Professional Practice Guideline

Personal Annual Competency Evaluation

V0.22

November 1, 2024

The Association of Professional
Engineers and Geoscientists of Alberta

This final draft is provided for reference only. No further comment is required.

DOCUMENT HISTORY

Date	Version	Revision Description
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TBD	1.0	Initial issue supplementing the *Continuing Professional Development* practice standard.

Contents

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 bulletin, and a practice guideline 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 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force until a practice standard or guideline on the subject is developed or revised, or until the practice bulletin is repealed.
- 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.

Practice standards, bulletins, and guidelines 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 guideline for their time and commitment. The contributors to this version were as follows:

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The continuing professional development and education programs of the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) and Engineers and Geoscientists British Columbia (EGBC) informed the development of this practice guideline. Thank you to APEGS and EGBC.

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Visit apega.ca/practice-standards for more information.

Definitions

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

Authentication
The act of applying the required *authentication* components to a *professional work product* (*PWP*). *Authentication* must be performed in accordance with the practice standard *Authenticating Professional Work Products*. When a *licensed professional* authenticates a *PWP*, this means they have completed, performed a *thorough review* of, or directly supervised and controlled the engineering or geoscience work and accept professional responsibility for the engineering or geoscience involved.

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 contribute to their continuing competency 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 Services Output

Any product—physical, electronic, or digital—resulting from a *professional service*. Not all *outputs* require *authentication* and *validation*.

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
Actions or behaviours of *permit holders*, *licensed professionals*, and members-in-training that are 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
The act of applying the required *validation* components to a *professional work product* (*PWP*). *Validation* must be performed in accordance with the practice standard *Authenticating Professional Work Products*. When a *permit holder's Responsible Member* validates a *PWP*, this means they have reviewed the *PWP* to ensure it meets the quality control and assurance measures described in the *permit holder's Professional Practice Management Plan*.

1.0 Overview

The *Personal Annual Competency Evaluation* practice guideline was developed in coordination with the mandatory requirements of the *Continuing Professional Development* practice standard and should be read in conjunction with that standard. This guideline provides best practice recommendations for creating a *Personal Annual Competency Evaluation (PACE) plan* to help *licensed professionals* and *permit holders* meet their professional obligations under the *Continuing Professional Development* practice standard and the *Engineering and Geoscience Professions (EGP) Act*.

1.1 Purpose and Scope

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 evaluate their competency, identify skills and knowledge they will enhance, and record their completed *continuing professional development (CPD) activities*. It also provides examples of the types of *CPD activities* that *licensed professionals* could undertake to maintain their competency.

1.2 References

This guideline references the following publications. The latest versions are available at apega.ca/practice-standards.

- *Engineering and Geoscience Professions Act, General Regulation,* and APEGA's bylaws
- *Continuing Professional Development* practice standard
- *Professional Practice Management Plan* practice standard
- *Ethical Practice* practice guideline
- *Personal Annual Competency Evaluation plan* template

2.0 Roles and Responsibilities

2.1 Role of the Licensed Professional

The responsibility for undertaking *continuing professional development (CPD) activities* and maintaining competency rests with *licensed professionals*. *Licensed professionals* are required to examine their skills and knowledge relative to their practice and undertake *CPD activities* to maintain and enhance their continuing competency. *Licensed professionals* are required to document this in their *Personal Annual Competency Evaluation (PACE) plan*.

When developing their *PACE plans*, *licensed professionals* may choose to engage with their peers to help ensure the plan is sufficient to maintain competency.

Licensed professionals may choose to discuss their professional development goals with their employer, if they have one. 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.

2.2   Role of the Permit Holder or Employer

APEGA expects *permit holders* to support the *CPD* efforts of their *licensed professional* employees. Please refer to the *Professional Practice Management Plan* practice standard for more information.

Permit holder or employer support can include:

- encouragement of professional development
- discussion of skills and knowledge
- consultation during selection of *CPD activities*
- provision of learning opportunities
- assistance developing job expectations and responsibilities
- periodic review of performance and progress
- financial support of *CPD activities*
- time to participate in *CPD activities*

3.0 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, choose *continuing professional development (CPD) activities* to enhance skills and knowledge in these areas, and document these considerations.

Licensed professionals can use any format for their *PACE plan*. APEGA's *PACE plan* template is recommended because it includes all requirements of the *Continuing Professional Development* practice standard and the additional recommendations of this guideline. Self-developed plans or templates from other professional associations or employers may be acceptable.

The *Continuing Professional Development* practice standard requires *licensed professionals* to create a new *PACE plan* annually and revise their *PACE plan* within that year if they experience a change to their role, responsibilities, or area of practice such that the existing *PACE plan* is no longer suitable. It is recommended that *licensed professionals* retain all previous copies of their *PACE plans*.

To meet these requirements, a *licensed professional's PACE plan* must, at a minimum, include a description of their area(s) of practice, identify the skills and knowledge they need to maintain or enhance their continued competency, and include their completed *CPD activities*. APEGA advises using the following list of required and recommended sections in a *PACE plan*:

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

6. Peer input and review
7. *PACE plan* sign-off

3.1   Personal Information (recommended)

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

3.2   Description of Area(s) of Practice (required)

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, including job duties, responsibilities, and industry of practice, can help *licensed professionals* identify the skills and knowledge they need to continue to perform competently in their current role and to improve further. Describing planned future areas of practice can help *licensed professionals* identify the skills and knowledge they must develop to competently practise 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 (recommended)

A *PACE plan* should include a competency evaluation reflecting an honest personal assessment. This can help *licensed professionals* identify the skills and knowledge that they need to meet their competency goals.

Relative to their current and future roles and responsibilities, *licensed professionals* are encouraged to evaluate their level of:

- professional experience
- skills and knowledge in technical, regulatory, ethical practice, communication, management, and leadership areas

During this evaluation, *licensed professionals* should consider potential risk factors of their professional practice, such as:

- level of supervision received or provided to others
- interaction with other *licensed professionals* in related areas of practice
- technological advancements
- changes in codes, standards, regulations, and societal expectations
- consequences of failure associated with their responsibilities

An honest evaluation can help *licensed professionals* identify the highest risks to the public and the environment associated with their practice and focus on maintaining competency in areas that mitigate those risks. The competency evaluation can also help *licensed professionals* identify and prioritize the

skills and knowledge that would most benefit their practice. If a *licensed professional* has identified greater risks in their practice, this should lead to an increase in *CPD activities* to address these risks.

3.4   Identification of Skills and Knowledge (required)

Licensed professionals must identify skills and knowledge that will contribute to their continued competency. They should prioritize gaining or enhancing skills and knowledge that will both benefit their practice and mitigate identified risks, with a particular focus on the public interest and the environment. Discussion with peers can help *licensed professionals* identify the skills and knowledge they should focus on and select appropriate *continuing professional development activities*. Refer to section 3.6 Peer Input and Review.

3.5   Completed Continuing Professional Development Activities (required)

As annually required by the *Continuing Professional Development* practice standard, *continuing professional development* (*CPD*) *activities* must include at least one technical activity and at least one regulatory; ethical practice; or communications, management, and leadership activity. The categories, topics, type, and quantity of *CPD activities* completed annually will depend on the *licensed professional's* practice, roles, responsibilities, and competency evaluation. It is the *licensed professional's* responsibility to determine which activities to complete. The learning modules required by the *Continuing Professional Development* practice standard are a distinct and separate component from the *PACE plan* and cannot be used to meet the *CPD activity* requirements.

As required by 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* competency.

APEGA recognizes that professional practice contributes to the maintenance of competency. On its own, however, professional practice may not be sufficient to maintain competency, and *licensed professionals* are expected to undertake additional *CPD activities*. The duration and scope of these activities depends on their practice and needs. Activities that *licensed professionals* undertake as part of their employment that are outside of routine work and that contribute to maintaining competency can be included in their *PACE plans*.

APEGA recommends that *licensed professionals* who intend to return to practice and who have not actively practised for longer periods should complete additional *CPD activities* in preparation for their return.

3.5.1 CPD Activity Categories, Topics, and Types

3.5.1.1 Technical

Technical *CPD activities* are activities related to maintaining or enhancing technical skills and knowledge within a *licensed professional's* area(s) of practice. Technical activities often involve learning about or working with *technical information*.

Licensed professionals are responsible for determining the extent to which they need to engage in activities to maintain technical competency based on their current and planned career path. Maintenance and development of technical skills 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 both technical and non-technical audiences.

Category	Example topics	Example activity types
Technical	• Technical codes, regulations, and standards • Risk management • Sustainability and climate change • New or emerging technologies • Design tools and methods • Technical industry trends and developments	• Attending technical conferences, workshops, seminars, webinars, 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 or contributing to industry technical standards, specifications, and handbooks • Participating in formal technical mentoring • Attending professional development offerings delivered by technical societies or associations relevant to the *licensed professional's* area of practice • Attending industry information-sharing sessions • Reviewing content on emerging technologies

3.5.1.2 Regulatory

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

Category	Example topics	Example activity types
Regulatory	• Regulations, codes, bylaws, and standards • Professional obligations under legislation relevant to the *licensed professional's* practice	• Reviewing applicable regulations, codes, bylaws, standards, bulletins, and regulatory updates • Attending quality management training

	• International quality management standards • Professional obligations under the *Engineering and Geoscience Professions Act*	• Attending training 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 • Volunteering in a regulatory capacity • Reviewing APEGA practice standards, bulletins, guidelines, and joint publications

3.5.1.3 Ethical Practice

Ethical practice *CPD activities* are related to maintaining or enhancing knowledge about identifying ethical concerns and adhering to the standards of ethical behaviour required of *licensed professionals*.

Category	Example topics	Example activity types
Ethical practice	• Code of Ethics and *Ethical Practice* 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	• Reviewing publications and presentations on ethics and conduct • Reviewing published disciplinary actions • Reviewing engineering and geoscience failures • Attending training on ethical practice and professionalism • Attending training on Indigenous engagement and reconciliation • Attending training on equity, diversity, and inclusion • Attending training on social, environmental, economic, and sustainability issues • Discussions with peers about ethical topics related to practice • Attending training on unprofessional conduct and harassment

3.5.1.4 Communication, Management, and Leadership

Communication, management, and leadership *CPD activities* are related to maintaining or enhancing these skill sets within a professional environment.

Category	Example topics	Example activity types
Communication, management, and leadership	• Project management • Oral and written communication skills • Leadership • Financial management • Client management • Contracts • Time management • Budgeting • Consulting and business skills • Team effectiveness • Team management • Conflict resolution • Stakeholder consultation	• Attending training and presentations on business, communications, and leadership skills • Engaging with a mentor • Mentoring to assist with career development • Attending business and leadership training programs, including MBA or certification programs • Presenting on business, communications, and leadership topics outside of routine work • Volunteering • Community engagement • Reviewing publications and presentations on communication, management, and leadership • Participating in peer group discussions on communication, management, and leadership • Conducting a peer review outside of routine work

3.5.2 Record of Completed CPD Activities

As required by the *Continuing Professional Development* practice standard, the *PACE plan* must include a record of completed *CPD activities*.

It is recommended that in addition to the *CPD activity* title or description, the following details also be documented for each completed *CPD activity:*

- organizer or provider
- activity date
- activity duration (days or hours)

3.5.3 Written Explanation

As required by the *Continuing Professional Development* practice standard, the *PACE plan* must include a written explanation of how each *CPD activity* contributed to the *licensed professional's* continuing competency. This explanation should connect the *CPD activity* with one or more of the skills or knowledge areas the *licensed professional* identified as relevant for maintaining or enhancing competency.

3.5.4 Supporting Documentation

As required by the *Continuing Professional Development* practice standard, the *PACE plan* must include supporting documentation as evidence of completed *CPD activities*.

Supporting documents provide evidence of the activity details, such as the activity title, organizer or provider, activity date, and activity duration. Examples of supporting documents include registration confirmations, course certificates, presentation outlines, article abstracts, calendar entries, meeting agendas, and emails. For *CPD activities* that may not have more formal documentation of completion, a more detailed *CPD activity* description may be suitable.

With the large variety of possible *CPD activity* types, documentation of completed *CPD activities* will also vary. *Licensed professionals* must use their own professional judgement to determine what supporting documentation should be maintained.

3.6   Peer Input and Review (recommended)

Although it is not a requirement, APEGA recommends that *licensed professionals* review their *Personal Annual Competency Evaluation* (*PACE*) *plan* with another *licensed professional*, such as a *Responsible Member*, supervisor, peer, or mentor. A peer reviewer does not need to work in the same organization. The input of *licensed professionals* engaged in a similar area of practice is a significant benefit when developing and acting on a plan. These individuals can provide an outside perspective on the *licensed professional's* skills and knowledge and may have suggestions for activities to maintain and develop their professional competency. Being unaware of an area of weakness in competency can be a significant risk in a *licensed professional's* practice. Soliciting and documenting peer input can mitigate this risk.

The *licensed professional's* written *PACE plan* can also facilitate discussions about learning goals and plans, making it easier for peers and employers to provide feedback on and support for those goals. If a peer has reviewed and provided input to a *licensed professional's PACE plan*, it is recommended that this review be documented to show that a peer found the *PACE plan* to be reasonable. It is not expected that the peer reviewer confirm completion of recorded *continuing professional development* (*CPD*) *activities*.

3.7   PACE Plan Sign-Off (recommended)

It is recommended that once all completed *continuing professional development* (*CPD*) *activities* have been recorded, *licensed professionals* sign and date their *Personal Annual Competency Evaluation plan* by their *CPD due date*.