



# Backgrounder

## CONTINUING PROFESSIONAL DEVELOPMENT, COMPETENCE AND QUALITY ASSURANCE TASK FORCE

### *Introduction*

In September 2013, OSPE presented a report on continuing professional development (CPD) to PEO Council. The report recommended that PEO adopt a modified version of the program used by the Association of Professional Engineers and Geoscientists of Alberta (APEGA).

After review of the report by the Professional Standards Committee and consultation with the PEO membership, Council decided to create the Continuing Professional Development, Competence, and Quality Assurance Task Force (Task Force).

Council approved the Terms of Reference (ToR) and created this task force on March 21, 2014. The ToR calls for the Task Force “to prepare a plan for a comprehensive program of continuing professional development and quality assurance”. Subsequently, ten PEO volunteers, each representing a different demographic of PEO membership as described in the Terms of Reference, were selected to sit on the Task Force. Annette Bergeron, as representative of the Executive Council, was installed as chair. In addition to the Task Force, due to the importance of this matter, a review network was established. That network consists of 60 members who sought to participate on the Task Force but were not selected. The purpose of this network is to consider and comment on proposals made by the Task Force in order to refine the final output.

On October 15, 2014 the Honourable Paul R. Bélanger, Commissioner of the Elliot Lake Inquiry, released his report on the collapse of the Algo Mall in Elliott Lake. Among the recommendations in the report one was of significance for the Task Force.

### **Recommendation 1.24**

The Professional Engineers of Ontario (PEO) should establish a system of mandatory continuing professional education for its members as soon as possible, and in any event no later than 18 months from the release of this Report.

The members of the Task Force noted that the Council decision to proceed with a CPD program was made before the issuance of the Bélanger Report. Therefore, the Task Force members concluded that PEO should not be compelled to respond to the directive from the Inquiry by rushing to implement an ill-considered plan. However, the Task Force also recognizes the possibility that, due to the high profile afforded to the incident at the Algo Mall by the media and the Inquiry, the government will pressure all parties to adopt the recommendations. The Task Force will be prepared to respond to government by demonstrating a rigorous plan that suits the needs of the public, PEO and members.

PEO owes it to members and the public to make a decision on CPD based on a thorough investigation of the facts. As the Task Force’s Terms of Reference reported, “PEO Council has formed at least three task

forces and committees to investigate the need for and the ways of implementing competency assurance or continuing professional development. Council has also conducted two membership surveys that found strong support for the implementation of a continuing competency program, created but did not implement the Professional Excellence Program and passed motions directing the Registrar to develop a system of mandatory self-declaration of competence maintenance.” Each of the previous attempts to implement a CPD program was abandoned in the face of opposition. There are always contrary opinions that make a decision challenging to implement. Opposition can only be countered by dealing with the concerns of those opposed either through better design of the program or through communication that explains the program in a way that counters objections. Therefore, the Task Force has commissioned Ipsos Reid to carry out a policy research project to ascertain attitudes and perceptions of PEO members towards the proposed CPD program. The results of this project will be used to assist in the design of the program and to develop a communications and education plan to explain the CPD program to all stakeholders.

During the period from September 18, 2014 to May 8, 2015 the Task Force held 8 meetings. The Task Force has prepared a work plan, considered many pieces of research on competency assessment and continuing professional development, arranged for stakeholder polling, and has developed a set of guiding principles that will define a future PEO continuing professional development and quality assurance program. The Task Force has developed the framework for a proposed CPD program that

- i) differs from those in other provinces
- ii) recognizes that there are both practicing and non-practicing licence holders
- iii) ensures CPD requirements will be based on the risk that the work of individual member presents to the public and the profession

### *Guiding Principles for a CPD Program*

#### **1. CPD Program must be necessary to improve the regulation of professional engineering**

The first principle that the Task Force adopted stipulates that PEO should not implement a CPD program that is essentially “window dressing”. Those advocating for a CPD program often point out that PEO is the only professional engineering association in Canada that does not have a CPD program. The Task Force felt that no program should be put in place solely for PEO to say they have a program.

PEO’s role as mandated by the *Professional Engineers Act*, is to regulate the practice of professional engineering in order that the public interest may be served and protected. It is clear that decisions made by PEO must not be made on the basis of member self-interest, the interest of the profession, or the interest of engineering companies. Whatever policies are adopted must fulfill PEO obligation to the public.

The Task Force has established a need for a CPD program based on protecting the public interest.

#### **2. CPD Program Requirements must be Relevant for Practice**

Following from that principle, the Task Force concluded that whatever CPD program is established it must be relevant to the practice of professional engineering and it must be done in the interest of safeguarding public health, safety and welfare. For this reason, the Task Force also concluded that PEO should not follow the lead of most other provincial associations by adopting a program that allows members to acquire CPD credits for activities unrelated to the practice of professional engineering.

A CPD program should be implemented only to facilitate the obligations that professional engineers have already taken upon themselves by accepting the privilege of licensure. Maintaining competence in practice is an ethical obligation imposed on all licence holders by section 77.1.v of Ontario Regulation 941. That section states that a practitioner shall act at all times with “competence in the performance of any engineering services that are undertaken.” A CPD program should be tied only to the actual engineering services provided by the practitioner and the skills and knowledge needed to perform that work.

### **3. CPD Program must be Pragmatic**

Goals established by professional regulatory bodies for a CPD program vary from profession to profession. Some professions specifically identify the need to push the profession to higher levels of skills and knowledge. The objective of this leading-edge approach is to continually raise the standard of practice within the profession.

Commissioner Bélanger seems to have this conception of CPD in mind as the recommendation states a mandatory PEO CPD program should enable “members to expand and gain greater expertise and competence in their areas of practice”.

The Task Force decided that introducing a CPD program for this purpose was unnecessary. Not all practitioners work at the leading edge of science and technology. Those that do will be driven by employers or market forces to augment their skills and knowledge. The Task Force agreed that the purpose of any future PEO CPD program should be to ensure that practitioners maintain a level of knowledge and skill commensurate with safeguarding the public.

### **4. CPD Program must recognize Diversity of Practitioners’ needs and resources**

The Task Force agrees that diversity of both engineering practices and member demographics is not an excuse for PEO to avoid implementing CPD program. Instead the program should be designed with diversity in mind. Consequently, PEO should not rely on a one size fits all CPD approach as done in other provinces. A single all-encompassing CPD program would be either too onerous for some members or watered-down to meaninglessness for others. Most importantly, the program should allow professional engineers the opportunity to design their CPD plan to align with their area of practice and the available professional development opportunities.

PEO must ensure that members in every area of the province are reasonably accommodated and will have suitable CPD resources available to meet the program requirements. Therefore the program should be flexible to accommodate different methods of skills and knowledge delivery.

Since a CPD program should be aimed at promoting competency in practice the program needs to treat practicing and non-practicing members differently. Some members of the task force have expressed concern regarding the need for non-practicing engineers to have any CPD requirements. However, there is recognition that non-practicing members who wish to continue to hold a licence that provides practice rights, even if they do not exercise those rights, have the same benefits and obligations as practicing members. For instance, non-practicing members must understand that, even though they are in a non-practicing capacity, any act or statement made by them when they identify themselves as professional engineers is subject to the same duty of care as a practicing member.

Every practitioner should be familiar with the role of the professional engineer and obligations established in the *Professional Engineers Act* and its regulations. Members should be aware of changes in the regulations that govern the profession including professional standards, as well as changes in both statutory and common law that may impact on them whether they are practicing or not. PEO's practice advisory unit has found that a large percentage of the membership is either unfamiliar with or confused about many of the fundamental provisions established in the Act and its regulations. For instance, based on questions brought to the attention of the Professional Standards Committee, a large majority of the membership is confused about the meaning of the term "public" in the Act.

The existence of a similar situation in Quebec led to the introduction of mandatory professionalism courses by the OIQ. The Task Force has suggested that a minimum level of CPD that ensures both practicing and non-practicing members have a current understanding of the Act and its regulations as well as best practices for professionalism described in such PEO Guidelines as the *Guideline for Professional Practice* and the *Guideline for Use of the Professional Engineer's Seal* .

#### **5. CPD Program Requirements must be Scalable and Proportional to Risk to the Public**

The Task Force decided to address the diversity of practice among PEO members by adopting a risk-based approach to CPD. That is, CPD requirements would be correlated to the amount of risk to the public the practitioner's work entails. The Task Force has spent much of its meeting time devising a methodology to categorize risk to the public posed by individual practitioners.

The risk attributable to practicing engineers is often mitigated through the implementation of risk management measures within firms and industry or through oversight of the work by regulatory authorities. For instance, the nuclear industry undoubtedly has a high degree of risk associated with it. However, industry and government have mitigated that risk by creating a heavily regulated system with both internal checks and balances and regulatory oversight.

The task force views CPD as only one of a variety of methods that may contribute to a reduction in risk to the public. Therefore, to establish a licensee's individual CPD requirement, each licensee would carry out a standardized Engineering Practice Risk Assessment of his or her practice. The parameters for such an assessment could include items such as the following:

1. Practitioner's area of practice or discipline
2. Practitioner holds an external industry certification that requires CPD
3. Percentage of time practicing vs. management, marketing, etc.
4. Has practitioner's scope of practice changed recently?
5. Does practitioner work in an emerging field of technology
6. Practitioner's responsibility level (A-F) according to Classification Guide of Engineering Responsibility Levels
7. Severity of errors or omissions in work performed (economic, environmental, number of persons affected).
8. Severity of consequences possible due to practitioner error
9. Is practice covered by professional liability insurance?
10. Does practitioner's work follow well established industrial codes and standards?
11. Is the firm audited as part of an industry approved quality assurance program?
12. Size and structure of organization for or through which the practitioner provides engineering services.
13. Internal quality assurance programs or peer reviews

Based on the outcome of the risk assessment the practitioner would be assigned specific CPD requirements in an effort to further address the residual risks not addressed by other initiatives. The Task Force believes that this approach will encourage many firms or individual practitioners to adopt risk management procedures such as quality assurance programs or peer reviews as alternatives to compulsory CPD as the sole means of reducing risk. Under these conditions CPD requirements for a practitioner would be commensurate with the actions taken by the practitioner or firm while still achieving PEO's goal of reducing the overall risk associated with the member's engineering practice.

To accommodate these considerations the Task Force has suggested that the CPD program have levels of CPD requirements assigned according to

<b>Tier</b>	<b>Category</b>	<b>CPD Requirements</b>
1	Non-practising	Professionalism (Ethics, Regulatory, Legal)
2	Practising	Tier 1 + self-directed technical commensurate with engineer's practice risk assessment
3	Specialist	Tier 1 + Tier 2 + mandatory technical

Additional tiers such as retired status or different categories of practising may be considered for variations in risk associated with different industries or types of business organization. The CPD requirements for particular areas of practice could be flexibly adapted to deal with issues reported by clients, employers or government. For example, the Ontario government has recently reported to PEO concerns regarding the quality of work provided by professional engineers in the area of environmental site assessment. Most of these problems indicate a lack of understanding of the regulations or of best practices available to the industry. Most of these problems are attributable to small firms that do not have the resources to interpret the regulations or investigate best practices. By creating a CPD requirement for these specific practitioners and ensuring that the appropriate training is made available, PEO assists both these practitioners and the public.

Some members of the Task Force have suggested that specific areas of practice need recognition as specialist categories. The introduction of specialist categories needs to be considered in light of one of the other recommendations from the Bélanger Inquiry. That recommendation called for a structural assessment of buildings to be carried out by a Structural Engineering Specialist. The Task Force has suggested that mandatory CPD requirements for the proposed Structural Engineering Specialist could be the first stage of implementation of a CPD program that would be expanded to other areas of practice.

## **6. CPD Program must be Effective**

Like all policy implementations, PEO must have a means for determining whether the program is effective. To accomplish this task there must be a stated goal for the program, a baseline, and a means for measuring progress towards the goal. Further consideration must be given to how this data can be obtained. PEO will likely need to obtain advice on how to do this from experts with experience in development and assessment of continuing professional development programs.

Also, PEO must have a system to ensure that members who consider their work to be low risk are not actually doing high risk work. For instance, control and software engineers have reported that they have very little or no impact on the public safety. This may be the result of a misunderstanding of who the public is (the public includes workers in the plant and the firms and consumers to whom completed

products are distributed) or what kinds of risks professional engineers are responsible for preventing or mitigating.

Finally, PEO must ensure that the program provides assistance to professional engineers for both determining their individual CPD requirements and for locating suitable means of complying with those requirements. This will require the establishment of tools to provide assistance in carrying out this assessment.

### *Conclusion*

The Task Force continues to refine this proposed program and to carry out research to justify the kinds of program elements that should be included. A report on the program will be provided to Council in December 2015.

### *Comments and Suggestions*

The Task Force asks that all stakeholders who have an interest in this program submit their comments, questions and suggestions to [CPDCQA@peo.on.ca](mailto:CPDCQA@peo.on.ca).

Prepared by the Continuing Professional Development, Competence, and Quality Assurance Task Force  
May 12, 2015

Annette Bergeron, P. Eng.	Chair
David Brown, P. Eng.	Current member of PEO Council
Amin Ghoheity, P. Eng.	Academic licence holder
Rick Hohendorf, P. Eng.	Licence holder employed in an in-house engineering department
Tyler Ing, P. Eng.	Non-practicing employed licence holder
Marco Mariotti, P. Eng.	Licence holder employed by a government
Chris Maltby, P. Eng.	Licence holder employed by a manufacturing company
Sean McCann, P. Eng.	Licence holder employed by a consulting practice
Bruce Miller, P. Eng.	Retired Licence holder
Chris Roney, P. Eng.	Sole Practitioner