

2.5 Ethical Obligations

APEGA *licensed professionals* and *permit holders* must comply with the Code of Ethics and its five Rules of Conduct.

APEGA *licensed professionals* and *permit holders* must advise APEGA of any entity or individual failing to meet the obligations of the *EGP Act*, the *General Regulation*, or any APEGA practice standard if attempts to resolve issues directly with *licensed professionals* or *permit holders* involved do not lead to the required compliance. This is consistent with self-regulation.

3 Professional Practice Management Plan Administration

3.1 PPMP Submission to APEGA

If requested by APEGA, *permit holders* must submit their *Professional Practice Management Plan (PPMP)* in its entirety, along with its supporting documents, within the stated deadline in the request (APEGA Bylaw 32.1).

3.2 PPMP Change Management

3.2.1 Review Cycle

An up-to-date *PPMP* is essential to effectively manage a professional practice. *Permit holders* must review their *PPMP* at least annually to verify its continued suitability and effectiveness. These reviews clarify organizational structure and roles, examine areas of concern, ensure references are current and accessible, and confirm quality control and assurance processes are adequate.

When *permit holders* implement substantive changes to their provided scope of services or organizational structure, they must review and update their *PPMP* as soon as practicable.

Permit holders must keep a record of findings resulting from their *PPMP* review.

After the review is complete, the required declaration statement is signed as described in Section 4.1.1.

3.2.2 Communication of Change

When updating their *PPMP*, *permit holders* must inform all impacted *licensed professionals* of any changes as soon as practicable. *Senior officers*, on behalf of the *permit holders*, must keep evidence of the communication of change sent to *licensed professionals* (such as an email or record of attendance for training).

3.3 Disclosing Information from PPMPs

When procuring *professional services* from other *permit holders*, *due diligence* requires ensuring *professional work products* are created using adequate and acceptable quality control and assurance processes. For this reason and as part of self-regulation, APEGA recommends that *permit holders* provide their *PPMP* when requested by other *permit holders*, *licensed professionals*, or the public. This elevates the quality of practice in the professions and enables other *permit holders* and the public to have confidence in a *permit holder's* professional practice *outputs*.

4 PPMP Content Requirements

This section describes *Professional Practice Management Plan (PPMP)* content requirements. *Permit holders* must include these components when developing their *PPMP*. If a *permit holder* determines a particular requirement is not applicable to its practice, the *permit holder* must include the section requirement with a statement that explains why it is not applicable.

PPMPs must be clearly written and describe the processes designed to support the *permit holder's* professional practice. *PPMPs* may vary considerably in complexity, degree of detail, and specific content depending on the size of the *permit holder* and the nature and scope of professional practice. They do not need to duplicate existing documentation and may refer to supporting or more detailed documentation.

The *PPMP* must include a table of contents.

4.1 PPMP Part 1: General Information

4.1.1 PPMP Declaration

The *PPMP* must contain a declaration statement that is signed annually to certify that an internal review of the *PPMP* has been conducted and that the *senior officer*, on behalf of the *permit holder*, approves and accepts responsibility for its content.

The declaration must also contain:

- a statement that the *PPMP* is reviewed annually (at a minimum)
- signatures of the *Responsible Member(s)* and the *senior officer*, and the *date* each signed

If a *Permit to Practice* includes both engineering and geoscience, at least one *Responsible Member* licensed in each profession must sign the declaration.

4.1.2 Revision History

The *PPMP* must include:

- the *date* of each revision
- a numbered revision history
- a summary of the most recent update (or reaffirmation if no updates were required)

4.1.3 Permit Holder Information

The *PPMP* must contain *permit holder* information, including its:

- legal and operating name(s)
- contact information
- *permit number*
- area of practice, which identifies the *disciplines* and types of work the *permit holder* engages in

4.1.4 Objective of the PPMP

The *PPMP* must include an objective specific to the *permit holder's* practice to guide the practice of engineering, geoscience, or both and provide awareness to *licensed professionals* of the *permit holder's* commitment to responsible and ethical practice.

4.1.5 Definitions, Acronyms, Abbreviations

All terms, acronyms, and abbreviations used in the *PPMP* must be defined.

4.1.6 Supporting Documents

The *PPMP* must reference key internal and external documented systems, policies, and procedures used to create and support the *PPMP*, including applicable APEGA practice standards, guidelines, and bulletins.

The *permit holder* is responsible to ensure that all supporting material is current and accessible.

4.2 *PPMP Part 2: Ethical Practice*

4.2.1 Ethical Practice

The *PPMP* must include or reference policies or procedures that ensure ethical practice in the professions. The *permit holder's* code of ethics must be consistent with the Rules of Conduct in the Code of Ethics as defined in the *General Regulation*, which is used by APEGA when investigating a complaint.

Permit holders must ensure the culture they create allows *licensed professionals* to freely and safely bring forward concerns about the practices of engineering and geoscience, particularly related to Rules of Conduct. Refer to APEGA's guideline [Ethical Practice](#) for more information.

4.3 *PPMP Part 3: Professional Business Practice*

4.3.1 Quality Control and Assurance

Quality assurance relates to how a *PWP* is prepared or how a *professional service* is offered. The *PPMP* must include or reference policies, systems, procedures, or processes to ensure adequate oversight of the professional engineering and geoscience work produced. These processes help ensure the professional work is performed competently and with the required due diligence, and that appropriate and sufficient records are produced, maintained, and available as required.

The *PPMP* must include or reference how the *permit holder* will:

- minimize errors and omissions in technical work
- manage errors once discovered
- perform appropriate, independent checks and documentation of concepts, calculations, models, processes, and procedures, such as peer reviews to verify accuracy of work
- ensure adherence to applicable regulations, codes, standards, and other relevant specifications
- ensure the risks and impacts of professional work performed are understood and acceptable

4.3.2 Project Execution

PPMPs must include or reference policies or procedures on how *permit holders* execute engineering- or geoscience-related projects.

For engineering and geoscience projects that deliver *professional services* or have deliverables that require *authentication* and *validation*, *permit holders*, with support from their *Responsible Members* and *licensed professionals*, must ensure:

- the scope of professional work is defined and documented, including assumptions and limitations of work
- appropriate communication plans exist detailing when, what, and how information is communicated to stakeholders throughout the project, especially related to the expectations regarding *professional services*
- all *professional service output* deliverables requiring *authentication* and *validation* are identified throughout the project. Refer to the authentication test described in the practice standard [Authenticating Professional Work Products](#) to determine what *professional services outputs* require *authentication* and *validation*
- appropriate and adequate policies and procedures for change orders and change management are in place and agreed upon to ensure impacts to *professional services* and *PWPs* are considered and authenticated and validated, if required
- appropriate resources are in place to carry out the professional responsibilities for the project, such as field construction and inspections, field reviews, field supervision, and commissioning and start-up plans
- appropriate risk assessments related to the practices of engineering and geoscience are completed and documented

4.4 PPMP Part 4: Authentication and Validation

Permit holders must document authentication and validation processes which must comply with APEGA's practice standard [Authenticating Professional Work Products](#). The *PPMP* must reference or include documentation outlined in the following sections.

4.4.1 Authentication and Validation of Professional Work Products

The *PPMP* must include or reference the nature of the *permit holder's PWPs*, including their format (physical, electronic, or digital). This list must include the types of *PWPs* normally created and used internally by the *permit holder* and may contain internal practice references and aids, as described in Section 4.8.1. The *PPMP* must also include or reference *outputs* from *professional services* that are not usually considered *PWPs* and are therefore not authenticated.

The *PPMP* must include or reference policies or procedures on:

- the *authentication* and *validation* process used by the *permit holder*, including how the *permit holder* will authenticate and validate digital *PWPs* (such as code, software, or modelling and simulation)
- the method used for *authentication* and *validation* (physical, digital, or combination)
- how revisions to previously authenticated *PWPs* are managed, including subsequent *authentication* and *validation*

- *authentication* and *validation* during continuous operation for design revisions, change orders, and field or operational changes
- *authentication* and *validation* of *single-discipline PWP*s and *multi-discipline PWP*s
- *authentication* and *validation* of *PWP*s destined for use outside of Alberta

4.4.2 Stamps – Control and Security

Electronic and physical stamps are the property of APEGA. Physical stamps must be returned upon request. *Permit holders* and *licensed professionals* are responsible to keep their stamps secure.

The *PPMP* must include or reference policies or procedures on:

- control and security over professional and *Permit to Practice* stamps (physical and electronic)
- written delegations of stamp application to others, if not performed by the *licensed professional* or *Responsible Member*

4.5 *PPMP Part 5: Relying on the Work of Others and Outsourcing*

Permit holders must ensure compliance with APEGA's practice standard [Relying on the Work of Others and Outsourcing](#). The *PPMP* must reference or include documentation outlined in the following sections.

4.5.1 Relying on the Work of Others

The *PPMP* must include or reference policies or procedures describing how *licensed professionals* take professional responsibility for *PWP*s created by others who are not licensed by APEGA, as described in the practice standard [Relying on the Work of Others and Outsourcing](#).

4.5.2 Outsourcing to Entities Licensed by APEGA

The *PPMP* must include or reference the *outsourcing* process used when *outsourcing professional services* to another APEGA *licensed professional* or *permit holder*.

Permit holders must document and follow an *outsourcing* process, as defined in the practice standard [Relying on the Work of Others and Outsourcing](#).

4.5.3 Outsourcing to Entities Not Licensed by APEGA

When *permit holders* procure *professional services* from entities not licensed by APEGA, they have additional *due diligence* requirements. An *outsourcing plan* must be created to comply with the practice standard [Relying on the Work of Others and Outsourcing](#).

The *PPMP* must include or reference the process used to create the *outsourcing plan*.

4.6 *PPMP Part 6: Organization and Roles*

The *permit holder* must define clear lines of professional responsibility as outlined in the following sections.

4.6.1 Use of Title

Reserved titles must only be used by *licensed professionals* permitted to practise engineering or geoscience in Alberta.

Part 1, sections 3 and 6 of the *Engineering and Geoscience Professions (EGP) Act* specify that only *licensed professionals* are permitted to use:

- restricted titles, including professional engineer, professional geoscientist, and any abbreviation of those titles
- the word “engineer” or “geoscientist” in combination with any other name, title, description, letter, symbol, or abbreviation that implies an individual, corporation, partnership, or other entity is a professional engineer or professional geoscientist

The *PPMP* must include or reference policies or procedures on how reserved titles are managed to ensure the use of title complies with the *EGP Act*.

Whenever referring to the titles of member-in-training (M.I.T.), engineer-in-training (E.I.T.), or geoscientist-in-training (G.I.T.), the acronyms must be spelled out.

4.6.2 Organizational Structure

All individuals involved in the practice of engineering or geoscience must be included in the organizational structure, including any student engineering or geoscience positions. The organizational structure may be presented in an organizational chart, list, or database.

The *PPMP* must include or reference policies or procedures on organizational structure that identify:

- the decision-making authority used for engineering and geoscience work
- how the lines of technical communication are managed to ensure there are appropriate checks as required across disciplines
- how professional oversight is managed through the ratio of *Responsible Members* to *licensed professionals*, members-in-training, and individuals involved in the practices of engineering and geoscience, with reasonable representation in each area of practice, geographical area, and business unit. APEGA recommends a ratio of one *Responsible Member* to 10 *licensed professionals*, members-in-training, and individuals involved in the practice of engineering or geoscience

Licensed professionals must be aware of who is designated as the *Responsible Member* for their engineering and geoscience work.

4.6.3 Roles

The *PPMP* must include or reference the following information (either in the organizational chart itself or separately, such as in a database, organizational list, or project-specific list) for each individual involved in the practice of engineering or geoscience:

- name (as registered with APEGA)
- APEGA ID number
- position (job or work) title (refer to Section 4.6.1 of this standard)
- work location
- professional designation, if applicable
- area of practice (such as *discipline*)
- practising status

- technical supervisor
- *Responsible Member* status and the *date* they last attended a *Permit to Practice* seminar

4.7 *PPMP Part 7: Management of Professional Resources*

The *PPMP* must include information to ensure the individuals performing professional work for a *permit holder* have the necessary qualifications to effectively accomplish their work. It must describe the *permit holder's* policies and processes supporting the management of professional resources identified in the following sections.

4.7.1 Recruitment and Hiring

The *PPMP* must include or reference policies or procedures to ensure only qualified and competent individuals are hired, and the job postings and descriptions use reserved titles appropriately (Section 4.6.1 of this standard).

4.7.2 Continuing Professional Development

The *PPMP* must include or reference the *permit holder's* process to ensure continued competence of the *licensed professionals* the *permit holder* employs.

All *licensed professionals* must adhere to the mandatory minimum requirements in APEGA's practice standard [Continuing Professional Development](#).

4.7.3 Supervision of Members-in-Training

The *PPMP* must include or reference policies or procedures to ensure members-in-training are supervised and trained appropriately.

Since members-in-training cannot practise independently, the *PPMP* must include or reference policies or procedures to ensure they have appropriate professional supervision for their development as they prepare for licensing with APEGA.

4.8 *PPMP Part 8: Management of Technical Resources*

Professional work must be carried out with appropriate technical resources that are maintained and available to *licensed professionals*. The *PPMP* must describe the available technical resources as follows.

4.8.1 Practice Reference Resources and Aids

The *PPMP* must include or reference policies or procedures that describe the process used to ensure *licensed professionals* have access to current reference resources or materials required to deliver *professional services*. At a minimum, these include applicable:

- statutes, regulations, bylaws, standards, and codes
- technical journals
- data sheets
- *permit holder* codes of practice
- internal standards and guidelines
- manuals (such as equipment and operating manuals)
- internally relied upon resources (such as calculators and programs) that may themselves be *professional work products (PWPs)* used to create *PWPs* or to perform *professional services*

4.8.2 Information Technology

The *PPMP* must include or reference an information technology policy appropriate to its practice to mitigate risk associated with information security. Ensuring the confidentiality and *integrity* of information related to the practices of engineering and geoscience is important to maintain contractual, legal, regulatory, and statutory requirements, and to meet APEGA's Code of Ethics.

4.8.3 Equipment and Tools

The *PPMP* must include or reference policies or procedures that describe the processes used to ensure the equipment, instruments, hardware, software, firmware, or tools used in providing *professional services* are certified, operated, maintained, and calibrated properly.

Calibration must be completed in accordance with specifications to ensure the *integrity* of the system's *outputs*. If applicable, the *PPMP* must include or reference how *licensed professionals* access and use:

- equipment operating procedures (or standard operating procedures) or a catalogue of operating procedures
- maintenance plans or procedures
- methods of and schedules for certification and calibration

4.9 *PPMP Part 9: Professional Document and Work Product Management*

The *PPMP* must address appropriate controls for developing and handling *PWPs* and professional documents. It must define the roles, responsibilities, and authorities of the *senior officer*, *Responsible Members*, *licensed professionals*, staff, and support personnel involved in professional document and *PWP* management.

4.9.1 Originals and Copies

The *PPMP* must include or reference policies or procedures on how original *PWPs*, and copies of them, are marked and controlled as outlined in the practice standard [Authenticating Professional Work Products](#).

4.9.2 Revision Control and Transmittals

The *PPMP* must include or reference policies or procedures for revision control.

4.9.3 Retention

The *PPMP* must include or reference policies or procedures on how *permit holders* will manage document retention, considering applicable regulations, standards, and codes, and the lifespan of the work as outlined in the practice standard [Authenticating Professional Work Products](#).

The *PPMP* must also describe if and how copies of *PWPs* will be provided to employees or contractors in the case of a claim made against them.

4.9.4 Storage and Disposal

The *PPMP* must include or reference policies or procedures on how *permit holders* manage safely storing and disposing of documentation and *PWPs*, including:

- storage format (hard copy, electronic, digital)
- storage security (including access, ownership, and protection from loss, damage, and deterioration)
- retrieval
- disposal

The *permit holder* must ensure compliance with applicable regulations, standards, and codes.

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