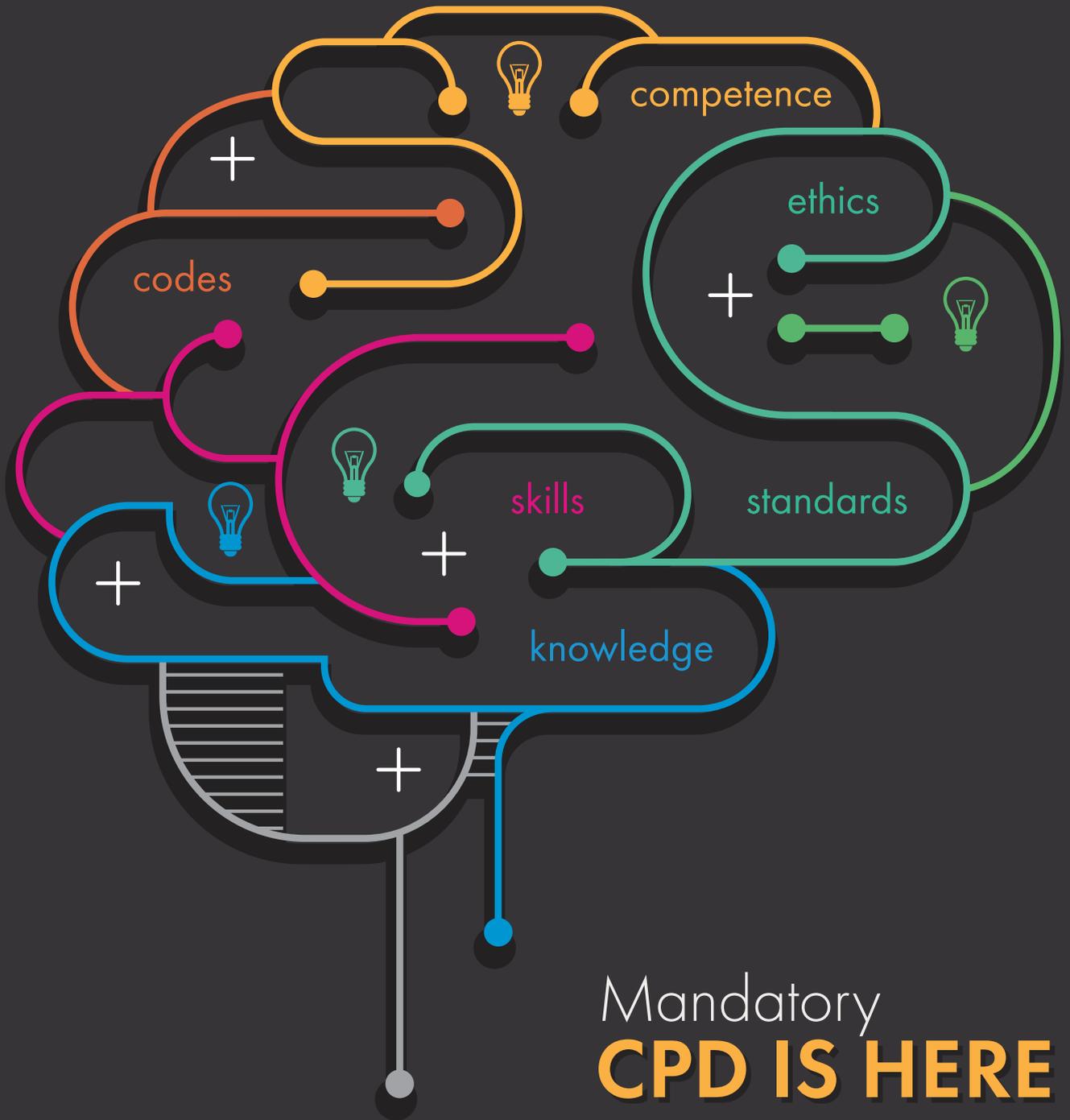


WINTER 2023

# ENGINEERING DIMENSIONS



Mandatory  
**CPD IS HERE**



Professional Engineers  
Ontario



**Exclusive Protection.  
Exclusive Rates.  
Exclusively *Yours*.**

## Help protect your family with the Engineers Canada-sponsored Insurance plans.

As an engineering professional, you and your family can take advantage of affordable association rates and flexible plan options. Several plans are available, and we think there could be a plan that's right for you and your family.

**Exclusive offer: First-time term life applicants can get an extra \$50,000 of coverage at no cost for up to 2 years!\***

Learn more and apply online  
or speak with a Licensed  
Insurance Advisor.

[manulife.ca/ED](https://manulife.ca/ED)  
1 877 598-2273

### Your exclusive coverage options:

-  Term Life Insurance
-  Health & Dental Insurance  
(including plans for retirees)
-  Disability Income Protection
-  Critical Illness Insurance
-  Major Accident Protection



\* To be eligible for the offer of \$50,000 of additional Term Life coverage at no extra cost for up to two years, Members must meet the Engineers Canada-sponsored Term Life eligibility requirements: be aged 18 to 65; be applying for Engineers Canada-sponsored Term Life Insurance for the first time without having previously been declined for Term Life coverage by Manulife; be applying and approved for \$25,000 of Term Life coverage or more. Available to Members only (not available on Spousal coverage). For complete details, see [manulife.ca/newmember](https://manulife.ca/newmember).

Underwritten by **The Manufacturers Life Insurance Company (Manulife).**

Manulife, Stylized M Design, and Manulife & Stylized M Design are trademarks of The Manufacturers Life Insurance Company and are used by it, and by its affiliates under license. © 2022 The Manufacturers Life Insurance Company. All rights reserved. Manulife, P.O. Box 670, Stn Waterloo, Waterloo, ON N2J 4B8. Accessible formats and communication supports are available upon request. Visit [Manulife.ca/accessibility](https://Manulife.ca/accessibility) for more information.

Scan to learn more.



# ENGINEERING DIMENSIONS

## FEATURES

- 14 Scaling PEAK: The rise of PEO's mandatory CPD program
- 22 Introducing mandatory PEAK
- 23 Declaring your practice status: What engineers need to know
- 25 PEAK online: A step-by-step guide
- 27 CPD activities: What counts towards licence holders' target hours
- 29 How does PEAK compare to other CPD programs?
- 32 CPD compliance audits and sanctions are coming in 2024



## SECTIONS

### ASSOCIATION BUSINESS

- 5 Editor's Note
- 6 President's Message
- 7 CEO/Registrar's Report
- 13 Governance: Why your vote matters
- 19 Gazette
- 36 In Council: Council approves changes to licensure process

### NEWS AND COMMENTARY

- 8 News: PEO to suspend its Engineering Intern program; PEO names its new CEO/registrar; Engineers Geoscientists Manitoba removes practice barriers, increases transparency; Newfoundland and Labrador introduces fair registration legislation; Guelph professor named inaugural chair for women in engineering
- 34 Bulletin Board
- 35 Profile: Retired professor serves on ARC for 33 years



### ADVERTISING FEATURES

- 38 Professional Directory
- 38 Ad Index

**WHAT DO YOU THINK?**

Send your letter to the editor to [editor@peo.on.ca](mailto:editor@peo.on.ca). If published, letters may be edited for length and clarity.

# ENGINEERING DIMENSIONS

## PUBLICATIONS STAFF

### Editor

Nicole Axworthy  
editor@peo.on.ca

### Associate editor

Marika Bigongiari

### Associate editor

Adam Sidsworth

### Graphic designer

Cindy Reichle

### Director, communications

Katarina Praljak

### Manager, communications

Duff McCutcheon

### Digital communications

#### coordinator

Michelle Yiu

## CONNECT WITH US



Professional Engineers  
Ontario



## ADVERTISING SALES

### DOVETAIL COMMUNICATIONS

#### Senior account executive

Vince Naccarato  
vnaccarato@dvtail.com

*Engineering Dimensions* (ISSN 0227-5147) is published quarterly by Professional Engineers Ontario and is distributed to all PEO licensed professional engineers.

*Engineering Dimensions* publishes articles on regulatory business and professional topics of interest to the professional engineer. The magazine's content does not necessarily reflect the opinion or policy of PEO Council, nor does PEO assume any responsibility for unsolicited manuscripts and art. All material is copyright. Permission to reprint editorial copy or graphics should be requested from the editor.

*Engineering Dimensions* is a member of Canadian Business Press.

Indexed by the Canadian Business Index and available online in the Canadian Business and Current Affairs Database.

Approximately \$5.00 from each membership fee is allocated to *Engineering Dimensions* and is non-deductible.



Alliance for  
Audited Media

## EXECUTIVE STAFF

### CEO/registrar

Jennifer Quaglietta, MBA,  
P.Eng., ICD.D

### Vice president, regulatory operations/deputy registrar

Linda Latham, P.Eng.

### Vice president, policy and governance

Dan Abrahams, LLB

### Vice president, organizational effectiveness

Vacant

## PEO COUNCIL

### Officers

#### President

Nick Colucci, MBA, P.Eng., FEC  
president@peo.on.ca

#### Past president

Christian Bellini, P.Eng., FEC

#### President-elect

Roydon Fraser, PhD, P.Eng., FEC

#### Vice president (elected)

Greg Wowchuk, P.Eng.

#### Vice president (appointed)

Lorne Cutler, MBA, P.Eng.

### Executive Member

Scott Schelske, P.Eng., FEC

## Councillors

### Councillors-at-large

Vajahat Banday, MSEE, MSCE,  
P.Eng., PE (Michigan), FEC

Chantal Chiddle, P.Eng., FEC

Leila Notash, PhD, P.Eng., FEC

### Eastern Region councillors

Tim Kirkby, P.Eng., FEC

Randy Walker, P.Eng., FEC

### East Central Region councillors

Christopher Chahine, P.Eng.

David Kiguel, P.Eng., FEC

### Northern Region councillors

Dana Montgomery, P.Eng.

Luc Roberge, P.Eng., FEC

### Western Region councillors

Vicki Hilborn, P.Eng.

Susan MacFarlane, MSc, PhD, P.Eng.

### West Central Region councillors

James J. Chisholm, P.Eng., FEC

Pappur Shankar, P.Eng., FEC

### Lieutenant governor-in-council appointees

Arjan Arenja, MBA, P.Eng.

Robert Brunet, P.Eng.

Lorne Cutler, MBA, P.Eng.

Andy Dryland, C.E.T.

Paul Mandel, MBA, CPA, CA

George Nikolov, P.Eng.

Scott Schelske, P.Eng., FEC

Sherlock Sung

### Engineers Canada Directors

Arjan Arenja, MBA, P.Eng.

Christian Bellini, P.Eng., FEC

Danny Chui, P.Eng., FEC

Nancy Hill, P.Eng., LLB, FEC, FCAE

Marisa Sterling, P.Eng., FEC

## CHEERS TO 2023 AND LONG-TERM LEARNING

By Nicole Axworthy



In a move to further strengthen the quality of Ontario's engineering profession, this month PEO is rolling out its mandatory continuing professional development (CPD) program for professional engineers and limited licence holders. By now, you should have received a formal letter in your mailbox notifying you of this new requirement, and perhaps you've already perused PEO's dedicated webpage.

In this issue, we're sharing several articles about the new Practice Evaluation and Knowledge (PEAK) program, which is based on the voluntary program PEO piloted for

nearly six years. To cover all the bases, we've got articles on various aspects of the program, starting with the decades-long backstory of how and why PEO implemented CPD as a requirement to maintain an engineering licence (p. 14).

As you'll read in the following pages, the new PEAK program is delivered through PEO's online portal and is laid out in three steps to be completed annually (p. 22). The first step is to self-declare if you are practising or not practising professional engineering (p. 23). No matter your company or industry, you'll need to assess your work to determine if it falls under the definition of professional engineering in the *Professional Engineers Act*.

If you self-declare as a non-practising licence holder (retired engineers fall into this category), you will need to complete the first two steps of PEAK—the Practice Evaluation and the Professional Practice Module, which take about an hour. If you self-declare as a practising licence holder, you will need to go one step further and complete any CPD hours that are assigned to you. Conveniently, if you are assigned CPD hours to complete throughout the year, PEO leaves it up to you to find activities that are relevant to your practice under the broadly interpreted requirements of the program (p. 27). It's quite possible the activities you are already doing to stay informed in your practice meet these requirements—if that's the case, all you need to do is report them to PEO before the end of the year.

Mandatory CPD is not new to regulated professions. If you're wondering how PEAK compares to the programs of other professional regulators, we've got you covered (p. 29). Also of note are the upcoming PEAK audits and sanctions that will be introduced in 2024 (p. 32).

In this issue, you'll also find the candidate statements for PEO's 2023 Council elections. Now that elections season is upon us, I encourage you to support your fellow engineers who are running this year. Head over to [peovote.ca](http://peovote.ca) for more elections-related resources to help you make an informed vote. Voting closes February 17, so be sure to count yours in. **e**

### LET US KNOW

To protect the public, PEO investigates all complaints about unlicensed individuals or companies, and unprofessional, inadequate or incompetent engineers. If you have concerns about the work of an engineer, fill out a Complaint Form found on PEO's website and email it to [complaints@peo.on.ca](mailto:complaints@peo.on.ca). If you suspect a person or company is practising engineering without a licence, contact PEO's enforcement hotline at 800-339-3716, ext. 1444, or by email at [enforcement@peo.on.ca](mailto:enforcement@peo.on.ca).



## ANOTHER YEAR OF COMMITMENT AND CHANGE

By Nick Colucci, MBA, P.Eng., FEC



As we ring in another new year filled with potential and promise, I'm happy to be able to continue to be a part of significant change here at PEO, and working with new CEO/Registrar Jennifer Quaglietta, MBA, P.Eng., ICD.D.

Changes that are part of the regulator's immediate future relate to the application process and licensing system. In November, Council made licensure decisions around academic equivalent qualifications and the experience assessment method in support of PEO's compliance with recent amendments to the *Fair Access to Regulated Professions and Compulsory Trades Act* (FARPACTA). Specifically, on the advice of its Regulatory Policy and Legislation Committee, Council decided to recognize that a bachelor's degree in an engineering program that is included in the International Institutions and Degrees Database (IIDD) administered by Engineers Canada, subject to successful completion of a confirmatory examination program, is equivalent to a bachelor's degree in a Canadian engineering program that is accredited to Council's satisfaction.

Council also decided to support the use of a competency-based assessment model, including ethics indicators, to confirm that an applicant for a licence has sufficient experience to enable them to meet the generally accepted standards of practical skill required to engage in the practice of professional engineering.

**ULTIMATELY, PEO IS COMMITTED TO A TRANSPARENT, CONSISTENT LICENSING SYSTEM THAT ENSURES ALL QUALIFIED APPLICANTS ARE LICENSED FAIRLY AND WITHOUT UNDUE DELAY SO THEY CAN ACTIVELY WORK IN THEIR CHOSEN PROFESSION.**

These Council decisions specifically support a planned shift to "front-end" academic and experience requirements for all those wishing to apply for licensure. The substantive changes approved in November will be applied as soon they can be communicated to prospective applicants and, in any case, no later than July 1, 2023, which is when the FARPACTA requirement for six-month processing of the vast majority of new licence applications will come into effect.

These changes not only help PEO comply with government-imposed FARPACTA amendments, but they also help us meet a key pillar in PEO's 2023–2025 Strategic Plan: improving PEO's licensing processes, without compromising public safety. Ultimately, PEO is committed to a transparent, consistent licensing system that ensures all qualified applicants are licensed fairly and without undue delay so they can actively work in their chosen profession. For full details on PEO's upcoming licensure changes, please visit PEO's website.

### A SHOUTOUT TO PEO VOLUNTEERS

I would also like to take this opportunity to recognize all PEO volunteers for their contributions in helping PEO regulate the profession in the public interest. Over 2022, hundreds of professional engineers, engineering interns and non-engineers volunteered their time to PEO, including those who served on PEO Council, committees and their subcommittees, task forces, the Government Liaison Program and PEO chapter executive boards, as well as those who represented PEO on external boards and advisory groups and volunteered for chapter-sponsored programs.

PEO is fortunate to have so many individuals with a strong desire to serve and improve the profession. PEO Council gratefully recognizes and thanks all those who have served the profession in a wide variety of activities and events throughout the year.

Thank you, PEO volunteers. **e**

## PARTING THOUGHTS

By Johnny Zuccon, P.Eng., FEC



Thank you.

I'll begin by thanking PEO's new CEO/registrar, Jennifer Quaglietta, MBA, P.Eng., ICD.D, for allowing me to use this space one last time as I ease into retirement after 27 years with PEO.

Jennifer officially took the helm on January 9, and I am confident the expertise and leadership she brings from the healthcare sector will translate well in her new role. She inherits a talented team; one I know will provide her the support she needs to continue PEO's critical journey of transformation. And what a journey it has been!

Thank you to our staff, Councils and volunteers for their support over the past several years as we envisioned, planned and began implementing change to make PEO a more modern, relevant, inclusive and public interest-focused regulatory body. Change isn't always easy, especially for an organization with such a deep history as ours, but we are now beginning to reap the benefits of our collective efforts. Consider our situation just one year ago:

- Our new organizational structure was being finalized with a number of key positions to be filled;
- We had a plan to move forward with mandatory continuing professional development (CPD) based on our voluntary Practice Evaluation and Knowledge (PEAK) program but uncertainty around implementation remained;
- Amendments to the *Fair Access to Regulated Professions and Compulsory Trades Act* (FARPACTA) had

just been announced, and our ability to make the necessary policy and organizational changes to become compliant was at best uncertain;

- Changes to Council and committee roles identified through the Governance Roadmap had been made, although they needed enhanced staff support for Council to perform more effectively as a direction and control board; and
- We had yet to develop a more proactive, more meaningful strategy for engaging with external stakeholders.

As we continue to unwrap 2023, we can be proud that during the past year we have made significant progress in all these areas—and we managed to celebrate PEO's 100th anniversary at the same time. Consider that today:

- There is greater clarity about the roles of our executive leadership team, directors, managers and all staff within the new organizational structure, with key positions continuing to be filled;
- Mandatory CPD based on the PEAK program is now in effect for our roughly 90,000 licence holders, supported by a new regulation passed last spring;
- Significant FARPACTA-related policy changes are now in place;
- Work continues on solidifying the commitments that emerged through the Governance Roadmap, including supporting the four governance committees that serve Council's needs; and
- A new external relations strategy is being developed that aligns with an approach to policy making that uses both evidence and effective stakeholder engagement to create the best possible case for regulatory changes.

During my time at PEO, I have noticed the tendency for some to focus on what remains to be achieved rather than reflecting on and celebrating what has been accomplished. Understandably, change takes time and as an organization, we can and should always strive to do better. But I do hope that as you read this message, you will at least pause to recognize and appreciate the progress we have made together. I am convinced that with the talented team assembled, and now under Jennifer's leadership, PEO is well-positioned to fulfill its public interest mandate effectively and efficiently.

My final words are to all the staff and volunteers, as well as colleagues in the greater engineering community, whom I have had the privilege of knowing and working with these past few decades. Thank you for your support, your guidance, your patience, your opinions, your friendship and, most importantly, your passion for the engineering profession and PEO's role within it. PEO has been a huge part of my life—a second family at times—and the collective desire I have witnessed to ensure our organization reaches its full potential has always inspired me.

While this chapter closes, a new one opens. I look forward to transitioning into retirement following a brief advisory role to the new leadership group. I'll take with me a lifetime of fond memories and offer my best wishes to those continuing to commit PEO's focus on its public interest mandate and adapting to society's evolving needs. Ciao! **e**

## PEO TO SUSPEND ITS ENGINEERING INTERN PROGRAM

New applicants are no longer able to enroll in PEO's EIT program on a date to be determined before July 1, 2023.

By Nicole Axworthy



As of July 1, 2023, or earlier, PEO's optional Engineering Intern (EIT) program will no longer be available to applicants for licensure. The program will be suspended with the implementation of an improved application process that enables PEO to comply with requirements imposed by the provincial government through amendments to the *Fair Access to Regulated Professions and Compulsory Trades Act* (FARPACTA).

The *Professional Engineers Act* and its regulations make the EIT program available only to those who have already applied for licensure. However, under PEO's 180-day FARPACTA-compliant licensing process, prospective applicants must gain the required engineering work experience prior to applying, making the EIT program operationally impractical.

Current applicants who are enrolled in the EIT program or who join prior to its suspension will continue to be supported through their licensing journey until such time that the program is fully phased out or until they no longer meet the requirements.

The EIT program was originally created to support engineering graduates who apply for licensure as they gain the 48 months of required engineering work experience. The program includes:

- The opportunity to receive detailed annual work experience reviews;
- Eligibility to participate in PEO's Licensure Assistance Program;
- Access to *Engineering Dimensions*;
- Opportunities to attend PEO and PEO chapter EIT seminars;
- The opportunity to join and participate in a PEO chapter;
- Email notices of events or items pertaining to their development into a licensed engineer;

**UNDER PEO'S 180-DAY FARPACTA-COMPLIANT LICENSING PROCESS, PROSPECTIVE APPLICANTS MUST GAIN THE REQUIRED ENGINEERING WORK EXPERIENCE PRIOR TO APPLYING, MAKING THE EIT PROGRAM OPERATIONALLY IMPRACTICAL.**

- Access to PEO's online portal;
- The opportunity to participate in PEO's LinkedIn discussion group; and
- The opportunity to join the province's engineering advocacy organization, the Ontario Society of Professional Engineers.

### UPCOMING CHANGES TO PEO'S APPLICATION PROCESS

Throughout this year, PEO will be implementing changes to its application process and licensing system to ensure it complies with amendments to FARPACTA, introduced in the *Working for Workers Act, 2021*, and the *Working for Workers Act, 2022*. The legislative amendments aim to promote fairness and transparency in the licensing process of regulated professions, particularly, but not exclusively, for those who are internationally educated. Among other requirements, the amended legislation compels affected regulators to provide clarity on what constitutes a completed application so it can be confirmed as complete within 10 days of receipt; and meet an overall six-month target for reaching registration decisions for 90 per cent of all completed applications from internationally trained professionals received on or after July 1, 2023.

To enable PEO to meet the FARPACTA requirements, the existing application process will be front-loaded, meaning prospective applicants will be required to meet all academic and work experience requirements prior to applying.

Further review of PEO's approach to licensing, independent of the FARPACTA-driven initiatives, will consider the most effective way of ensuring that experience gained prior to licensure is meaningful for applicants and, above all, serves public health and safety interests.

For the latest updates about the upcoming changes to PEO's application process and licensing system, visit PEO's website.

## PEO NAMES ITS NEW CEO/REGISTRAR

Jennifer Quaglietta, MBA, P.Eng., ICD.D, who took on PEO's top position this month, brings executive leadership and biomedical engineering experience to PEO.

By Adam Sidsworth



Jennifer Quaglietta, MBA, P.Eng., ICD.D, is PEO's new CEO/Registrar.

Jennifer Quaglietta, MBA, P.Eng., ICD.D, became PEO's new CEO/Registrar on January 9. She takes over from former CEO/Registrar Johnny Zuccon, P.Eng., FEC, who announced his intention to retire in the spring of 2022. Quaglietta's appointment to PEO's top position was announced on November 17, 2022, after a months-long search for Zuccon's successor.

In her role as CEO/Registrar, Quaglietta will be responsible for administering the *Professional Engineers Act* and overseeing the staff and operations of PEO.

"On behalf of our Council, I'm thrilled to welcome Jennifer to our organization," says PEO President Nick Colucci, MBA, P.Eng., FEC. "Jennifer has achieved extensive success and leadership in activities supporting public protection, policy and strategy, operations and quality improvement. These skills will be invaluable as we continue to fulfil our legislative mandate while advancing our enterprise-wide transformation through such notable initiatives as implementing a mandatory continuing professional [development] program for licence holders and creating a more efficient, transparent and objective licensing system that complies with recent amendments to the *Fair Access to Regulated Professions and Compulsory Trades Act* (FARPACTA)."

Quaglietta takes over the reigns of PEO as it pursues perhaps its largest transformation in its nearly 101-year history. This month, PEO's 87,000 P.Eng. and limited licence holders begin participating in the Practice Evaluation and Knowledge program, PEO's new mandatory continuing professional development program. Alongside this new initiative, PEO continues to modernize its licensing processes, including complying with the province's FARPACTA amendments, which seek to speed up professional regulators' decision-making timelines and create a more equitable licensing process for internationally trained professionals.

---

**"ON BEHALF OF OUR COUNCIL, I'M THRILLED TO WELCOME JENNIFER TO OUR ORGANIZATION," SAYS PEO PRESIDENT NICK COLUCCI, MBA, P.ENG., FEC.**

---

### QUAGLIETTA BRINGS LEADERSHIP EXPERIENCE TO PEO

Prior to coming to PEO, Quaglietta was the vice president of performance excellence and information services at the Healthcare Insurance Reciprocal of Canada, a not-for-profit insurance reciprocal with a focus on healthcare safety and risk mitigation for the healthcare industry. Prior to that, Quaglietta was the director of patient experience, patient flow and patient- and family-centred care at the North York General Hospital in Toronto, ON. Additionally, Quaglietta has worked in strategy lead and project management roles at the Ministry of Health and Long-Term Care and Cancer Care Ontario.

Quaglietta holds an undergraduate degree in chemical engineering from the University of Toronto (U of T), where she also earned an MBA from U of T's Rotman School of Management. Quaglietta continues to have a relationship with her alma mater, where she is an industry affiliate at U of T's Centre for Healthcare Engineering.

In addition to being a licensed professional engineer, Quaglietta holds a PMP designation from the Project Management Institute, an ICD.D designation from the Institute of Corporate Directors, a Certified Health Executive designation from the Canadian College of Health Leaders and is a Lean Six Sigma Green Belt.

# ENGINEERS GEOSCIENTISTS MANITOBA REMOVES PRACTICE BARRIERS, INCREASES TRANSPARENCY

Manitoba's engineering and geoscience regulator recently modernized its engineering and geoscience act.

By Adam Sidsworth



Manitoba's engineering and geoscience regulator, Engineers Geoscientists Manitoba (EngGeoMB), recently updated its engineering and geoscience act to remove practice barriers for Canadian mobility applicants and increase transparency in its discipline and licensing processes.

"Amendments in this bill touch upon a common goal to achieve consistency with other provincial acts in Manitoba and professional engineering regulators in Canada," wrote EngGeoMB in its *Brief to the Government of Manitoba as the Engineering and Geoscientific Professions Amendment Act* (Bill 233) proceeded through the legislative process before becoming law on October 25, 2022.

## STREAMLINING THE REGISTRATION PROCESS

As part of the amendments, EngGeoMB introduced a new licence specifically for mobility applicants already licensed in another Canadian jurisdiction to be approved directly by the registrar instead of through the conventional registration channel. "Under the Canadian Free Trade Agreement, an application to practise engineering or geoscience in Manitoba from a member licensed by a Canadian regulator of engineers or geoscientists must be recognized to practise in Manitoba without being subject to significant additional assessment, evaluation, training or work experience," EngGeoMB notes. "Thus, approving out-of-jurisdiction applicants by the registrar is a prescriptive process similar to [certificates of authorization]. The registrar's review and approval of these applications enhances the registration process without distracting from the integrity of the profession and safety of the public."

Furthermore, in a bid to democratize engineering and geoscience practice rights in Manitoba, the amendments now allow Manitoba residents already licensed by another provincial or territorial engineering or geoscience regulator to apply for a temporary licence from EngGeoMB. Previously, only individuals residing in another Canadian jurisdiction and already licensed by another provincial or territorial engineering or geoscience regulator could qualify for a Manitoba temporary licence.

## SIMPLIFYING THE APPEALS PROCESS

Under the amendments, investigation and registrations appeals processes are simplified and now go to the Appeal Committee. If necessary, a registration appeal can proceed to the Court of King's Bench and Court of Appeal. Discipline decisions, however, go directly to the Court of Appeal. This makes EngGeoMB's appeals process in line with Manitoba's health professionals, architects and legal professionals.

"This will remove some of the administrative burden placed on Council and allow councillors to focus on other responsibilities," EngGeoMB's brief

states. "The new appeals process will reduce the financial and legal burden on Council, relative parties and courts by allowing the appellant to appeal disciplinary actions directly to the Court of Appeal."

Previously, EngGeoMB's registration, investigation and discipline committees were outlined by separate sections of Manitoba's *Engineering and Geoscientific Professions Act*, which EngGeoMB noted could lead "to cumbersome decisions." Discipline and registration appeals required an appeal first to a panel of EngGeoMB councillors and then, if necessary, to the Court of the King's Bench and the Court of Appeal. Investigation appeals went only to councillors.

## INCREASING PUBLIC PROTECTION TOOLS

With the passage of the amendments, EngGeoMB's ability to proactively protect public safety has also increased. Notably, EngGeoMB will:

- Be able to proactively enforce title protection rights for the use of the Eng. L. and Geo. L. (equivalent to PEO's limited licences);
- Formalize the Investigations Committee's power to investigate other matters that may arise during the initial investigation of a licence holder and to acquire the appropriate expert opinion and legal counsel;
- Be able to notify the public and a licence holder's employer should the licence holder be non-compliant with the requirements of continuing professional development; and
- Be able to publish the names, charges and/or circumstances of events of licence holders who have been referred to the Discipline Committee, have been disciplined or voluntarily withdraw from practice, are formally cautioned or agree to a charge, conviction or penalty.

# NEWFOUNDLAND AND LABRADOR INTRODUCES FAIR REGISTRATION LEGISLATION

The province is the latest jurisdiction in Canada to require professional regulators to adhere to fair registration practices.

By Adam Sidsworth

In a move to implement fairer and more transparent registration practices within regulated professions, the Newfoundland and Labrador government recently passed the *Act to Ensure Fair Registration Practices by Regulating Bodies*.

The legislation will affect multiple regulatory bodies, including the province's engineering regulator, Professional Engineers and Geoscientists Newfoundland and Labrador (PEGNL), as well as regulators for early child educators, teachers, nurses, physicians and surgeons and social workers.

"The *Fair Registration Practices Act* helps to ensure newcomers in regulated professions receive a transparent, timely and fair review of their credentials," notes Gerry Byrne, Newfoundland and Labrador minister of immigration, population growth and skills. "We all benefit when highly skilled newcomers are able to meet their full potential and fill positions in fields that are experiencing labour shortages."

Under the new act, regulatory bodies in Newfoundland and Labrador will eventually report to a Fair Registration Practices Office, which will require them to, among other things:

- Provide information on its registration practices and internal review processes, average registration times and requirements for registration;
- Ensure their assessment criteria requirements are necessary and relevant to the profession;
- Publicly disclose all necessary documents for applicants to complete the registration process;
- Make registration decisions within a time period to be prescribed in the regulations;
- Take reasonable steps to develop programs to help unsuccessful applicants obtain licensure;
- Ensure the review process for registration decisions are done by different decision makers; and
- Undertake regular reviews of their registration practices and submit a report to the minister of immigration, population growth and skills.

Under the legislation, the Fair Registration Practices Office can review regulators' registration and assessment processes, make recommendations and issue compliance orders.

In a statement to *Engineering Dimensions*, PEGNL notes that it is waiting for the provincial government to begin its consultation process with the affected regulatory bodies



and develop the legislation's accompanying regulations. The regulations will prescribe the finer details of the act, such as specific timelines for regulatory bodies to make licensing decisions.

## FAIRNESS LEGISLATION BECOMES THE NORM

Fairness legislation for regulated professions has become common practice in Canadian jurisdictions, including Alberta, Manitoba, Nova Scotia and, notably, Ontario. Ontario established its Office of the Fairness Commissioner (OFC) in 2007 after recognizing that broad solutions were needed to remove systemic barriers to professions.

In recent years, PEO has worked closely with the OFC to resolve any concerns regarding its own registration practices. Notably, in 2020, PEO shifted to the psychometrically valid National Professional Practice Exam (see "PEO adopts National Professional Practice Exam," *Engineering Dimensions*, July/August 2020, p. 13).

And with amendments to Ontario's *Fair Access to Regulated Professions and Compulsory Trades Act* (FARPACTA) taking effect this year, PEO and other regulators are compelled to eliminate Canadian work experience as part of their licensing requirements and to shorten the timeline for registration decisions for licensing applications, among other requirements. This deadline for registration decisions may have been inspired by Alberta, which in 2019 ushered in its *Fair Registration Practices Act* and likewise requires that interim decisions on licensure from Alberta's regulatory bodies be made within six months of receiving an application.

## GUELPH UNIVERSITY PROFESSOR NAMED INAUGURAL CHAIR FOR WOMEN IN ENGINEERING

Jana Levison, PhD, P.Eng., was named the inaugural Doody Family Chair for Women in Engineering.

By Adam Sidsworth

A University of Guelph (U of G) engineering professor was named the inaugural Doody Chair for Women in Engineering after the school received a \$1 million donation from two retired engineers. Jana Levison, PhD, P.Eng., associate professor of water resources engineering at U of G, was named the inaugural chair holder for a five-year term on November 2, 2022.

The Doody Family Chair for Women in Engineering is funded over a 15-year period by retired engineering couple Diana Doody, P.Eng., and Brian Doody, P.Eng. Diana worked in the modelling, simulating and testing energy efficiency of materials in buildings, while Brian served as CEO of a digital imaging and semiconductor technology company. The Doodys' donation is being matched by U of G's College of Engineering and Physical Sciences (CEPS), School of Engineering and the Office of the President.

"This commitment from the Doodys and the university's matching commitment [gives us] 15 years to make change," Levison said in an interview with *Engineering Dimensions*, where she was joined by Jean Hein, manager, outreach for CEPS.

### EXPANDING STEM OUTREACH

Levison says much of the funding will go towards maintaining and expanding U of G's engineering outreach programs aimed towards girls and young women. "Initiatives like our RISE conference and having mentors for our [women] students will help make that link from being an undergraduate to practising engineering—that's the place where a lot of women leave the profession."

The funding will also allow U of G to reignite its K-12 outreach programs from several years ago. "The K-12 outreach is a big part of this initiative, and a very important part of this is being led by [Professor] Joanna O'Meara," reports Levison. "She's working with elementary school teachers in our city and teaching them science skills based on the Ontario curriculum. They get special kits to take back to the classroom so they can teach their students the skills to help elevate the level of science learning at the elementary school level."

Hein noted that with U of G's outreach programs now happening in person again, they are proving popular. The 2022 GO ENG Girl event, which happened last October, attracted 50 girls and 24 volunteers on a Saturday to participate in hands-on activities. And the GO CODE Girl, scheduled to begin again next month, will likely prove popular as it did in previous years.

### U OF G IS COMMITTED TO GENDER EQUITY

Levison acknowledges the U of G administration's support of gender equity across the university, noting President and Vice-Chancellor Yates' GenEQ initiative to advance the status of women across the university and increasing women's equity in university leadership positions. And, most recently, U of G announced its



Jana Levison, PhD, P.Eng. (far left), was named the inaugural Doody Family Chair for Women in Engineering at the University of Guelph. The position is co-funded by retired engineers Brian Doody, P.Eng. (middle) and Diana Doody, P.Eng. (second from right). They were joined by Dan Penfold, senior development manager at the university's College of Engineering and Physical Sciences (second from left); and Charlotte Yates, PhD, president and vice-chancellor of the university (far right). Photo: University of Guelph

2022–2027 strategic plan, which includes provisions to lead Canada in participation of faculty and students from underrepresented groups in STEM fields.

Notably, women have already enrolled in U of G engineering programs in a proportionally higher rate compared to other Canadian engineering faculties. In 2021, women made up 26 per cent of U of G's undergraduate engineering students and 32 per cent of its graduate engineering students, compared to the 23.4 per cent of women undergraduates and 26.6 per cent of graduate students for all of Canada's engineering programs in 2019.

Levison also cites the work of Valerie Davidson, PhD, P.Eng., professor emerita of the School of Engineering at U of G, who served as the Natural Sciences and Engineering Research Council Ontario region chair for Women in Science and Engineering from 2003 to 2011, during which time she founded the Ontario Network of Women in Engineering and its flagship GO ENG Girl outreach program in 2005. It has subsequently grown to a network of 26 engineering faculties across Canada sharing resources to encourage girls and non-binary youth across the country to pursue careers in engineering, as well as support current engineers and students who identify as women.

## WHY YOUR VOTE MATTERS

The outcome of PEO's annual elections determines the makeup of Council and the regulator's trajectory for years to come.

By Marika Bigongiari

As the engineered world becomes increasingly complex, interconnected and dependent on technology, the profession must evolve with it. And it is paramount that PEO keeps up with the exponential pace of change. To do this, it must have an agile and capable Council at the helm to provide overall direction for the regulator and the profession.

### THE IMPORTANT ROLE OF COUNCIL

Although there is a common misconception that individual votes don't make a difference, by voting in PEO's annual Council elections licence holders are doing their part to ensure the engineering profession can continue enjoying the privilege of self-regulation by supporting the regulator's duty to protect the public interest and promote the integrity of engineering in Ontario.

Ultimately, the councillors you vote for serve the people of Ontario, and it's a big responsibility. "What PEO Council decides has a significant impact on how engineering protects public wellbeing for years to come," says Marisa Sterling, P.Eng., FEC, former PEO president and current chair of the Central Election and Search Committee. "And I suspect we all agree public protection matters."

In recent years, Council has played a big role in shaping PEO's future as it undergoes what is perhaps its most significant transformation since its creation in 1922. In addition to PEO's own internal governance and operational improvement initiatives, elected councillors also influence regulatory and public protection activities—including setting standards for practice, recognizing emerging disciplines, implementing continuing professional development requirements and improving PEO's licensing processes.

Council's role is also critical when society is in crisis. When Sterling became president at the beginning of the COVID-19 pandemic, for example, she had to look beyond the routine systems to help PEO determine what it was going to do to help protect the public interest. "Council needed to utilize the skills of everyone who sat around the board table," Sterling says. "Council needed to stay current with the speed of societal change, change in public risks and in technology use. As a result, Council made some very significant shifts that year."

With such vital decisions on their shoulders, councillors are expected to demonstrate a wide range of skillsets and knowledge to support PEO's mandate, from leadership qualities to regulatory smarts and working knowledge of the *Professional Engineers Act*. Beyond having board

governance experience, they must possess a willingness to foster an environment of openness and respect and an ability to ensure participation and decision-making processes are inclusive and non-biased.

Among Sterling's proudest accomplishments as president was Council's opening dialogue on systemic inequities and discrimination in Canadian regulatory systems—which led to PEO's Anti-Racism and Equity (ARE) Code, now embedded in policy. "I hope others will continue to bring a positive spark to PEO that will bring progressive policies that shine on the amazing ways engineering protects public wellbeing and cares for everyone," she observes.



### MAKE YOUR VOTE COUNT

Every January, it is important that licence holders make their voice heard by voting for candidates who have the profession's best interests at heart. By voting, you ensure those speaking for you will support the issues you think are key. And Sterling points out it also gives Ontario engineers who want to be involved in moving the profession forward the confidence and feedback that others care about their passion to make things better. She encourages licence holders to read the candidate biographies and set aside 15 minutes to vote electronically, stressing it is an easy process.

"By voting, you can recognize the efforts of the candidates, while also ensuring that PEO sees you, hears you and considers what matters to you," says Sterling. "You are the eyes and ears of the engineering profession." **e**



# SCALING PEAK

# SCALING PEAK

# SCALING PEAK

## THE RISE OF PEO'S MANDATORY CPD PROGRAM

This month, PEO is launching its mandatory continuing professional development program for licence holders following nearly six years of a voluntary program. Here, we explore the regulator's path to making CPD a requirement to maintain an engineering licence.

BY MARIKA BIGONGIARI



Continuing professional development (CPD) is one of those things most of us have heard of or been engaged in during our professional careers. In recent years, however, personalized training within companies and regulated professions has become a growing trend, driven by the need for working professionals to maintain their knowledge and skills, stay updated with current trends and progress in their careers. And the engineering profession is no exception.

With the introduction of PEO's mandatory Practice Evaluation and Knowledge (PEAK) program, licence holders are joining the growing number of professionals who are dedicated to long-term learning. The new requirement for licence holders to annually update their engineering competence supports PEO's public protection mandate, but the benefits are far-reaching: Individual licence holders improve their expertise in their area of practice, engineering firms employing them protect their reputations, and their clients enjoy increased confidence in the work at hand. Most importantly, practitioners demonstrate their commitment to public safety, health and welfare. And, in turn, the profession at large has increased credibility.

After exploring the idea for decades, this month PEO joined rank with all Canadian provincial and territorial engineering regulators by transitioning its voluntary PEAK program to a mandatory requirement for professional engineers and limited licence holders. It's been a long time coming—and several factors contributed to making it a reality.

### PEO'S LENGTHY HISTORY OF EXPLORING CPD

As far back as the 1990s, PEO was mindful of the government's increasing demands that self-regulated professions demonstrate the existence of quality assurance mechanisms in return for the privilege of self-regulation. "It is no longer appropriate for an organization whose primary purpose is protection of the public interest to have no quality assurance mechanisms beyond a reactive discipline process," PEO's Interim Licensure Model Task Group told Council in 1996.

Despite this warning, the regulator's numerous efforts to implement a form of voluntary CPD reporting in the following years never took root. In 1997, for example, Council authorized professional development reporting for licence and certificate of authorization holders called the Professional Excellence Program. In 2002, there was another data gathering initiative that involved sending a Professional Profile questionnaire out with licence renewals. And in 2007, PEO released an online Voluntary Annual Reporting mechanism that enabled licence holders to update their engineering services and continuing education via PEO's website.

At a 2008 Council workshop, a report presented by then-Councillor Chris Roney, P.Eng., BDS, FEC, on continued competency assurance specified that PEO had a choice—to maintain the status quo and promote voluntary reporting more rigorously or embark on a process to put a more structured program in place.

### OFFICIAL RECOMMENDATIONS

The need for a structured CPD program took on more urgency following two catastrophic engineering accidents in Ontario in 2012. The formal inquiries into these events resulted in recommendations that mandatory CPD be implemented for Ontario engineers, including the 2014 commissioner's report of the Elliot Lake Inquiry, which examined the fatal Algo Centre Mall roof collapse

in Elliot Lake, ON; and a 2019 coroner's inquest into the death of drum technician Scott Johnson at the Radiohead temporary stage collapse at Toronto's Downsview Park. Also, in 2019, an external review of PEO's performance as Ontario's engineering regulator recommended mandatory CPD for licensed engineers.

An additional push came in September 2013, when Council was asked to review a report by the Ontario Society of Professional Engineers (OSPE) recommending that PEO adopt a modified version of the CPD program used by the Association of Professional Engineers and Geoscientists of Alberta—the first professional engineering regulator in Canada to initiate a mandatory CPD program 16 years prior. Council concluded that a review of OSPE's proposal by the Professional Standards Committee (PSC) would be appropriate, and a motion to support the implementation of a CPD program was carried unanimously.

"OSPE had been advocating to PEO for CPD ever since I joined the OSPE board back in 2002," says Annette Bergeron, P.Eng., FEC, Electrical Safety Authority board chair and former president of both PEO and Engineers Canada. "It had been more than a decade of advocacy."

After review of OSPE's report by the PSC and consultation with PEO membership, in March 2014, Council created the Continuing Professional Development, Competence and Quality Assurance (CPDCQA) Task Force to prepare the guiding principles for a comprehensive CPD program with a strong focus on competency. Bergeron, then-president of PEO, was finishing up her term when the call for task force volunteers went out. "I immediately jumped on the opportunity, because I'm passionate about [CPD]," explains Bergeron, who chaired the CPD-CQA Task Force and, later, the Continuing Professional Competence Program (CP)<sup>2</sup> Task Force, which established the details of the new program.

By that time, all other Canadian provincial and territorial engineering regulators had CPD programs in place. Bergeron recalls thinking that this could be an opportunity for PEO, as the largest engineering regulator in the country, to become a leader in CPD with a completely new program that was unlike the others. "The task force saw the opportunity to leapfrog ahead," observes Bergeron. "We saw an opportunity to go from a position of lagging the country in terms of best practice to leading the country with the PEAK model."

### A NEW APPROACH TO CPD

To accomplish this goal, the task force planned to create a risk-based algorithm that assessed the impact of an engineer's work on public safety. In the (CP)<sup>2</sup> Task Force's final report to Council outlining the proposed PEAK program, it emphasized PEAK's uniqueness, stating: "The methodology employed by this program is different from

those of the mandatory [CPD] programs implemented by other professional regulatory bodies.”

Specifically, the multi-faceted program allowed professional engineers the opportunity to design their knowledge plan to align with their area of practice and available CPD opportunities. Distinctively, PEAK was designed to be flexible and relevant, to encourage individualized knowledge development and to provide PEO with an up-to-date and accurate regulatory profile of both practising and non-practising licence holders. Previously, PEO had little information on the specialties many licence holders were engaged in, and although PEO had a well-developed process to ensure applicants demonstrated high qualifications to enter the profession, it lacked a mechanism to measure whether practising licence holders had enhanced or maintained their competence beyond initial licensure.

“PEAK is a risk reduction strategy that aims to reduce licence holders’ risks to the public associated with their professional practice activities through CPD,” says Arden Heerah, MEng, P.Eng., PMP, PEO’s lead, professional development. “PEAK is not meant to operate in isolation; it complements PEO’s other public protection activities—licensing, discipline, practice guidelines and advisory.”

Prior to the PEAK program’s launch, Bergeron and PEO’s then-registrar, Gerard McDonald, P.Eng. (now chief executive officer at Engineers Canada), travelled the province over a 24-month period to inform members of the new program’s requirements. PEO’s 36 chapters were also heavily engaged in communicating the details of the PEAK program at the local level, along with PEO staff and volunteers.

### VOLUNTARY PEAK PROGRAM LAUNCH

After three years, two task forces and extensive research, testing and consultation, the PEAK program officially launched on March 31, 2017—albeit on a voluntary or optional basis. The program began as a data-gathering exercise to provide information on practitioners who were already doing CPD, and Council saw it as a pilot program that could provide insight for any future decisions to make PEAK mandatory, at which time Council would consider a licence holder referendum.

Later that year, an amendment was made to subsection 7(1)(27) of the *Professional Engineers Act* (PEA) that empowered Council to make regulations for CPD for PEO licence holders, including developing programs, making compliance mandatory and applying sanctions for non-compliance. However, approval of any new regulation that officially made the PEAK program mandatory did not come until five years later.

Although the program was voluntary at the time, licence holders’ completion status of the PEAK program

# HOW HAS PEAK CHANGED?

PEO’s new mandatory PEAK program has similar elements to its previous voluntary version. Here’s what’s new, and what stays the same.

## WHAT STAYS THE SAME

- **The name**—the new mandatory CPD program will continue to be called the Practice Evaluation and Knowledge (PEAK) program;
- **The support**—PEO continues to offer a CPD support strategy for licence holders through a CPD program;
- **The framework**—this will remain the same as the voluntary version, including the strategy, goals, design intent, risk-informed basis, personalization and flexibility;
- **The core elements**—there are three core elements of the program: a Practice Evaluation, a Professional Practice Module and a CPD Report;
- **The participants**—the mandatory program will continue to apply to PEO-licensed P.Engs and limited licence holders and will not apply to provisional and temporary licence holders, engineering interns and applicants; and
- **The delivery format**—the mandatory program will still be delivered through the online PEO portal.

## WHAT’S NEW

- **Enforcement**—enforcement and confirmation measures will be introduced in 2024 and will include administrative suspension of licences for failure to complete program elements on time, as well as auditing of submissions and declarations for the program;
- **Status definitions**—PEAK will reflect PEO’s new Practice Status options (“practising” and “not practising”) and new Licence Status options (“permitted to practise” and “not permitted to practise”);
- **The platform**—A new platform for the PEAK system, accessible through PEO’s online portal, will deliver a modern, accessible and seamless user experience;
- **Updating practice status**—“Not practising” licence holders must update the Practice Evaluation element of the program, which includes the practice status declaration, within 30 days of resuming practising, as per subsection 51.2(3) of Regulation 941;
- **Calendar-year cycle**—All licence holders will share one annual PEAK cycle during the calendar year that runs from January 1 to December 31. This replaces the previous approach of licence holders having a PEAK cycle that matched their licence renewal cycle;
- **Ethics module renamed**—the previous Ethics Module has been renamed to Professional Practice Module to better describe the scope and purpose of this element; and
- **Newly named CPD Report**—the previous Continuing Knowledge Declaration has been renamed Continuing Professional Development Report, or CPD Report, to better describe the purpose of this element.



was published in PEO's online directory of practitioners. This gamification feature was designed to incentivize licence holders to participate and publicized to the public and other stakeholders the fact that they engage in CPD relating to their engineering practice. "Our messaging focused on the aim, framework and simplicity of the program: PEAK is for the public and it is designed to be lean, targeted, automated and without make-work or unnecessary requirements," observes Heerah.

#### **PAVING THE WAY FOR MANDATORY CPD**

Despite the benefits and simplicity of the voluntary program, the average participation rate in declaring practice status was 22 per cent, and of the participants who declared themselves as practising engineers, 37 per cent started reporting CPD activities. So, in 2019, when Council was focused on addressing the recommendations from the external review of PEO's regulatory performance earlier that year, it also directed the registrar to review the PEAK program and propose the legislative framework needed for a mandatory CPD program.

Subsequently, in February 2021, Council rescinded its 2015 policy intent to ask licence holders to ratify in a referendum any mandatory requirement to participate in a CPD program. This decision allowed PEO to move forward with the creation of a mandatory program for its licence holders as soon as any required legislative and operational tasks had been completed—clearing the way for PEAK to evolve from a voluntary to mandatory program.

For Bergeron, PEAK represents the work she's most proud of in all that she's accomplished in the profession in Ontario and nationally. She was over the moon when she found out PEAK was going to become mandatory this year. And she is resolute that the new mandatory CPD program benefits everyone involved. "It's assurance for the engineer that they're staying up to date—and I guarantee they will learn something new through CPD," she asserts. **e**

## SUMMARY OF DECISION AND REASONS

In the matter of a hearing under the *Professional Engineers Act*, R.S.O. 1990, c. P.28, and in the matter of a complaint regarding the actions and conduct of STEPHEN R.H. SELF, P.ENG., a member of the Association of Professional Engineers of Ontario, and SELF, STEPHEN ROBERT HARWIN, a holder of a certificate of authorization.

The panel of the Discipline Committee heard this matter on October 24, 2022, by means of an online video conference platform, which was simultaneously broadcast in a publicly accessible format over the internet. All participants in the proceedings, including counsel for the Association of Professional Engineers of Ontario (the association or PEO) and the member, Stephen Self (the member or Self), represented by Shawn Stewart, attended via videoconference. The member represented the holder, Self, Stephen Robert Harwin (SSE or the holder).

The parties provided the panel with an Agreed Statement of Facts (ASF) that contained the Statement of Allegations against the member. The ASF was signed by the member on August 24, 2022, and by the association on October 3, 2022. The ASF provided as follows (references to the attached schedules are omitted):

1. At all material times, Self was a professional engineer licensed pursuant to the *Professional Engineers Act* (act). Self holds a bachelor's degree in applied science from Waterloo University. Self's focus is on structural engineering, and he and SSE have no academic training and no experience or expertise in environmental engineering or in septic system design.
2. At all material times SSE was the holder of a certificate of authorization. Self was listed as the responsible engineer for the purposes of section 17 of the act in connection with the professional engineering services provided by SSE.
3. The complainant, Allen Sadler (Sadler) was, at all material times, the owner of an undeveloped parcel of land less than one acre in area, located at 7560 Cornell Trail in the Municipality of Lambton Shores, Ontario (the property). In or about November 2019, Sadler engaged Self and SSE without a written contract, to design and obtain the permits required to construct an onsite septic system for a new seasonal dwelling on the property.
4. Between March and July 2020, Self and SSE prepared two sets of designs for a conventional septic system (the designs), which were signed and sealed on May 4 and July 13, 2020, respectively. At least one of the designs was submitted to the County of Lambton (the county), which had jurisdiction over the approval of designs and the issuance of permits for the construction of a septic system on the property.
5. The designs did not comply with the requirements of Part 8 of the Ontario Building Code (the code or OBC) governing such structures. In particular, the designs failed to comply, or to demonstrate compliance, with at least the following provisions of the code:
  - a. Sentence 8.2.1.2 and Appendix "A" Section A-8.2.1.2(1)—failure to include a Site Evaluation;
  - b. Sentence 8.7.3.2(1)(e)—elevation of absorption trenches;
  - c. Section 8.7.4.1—loading requirements; and
  - d. Section 8.2.1.6.B—minimum clearance distances.
6. The county refused to issue the permits applied for because Self and SSE's designs did not comply with the code and also because they did not take proper account of the small lot size, its location on a flood plain, the presence of a high groundwater table and other considerations, which resulted in the Ausable Bayfield Conservation Authority (ABCA) concluding that the property should be considered "hazardous." ABCA's approval of the location of the septic system was required, in addition to the county's approval of the design, before a permit would be issued, and ABCA also refused its approval.
7. PEO retained an independent expert to review the work done by Self and SSE. The independent expert prepared a report dated June 25, 2021, as well as an Addendum dated March 23, 2022 (collectively, the expert reports).
8. The independent expert's comments included that (i) the designs by Self and SSE did not meet the minimum requirements of the OBC, and that (ii) they suggest a lack of expertise and understanding in the field of onsite sewage treatment system design and the application of Part 8 of the OBC. If the sewage system had been constructed as originally designed by Self, then in independent expert's opinion it would not have provided a sewage system of adequate size, nor would the required

vertical separation from the high groundwater table have been provided. An undersized sewage system constructed in close proximity to the water table would not have provided adequate treatment of the wastewater, and this would have presented a potential risk to the environment and public health.

9. For the purposes of these proceedings, the respondents accept as correct the findings, opinions and conclusions contained in the expert reports. The respondents admit that they failed to make reasonable provision for the safeguarding of the public, that they failed to make responsible provision for complying with applicable standards and codes, and that they failed to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances.
10. By reason of the aforesaid, the parties agree Self and SSE are guilty of professional misconduct under section 72(2) of R.R.O 1990, Reg. 941 (Regulation 941), as follows:
  - a. They prepared, signed and sealed inadequate and deficient designs for a septic system, which designs also failed to meet applicable code requirements, amounting to professional misconduct as defined in section 72(2)(a), (b) and (d) of Regulation 941;
  - b. They undertook work they were not competent to perform by virtue of their training and experience, amounting to professional misconduct as defined in section 72(2)(h) of Regulation 941; and
  - c. The conduct of Self and SSE described herein was unprofessional, and therefore also amounted to professional misconduct as defined in section 72(2)(j) of Regulation 941.

The member admitted to allegations set out in paragraph 10 (a), (b) and (c) of the ASF. The panel conducted a plea inquiry and was satisfied that the member's admission was voluntary, informed and unequivocal.

## DECISION

The panel accepted the facts in the ASF and the plea and found that the acts admitted to in paragraphs 10 (a), (b) and (c) of the ASF were of professional misconduct. The panel made no finding with respect to s. 72(2)(f) of Regulation 941 as alleged at paragraph 10(c) of the Statement of Allegations as Mr. Self and SSE did not admit to the allegation and no evidence was presented to support a finding under this section.

The parties made a Joint Submission as to Penalty and Costs (JSP) signed by the member on August 24, 2022, and by the association on October 3, 2023.

The association provided the panel with previous cases including *Bradley v. Ontario College of Teachers, 2021 ONSC 2303 (Bradley)*. This decision by the Divisional Court emphasized the stringent nature of the public interest test set out in *R. v. Anthony-Cook, 2016 SCC 43, [2016] 2 S.C.R. 204* and confirmed that it applies to disciplinary bodies such as this panel. The court noted in its decision that any disciplinary body that rejects a joint submission on penalty must apply the public interest test and must show why the proposed penalty is so “unhinged” from the circumstances of the case that it must be rejected. In that case, the court found that the Discipline Committee clearly misunderstood the stringent public interest test, and impermissibly replaced the proposed penalty with its own view of a more fit penalty.

This element of *Bradley* is provided here as it is an important development in Common Law for discipline hearings.

The panel accepted the JSP for the member and the holder and orders as follows:

1. Pursuant to s. 28(4)(f) of the act, Self and SSE shall be reprimanded, and the fact of the reprimand shall be recorded on the register permanently.
2. Pursuant to s. 28(4)(b) of the act, the member's licence and the holder's certificate of authorization shall be suspended for a period of three (3) weeks, commencing on the date of pronouncement of the Discipline Committee's penalty decision.
3. The finding and order of the Discipline Committee shall be published in summary form under ss. 28(4)(i) and 28(5) of the act, together with the names of the member and holder.
4. Pursuant to s.28(4)(d) and/or s. 28(4)(c) of the act, it shall be a term, condition or restriction on Self's licence and SSE's certificate of authorization that they shall be prohibited from providing environmental engineering services.
5. If Self demonstrates this competence in environmental engineering by successfully passing the following examinations administered by PEO, namely,
  - i) 18-ENV-A1—Principles of Environmental Engineering,

- ii) 18-ENV-A4—Waste and Wastewater Engineering, and
- iii) 18-ENV-B2—Water Resources, the term, condition or restriction set out in paragraph 4. above shall be lifted; and

6. There shall be no order as to costs.

The panel pronounced its determinations as to conviction and penalty at the conclusion of the hearing on October 24, 2022, and advised that these written reasons were to follow. At the hearing, after the pronouncement of the penalty the member

waived his right to appeal and thus the effective date of the decision is October 24, 2022.

At the conclusion of the hearing, the panel administered a reprimand to the member and holder.

On November 17, 2022, Glenn Richardson, P.Eng., signed the Decision and Reasons for the decision as chair of this discipline panel and on behalf of the members of the discipline panel: David Germain, JD, and John Tyrrell, P.Eng.

**HARJINDER SINGH**'s professional engineering licence was suspended from June 13, 2022, to June 26, 2022, inclusive, in accordance with a registrar's Notice of Proposal issued pursuant to subsection 14(2)(c) of the *Professional Engineers Act* on June 2, 2022. As Mr. Singh did not request a hearing within 30 days after the Notice of Proposal was served upon him, the deputy registrar carried out the proposal and suspended his licence.

**ZHI QIANG CAO**'s professional engineering licence was suspended on July 8, 2022, in accordance with a registrar's Notice of Proposal issued pursuant to subsection 14(2)(c) of the *Professional Engineers Act* on May 24, 2022. As Mr. Cao did not request a hearing within 30 days after the Notice of Proposal was served upon him, the deputy registrar carried out the proposal and suspended his licence. Mr. Cao's licence shall remain suspended for six months, or until he passes PEO's National Professional Practice Examination, whichever comes first.

# Introducing **MANDATORY PEAK**

Starting now, professional engineers and limited licence holders must complete PEO's new mandatory continuing professional development program—called the Practice Evaluation and Knowledge (PEAK) program—every calendar year to maintain their licence. (The program does not apply to provisional and temporary licence holders or engineering interns.)

This new requirement is outlined in section 51.2 of Regulation 941 under Ontario's *Professional Engineers Act*, which took effect

on January 1, 2023. In addition to supporting PEO's public interest mandate by helping to ensure licence holders practise competently and ethically, it also helps licence holders demonstrate their commitment to continually improving their engineering practice.

Everything you need to know about this new mandatory program is provided in the following articles.

## PEAK program **steps & deadlines**

The new PEAK program is laid out in three steps to be completed annually by professional engineers and limited licence holders.



- 1. Practice Evaluation (due January 31)**—A self-administered assessment consisting of a practice status declaration and either a:
  - Practice Evaluation Questionnaire—for a practising licence holder to determine their target CPD hours for the year, which will be a personalized target of up to 30 hours; or a
  - Non-Practising Survey—for a non-practising licence holder to describe their non-practising situation and prospect of practising again.
- 2. Professional Practice Module (due January 31)**—A self-paced learning module for every licence holder (whether practising or not practising) that covers regulatory topics such as professional practice, engineering ethics and regulatory processes, as well as equity, diversity and inclusion within the profession and the role played by engineers in the safeguarding of the public welfare and the environment.
- 3. Continuing Professional Development Report (due December 31)**—A reporting mechanism for a practising licence holder to respond to their personalized CPD target for the year, as determined by the Practice Evaluation Questionnaire.

Note that, in some instances, a non-practising licence holder who is not subject to any practice restrictions could choose to complete the program as a practising licence holder by completing all three elements of the program (see p. 23).

# Declaring your practice status

## WHAT ENGINEERS NEED TO KNOW

The first element of the PEAK program requires you to declare your status as either “practising” or “not practising” professional engineering. Here’s how to determine where you fit.

By Adam Sidsworth



With the Practice Evaluation and Knowledge (PEAK) program now a mandatory requirement to maintain a professional engineering licence, many licence holders will be faced with a new question: What is your practice status? You may not have previously considered your practice status, but how you answer the question will determine your required PEAK elements—and whether you can provide engineering services to the public.

When you first log in to the PEO portal this month to participate in the PEAK program, you will be asked to declare your practice status as either “practising” or “not practising.” If you’re unsure how to answer, we understand. After all, anyone with a valid PEO licence can call themselves an engineer in Ontario, but not all licence holders’ work fits into the definition of practising professional engineering.

### THE DEFINITION OF PROFESSIONAL ENGINEERING

According to Ontario’s *Professional Engineers Act (PEA)*, professional engineering in Ontario includes:

- Any act of planning, designing, composing, evaluating, advising, reporting, directing or supervising or the managing of such act;
- The application of engineering principles; and

- The safeguarding of life, health, property, economic interests, the public welfare or the environment or the managing of such act.

### DECLARING YOUR PRACTICE STATUS

It is the PEA criteria that determine whether a person is practising. A person does not necessarily have to be employed in a firm holding a certificate of authorization to be classified as practising, nor does a person have to seal engineering documents to be considered a practising licence holder.

If you are actively engaging in or plan on engaging in engineering activities for the calendar year, including if you’re going to work in an engineering capacity only part time or on an intermediate or voluntary basis, you must declare yourself as practising.

If you are an engineering educator, you generally do not have to declare your status as practising unless you are actively conducting engineering consultation, providing expert opinions or supervising students who provide engineering work or research outside the institution.

Indeed, many licence holders pursue careers that don’t necessarily fit the PEA’s criteria of engineering, yet they see the value of maintaining their PEO licence. Being registered with PEO tells prospective employers and clients you are technically skilled and maintain high professional and ethical standards. And if this scenario fits you, you may choose to declare to PEO that you’re not practising. However, if you resume practising that year, you must change your practice status to practising within 30 days of resuming practising.



## Are you on the fee remission program?

PEO offers a fee remission program for licence holders who, because of special circumstances, do not pay the full licence fee. These individuals are still licence holders regardless of their reason for being on fee remission.

This includes licence holders who are:

- Retired (your age plus years of practise must total at least 90 to qualify as a retired licence holder);
- Undertaking full-time postgraduate studies at a recognized university and are not practising engineering;
- On parental leave or taking care of an ailing family member and are not practising engineering;
- Unemployed from the practice of engineering and have no income; or
- Experiencing a long-term health condition or physical impairment that prevents them from practising professional engineering.

If you are participating in the fee remission program, you are automatically placed in the “not permitted to practise” licence status and in the “not practising” practice status.

However, it is important to remember that although you are not allowed to practise engineering while on the fee remission program, you still hold a valid PEO licence. Consequently, you are still required to complete the PEO program as a non-practising engineer. You need to complete only the first two elements of the program (the Practice Evaluation and Professional Practice Module), which take about an hour and will help you stay up to date on the professional practice issues and regulations that licence holders are expected to follow.

## Practice status vs Licence status

There is a distinction between your practice status and your licence status—and you must update both every January on the PEAK platform. For most licence holders, you have a choice:

- Declare yourself as practising, acknowledge a licence status of “permitted to practise” and complete all three elements of PEAK to maintain your right to practise engineering;
- Declare yourself as not practising, acknowledge a licence status of “not permitted to practise” and complete two elements of PEAK to keep your right to call yourself an engineer but be restricted from engaging in the practice of professional engineering; or
- Declare yourself as not practising, choose a licence status of “permitted to practise” and complete all three elements of PEAK to keep your right to call yourself an engineer and to resume practising if you choose; however, you must update your status to practising within 30 days of resuming practising.

If you choose “practising” under the practice status, your licence status will automatically appear as “permitted to practise” unless there is a restriction on your licence. If you choose “not practising” for your practice status, you will be given a choice of “not permitted to practise” or “permitted to practise” for your licence status.

A small number of individuals will not have the right to make these choices and will automatically fall into the “not permitted to practise” licence status. This includes those who:

- Are in the fee remission program;
- Have had their licence suspended by the registrar or Discipline Committee; or
- Have had their licence administratively suspended for not completing any PEAK elements.

If you are automatically placed into the “not permitted to practise” licence status, PEAK will not allow you to choose your practice status; you are parallelly placed as “not practising” and will still be required to complete PEAK’s Practice Evaluation and Professional Practice Module.

# PEAK online

## A STEP-BY-STEP GUIDE

PEO's new mandatory continuing professional development program, PEAK, is delivered through a user-friendly online platform that allows you to complete all elements of the program: the Practice Evaluation, Professional Practice Module and, if required, report your CPD activities to PEO. To get there, go to PEO's website, [www.peo.on.ca](http://www.peo.on.ca), and on

the top right of the screen, click "Log in." This will take you to the PEO portal. When prompted, enter your PEO number or email and password. If you do not have an account, you can set up one by clicking on "First-time setup."

Once you're in the PEO portal, here's how to complete the program.

## For non-practising licence holders

### STEP 1

**Log in to the PEO portal and click on the PEAK option from the top menu bar** to go to the PEAK section of the portal. The landing page provides a summary of the program and outlines the requirements based on practice status. Click the "Start the program this year" button.

### STEP 2

**You will arrive at the first PEAK element, the Practice Evaluation.** At the top of the page, your current licence status will be listed. If your current licence status is "permitted to practise," you must choose your practice status. A definition of "practising" and "not practising" will appear. Click on "not practising."

You will be asked to confirm if you want a licence status of "not permitted to practise" or "permitted to practise." Choose one and click the box at the bottom of the screen acknowledging that you read and understood your decision. Click "continue."

If you choose a "permitted to practise" status, you must complete the program like a practising licence holder. See instructions on page 26, starting at Step 3.

### STEP 3

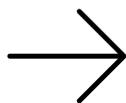
**If you agree to a "not permitted to practise" status, you will arrive at the Practice Declaration.** You must read a list of activities you will not be allowed to do as a "not practising" licence holder and understand that if you wish to practise again, you will need to update your practice status within 30 days of beginning to practise. Click the acknowledgment that you understand your practice and licence status.

### STEP 4

**You will arrive at the PEAK homepage.** Click on the Practice Evaluation element; then click on "proceed" in the box that says "Survey," where you must complete three multiple-choice questions about your non-practising circumstances and potential to resume practising.

### STEP 5

**On the PEAK homepage, click on the Professional Practice Module element.** You will arrive at a page that contains your completable modules. Modules will be added one at a time, one per year. The first module is titled "Governance, Ethics and Regulatory Compliance." Select "begin" to launch the module you are instructed to complete.



Finish all interactive components of the module; instructions are provided at each step. Click on any required graphs, videos or dropdown menus.

You are now done your PEAK elements for the year.

# For practising licence holders

## STEP 1

Click on the **PEAK** option from the top menu bar to go to the **PEAK section of the portal**. There is a summary of the PEAK program and the requirements based on your practice status. Click the "Start the program this year" button.

## STEP 2

You will arrive at the first PEAK element, the **Practice Evaluation**, where your current licence status will be listed at the top. You must choose your practice status. A definition of "practising" and "not practising" will appear on the screen. Click "practising."

At the bottom of the screen, you must click "I acknowledge that I have read, understood and agree to the contents of this declaration." Click "continue."

## STEP 3

You will arrive at the **Practice Disciplines page**. You must click on the discipline(s) you currently practise. For every discipline you click, a bubble called "Scopes of Practice" will appear. You must briefly describe your practice in that discipline. Click "Save and continue."

## STEP 4

You will arrive at the **Practice Declaration page**, where you acknowledge that you agree to complete the PEAK program and pay your annual licence fee. Click on the button acknowledging that you have read, understood and agree to the Practice Declaration. Click "Sign and continue."

## STEP 5

On the **PEAK homepage**, in the Practice Evaluation element, click "begin." On the next page, in the Questionnaire box, click "proceed," which takes you to the Practice Evaluation Questionnaire. You must answer 20 questions. Click beside the answer(s) for each question and click "save and continue."

When you get to the last question, click "submit" to finalize your answers. You will arrive at a page that shows the number of CPD hours you must complete by December 31. Click "Exit to Home."

## STEP 6

On the homepage, select "**begin**" in the **Professional Practice Module element**. You will arrive at a page that contains the modules you can complete. Modules will be added one at a time, one per year. The first is titled "Governance, Ethics and Regulatory Compliance." Select "begin" to launch the module you are instructed to complete.

Finish all interactive components; instructions are provided at each step. Click on any required graphs, videos or dropdown menus. Click "close" to exit the module.

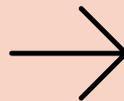
## STEP 7

Select "**Home**" in the navigation panel on the top left corner of the screen to return to the overview page. Select "begin" in the Continuing Professional Development Report element. You will arrive at the Continuing Professional Development Report page. Here you submit and monitor your CPD activities throughout the year until you've completed your target hours.

## STEP 8

When reporting an activity, on the top right of the screen, click "**Add activity**." When the "CPD Report Activity" form pops up, fill in the activity name and the start and end dates and duration. And using the dropdown menus, complete the learning objectives, learning category and learning format. Then at the bottom of the screen, click on the declaration that the CPDR activity is true and meets admissibility requirements and click "submit."

Scroll to the bottom of the CPD Report overview page to see each entered individual activity. If you want to adjust your CPD Report, click on the entry's "edit" button to edit the item.



Once you have submitted enough CPD activities to meet your target hours, you are done your PEAK elements for the year.

# CPD ACTIVITIES

## what counts towards licence holders' target hours

**Through PEO's mandatory CPD program, licence holders could be assigned up to 30 hours of continuing professional development to be completed annually. Here, we explain how those hours are assigned and what CPD activities are admissible.**

By Adam Sidsworth

Starting this year, practising and non-practising licence holders with a "permitted to practise" licence status will be required to undertake an assigned number of continuing professional development (CPD) hours as part of PEO's new mandatory Practice Evaluation and Knowledge (PEAK) program. But how are licence holders assigned these hours, and what activities count?

### HOW CPD HOURS ARE ASSIGNED

Licence holders who declare themselves as practising professional engineering and acknowledge the "permitted to practise" licence status, as well as those who declare themselves as non-practising and choose the "permitted to practise" status (see p. 23), will need to first complete the Practice Evaluation Questionnaire, which is due January 31 each year. Your personalized target CPD hours are assigned based on the risks in your practice and will range between zero and 30 hours. Your risks are determined by your responses to 20 questions about your engineering practice. The Practice Evaluation Questionnaire covers topics such as:

- Your engineering role in your organization;
- The structure of your organization's peer reviews;
- Your organization's engineering quality management system;
- Your participation in engineering bodies or technical associations;
- The presence of internal audits in your organization or practice;
- Whether your organization provides ongoing technical training in your practice area(s);
- The breadth of your practice;
- Your length of experience in your current areas of practice; and
- Whether you engage in CPD programs elsewhere.

Although most of the questions allow for only one answer, some questions allow you to select all the options that apply to you. The answer to each question is weighed, and an algorithm is used to calculate the number of CPD hours you will need to complete that year.

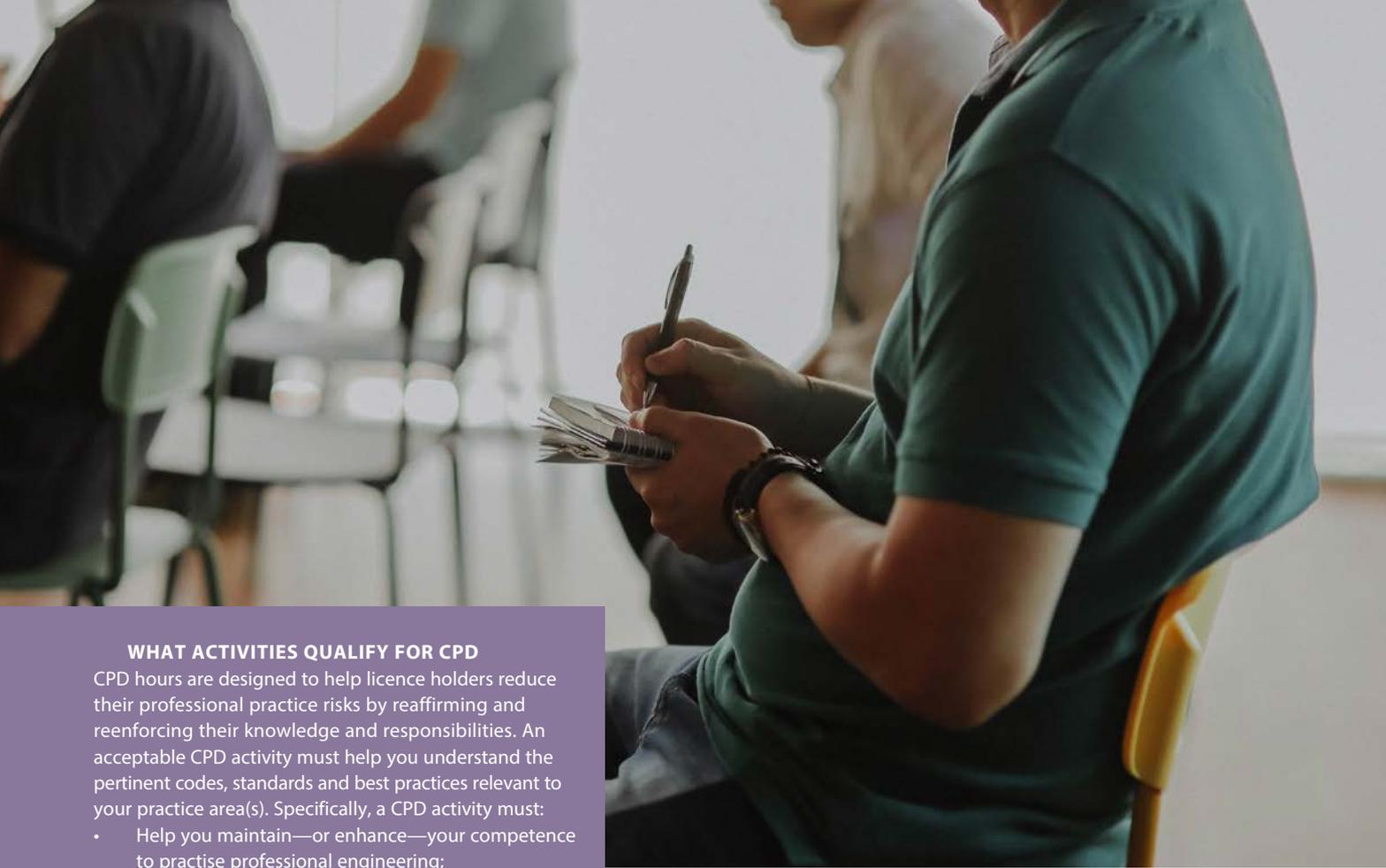
### WHY CPD HOURS ARE ASSIGNED ON AN ANNUAL BASIS

No individual's career is static, and engineers are no exception. You may change roles in your organization or be hired by another organization. Your practice area(s) may change. You may move from one organization with extensive external or internal reviews for your work to an organization with little review. These are all

areas that affect how PEO assesses your engineering practice risks, and because they change over time, PEAK requires licence holders to evaluate their practice annually by completing the Practice Evaluation Questionnaire.

Additionally, depending on a licence holder's career circumstances, practising licence holders could also become non-practising—or vice versa—within any given year, and this will also affect your PEAK requirements. Licence holders who initially declare themselves as "non-practising" in January can change their status to "practising" at any time throughout the year if they are not subject to any practice restriction, such as a licence suspension or fee remission. If you change your licence and practice statuses within the same calendar year, you will not have a CPD target for the rest of the year.





### WHAT ACTIVITIES QUALIFY FOR CPD

CPD hours are designed to help licence holders reduce their professional practice risks by reaffirming and reinforcing their knowledge and responsibilities. An acceptable CPD activity must help you understand the pertinent codes, standards and best practices relevant to your practice area(s). Specifically, a CPD activity must:

- Help you maintain—or enhance—your competence to practise professional engineering;
- Have engineering learning content that is directly related to your engineering practice area(s);
- Address your technical or regulatory knowledge pertaining to professional engineering; and
- Not be acts of management or acts of professional engineering that are part of your job.

CPD activities are remarkably versatile—PEAK focuses on what you learn rather than how you learn it. However, they must pertain to your practice area(s). Activities can include:

- Attending seminars and webinars;
- Studying an engineering, technical or regulatory topic;
- Passing a technical course;
- Giving a lecture or presentation on an engineering topic;
- Helping PEO, your employer or other engineering organization develop an engineering guideline; or
- Acting as a technical mentor to another engineer or engineering intern, or as a mentee receiving guidance from an experienced engineer.

Completing your CPD hours is not about redoing your engineering education; rather, it simply requires you to maintain or develop your skill level and knowledge as an engineer. You do not have to earn additional degrees, pay for courses or partake in any specific program, nor do you have to enroll in any courses or programs designed by any specific external educational or engineering organization. (PEO neither recommends nor endorses any program.)

PEAK was developed to keep in mind that a well-rounded engineer needs to be proficient in areas beyond their technical expertise. Therefore, CPD activities can also be used to develop such areas as engineering-related management skills or communication skills, including how to communicate engineering verbally or in reports, letters or drawings to engineering and non-engineering audiences.

Activities can be free, or they can be at any price point. Activities can be in an instructor-led environment, such as a classroom, seminar or conference. Or they can be self-paced at your home or at your place of work. Activities can be done on your own time or during your work hours; however, your normal work activities cannot count towards your CPD hours.

### WHERE TO REPORT CPD ACTIVITIES

Licence holders who are assigned CPD hours are required to report to PEO the CPD activities they undertake by completing the CPD Report. This mechanism, which can be completed through PEO's online portal, allows you to enter the details for each CPD activity, including the learning format, category and objectives and the total duration of the activity.

You can log in to the PEO portal and add to the report as you complete your activities throughout the year. The report tracks your status in real time by showing your CPD target, completed hours and categories covered. Your completed CPD Report is due December 31.

Note that if you also complete CPD activities for other regulatory bodies—for example, if you are licensed as a professional engineer in another province—you can potentially add those activities to your CPD Report as long as they meet PEO's CPD admissibility criteria. [e](#)

# How does PEAK compare to other CPD PROGRAMS?

We compare PEO's new mandatory PEAK program to other regulators' CPD programs across Canada.

By Adam Sidsworth

Mandatory continuing professional development (CPD) is not new to regulated professions in Canada. This month, PEO joins the ranks of all provincial and territorial engineering regulators in adopting mandatory CPD for its licence holders. The chart on the following pages compares PEO's Practice Evaluation and Knowledge (PEAK) program to the mandatory CPD programs introduced by Engineers and Geoscientists British Columbia (EGBC) and by the Association of Professional Engineers and Geoscientists of Alberta (APEGA). We also draw comparisons to the CPD programs of Ontario's architecture regulator, the Ontario Association of Architects (OAA); and Ontario's engineering technologist and technician regulator, the Ontario Association of Certified Engineering Technicians and Technologists (OACETT).

By comparing PEAK to other regulators' CPD programs, we hope to demonstrate that PEAK follows best practices of CPD in Canada and that Ontario's professional engineers are in good company with their fellow regulated professionals in demonstrating their commitment to continually improving their practice.



## FACT

Compared to other regulators' CPD programs, PEO's PEAK program requires a low number of CPD hours, focuses on reducing practice-related risks and allows for a wide range of CPD activities.

**Regulator** —•

**PEO**

**APEGA**

**Launch** —•

2023

1997

**Name** —•

Practice Evaluation and Knowledge (PEAK) program

Continuing Professional Development Program

**Participation** —•

All practising P.Eng. and limited licence holders complete all three elements; non-practising P.Eng. and limited licence holders complete two elements

Practising engineering and geoscience professionals

**Self-guided modules** —•

Yes, on professional practice, engineering ethics and regulatory processes, along with equity, diversity and inclusion and protection of the environment

Not included

**Elements** —•

Practice Evaluation, Professional Practice Module, CPD Report

CPD activities only

**Elements due** —•

Annual cycle

Annual cycle

**CPD hours** —•

Personalized target (based on practice risks) of up to 30 hours per year for all practising licence holders

240 hours over three years

**Admissible CPD activities** —•

Wide-ranging (reading, attending seminars, delivering engineering lectures, technical mentoring, etc.)

Wide-ranging (university or college courses, self-directed study, attending a seminar, mentoring, etc.)

**Criteria for activities** —•

Must help maintain or enhance engineering competence, be directly related to engineering practice areas and address technical or regulatory engineering knowledge about their acts of professional engineering

Must benefit licence holder's practice and have a clear purpose and objective that will maintain, improve or expand the skills or knowledge in their area of practice

**Audits** —•

Yes (beginning in 2024)

Yes

**Penalties** —•

From 2024, licence suspension

licence cancellation

## EGBC

2021

Continuing Education Program

Practising licence holders complete the entire program; non-practising licence holders complete part of the program

Yes, on regulatory learning and, every three years, topics related to Indigenous history, Indigenous engagement and reconciliation

Regulatory Learning Module, Continuing Education Plan and Continuing Education Hours

Annual cycle

At least 60 hours per three-year rolling period for practising licence holders; an additional 60 hours for structural engineers. Non-practising licence holders complete just one hour per three-year rolling period

Any wide-ranging yet relevant activities that are outside the licence holder's normal job function (self-directed study, participation on boards and panels, mentoring, etc.)

Must contribute to maintaining the licence holder's competency in their area(s) of practice

Yes

\$200 late fee, licence suspension, automatic licence cancellation

## OACETT

2016

Continuing Professional Development Program

All certified technicians and technologists, life and fellow OACETT members and associate members who did not achieve certification within a prescribed timeline

Not included

CPD activities only

Three-year cycle

Four activities must be drawn from four categories. At least one activity must be from one of two mandatory categories, which require activities between three and six hours in length; and the three elective activities can be between one and six hours in length.

Wide-ranging (developing codes and standards, presenting at conferences, serving on an industry committee, technical mentoring, etc.)

Over a three-year cycle, one activity must contribute to technical knowledge or management/leadership; and three activities should contribute to knowledge, management/leadership, the profession or peer and professional interaction

Yes

Removal of membership/certification

## OAA

1999

Continuing Education Program

Practising architects, non-practising architects and licensed technologists

Yes, on professional responsibility and ethics, professional liability and the Ontario Building Code and National Building Code of Canada

CPD activities and self-guided modules

Two-year cycle

70 hours every two years for practising architects, of which 25 hours must be structured learning; 35 hours for non-practising architects; 35 hours for licensed technologists, of which 12 hours must be structured

Structured learning (in-person learning at a college or university, online learning); and unstructured learning (participating on an architecture committee, attending OAA Council meetings, conducting scholarly research, etc.)

Must be related to architectural design, Ontario Building Code or National Building Code of Canada, environment and energy, heritage building restoration, legal issues related to architecture, practice or project management, risk management or sustainable design and green architecture

Yes

\$500 and \$1000 late fees

# CPD compliance audits and sanctions **ARE COMING IN 2024**

**Licence holders could be audited for compliance in PEO's mandatory CPD program, and those who don't complete the requirements could face penalties.**

**By Adam Sidsworth**

Last year, the provincial cabinet approved an amendment to Regulation 941 under the *Professional Engineers Act* that outlines an annual requirement for continuing professional development (CPD) for PEO licence holders and how PEO will administer, monitor and enforce this requirement. Section 51.2 allows PEO to audit licence holders for participation in its CPD program and apply an administrative licence suspension until such time that the licence holder has met all of the program's requirements.

Starting in 2024, PEO will begin randomly auditing licence holders for completion of specific elements of its Practice Evaluation and Knowledge (PEAK) program. Individual licence holders will be informed when they are selected for an audit and of the result of the audit. (The audit procedures, including what proof of completion will be required, are currently being developed and will be published later this year.)

What does this mean for licence holders? It means that if you fail to meet any of PEAK's elements or respond to PEO regarding an audit, you could face penalties. PEO is currently exploring options such as administrative licence suspensions. If this happens, your licence will not be cancelled and no financial penalties will be incurred, but a person with a suspended licence cannot call themselves a professional engineer, cannot use the licence title, cannot practise professional engineering and cannot be the designated person for the certificate of authorization for a company providing engineering services to the public.

## **KEY DATES FOR MANDATORY CPD**

PEO understands that the mandatory CPD requirement is new for licence holders. Therefore, no licence holder will face penalties or an audit of their PEAK activities in the first year of the program. Throughout 2023, PEO's PEAK program team will support licence holders as they navigate the program. PEO will also continue its communication campaigns through PEO's regularly updated PEAK webpage, email blasts, social media channels and in *Engineering Dimensions* to remind licence holders how and when to complete their PEAK elements. However, to be considered compliant, it is important to meet the key deadlines for your PEAK elements (see p. 22).

The PEAK online system will send you automated email reminders before and after element deadlines. And formal notices will be mailed to you to remind you to complete any overdue PEAK elements, if your licence has been suspended and when your suspension is lifted after you complete your overdue PEAK elements.

## **FACT**

**PEAK is a simple, personalized CPD program. The first two elements take approximately one hour to complete. And if you're a licence holder with a "permitted to practice" status, you have the whole year to complete your target CPD hours.**



## Tips for completing **PEAK on time**



Mandatory CPD is the new norm for PEO licence holders; completing all the required PEAK elements is now necessary to maintain your engineering licence in Ontario. Here are a few tips for easily incorporating the PEAK program into your life.

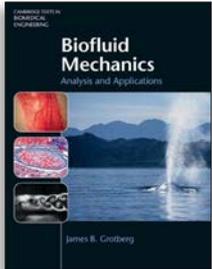
1. **Let the new year be a reminder:** The PEAK program is on a calendar-year cycle (this is different from your licence fee cycle), meaning licence holders will be required to redo the program beginning each new year. In January, you'll need to complete the first two elements, the Practice Evaluation and the Professional Practice Module.
2. **Set aside time:** You'll likely be able to complete the first two elements of the PEAK program in about an hour. Accessing the program online can be done anywhere and at any time.
3. **Plan ahead:** If you also have to complete the CPD Report, plan what activities could work within your schedule throughout the year. Remember—activities are flexible (see p. 27).
4. **Consider your preferred learning method:** You'll be more likely to complete and learn from CPD if it's in a style you prefer. Find activities that complement your favourite way to learn (visual, auditory, reading and writing or tactile) and subscribe to websites that may offer this style of CPD.
5. **Reflect on what you already do:** Consider what CPD activities you may already be engaging in. Participating in PEAK does not necessarily mean you must do more and spend more beyond what you are already doing to stay informed in your practice.
6. **Report as you go:** Every time you complete a CPD activity, log in to PEO's online portal and add it to your CPD Report instead of trying to remember everything you did at the end of the year when the report is due. The report also has a nifty feature that tracks how far along you are in meeting your target hours.

## Need more **support?**

Contact PEO's PEAK

program team by email at  
[peoPEAK@peo.on.ca](mailto:peoPEAK@peo.on.ca), or by  
phone at 416-840-1117 or  
1-800-339-3716, ext. 1117.

READ



**Biofluid Mechanics**, by James B. Grotberg, 2021: An overview of the fundamentals of fluid mechanics, including how to place that knowledge within a biological context, as well as practical biofluid applications, clinical correlations and worked examples that provide real-world scenarios to help readers master key theoretical topics

**The Tower and the Bridge: The New Art of Structural Engineering**, by David P. Billington Jr., 2022: An exploration of the engineering aesthetics of celebrated structures from long-span bridges to high-rise buildings. What do structures like the Eiffel Tower, the Brooklyn Bridge and the concrete roofs of Pier Luigi Nervi have in common? All are striking examples of structural art, an exciting area distinct from either architecture or machine design.

LISTEN

**Learnio: CPD for Engineers**  
Flexible podcast-based learning modules for busy engineers

**The Data Engineering Podcast**  
This podcast tackles a new approach to data management every week, providing useful insights into projects, platforms and practices for data engineers and data scientists.

The following events may have an in-person and/or online component. See individual websites for details.

ATTEND

**JANUARY 19–20**  
Energy Transition for Metals and Mining Industry, Toronto, ON

**JANUARY 25–27**  
Canadian Environmental and Engineering Executives Conference, Vancouver, BC

**FEBRUARY 1–2**  
International Conference on Chemical, Biological and Environmental Engineering, Mississauga, ON

**FEBRUARY 1–2**  
World Congress on Industrial Biotechnology, Mississauga, ON

**FEBRUARY 22–24**  
Conference for Advanced Reactor Deployment, College Station, TX

**FEBRUARY 25–MARCH 1**  
International Symposium on Code Generation and Optimization, Montreal, QC

**MARCH 5–8**  
Precious Metals Summit, Toronto, ON

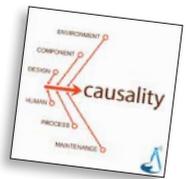
**APRIL 11–13**  
Joint Rail Conference, Baltimore, MD

**APRIL 18–20**  
Montreal Wood Convention, Montreal, QC

LISTEN

**The Amp Hour**  
A non-scripted electronics-oriented radio show, with discussions ranging from hobbyist electronics to the state of the electronics industry, components and circuit design.

**Causality**  
A podcast that examines chain of events, cause and effect and the importance of physics, including an analysis of what went right and wrong in some of the world's worst engineering disasters.



**Aerospace Engineering Podcast**  
An engineer working with NASA and Airbus on next-gen composites interviews industry veterans and start-ups about recent advances and the fascinating future of the field.

WATCH

**PEO PEAK Trailer**  
An overview of the required continuing professional development components for professional engineers and limited licence holders to maintain their licence every calendar year



**The Power of Self-Learning Systems**  
The capabilities and power of self-learning systems and the implications of cutting-edge AI research for scientific and philosophical discovery

**Why Neural Networks Can Learn (Almost) Anything**  
A video about neural networks, how they work and why they're useful

## RETIRED PROFESSOR SERVES ON ARC FOR 33 YEARS

When a mechanical engineering professor decided to give back to her profession by volunteering with the Academic Requirements Committee, it sparked a 33-year commitment to the profession.

By Adam Sidsworth

"I am an immigrant," states Judith Dimitriu, P.Eng., FEC, professor emeritus of mechanical and industrial engineering at Toronto Metropolitan University. "I was born in Romania. I studied in Romania."

Although Dimitriu, who earned her master's degree in major power engineering from the Polytechnic Institute of Bucharest (now University Politehnica of Bucharest) in 1968, spent her formative years in Romania, she ultimately chose to immigrate to Canada with her husband, a one-time PEO licence holder. "I arrived in Canada in 1981, and I went through the process of being licensed [with PEO]," Dimitriu says.

### A LONG CAREER IN ACADEMIA

In 1985, Dimitriu started teaching at what was then Ryerson Polytechnical Institute, which was renamed last year to Toronto Metropolitan University. Dimitriu taught courses on engineering design and drafting, various strength of materials courses, and thermodynamics, among other subjects. Additionally, Dimitriu coordinated the mandatory engineering and ethics course for all engineering students, in which she taught the ethics component. Dimitriu, who was the director of the mechanical program for eight years, taught for 25 years before retiring in 2010.

Interestingly, Dimitriu also helped pioneer Ryerson's "Discover Engineering Summer Camp," initiated by the university's Women in Engineering Committee. At the time, in the early 1990s, the percentage of women studying in traditional fields of engineering, such as mechanical, electrical and aerospace engineering, was only 3 to 5 per cent of the programs' total students.

### A 33-YEAR VOLUNTEER COMMITMENT

It was in part because of her PEO licensing experience during the 1980s—specifically the challenge of obtaining proof of her post-secondary engineering education transcripts in Romania, then still under a strict communist dictatorship—that when the opportunity to volunteer for PEO's Academic Requirements Committee (ARC) came up in 1990, Dimitriu jumped at the opportunity. "On this committee, we see applicants like me, who have an education outside of Canada and grew up in Europe and got an education there," says Dimitriu, who recalls thinking at the time, "'I'll do a good deed.'"

The ARC is one of several statutory committees introduced by the heavily overhauled 1984 *Professional Engineers Act*, which had the aim of devolving many of Council's responsibilities to either staff or a roster of volunteers—



Judith Dimitriu, P.Eng., FEC, is a professor emeritus at Toronto Metropolitan University and has been volunteering on PEO's Academic Requirements Committee since 1990.

typically PEO-licensed engineers. Although PEO will be implementing changes to its licensure process in the coming months, including how it assesses academics, the ARC's traditional responsibilities have included assessing the academic qualifications of applicants referred to the ARC—typically graduates of an engineering program not accredited by the Canadian Engineering Accreditation Board (CEAB). The ARC also advises Council and staff on matters relating to academics for PEO's admissions process. But it is the assessing of academic qualifications of non-CEAB applicants that takes up the bulk of time for an ARC volunteer.

### A REWARDING VOLUNTEER ROLE

With Dimitriu's commitment to the ARC—they meet at least once a month all year round—she says it is a rewarding experience. "It's a service to the profession. And that's one of the things academics have to do is serve the profession—academic committees and technical committees, teaching committees. If you can do it, by all means do it," notes Dimitriu, who was also a member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, where she was president of its Toronto chapter; and the American Society of Mechanical Engineers.

In addition to her ARC volunteerism at PEO, Dimitriu has also contributed as an examiner and reviewer of PEO technical exams for, among other things, environmental engineering, finite elements and thermodynamics and heat transfer, and she once served on a PEO subcommittee that mentored and interviewed applicants having difficulty passing exams.

It is because of Dimitriu's decades-long commitment to volunteering at PEO that she was inducted as a Member of PEO's Order of Honour in 2005. "Judy is a respected member of the ARC," says Cliff Knox, P.Eng., FEC, PEO's manager, applications and academic assessment. "And she has been a leader among her ARC colleagues in adapting to the online review of academic files." [e](#)

# COUNCIL APPROVES CHANGES TO LICENSURE PROCESS

By Nicole Axworthy

## 552ND MEETING, NOVEMBER 25, 2022

At its November meeting, Council approved new academic qualifications and the experience assessment method for PEO's licensure process that enable PEO to become compliant with amendments to the *Fair Access to Regulated Professions and Compulsory Trades Act* (FARPACTA). Specifically, on the advice of the Regulatory Policy and Legislation Committee, Council decided to recognize that obtaining a bachelor's degree in an engineering program that is included in the International Institutions and Degrees Database (IIDD) administered by Engineers Canada, subject to successful completion of a confirmatory examination program, is equivalent to a bachelor's degree in a Canadian engineering program that is accredited to Council's satisfaction.

Council also supported the use of a competency-based assessment (CBA) model, including ethics indicators, to confirm that an applicant for licensure has sufficient experience to enable them to meet the generally accepted standards of practical skill required for the practice of professional engineering. This means the method of assessing the 48 months of work experience will be shifted to a CBA method, which uses a scoring rubric for applicant self-assessment prior to applying.

These decisions will help standardize equivalent qualifications to a Canadian bachelor's degree for internationally trained professionals and supports PEO's intention to shift academic and experience requirements to the pre-application stage of licensure, allowing PEO to meet FARPACTA's six-month registration decision timeframe. Both the academic and experience assessment methods are expected to apply to new applicants no later than July 1, 2023, when the FARPACTA amendments come into effect.

### 2023 OPERATING AND CAPITAL BUDGETS APPROVED

Council approved the draft 2023 operating and capital budgets, as recommended by the Audit and Finance Committee. Total revenue for 2023 is budgeted at \$32 million and total expenses for sustaining regular day-to-day or core operations is budgeted at \$30.5 million, resulting in an excess of revenue over expenses of \$1.5 million. In addition to these expenses, an additional spend of \$5.1 million is budgeted for various projects and Council initiatives, resulting in a deficit of \$3.6 million.

The 2023 budgeted revenue is planned to be \$32 million, representing a decrease of \$1.1 million, or 3.2 per cent, below the 2022 forecasted revenue of \$33.1 million. The main factor contributing to the fall in revenues is a decrease of \$1.4 million, or 14.5 per cent, in application, registration and other fees resulting from an expected fall of over 50 per cent in the number of applications in 2023 (4500 in 2023 compared to 9500 in 2022). This is a result of amendments to FARPACTA, which will require PEO to make changes to its licensure process so that applications will need to meet certain experience and academic criteria before they can be accepted by PEO.

The fall in revenue is partially offset by:

- An increase of \$223,800, or 1.1 per cent, in P.Eng. revenues due to the expected growth in membership. In 2023, PEO is expected to have 92,500 members, compared to 88,750 in 2022; and
- An increase of \$161,700, or 6.6 per cent, in 40 Sheppard (PEO headquarters) revenue due to recovery of higher operating costs.

The 2023 budgeted expenses for regular operations are planned to be \$30.5 million, which represents an increase of \$3.8 million, or 14.4 per cent, over 2022 forecasted expenses. Some of the reasons contributing to this increase are:

- An increase in employee salaries and benefits and retiree and staff future benefits of \$2.2 million, or 15.5 per cent, over the 2022 forecast due to an increase in headcount (the full-time headcount in 2023 is expected to be 136, compared to 120 in 2022) and a merit increase of 5 per cent in 2023 (compared to an increase of 2.5 per cent in 2022);
- An increase of \$633,300, or 104 per cent, for chapter operations due to an expected increase in allotments and chapter activities;
- An increase in purchased services of \$305,000, or 18.6 per cent, largely due to costs for event meals, accommodation, audio-visual equipment and travel-related expenses for various in-person events;
- An increase of \$285,000, or 153 per cent, in the spend for professional development in 2023 due to the expectation that operations will stabilize with the gradual lifting of COVID-19-related restrictions and attendance at in-person training sessions will pick up; and
- An increase of \$163,000, or 11.7 per cent, for computers and telephones due to higher spend on leasing IT equipment and costs for various IT service maintenance contracts.

The above increases are partially offset by:

- A reduction of \$211,000, or 19.8 per cent, in legal (corporate, prosecution and tribunal) largely due to a reduction in costs for independent legal counsel for discipline, complaints investigations and prosecutorial viability opinions. These costs are expected to be partially offset by an increase in prosecution costs for various other regulatory matters; and
- A reduction of \$102,000, or 17.7 per cent, in amortization due to reduced spend on new capital projects and the continued amortization of spend on capital items such as furniture, IT and telecon equipment, which were purchased in previous years.

The 2023 capital budget is \$484,400 and is comprised of capital improvements to 40 Sheppard (\$404,400), computer hardware (\$40,000) and office furniture and miscellaneous contingencies (\$40,000).

#### **BORROWING RESOLUTION POLICY**

Council approved a motion to renew PEO's existing operating line of credit with Scotiabank until January 31, 2024. This includes an overdraft of up to \$250,000, and use of corporate credit cards with an aggregate limit of up to \$120,000. Additionally, this borrowing resolution is set to expire on January 31, 2024.

#### **SAFETY DISCLOSURE POLICY**

Council approved a Safe Disclosure ("Whistleblower") Policy, which establishes the expectation and conditions for reporting and handling allegations of unethical, illegal or fraudulent conduct,

as recommended by the Human Resources and Compensation Committee. The new policy sets out the duty of all employees, volunteers and Council members to report misconduct or suspected misconduct, including fraud and financial impropriety. It also guarantees that anyone who makes a report in good faith will be protected from retaliation. Now that the policy has been approved, it will be communicated to employees, volunteers and councillors and posted on PEO's website.

#### **PEAK REFERENDUM**

At its November meeting, Council defeated a motion asking it to defer the launch of PEO's new mandatory Practice Evaluation and Knowledge program until such time that a referendum of licence holders on the program is held. [e](#)

## **ARE YOU INVOLVED IN YOUR LOCAL PEO CHAPTER?**

Make note of the upcoming chapter annual general meetings



#### **PEO Windsor-Essex Chapter 2023**

##### **Annual General Meeting**

Wednesday, March 1 at 6 p.m. EST, Hellenic Cultural Centre, Windsor, ON [Click here to register](#)

#### **PEO London Chapter 2023 Annual General Meeting**

Friday, March 3 at 12 p.m. EST, Highland Country Club, London, ON [Click here to register](#)

#### **PEO Willowdale/Thornhill Chapter 2023**

##### **Annual General Meeting**

Tuesday, March 7 at 6:30 p.m. EST, Thornhill Community Centre, Thornhill, ON [Click here to register](#)

#### **PEO Peterborough Chapter 2023**

##### **Annual General Meeting**

Saturday, March 25 at 10:30 a.m. EST, Peterborough Golf and Country Club, Peterborough, ON [Click here to register](#)

#### **PEO North Bay Chapter 2023**

##### **Annual General Meeting**

Thursday, April 13 at 5:30 p.m. EST, Best Western North Bay Hotel & Conference Centre, North Bay, ON [Click here to register](#)

## SteelBuildingExperts

### Using Manufacturer Designed Building Components?

Project Support for Steel Buildings, Cold-formed, Deck, Diaphragm, Composite Cladding, General Review

[steelbuildingexperts.ca](http://steelbuildingexperts.ca) • 905 617-2729

## Accused of Professional Misconduct?



We can help you protect your reputation. James Lane has acted for numerous engineers in defending negligence claims and professional conduct charges.

416-982-3807 [www.tbll.ca](http://www.tbll.ca) [jlane@tbll.ca](mailto:jlane@tbll.ca)

## Building/House Design

Architectural,  
Engineering Design  
and Building Permit:  
Commercial,  
Residential, Industrial  
and Farm Buildings



*Over 15 years of experience in building design and construction management in Ontario.*

416-668-9810 | [info@fdldesign.com](mailto:info@fdldesign.com)  
[www.fdlldesign.com](http://www.fdlldesign.com)



## Terraprobe since 1977

Consulting Geotechnical & Environmental Engineering  
Construction Materials Inspection & Testing

subsurface investigations, foundations, tunnels, erosion, slope stability studies, Phase 1 & 2 environmental site assessments, contamination studies, ground water availability, hydrogeology, septic tile bed design, pavements, soil, asphalt, concrete, steel, roofing, shoring design, retaining wall design

<b>Brampton</b> (905) 796-2650	<b>Barrie</b> (705) 739-8355	<b>Sudbury</b> (705) 670-0460	<b>Stoney Creek</b> (905) 643-7560
-----------------------------------	---------------------------------	----------------------------------	---------------------------------------

[www.terraprobe.ca](http://www.terraprobe.ca)

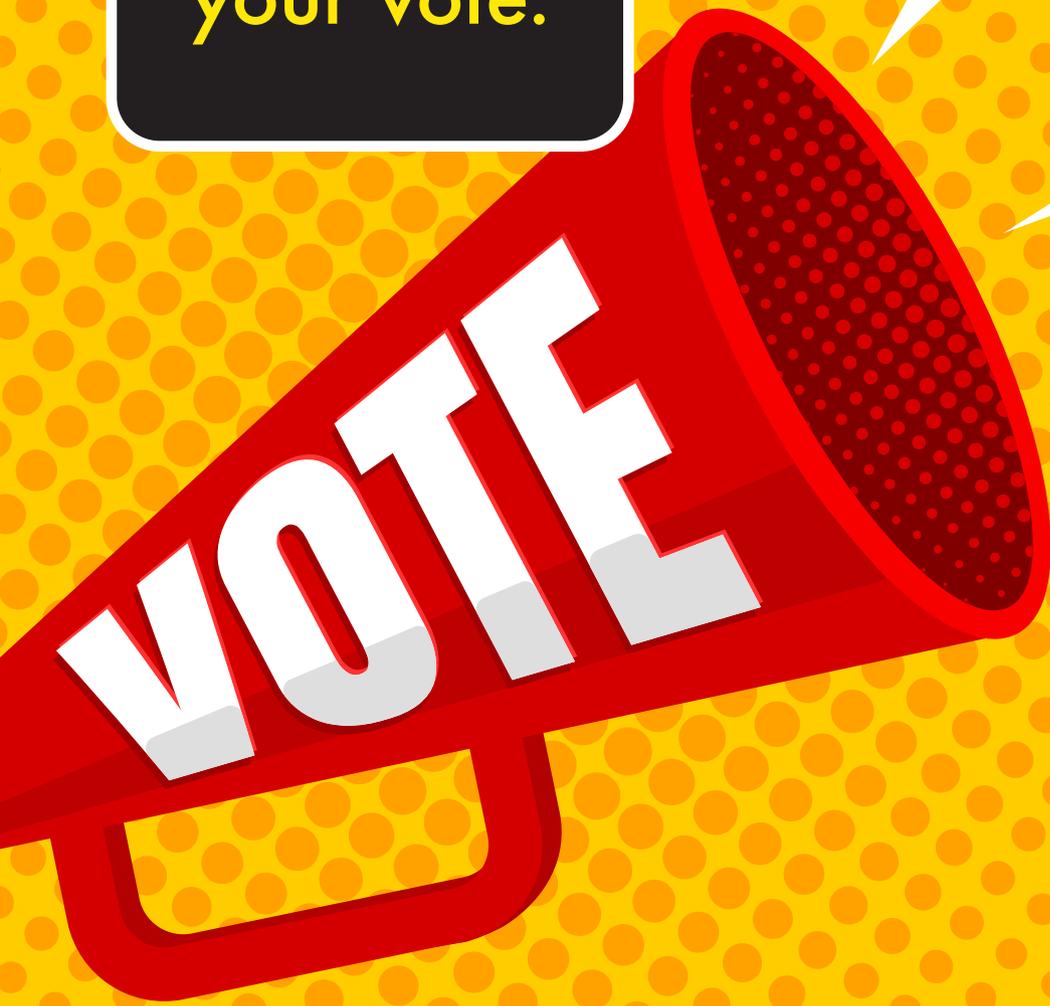


Contact Dovetail  
Communications:  
Vince Naccarato  
905-707-3509  
[vnaccarato@dvetail.com](mailto:vnaccarato@dvetail.com)

**Deadline for Spring 2023  
is March 6, 2023**

<b>+</b>	<b>AD INDEX</b>
p. 2	<b>Manulife</b> <a href="http://manulife.ca/ED">manulife.ca/ED</a>

Your  
profession  
matters.  
So does  
your vote.



Find the 2023 Council Elections candidate statements in this issue's insert.

Go to [peovote.ca](https://peovote.ca) for all election-related resources,  
including video recordings of this month's All Candidates Meetings.

Voting opens January 13. Count yours in.

# Mandatory continuing professional development is here



PEO's mandatory Practice Evaluation and Knowledge (PEAK) program is designed to help licence holders maintain their professional knowledge, skills and competence as engineers and is in keeping with PEO's regulatory, public protection mandate as set out in the *Professional Engineers Act*.

As of January 2023, all licence holders (both practising and non-practising) must comply with the program. More information can be found at [www.peopeak.ca](http://www.peopeak.ca).



Professional Engineers  
Ontario

**PEAK**  
REACHING NEW HEIGHTS