

# THE PROFESSIONAL BENEFITS OF PARTICIPATING IN PEAK

By Arden Heerah

Engineers perform professional engineering to develop solutions to everyday challenges encountered by society. They perform their activities in a way that safeguards public welfare and the environment, as proclaimed in Ontario’s *Professional Engineers Act* (PEA) through its definition of professional engineering. However, at times, engineers might find themselves unsure of their day-to-day engineering practice and development activities in delivering on their public promise.

This is where PEO has stepped in to provide support to Ontario’s engineering licence holders. Through PEO’s voluntary Practice Evaluation and Knowledge (PEAK) program—which was implemented in March 2017—engineers and their employers have regulatory support when it comes to improving their engineering practice. The goal of the PEAK program is to serve as a practical and effective layer of regulatory protection in the public interest regarding the practice of professional engineering.

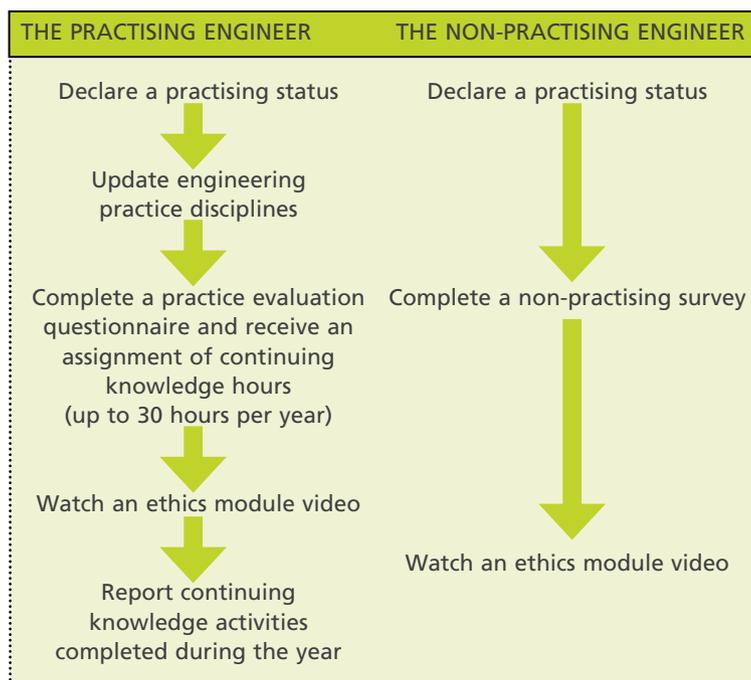
A principal outcome of PEAK is more public visibility regarding engineers who are practising and taking the extra step to inform PEO of their participation in continuing knowledge activities and also watch PEO’s ethics and professionalism refresher video every year. It is an outcome that strengthens public trust in the profession and provincial regulation of engineering.

Because the program is based on professional engineers’ voluntary participation, PEO Council has incorporated an incentive in the PEAK program, which is to track engineers’ commitment to maintaining and elevating their engineering services, skills and professionalism and publicly post which engineers have completed their PEAK program elements on PEO’s online directory.

However, engineers understand the merits of the PEAK program without its gamification feature, as noted in the 2015 final report by PEO’s Continuing Professional Development, Competence and Quality Assurance Task Force on its findings from member consultation. It is a continuing knowledge reporting program that promotes the maintenance and elevation of engineering practice through insights and activities geared toward continuing competence and professionalism. By participating in a voluntary regulatory program that was created to protect the public interest, engineers recognize that it shows their dedication to the public, their employer and clients and themselves as professionals—through their ongoing promise of competence in the engineering services they undertake and remaining knowledgeable of developments in those engineering areas.

## PEAK’S THREE ELEMENTS

There are three elements of the program: a practice evaluation, ethics module, and CPD reporting mechanism. PEAK’s website ([www.peoPEAK.ca](http://www.peoPEAK.ca)) provides an outline, the goals and the development history of the program, as well as additional support for the public to learn about the program and why it’s important for PEO licence holders to complete it each year.



The first step of the PEAK program is for members to declare their practising status, which determines whether they require continuing knowledge relevant to their practice areas.

## The questionnaire

The practice evaluation questionnaire achieves two things: (1) the practising status question quantifies how many engineers actively practise engineering in Ontario, and (2) tracking how engineering procedures are conducted in the performance of engineering. The questionnaire works much like an engineering practice audit or review. However, unlike a technical review, which results in an opinion on whether the reviewed engineering work complies with technical and industry standards and is appropriate for the outcome of the work, the practice review evaluates the policies and procedures in place for how the practice of engineering is being performed.

The distinction between practising and non-practising status is especially useful: The public needs to know the practising status of an engineer to make an informed choice; the engineer must be clear about their professional practice activities; and PEO needs to know which engineers are practising in which practice area at a given time. It allows PEO to compile data on which Ontario engineering licence holders are practising engi-

neering—for work, volunteer, unpaid or pro bono projects—and in which engineering disciplines. In fact, the first step in the program asks licence holders to reflect on the definition of engineering practice and whether, by that definition, they are practising. From the practising participants, PEO is learning the breakdown of engineering practice demographics in Ontario, such as engineering responsibility level, corporate quality management systems and personal and corporate continuing knowledge programs. These are useful regulatory details for the public and PEO because the regulator’s activities—which are focused on protecting the public interest—will have data and evidence needed for policy making.

Engineers’ answers to the online questionnaire will prompt a recommended number of continuing knowledge hours. A risk-based method is used to generate the recommended continuing knowledge hours. It delivers an informal review of the engineering risks to the public by looking at how the engineer and their employer carry out engineering procedures and reduce those risks. To do this, the questionnaire covers 20 risk-influence topics that address a wide range of member demographics, such as engineering discipline, experience level, supervisory level, size of organization and private and public sector.

### RISK-INFLUENCE TOPICS IN THE PEAK PRACTICE EVALUATION QUESTIONNAIRE

1. Organizational structure of practice
2. Engineering role within the organization
3. Engineering standards
4. External engineering reviews
5. Internal engineering peer reviews
6. Engineering quality management system
7. Engineering outcomes
8. Technical certifications
9. Membership in technical societies (PEO excluded)
10. Responsibility level
11. Audits
12. Practice improvements (lessons learned program)
13. Experience within current area of practice
14. Engineering mentorship or peer network
15. Review of relevant technical information
16. Reference library
17. Industry updates
18. Organizationally-provided training
19. Breadth of practice
20. Continuing professional development programs (outside PEO)

The risk-influence topics help PEO determine a recommended number of continuing knowledge hours for practising members.

The practice evaluation questionnaire achieves three goals: First, the engineer and his or her employer get an opportunity to reflect on their processes for performing professional engineering, and every time they complete the questionnaire, their responses benchmark how they see their processes. Second, because of the topic areas in the questionnaire, engineers and their employers are both inspired to maintain or improve their processes for performing engineering. This means future completions of the yearly questionnaire will draw their attention to the improvements they made and the process components they may wish to work on. Third,

through the annual completion of the questionnaire, PEO will learn how engineering practice is being conducted and how it is evolving. This information strengthens PEO’s position as the provincial regulator and could guide PEO’s activities in better supporting licence holders in maintaining and improving their professional engineering practice.

### An ethics refresher

A universal element of the PEAK program is the ethics module. Here, all engineers—whether practising or non-practising—watch a video created by PEO to acquaint themselves with their statutory and ethical obligations as a professional engineer. The module provides an understanding of how to apply those obligations to real-life situations. In addition to Ontario’s PEA, a key focus of the ethics module is Ontario Regulation 941, which provides details on how to implement the PEA. Additionally, it specifically covers professional misconduct by engineers in section 72 and recommends the principles of a trusted engineer in the Code of Ethics in section 77. References to practitioners’ obligations and recognized best practices can be found in O.Reg. 260 and PEO’s professional standards and guidelines. All of these documents are available on PEO’s website, [www.peo.on.ca](http://www.peo.on.ca).

### A continuing knowledge reporting form

The final element of the PEAK program is the online reporting of continuing knowledge activities. This is where practising engineers report back to PEO on the continuing competence activities they have completed—specifically, the activities that are relevant to their engineering practice areas and help to maintain or enhance their technical engineering skills and practice of professional engineering. The program accommodates a variety of topics and ways by which engineers learn, as long as the content of learning activities align with the goals of the PEAK program.

### THE BENEFIT OF SELF-REFLECTION

The program’s focus on self-reflection is insightful: The engineer and their employer become more aware of their practice activities and their engineering risks to the public from the way they apply engineering codes, standards, best practices and risk-reducing steps. Because the practice evaluation questionnaire is a self-directed practice review, engineers are compelled to reflect on their practice habits, guided by the risk-influence topics listed above. For example, an engineer practising in the same role for many years but not following updates to developments in their practice areas should be motivated by the PEAK program to modernize his or her engineering knowledge and

competence level. In another example, an engineer practising in a supervisory engineering role within a new and emerging practice area that has few published guidance documents will be propelled by the PEAK program—if he or she is not already moved to do so by employer and market forces—to stay meticulously up-to-date on codes and best practices in order to reduce the risks their practice activities present to the public. After all, Ontario legislation allows and reinforces engineers to practise in any engineering area as long as they become and remain competent to do so.

Another benefit of this self-reflection is the engineer becomes aware of the quality assurance measures they can employ in their practice. These measures are intended to reduce the risks their practice activities present to the public—risks from errors and omissions in engineering procedures. Sometimes these measures do not exist, are internally designed and implemented in an ad hoc manner or are strictly administered and industry recognized. And because the responses to the questionnaire remain confi-

dential and can be updated anytime, engineers can use it as another instrument in their toolkit for delivering high-quality and modern engineering practices to their clients.

When reflecting on their continuing knowledge activities, the engineer becomes more aware of their practice activities and their engineering risks to the public from the way they follow updates to engineering codes, standards, best practices and risk-reducing steps on a continuing basis.

Another benefit is the engineer becomes aware of their continuing education plan. Continuing knowledge is the process of planning, pursuing and tracking activities that support learning targets on an ongoing basis. The PEAK program propels the engineer to review what continuous learning they have completed (the topics and learning format) and contemplate what to do next for their current, and perhaps future, engineering roles. The outcome is a continuously informed and in-touch professional engineer.

The PEAK program was created for the public and founded on engineer participation. Therefore, feedback from the public and engineers is important to refining the program to meet and maintain the goal of serving and protecting the public. To learn more about the PEAK program, visit [www.peoPEAK.ca](http://www.peoPEAK.ca). The PEAK program team is also available for questions and feedback by email at [peoPEAK@peo.on.ca](mailto:peoPEAK@peo.on.ca) and phone at 416-224-1100 or 800-339-3716.

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**Voting opens January 18. Count yours in.**