

Professional Practice Guideline Personal Annual Competency Evaluation

DRAFT V1.0
January 2025

**The Association of Professional
Engineers and Geoscientists of Alberta**

**Please be advised this document is only a
draft.**

DOCUMENT HISTORY

DATE	VERSION	REVISION DESCRIPTION
Month Day, Year	1.0	Initial issue supplementing version 2.0 of the <i>Continuing Professional Development</i> practice standard.

© Association of Professional Engineers and Geoscientists of Alberta, 2025
All rights reserved.

DRAFT

Contents

Preface	4
Contributors	4
Definitions	5
1 Overview	8
1.1 Purpose and Scope.....	8
1.2 References	9
2 Roles and Responsibilities.....	9
2.1 Role of the Licensed Professional	9
2.2 Role of the Permit Holder or Employer	9
3 PACE Content Requirements and Recommendations	10
3.1 Personal Information	11
3.2 Description of Area(s) of Practice	11
3.3 Completed Competency Evaluation	11
3.4 Identification of Skills and Knowledge to Be Maintained or Developed	11
3.5 Continuing Professional Development Activities.....	12
3.5.1 Technical	12
3.5.2 Regulatory.....	13
3.5.3 Ethical Practice.....	14
3.5.4 Communication, Management, and Leadership.....	14
3.6 Completed Continuing Professional Development Activities	15
3.7 Peer Input and Review	15

Preface

An APEGA professional practice guideline describes the level of performance expected of *permit holders* and *licensed professionals*. Part 8 of the *General Regulation* under sections 58 and 59 allows APEGA to publish guides that define and promote the expectations of APEGA *permit holders* and *licensed professionals*.

The differences between a professional practice standard, a practice guideline, and a practice bulletin are as follows.

- An APEGA professional practice standard sets the minimum standard of practice *permit holders* and *licensed professionals* must meet. It is the standard against which a *permit holder's* or *licensed professional's* practice and conduct will be assessed by APEGA's statutory boards.
- An APEGA professional practice guideline provides professional practice advice and best practice recommendations to help *permit holders* and *licensed professionals* meet their professional obligations. APEGA statutory boards may assess a *permit holder's* or *licensed professional's* practice and conduct against practice guidelines.
- An APEGA professional practice bulletin provides clarity on a specific subject related to professional practice. Bulletins remain in force until a practice standard or guideline on the subject is developed, revised, or until the practice bulletin is repealed.

Practice standards, guidelines, and bulletins should be read in conjunction with the *Engineering and Geoscience Professions Act*, the *General Regulation*, APEGA's bylaws, and any other applicable legislation, codes, or standards.

Contributors

APEGA thanks everyone who contributed to this practice standard for their time and commitment. At the time this standard was completed, the contributors included:

Michael Colgan, P.Eng.

John Corriveau, P.Eng.

Patricia Gigantelli, P.Geo.

Kasia Hinks, P.Geoph.

Dianne Johnstone

Dan Lawrysyn, P.Eng.

Kirsten Merle, P.Eng.

Allan Ng, P.Eng.

Andy Smith, P.Eng.

Mark Tokarik, P.Eng., LLB

Alan Varughese, P.Eng.

Questions or suggestions concerning this document can be addressed to the:

Director, Professional Practice

APEGA

1500 Tower One, 10060 Jasper Avenue

Edmonton, Alberta T5J 4A2

professionalpractice@apega.ca

Definitions

For the purposes of this guideline, the terms and definitions listed below apply. These terms are italicized throughout the text.

Authentication

Authenticating a *professional work product* means a *licensed professional* has completed, performed a *thorough review of*, or *directly supervised and controlled* the engineering or geoscience work and accepts professional responsibility for the engineering or geoscience involved. *Authentication* must be performed in accordance with the practice standard *Authenticating Professional Work Products*.

Continuing Professional Development Activity

Any activity by the *licensed professional* that enhances their technical, regulatory, ethical practice, or communication, management, and leadership skills and knowledge.

Continuing Professional Development Due Date

Date when the requirements of the *Continuing Professional Development* practice standard must be met (same as the annual expiry date).

Direct Supervision and Control

The high degree of guidance a *licensed professional* provides to one or more individuals. The *licensed professional* accepts professional responsibility for engineering or geoscience tasks performed under their guidance. *Direct supervision and control* includes directing, monitoring, and controlling the engineering and geoscience work performed, including making all decisions related to the practices of engineering and geoscience.

Direct supervision and control requirements are detailed in the practice standard *Relying on the Work of Others and Outsourcing*.

Licensed Professional

A professional engineer, professional geoscientist, professional licensee (engineering), professional licensee (geoscience), licensee (engineering), or licensee (geoscience) entitled by the *Engineering and Geoscience Professions Act* to practise engineering or geoscience in Alberta.

Output

See *Professional Services Output*.

Permit Holder

A partnership or other association of persons, or corporation that holds a *Permit to Practice* under the *Engineering and Geoscience Professions (EGP) Act*. The Association of Science and Engineering Technology Professionals of Alberta (ASET) permit holders, as defined in Section 86(4) of the *EGP Act*, are not included.

Permit to Practice

An APEGA certificate given to *permit holders* to practise engineering or geoscience in Alberta.

Personal Annual Competency Evaluation Plan

A *licensed professional's* written plan describing how they will ensure their own continuing competence in their specific area or areas of practice. This plan is a requirement of the *Continuing Professional Development* practice standard.

Practice Review Board

A statutory board established under Section 15 of the *Engineering and Geoscience Professions (EGP) Act*. Through its powers established in Section 16 of the *EGP Act*, the *Practice Review Board* provides regulatory oversight to professional practice by developing and maintaining practice standards relating to the competent practice of the professions, conducting practice reviews of *licensed professionals* and *permit holders*, and administering the Continuing Professional Development Program [*General Regulation* Section 16(2)].

Professional Practice Management Plan

A *permit holder's* written corporate policies, procedures, and systems describing the quality control and assurance measures in place to ensure appropriate standards of professional practice are maintained as described in Section 48(1)(d) of the *General Regulation*.

Professional Services

Services that involve the practice of engineering as defined in Section 1(q) of the *Engineering and Geoscience Professions (EGP) Act* or the practice of geoscience as defined in Section 1(r) of the *EGP Act*. The products of *professional services* are called *outputs*.

Professional Work Product

A *professional services output* that requires *authentication* and *validation* as described in the practice standard *Authenticating Professional Work Products*. Defined in the *General Regulation* as "...plans, specifications, reports, or documents of a professional nature," a *professional work product (PWP)* is any *professional services output* with *technical information* that is complete and final for its intended purpose, and which is relied upon by others, internally or externally. A *PWP* can be physical (e.g., paper, plastic film), electronic (e.g., electronic document, image), or digital (e.g., code, software, modelling, simulation, or any other computer application that cannot be reproduced in a physical or electronic format). See the *authentication* test in the practice standard *Authenticating Professional Work Products* when assessing whether an *output* is a *PWP*.

Responsible Member

A *licensed professional* who is responsible for providing oversight of the practice of engineering or geoscience by the *permit holder* and meets the specification in Part 7, Section 48(1)(c) of the *General Regulation*. A *Responsible Member* must be qualified by education and experience in the profession of engineering or geoscience in which the partnership, corporation, or other entity intends to engage; designated in writing by the *permit holder*; and registered with APEGA as a *Responsible Member*.

The *Responsible Member* must have a sufficiently close relationship with the *permit holder* to undertake the roles and responsibilities associated with acting as a *Responsible Member*. The role of *Responsible Member* may not be delegated to other *licensed professionals* who are not *Responsible Members*.

A *Responsible Member* can be:

- a full-time, permanent employee of the *permit holder*
- a member of the *permit holder*
- a *sole practitioner*
- an individual providing *professional services* to the *permit holder* through a contractual arrangement or as a part-time employee.

The *permit holder's Responsible Members* direct, supervise, and control all or part of a *permit holder's* professional practice in accordance with the *permit holder's Professional Practice Management Plan* and all relevant legislation, regulations, and codes.

Sole Practitioner

Within Alberta, an individual who practises engineering or geoscience as an incorporated entity. A *sole practitioner* must hold a *Permit to Practice*.

Technical Information

A term for content or data derived from the practice of engineering or geoscience as defined by the *Engineering and Geoscience Professions Act*, including advice, analyses, assessments, calculations, designs, evaluations, inputs (e.g., to planning or to modelling and simulation), interpretations, notes, opinions, recommendations, and process descriptions.

Thorough Review

An evaluation of the *outputs of professional services* prepared by others to verify their reliability, validity, and technical accuracy. *Thorough review* requirements are detailed in the practice standard *Relying on the Work of Others and Outsourcing*.

Unprofessional Conduct or Unskilled Practice

Conduct by *permit holders, licensed professionals*, and members-in-training that is found to be *unprofessional conduct* or *unskilled practice* under Section 44 of the *Engineering and Geoscience Professions (EGP) Act*, in accordance with the discipline processes set out in Part 5 of the *EGP Act*.

Validation

Validating a *professional work product (PWP)* means a *permit holder's Responsible Member* has reviewed the *PWP* to ensure it meets the quality control and assurance measures described in the *permit holder's Professional Practice Management Plan*. *Validation* must be performed in accordance with the practice standard *Authenticating Professional Work Products*.

1 Overview

The *Personal Annual Competency Evaluation* practice guideline has been developed in coordination with version 2.0 of the *Continuing Professional Development* practice standard and should be read in conjunction with this standard.

Rule 2 of the Code of Ethic's Rules of Conduct states that professional engineers and geoscientists shall undertake only work that they are competent to perform by virtue of their training and experience. *Licensed professionals* have an ethical and professional responsibility to develop and maintain their knowledge, skills, and competence throughout their careers by engaging in ongoing learning.

The *Engineering and Geoscience Professions (EGP) Act*, Section 16(1) of the *General Regulation*, grants APEGA Council the authority to establish a compulsory continuing education program for all *licensed professionals*. The requirements of this compulsory Continuing Professional Development (CPD) Program are outlined in the *Continuing Professional Development* practice standard.

In accordance with Section 19(a) of the *General Regulation*, which states that *licensed professionals* must maintain a written record of *CPD activities*, the *Continuing Professional Development* practice standard requires *licensed professionals* to create and maintain a *Personal Annual Competency Evaluation (PACE) plan*. This guideline provides best practice recommendations for creating a *PACE plan* to help *licensed professionals* and *permit holders* meet their professional obligations under the *Continuing Professional Development* practice standard and the *EGP Act*.

1.1 Purpose and Scope

The practices of engineering and geoscience are constantly evolving, whether through updates and changes to regulations, codes, and standards; the development of new techniques and technologies; the creation of new industries and areas of practice; changes in societal values; or the need to respond to new environmental and security threats. In addition to keeping up with changes in the practice of the professions, CPD is important for reinforcing knowledge in key technical, ethical, and regulatory areas that support the protection of the public and the environment.

CPD is learning that contributes to the maintenance of competency and helps *licensed professionals* perform in their present or future roles more effectively. CPD can take many forms, such as courses and seminars, participation on technical committees, attending conferences and workshops, self-directed study, and mentorships with other professionals.

This practice guideline provides *licensed professionals* with recommendations for creating and maintaining a *PACE plan* in compliance with the *Continuing Professional Development* practice standard, and it provides guidance on how *permit holders* can help *licensed professionals* meet the requirements of the standard. This guideline outlines how *licensed professionals* can assess and document their competency and plan and record their *CPD activities*. It also includes examples of the types of *CPD activities* that *licensed professionals* should undertake to maintain their competency and recommendations for keeping a written record of these activities.

1.2 References

The following publications support this guideline. Refer to the latest versions available at apega.ca/practice-standards.

- The *Engineering and Geoscience Professions (EGP) Act*, the *General Regulation*, and APEGA's bylaws
- *Continuing Professional Development* practice standard
- *Professional Practice Management Plan* practice standard
- *Ethical Practice* practice guideline

2 Roles and Responsibilities

2.1 Role of the Licensed Professional

The *Engineering and Geoscience Professions Act* grants the professions the privilege of self-governance. *Permit holders*, *licensed professionals*, and members-in-training must uphold high standards of professional competence to retain this privilege. *Licensed professionals* can achieve this by engaging in lifelong learning.

The *Continuing Professional Development* practice standard requires *licensed professionals* to create and maintain a *Personal Annual Competency Evaluation (PACE) plan*. The *PACE plan* helps *licensed professionals* document their learning and progression each year to ensure their own competency.

2.2 Role of the Permit Holder or Employer

APEGA expects *permit holders* to support the continuing professional development (CPD) efforts of their *licensed professional* employees, and they have a duty to report *unskilled practice*, *unprofessional conduct*, and non-compliance with the *Continuing Professional Development* practice standard. Please refer to the *Professional Practice Management Plan* practice standard for more information.

If they have an employer, *licensed professionals* should discuss their professional development objectives with their employer. These discussions can include a review of the *licensed professional's PACE plan* and consultations about the type and level of support the employer will provide to help the *licensed professional* achieve their learning goals.

Employer support can include:

- consultation during selection of *CPD activities*
- provision of learning opportunities
- assistance developing job expectations and responsibilities
- periodic review of performance and progress
- assistance documenting *CPD activities* and levels of effort through company performance-management systems
- financial support of *CPD activities*
- time to participate in *CPD activities*

However, the responsibility for undertaking *CPD activities* and maintaining competency rests with the *licensed professional*.

3 PACE Content Requirements and Recommendations

Creating and maintaining a *Personal Annual Competency Evaluation (PACE) plan* helps *licensed professionals* reflect on what they need to learn to stay competent in their professional practice, identify any gaps in their knowledge, choose and plan *continuing professional development (CPD) activities* to help fill those gaps, and document these considerations. In addition, the *licensed professional's* written *PACE plan* facilitates discussions about learning goals and plans, making it easier for peers and employers to provide feedback on and support for those goals. To be effective, a *PACE plan* should include a competency evaluation reflecting an honest personal assessment of current knowledge and skills relevant and beneficial to the *licensed professional's* practice.

Licensed professionals can use any template for their *PACE plan*, such as the one provided by APEGA, one from an employer, or one from another professional association, as long as the *PACE plan* meets the requirements of the *Continuing Professional Development* practice standard.

The *Continuing Professional Development* practice standard requires *licensed professionals* to update their *PACE plan* yearly by their annual *CPD due date* and revise their *PACE plan* when they experience significant changes to their roles or responsibilities.

As described in the *Continuing Professional Development* practice standard, the *PACE plan* must:

- be the *licensed professional's* individualized plan, covering their current practice area(s) and any future areas they are pursuing, if applicable.
- include technical activities appropriate for ensuring competency with technological advancements and changes to codes, industry standards, and techniques, as well as other activities related to their individual practice area(s).
- include at least one activity in one of the following categories:
 - regulatory;
 - ethical practice; or
 - communications, management, and leadership.
- be sufficient to reasonably defend the *licensed professional's* competence to professional peers on the *Practice Review Board*, the Investigative Committee, the Discipline Committee, or any other APEGA entity concerned with competence.

Please refer to the *Continuing Professional Development* practice standard for further details.

To meet these requirements, a *licensed professional's PACE plan* must, at a minimum, include a description of their area(s) of practice and their completed *CPD activities* (see sections 3.2 and 3.6 of this guideline). APEGA recommends that the *PACE plan* include all the information described in sections 3.1 through 3.7 of this guideline.

1. Personal information
2. Description of area(s) of practice*
3. Completed competency evaluation
4. Identification of skills and knowledge to be maintained or developed

5. *CPD activities*
6. Completed *CPD activities**
7. Peer input and review

*Required information

3.1 Personal Information

The *PACE plan* should include the *licensed professional's* name and APEGA ID.

3.2 Description of Area(s) of Practice

The *PACE plan* must include a description of the *licensed professional's* current practice area(s) and any future areas being pursued, if applicable. This description should also include the *licensed professional's* job title and the name of their current employer.

Describing their current area(s) of practice and responsibilities can help *licensed professionals* identify the knowledge, skills, and abilities they need to continue performing competently in their current role. Describing planned future areas of practice can help *licensed professionals* identify the knowledge and skills they must develop to competently practice in these new areas and support their career development. This information can then be used to help identify the *CPD activities* that will provide the most benefit to the *licensed professional's* practice, both in their day-to-day duties and any future duties they are planning to perform.

3.3 Completed Competency Evaluation

Licensed professionals are encouraged to evaluate the level of their experience, skills, and knowledge relative to their roles and responsibilities, now and in the future. During this evaluation, *licensed professionals* should consider aspects of professional practice such as *supervision*, interaction with other *licensed professionals*, technological advancements, changes in codes, standards, regulations, societal expectations, and consequences of failure associated with their area of practice and responsibilities.

An honest evaluation can help a *licensed professional* identify the highest risks to the public and the environment associated with their practice and focus on maintaining competence in areas that mitigate those risks. The competency evaluation can also help the *licensed professional* identify and prioritize the skills and knowledge that would most benefit their practice.

3.4 Identification of Skills and Knowledge to Be Maintained or Developed

The *licensed professional* should use their competency evaluation to help them plan their *CPD activities* for the coming year. They should prioritize gaining, reinforcing, or enhancing skills and knowledge that will both benefit their practice and mitigate risks to the public interest and the environment.

3.5 Continuing Professional Development Activities

The selected *CPD activities* must include at least one technical activity and at least one regulatory; ethical practice; or communications, management, and leadership activity. The subject areas will depend on the *licensed professional's* practice, roles, responsibilities, and competency evaluation.

As described in the *Continuing Professional Development* practice standard, each *CPD activity* must be accompanied by a written explanation of how the activity will contribute to the *licensed professional's* competence.

The *licensed professional* should include *CPD activities* in their *PACE plan* that meet the requirements of the CPD Program and are most relevant to their specific circumstances. It is the *licensed professional's* responsibility to determine which activities meet these requirements. When selecting suitable *CPD activities*, *licensed professionals* should choose activities that are useful and accessible.

If the *licensed professional's* situation changes and the planned activities are no longer relevant to their continuing competence, they must update their *PACE plan* to reflect their new circumstances.

Day-to-day practice is not considered sufficient to maintain competency without additional ongoing professional development. Activities that *licensed professionals* undertake as part of their employment that are outside of routine work and do contribute to maintaining competency can be included in their plan. Examples may include reviewing new or updated standards and codes or actively engaging in reviews of their work with *licensed professionals* outside their regular work group.

3.5.1 Technical

Technical *CPD activities* are activities related to advancing a *licensed professional's* technical knowledge and skills within their area(s) of practice, including any anticipated future changes to the area(s) of practice.

The intent of technical *CPD activities* is to maintain or enhance technical competency. Technical activities often involve learning about or working with *technical information*, such as analyses, calculations, designs, inputs, interpretations, notes, and recommendations derived from the practice of engineering or geoscience.

The *licensed professional* is responsible for determining the extent to which they need to engage in activities to maintain technical competence based on their current and planned career path. Maintenance and development of technical skill is required of all *licensed professionals*, including those who focus on project management, management, or leadership roles. Staying current with changing technologies, advances, and techniques in one's field or industry enhances the *licensed professional's* ability to effectively lead teams and organizations, provide advice, make decisions based on *technical information*, and communicate *technical information* to non-technical stakeholders.

	Example topics	Example activities
Technical	<ul style="list-style-type: none"> • Technical codes, regulations, and standards • Risk management • Sustainability and climate change • New or emerging technologies • Design tools and methods • Technical industry trends and developments 	<ul style="list-style-type: none"> • Attending technical conferences, workshops, seminars, or courses • Furthering technical education • Attending technical sales presentations and demonstrations • Reviewing technical journals or other media • Writing for technical journals or other media • Reviewing industry technical standards, specifications, and handbooks • Participating in formal technical mentoring • Attending professional development offerings delivered by technical societies or associations relevant to the <i>licensed professional's</i> area of practice • Attending industry information-sharing sessions

3.5.2 Regulatory

Regulatory *CPD activities* are activities related to advancing knowledge of legislation, regulatory requirements, regulations, bylaws, codes, standards, and policies in the *licensed professional's* area(s) of practice.

	Example topics	Example activities
Regulatory	<ul style="list-style-type: none"> • Regulations, codes, bylaws, and standards • Professional obligations under the <i>Engineering and Geoscience Professions Act</i> • Professional obligations under legislation relevant to the <i>licensed professional's</i> practice • International quality management standards 	<ul style="list-style-type: none"> • Reviewing APEGA practice standards, bulletins, guidelines, and joint publications • Reviewing applicable regulations • Attending quality management seminars and webinars • Attending seminars and webinars on updates to regulations • Reading or writing articles in technical or regulatory publications regarding changes in regulations, codes, standards, and guidelines • Taking courses to become a certified auditor

3.5.3 Ethical Practice

Ethical practice *CPD activities* are related to learning how to identify ethical concerns and adhere to the standards of ethical behaviour required of *licensed professionals*.

	Example topics	Example activities
Ethical Practice	<ul style="list-style-type: none"> • Code of Ethics and <i>Ethical Practice</i> guideline • Conflict of interest • Whistleblower obligations, rights, and protections • Managing professional liability • Reconciliation with Indigenous Peoples • Equity, diversity, and inclusion • Professionalism • Social, environmental, economic, and sustainability concerns 	<ul style="list-style-type: none"> • Reviewing publications and presentations on ethics and conduct • Reviewing published disciplinary actions • Reviewing engineering and geoscience failures • Attending seminars on ethical practice and professionalism • Attending seminars on Indigenous engagement and reconciliation • Attending seminars on equity, diversity, and inclusion • Attending seminars on social, environmental, economic, and sustainability issues

3.5.4 Communication, Management, and Leadership

Communication, management, and leadership *CPD activities* are related to advancing skill sets within a professional environment.

	Example topics	Example activities
Communication, Management, and Leadership	<ul style="list-style-type: none"> • Project management • Oral and written communication skills • Leadership • Financial management • Client management • Time management • Budgeting • Consulting and business skills • Team effectiveness • Team management • Conflict resolution • Stakeholder consultation 	<ul style="list-style-type: none"> • Attending short seminars, webinars, and presentations that teach business, communications, and leadership skills • Engaging with a mentor • Mentoring to assist in career development • Attending business and leadership training programs, including MBA or certification programs • Presenting on business, communications, and leadership topics outside of the regular work environment • Volunteering • Community engagement

3.6 Completed Continuing Professional Development Activities

As described in the *Continuing Professional Development* practice standard, to support the *PACE plan*, *licensed professionals* must maintain a detailed record of completed *CPD activities* along with supporting documents and an explanation of how the activity contributes to the *licensed professional's* competence.

APEGA recommends including the list of *CPD activities* in the *PACE plan* to keep all CPD records together.

The *CPD activities* a *licensed professional* completes do not have to match those listed in the *PACE plan* exactly, but the overall focus should be consistent between planned and completed activities.

The following information should be recorded for each *CPD activity* completed under the *PACE plan*:

- activity title and description
- organizer, provider, and participants
- date(s) of activity
- duration of activity (days or hours)

3.7 Peer Input and Review

APEGA recommends that *licensed professionals* review their *PACE plan* with another *licensed professional*, such as a peer, mentor, or supervisor, to receive feedback. The input of *licensed professionals* engaged in the same area of practice is a significant benefit when developing a plan. These individuals can provide an outside perspective on the *licensed professional's* knowledge and skills and may have suggestions for other activities they can engage in to maintain and develop their professional competence. Being unaware of an area of weakness in competence can be a significant risk in a *licensed professional's* practice. Soliciting and documenting peer input can both mitigate this risk and increase the defensibility of the plan and activities if they are reviewed.