PEO at a local level with provincial politicians, including involving them in chapter events, to raise

the MPPs' awareness of self-regulation of the profession and how that plays out in regulated activities at the local level. PEO has and will continue to develop statements of its positions on key issues to help the spokespeople convey a consistent message when dealing with their local politicians (see “Official messaging,” p. 28).

“With our chapter system, we have a strong framework for engaging government at the local level,” says PEO Chapter Manager Michael Chan, P.Eng.

“We want to build relationships with MPPs and make sure we are sending out a consistent message about what PEO does and how engineers are committed to upholding public safety.”

Currently, there are some 70 volunteer PEO spokespeople. The new program's initial goal is to engage 103 spokespeople (one per riding), expanding to 309 (one per riding per major party) by the end of 2006.

Council approved the Government Liaison Program at its September 23 meeting. To be fully integrated into PEO's ongoing operations, the program is based on three pillars: a strong local presence, a legislative framework, and policy and communications support.

The local presence pillar will involve the Regional Councillors Committee, which will coordinate and support the chapter spokespeople in liaising with local MPPs. PEO Policy and Communications staff will provide necessary communications and policy support, including the development of position statements. PEO's Standards and Regulations staff will provide support by working closely with the Ministry of the Attorney General in maintaining the integrity of the PEA, providing regulatory impact analyses as part of the policy development process, and supporting the Professional Standards Committee in developing professional practice standards.

The Professional Standards Committee will take on the role of oversight for all committees, task forces, and working groups dealing with practice standards and related activities, while the Environment and Government Affairs committees will become working groups supporting the Professional Standards Committee's new role.

The Executive Committee will oversee the program, integrating it into its policy development role and ensuring the program's direction remains in line with the PEO strategic objective of having “the government view PEO as a partner, and understand and support PEO's policy direction”—a key objective in the 2005-2009 Strategic Plan.

“With Council's approval of the framework for the Government Liaison Program, we now have a dedicated program to engage professional engineers across the province in helping to raise awareness with government of Professional Engineers Ontario and the value of self-regulation in protecting the public where engineering is concerned,” says Connie Mucklestone, PEO's director of communications.

Benchmark survey confirms salary growth

By ELEANA RODRIGUEZ

Results of the 2005 Ontario Society of Professional Engineers (OSPE) employer compensation survey show that median base salary growth for engineers at all levels in Ontario has outpaced the increase in Ontario's Consumer Price Index (CPI). From 2004 to 2005, the CPI for Ontario increased 1.9 per cent, while median base salaries for engineers increased in the 2.3 to 4.4 per cent range, depending on the engineering responsibility level.

A total of 190 organizations across all major industry groups, in both the private and public sectors, submitted compensation data for close to 16,000 engineers in 2005. This represents a 29 per cent increase in the number of participants and a 36 per cent increase in the number of engineers over the 2004 survey. The 2005 survey reports data for engineers in 14 job types, working in small and large organizations, across a broad array of industries located in 17 metropolitan areas in Ontario.

In general, pay increases have remained relatively stable. Median base pay is up for all levels over 2004. In addition to increases in base salaries, annual incentives also increased over 2004, with median awards ranging from 5 per cent to 12 per cent of base salary, again depending on the engineering responsibility level.

As of June 1, 2005, the median annual base salary was \$78,000 and the median total cash payment was \$82,600 across all engineering responsibility levels. Figure 1 provides base salary and total cash compensation data by engineering responsibility level.

This year's survey shows predictable pay increases over the 2004 survey. Not surprisingly, base salary and total cash compensation are highest for jobs with a focus on management, marketing and teaching/education. Incentive pay is highest for jobs in the management category.

The survey also collected data on geographic salary differentials. Figure 2 illustrates that relative to the provincial average base salary (0 on the scale), engineers who work in Sarnia, Ottawa and Mississauga enjoy the highest base salaries, on average, while engineers who work in Hamilton,

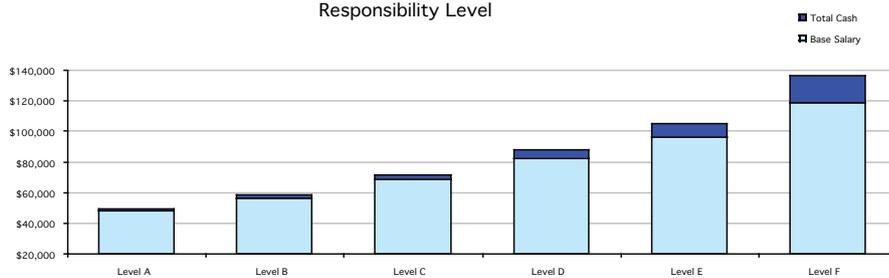
Windsor and Sudbury have the lowest base salaries, on average.

For the first time, employers accessing the 2005 OSPE Employer Compensation Survey results online can analyze the data for possible gender inequities. Analyses, illustrated in Figure 3, reveal that while there is still an earnings gap between men and women in engineering, it is narrowing. On average, base salaries for female engineers are approximately the same or slightly lower than those for male engineers, depending on the level. Notably, at

the entry levels (A and B), the gap is almost eliminated, a strong indication that historical differentials seem to be disappearing in current pay practices.

In 2005, OSPE partnered with Mercer Human Resource Consulting to undertake the survey. Now in its 52nd year, this survey will help employers of engineers develop effective compensation plans for their professional engineering employees and will help OSPE members understand competitive market pay for Ontario engineers.

Figure 1. Base Salary & Total Cash Compensation by Engineering Responsibility Level



As in previous years, an OSPE advisory committee comprising representatives from industry, as well as the engineering and human resources communities, oversaw the design and implementation of the survey. The committee ensures that the survey remains a current and reliable resource on compensation for engineers. The published report lists the committee members.

The survey reports base salary, short-term incentives and total cash compensation for the full spectrum of engineering responsibility levels (Levels A through F). As in previous years, data reported includes year of graduation, industry, organization size, job type and incumbent location. Data enhancements for the 2005 survey include gender, total number of employees and revenue/operating budget.

Employers and OSPE members can order the *2005 OSPE Employer Compensation Survey* by contacting Mercer at www.imercer.ca/ospe, 800-631-9628 or

Figure 2.

All Levels Combined
Geographic Base Salary Differentials

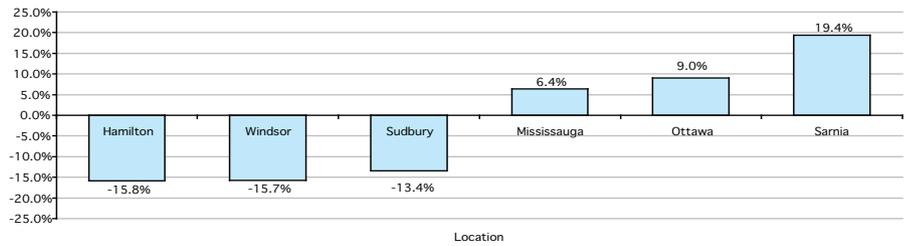
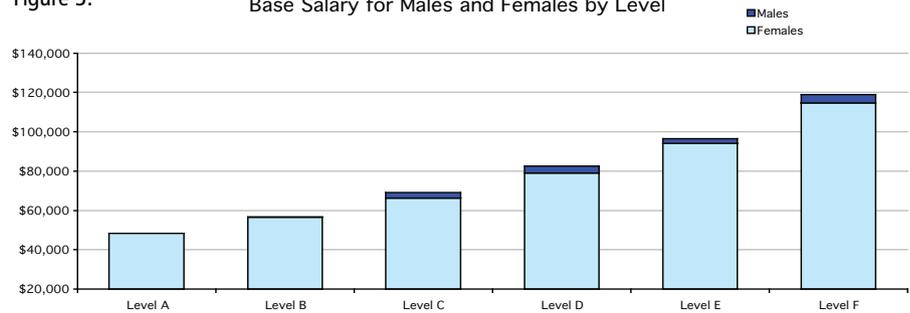


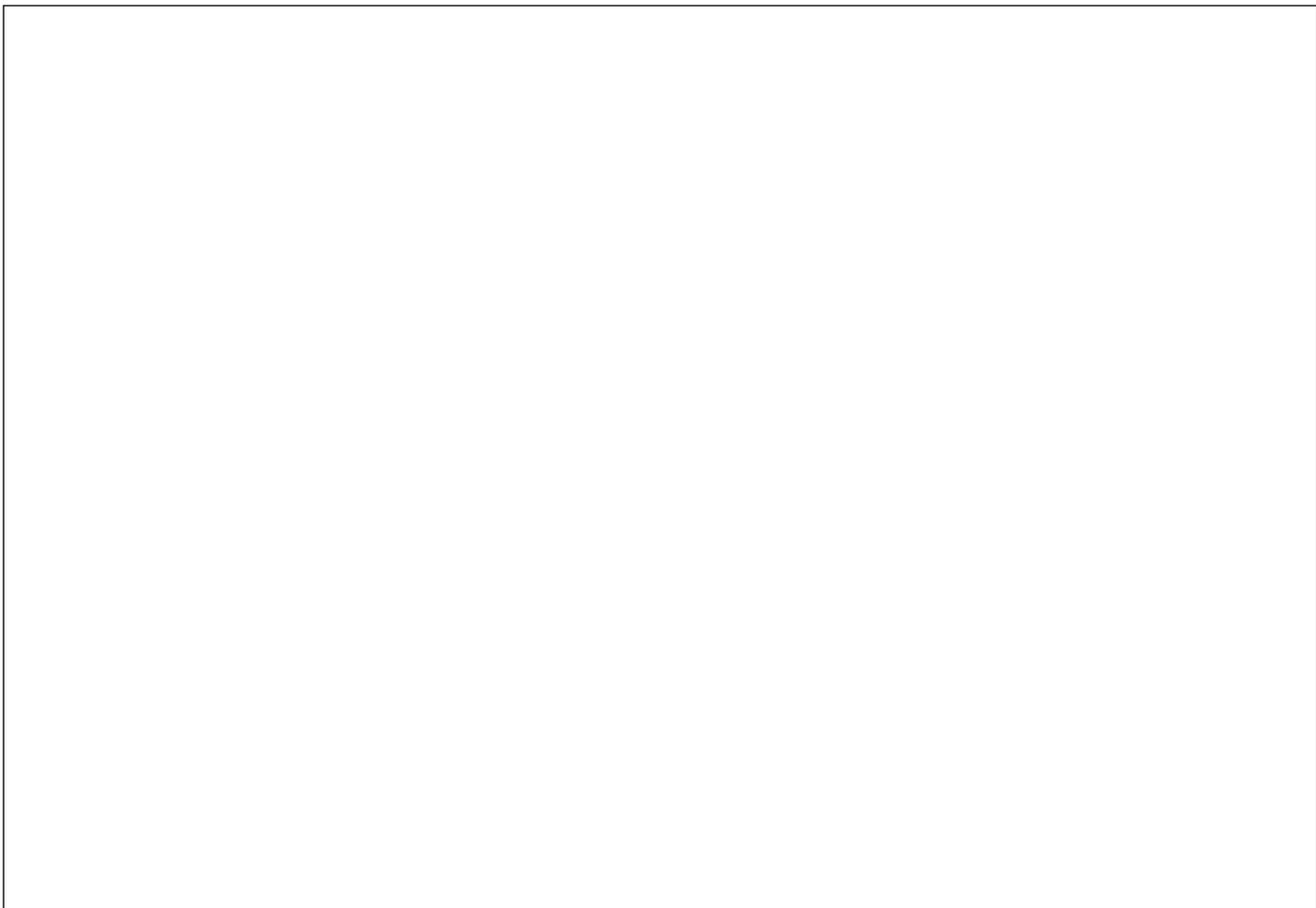
Figure 3.

Base Salary for Males and Females by Level



info.services@mercer.com. OSPE members can access a complimentary copy of the

Member Market Compensation Summary online at www.ospe.on.ca.



Ontario to make polluters pay more for spills

By KAREN HAWTHORNE

The message is clear: Companies need to step up their environmental risk management practices to avoid prosecution.

Ontario's controversial new "you spill, you pay" law (Bill 133) is a strong signal that the government's rules on spill reporting, management, enforcement and due diligence have changed.

Under the new legislation, which was given royal assent on June 13, amendments to the *Environmental Protection Act* and the *Ontario Water Resources Act* impose individual liability on corporate directors and officers who fail to prevent spills or breaches of approval conditions. Harsher sentencing provisions include new "aggravating factors" that judges must add

up to increase fines. New mandatory minimum fines of \$25,000 for companies and \$5,000 for individuals apply on conviction for discharge offences.

These fines will also feed a newly created community clean-up fund to help the province and municipalities clean up spills and repair environmental damage. The principle is that polluters should pay for the cleanup, even if the pollution was accidental.

"The due diligence defence is now very limited. Every aspect of pollution prevention will need to be tightened up to ensure there are no incidents," says John Nicholson, P.Eng., president, Environmental Business Consultants.

"Although the act was not well received by the regulated community, it will indirectly raise the profile of the engineering profession in that companies will be very concerned about the prevention aspects associated with spills. Engineers will be called upon to address pollution prevention from all sides—management controls, design, maintenance, repairs, and containment."

"The intent of the government appears to be laudable: Deal with the spill right away, sort out blame later," says John Gamble, P.Eng., president, Consulting Engineers of Ontario.

"Bill 133 dramatically expands the liability of Municipal-Industrial Strategy for Abatement (MISA)-regulated industries and much of the resulting risk will likely be uninsurable. Engineers, whether they're acting as employees of, or providing consulting services to, MISA-regulated industries, should be concerned about how much of this risk could be transferred to them, contractually or otherwise.

"Engineering consultants should pay particular attention to any clause in a service agreement that could require them to indemnify their clients from costs arising from financial penalties."

In addition, Ministry of the Environment (MOE) directors will be authorized to levy environmental penalties of up to \$100,000

Time to kick into high gear for NEW 2006

By JULIE COHEN

As National Engineering Week (NEW) 2006 (February 25 to March 5) draws near, now is the time to be organizing an event or activity to promote the profession to young people. In its 15th year, NEW's mandate is to raise awareness of the importance of engineering and technology in daily life and to encourage young people to consider careers in engineering and technology.

While organizing an event or activity for Engineering Week takes some effort, the rewards are ample: personal satisfaction, improved visibility in the community, and professional development and networking benefits among them. Events like this also help to establish valuable relationships with other partners.

Last year, PEO's Porcupine Kapuskasing Chapter hosted a robotics competition with the support of Timmins Science. The competition, which was targeted at Grades 6 to 8 students using Mindstorm robotics kits, featured three events. First was a "planned" event that students knew about in advance: developing and building a robot to race around a timed maze. Next was an "unplanned" event: giving students a half-hour's notice to build and develop a robot for another race event. Last was an exhibition where students had advance notice



Students test the load-to-weight ratio of their drinking-straw bridge at the Peterborough Chapter's 2005 Engineering Challenge.

that they were to develop an amusement park mock-up ride with their robot.

PEO's Peterborough Chapter's 2005 Engineering Challenge featured a drinking-straw bridge-building competition. "It was a phenomenal success with bridges being built much more efficiently and stronger than anticipated," says organizer Gopal Mitra, P.Eng. "Designs were mainly based on truss frames, but there were a few bridges that incorporated arches and pyramid frames. Creativity and industry were in the air. Bridges took shape over three hours and every minute of it was just as exciting for the onlookers as it was for the participants."

Anyone interested in organizing an activity can find event ideas and information on the NEW Ontario website at www.engineeringweek.on.ca (click on "Event Organizer Help," then "Planning Advice").

a day for spills, with absolute liability; due diligence may reduce the penalty, but is not a defence to an environmental penalty.

The environmental penalty provisions will not come into force until the MOE has regulations in place. When that happens, the act will give ministry officials the authority to impose on-the-spot environmental penalties of \$100,000 a day without the risk, time, and expense of court proceedings.

When a penalty has been imposed, polluters could still face prosecution. A conviction could result in sentences ranging from fines against a company to up to five years of jail time for its directors and officers. The legislation also reverses the onus so that companies have to prove they didn't break the law, making it easier for officials to lay charges and get convictions for a broader list of offences.

The government intends to apply environmental penalties to 144 large industrial facilities in Ontario covered by MISA

regulations, including power generators, industrial minerals, iron and steel, metal casting, metal mining, petroleum, and pulp and paper.

"I see the penalty system as an economic incentive that encourages facilities to invest in spill prevention. However, I don't want to see penalties used as a replacement for tough enforcement when warranted," says Elaine MacDonald, PhD, P.Eng., staff scientist with the Sierra Legal Defence Fund, which advocates environmental protection.

"Many companies invest in environmentally sound engineering because they honestly care about the environment and, of course, their corporate image. But too often the bottom line dictates that corners be cut, which leads to accidents like spills. That's why a penalty system that affects the bottom line is effective."

Industry experts agree that tougher legislation and greater enforcement is not the only answer.

One pilot program introduced by the MOE, the Environmental Leaders Program, rewards companies that go beyond compliance, says Nicholson. "This 'carrot' gives companies the incentive to improve their environmental performance and hence increase the demand for engineering services."

"Too many of us are disconnected from the natural world or fail to make the connection between our everyday activities and the environment. If you start to make that connection, it changes your behaviour," MacDonald says.

"When you factor in the environmental costs and benefits, your decisions change: car versus transit, open the windows or turn on the air conditioner. Companies need to do the same thing; decisions should be based on analysis that incorporates full cost accounting, which requires environmental, economic and social impacts to be assessed," she says.

PEO's five-year strategic plan underway, project teams established

By WENDY ZHOU

With PEO's five-year strategic plan approved, projects are now underway to fulfill the plan's goals.

The new plan, published on the PEO website in April 2005 (www.peo.on.ca/registrar/StratPlan/2005/stratplan_home.htm), includes a vision for PEO, a statement of core values, and four key strategic goals that, in turn, encompass 27 objectives. Council selected the following seven objectives as having the highest priority over the next five years:

- increase the public's confidence in the engineering licence;
- increase the public's confidence in PEO as a regulator;
- make the Certificate of Authorization (C of A) a more effective instrument for regulating the provision of engineering services;
- use Council's regulation-making powers to develop engineering performance standards;
- have the government regard PEO as a partner, and understand and support PEO's policy direction;
- secure the needed financial resources; and
- improve Council's decision-making process.

Thirty-four projects were identified to achieve the top seven objectives; PEO's senior management team then drafted the first 17 "project charters," which outline the strategic goals and map out the work plan structure, analysis and constraints for each project. Timelines and budget requirements will vary, depending on each project's complexity and required resources.

Although many of the issues identified in the strategic plan are not new, they remain current. With the strategic plan, PEO is committed to the necessary research and analysis to develop policy options for their resolution. From these options, decision makers will be able to make informed choices and take action on these lagging issues.

"There may have been some successful initiatives addressing similar objectives in the past," said Councillor John Vieth, P.Eng. "However, we live in a changing world. What was implemented five years ago may not be very effective today. It is useful to revisit strategies to determine if new implementations are warranted."

For example, one project is voluntary annual reporting, which will involve the development and implementation of voluntary annual reporting of engineering areas of practice, associated experience, and continuing education for all licence holders. To provide the necessary detailed policy analysis, project participants will review previous PEO reports on similar initiatives and research other regulators' mechanisms for benchmarking purposes.

Other projects include developing an agenda management system for Council and Executive Committee meetings, activity-based costing of PEO operations, estab-

lishing a regulatory government relations program, developing a mechanism to report regulatory effectiveness to stakeholders, and improving the Certificate of Authorization.

Each of the 17 Strategic Plan projects is being steered by a committee that includes PEO senior management team members and a members of PEO Council to "champion" the project. The project teams comprise key PEO staff.

"I believe that PEO performs its core function of protecting the safety and broader interests of the public in Ontario very well. Within that mandate, I believe PEO performs more effectively in some areas and less effectively in others," said Vieth, project champion for two projects to establish and report on key performance indicators.

"Measurement and reporting of the key indicators of PEO performance will serve to strengthen professional engineering in

continued on p. 21

Housing minister welcomes new P.Engs



Minister of Municipal Affairs and Housing John Gerretsen was guest of honour at the Kingston Chapter's licence presentation and annual barbeque on July 13 at Royal Military College. Minister Gerretsen presented licence certificates to the new P.Engs and welcomed them into their chosen profession. Left to right, Cliff Knox, P.Eng., PEO Eastern Region Councillor; Carlos E. Saavedra-Munoz, P.Eng.; Chantal Chiddle, P.Eng.; Jean-Francois Ruta, P.Eng.; Simon Guy Smith, P.Eng.; Saeed Gazor, P.Eng.; Minister Gerretsen; V.I. John, P.Eng., Kingston Chapter director.