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Relying on the Work of Others and Outsourcing



The Association of Professional
Engineers and Geoscientists of Alberta

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Preface

An APEGA professional practice standard describes the level of performance required of *licensed professionals*. Part 8 of the *General Regulation* under Section 59 allows APEGA to publish standards that define the expectations and professional obligations 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.
- A 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.
- A professional practice bulletin provides clarity and guidance on a specific subject related to professional practice. Bulletins remain in force until a practice standard or guideline on the subject is developed, or until the practice bulletin is repealed.

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1.0 OVERVIEW

1.1 Purpose and Scope

This professional practice standard helps APEGA *licensed professionals* comply with statutory requirements when relying on *professional services* provided by others. Specifically, it details the requirements for providing *direct supervision and control* and conducting a *thorough review*, and it specifies professional obligations and *due diligence* requirements that must be undertaken when:

- APEGA *licensed professionals* rely on the *professional services* prepared by others
- APEGA *permit holders* or *licensed professionals* outsource *professional services* to others

Licensed professionals must use *due diligence* and professional judgement to ensure their professional practices conform with this standard. *Permit holders* must document their processes and protocols for managing outsourced *professional services* in their *Professional Practice Management Plans (PPMPs)* to ensure their *outsourcing* practices conform to this standard.

This standard replaces three guidelines:

- *Relying on Work Prepared by Others* v1.1 (March 2013)
- *Determining the Need for Professional Involvement in Outsourced Engineering* v.1.1 (March 2013)
- *Determining the Need for Professional Involvement in Outsourced Geoscience* v.1.1 (March 2013)

1.2 References

The following APEGA documents support this standard. Refer to the latest versions available on the [website](#).

- *The Engineering and Geoscience Professions Act, the General Regulation, and APEGA's bylaws*
- *Authenticating Professional Work Products*
- *Guideline for Ethical Practice*
- *Guideline for Professional Practice*
- *Guideline for Professional Practice Management Plans*

1.3 Definitions

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

APEGA Licensed Professional (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.

Authentication (Physical and Digital)

Authenticating a *professional work product* means an *APEGA 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*.

Code of Ethics

The *Code of Ethics* and its Rules of Conduct are detailed in the *General Regulation*, in the Schedule Code of Ethics.

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 the *licensed professional's* guidance. *Direct supervision and control* includes directing, monitoring, and controlling the engineering and geoscience work performed, including making all the decisions related to the practices of engineering and geoscience.

Direct supervision and control requirements are detailed in Section 3.1.1.

Discipline

A specific field of practice within a profession (e.g., electrical engineering, mechanical engineering, geophysics, geochemistry).

Due Diligence

The level of judgement, care, forethought, and determination a person reasonably uses to avoid harming oneself, other people, property, or the environment.

Integrity (of a Professional Work Product)

The ability to verify that a *professional work product's* information has not changed since *authentication* and that the way it is stored provides the stability and longevity to protect, keep, and retrieve the *professional work product* and its *authentication* information.

Outsourced Entity

The APEGA licensed professional, permit holder, or non-APEGA licensed entity that is providing professional services to an outsourcing entity.

Outsourcing

Procuring professional services from an individual or entity not practising under the outsourcing entity's Permit(s) to Practice. This includes when a sole proprietor procures professional services.

Outsourcing Entity

The APEGA permit holder or licensed professional that is procuring outsourced professional services. An outsourcing entity procures professional services from an outsourced entity.

Outsourcing Plan

A plan for procuring outsourced professional services. Outsourcing plan requirements are detailed in Section 5.1.

Permit Holder

A partnership, association, or corporation that holds a Permit to Practice as defined in Section 48(1)(d) of the General Regulation under the Engineering and Geoscience Professions Act. The Association of Science and Engineering Technology Professionals of Alberta (ASET) permit holders, as defined in Section 86(4) of the Act, are not included.

Permit to Practice

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

Professional Practice Management Plan (PPMP)

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 Service

For APEGA's purposes, professional services are the services that involve the practice of engineering as defined in Section 1(q) of the Engineering and Geoscience Professions Act or the practice of geoscience as defined in Section 1(r) of the Act. The products of professional services are called outputs.

Professional Work Product (PWP)

A professional work product (PWP) is an output of a professional service 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 PWP is any output of professional services with technical information relied upon by others, internally or externally, to make a decision or to take action. A PWP can be physical (e.g., paper, plastic film), electronic (e.g., electronic document, image), or digital (e.g., software, modelling, simulation, or any other computer application that cannot be reproduced in a physical or electronic format). See the authentication test in Section 3.1 of APEGA's *Authenticating Professional Work Products* practice standard when assessing whether an output is a PWP.

Responsible Member

A *Responsible Member* is an APEGA licensed professional who is responsible to provide 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 Proprietor

Within Alberta, a sole proprietorship exists when an individual is the sole owner of a business and makes no legal distinction between the individual and the business (i.e., the business does not exist as a separate entity).

Technical Information

Technical information differentiates a *professional work product* from an output. *Technical information* is an all-encompassing term for any content or data derived from the practices of engineering or geoscience as defined by the *Engineering and Geoscience Professions Act*. *Technical information* includes 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

A *thorough review* is 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 Section 3.1.2.

Validation (Physical and Digital)

Professional work product (PWP) validation 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 to the practice standard *Authenticating Professional Work Products*.

2.0 PROFESSIONAL AND ETHICAL OBLIGATIONS

2.1 Professional Obligations

Sections 3(2), 3(3), 6(2), and 6(3) of the *Engineering and Geoscience Professions Act (EGP Act)* and Sections 49 and 54 of the *General Regulation* require APEGA licensed professionals to authenticate professional work products (PWP), and to only authenticate and take professional responsibility for PWP that were:

- prepared by the *licensed professional*
- prepared under the *licensed professional's* supervision and control, referred to as *direct supervision and control* in this practice standard
- prepared by others but *thoroughly reviewed* by the *licensed professional*

The legislative obligation to stamp (authenticate) exists independently of any contractual agreements between a *permit holder* or *licensed professional* and a client or employer.

PWP development is often contracted to individuals or companies outside Alberta that may not employ APEGA licensed professionals or have APEGA Permits to Practice. Regardless of their place of origin, PWP imported for use in Alberta must be authenticated and validated to conform to the standard *Authenticating Professional Work Products*.

2.1.1 Outsourcing Entity Obligations

Licensed professionals and *permit holders* must establish and foster a healthy professional practice environment that allows *licensed professionals* to fulfil their professional obligations.

For *permit holders*, this includes:

- providing *licensed professionals* enough time and resources to provide *direct supervision and control* or to conduct a *thorough review* before authenticating a PWP
- ensuring *licensed professionals* are not pressured to authenticate PWP they consider to be unfit for their intended purpose
- ensuring *Responsible Members* take necessary steps to mitigate concerns raised by *licensed professionals* about their ability to authenticate PWP

For *licensed professionals*, this includes:

- taking enough time to provide *direct supervision and control* or to conduct a *thorough review* before authenticating a PWP

2.1.2 Outsourced Entity Obligations

Outsourced entities who are APEGA licensed professionals or *permit holders* have the same professional obligations as *outsourcing entities*. They must:

- conform with the requirements of APEGA standards, including this practice standard
- ensure that work they receive from the *outsourcing entity* as part of the outsourced work is fit for use for the intended purpose
- cooperate with the *outsourcing entities* to ensure quality management practices are communicated and understood

2.2 Ethical Obligations

Licensed professionals and permit holders must ensure that their professional practice conforms with the intent of the *EGP Act* and the *General Regulation*, as well as APEGA's bylaws, practice standards, and bulletins. Professional practice of engineering and geoscience must also comply with all other applicable statutes, regulations, bylaws, standards, and codes.

APEGA *licensed professionals and permit holders* must comply with the *Code of Ethics* and its Rules of Conduct. For details, see APEGA's *Guideline for Ethical Practice*.

Consistent with self-regulation, APEGA *licensed professionals and permit holders* must advise APEGA of any entity or individual failing to meet the obligations of the *EGP Act* and the *General Regulation* or failing to meet APEGA practice standard requirements.

As specified in Sections 2(1) and 5(1) of the *EGP Act*, an entity not licensed by APEGA is not permitted to practice engineering and geoscience in Alberta. APEGA *licensed professionals and permit holders* are obliged to advise APEGA of any entity or individual who is not licensed with APEGA and is suspected of practising engineering or geoscience within, or creating *professional work products* destined for use in, the province of Alberta.

3.0 RELYING ON THE WORK OF OTHERS

3.1 Taking Professional Responsibility for Work Prepared by Others

APEGA *licensed professionals* may take professional responsibility by authenticating *professional work products (PWP)* created by others if the work was prepared under their *direct supervision and control* or if they perform a *thorough review*.

3.1.1 Direct Supervision and Control

To comply with the intent of supervision and control in the *Engineering and Geoscience Professions Act* and the *General Regulation*, a *licensed professional* must use *due diligence* that demonstrates:

- active involvement
- responsible decision making

Appropriate documentation of *due diligence* could include individuals involved, mark-ups of the checked work, concerns raised during the course of the work and corrective action taken, completed forms or checklists, emails, or other documentation developed to suit the nature of the work being supervised. The *licensed professionals* should use their professional judgement to determine what documentation will meet the intent of these requirements and how the records should be kept. For a *permit holder*, a process for *direct supervision and control* and record keeping must be described in the *permit holder's Professional Practice Management Plan (PPMP)*.

3.1.1.1 Active Involvement

Licensed professionals must demonstrate active involvement through ongoing interaction and input to the professional engineering or geoscience work created by others. This requires:

- directing, monitoring, and controlling the work activities of others, as required, throughout the lifespan of the work
- establishing and documenting the scope of work, duties, responsibilities, and authorities of the individuals doing the work, including limitations to acting alone
- maintaining regular and ongoing communication with the individuals doing the work
- identifying and rectifying gaps in the competencies of the individuals doing the work
- completing periodic reviews of the work to ensure that resulting *PWPs* are accurate and reliable for the intended purpose, and were prepared following documented quality control and assurance processes. For *permit holders*, these processes are outlined in their *PPMP*

3.1.1.2 Responsibility in Decision Making

Licensed professionals are responsible for all technical engineering or geoscience decisions related to the work. Before making decisions, they must:

- consider and document relevant issues
- provide direction to make technical changes and ensure the work adheres to applicable regulatory requirements, standards, and codes as required
- be available to answer questions and to review and approve decisions made by the individuals doing the work

3.1.2 Thorough Review

To comply with the intent of the *thorough review* in the *Engineering and Geoscience Professions Act (EGP Act)* and the *General Regulation*, a *licensed professional* must use *due diligence* to confirm:

- the reliability, accuracy, and validity of the work
- adherence to applicable regulatory requirements, standards, and codes
- adherence to specified quality control and assurance processes

Appropriate documentation of *due diligence* could include methods used to verify reliability, accuracy, and validity of the work such as sample calculations, test or inspection results, or any other review documentations to suit the nature of the work being reviewed. The *licensed professionals* should use their professional judgement to determine what documentation will meet the intent of the *thorough review* requirements, and how the records should be kept. For *permit holders*, a process for *thorough review* and record keeping must be described in their *PPMP*.

3.1.2.1 Reliability, Accuracy, and Validity of the Work

The reliability, accuracy, and validity of *PWPs* are confirmed by reviewing the:

- scope of the work, including work done by any other entities involved
- relevant design and operational and maintenance conditions, including necessary risk assessments and mitigation strategies
- assumptions, limitations, and expressed caveats
- suitability of the work for its intended purpose and compliance with local environmental conditions
- health, safety, and environmental reviews to ensure that *PWPs* can be safely implemented and used without an adverse impact on people, assets, infrastructure, or the environment
- *integrity* and validity of all work products incorporated into an integrated design or *professional service*, including any work done by subcontractors as applicable to the work
- applicable tasks related to the work, such as design, supporting calculations, interpretations, evaluations, inspections, or examinations
- applicable materials and methods of construction, inspection, investigation, maintenance, or operation of the work, structure, or process, including phased implementation or works part of a larger system
- relevancy and accuracy of applicable tools used in the *PWPs* preparation (including software, hardware, firmware, applications, and other technologies)
- interdisciplinary reviews to ensure that the work prepared by any one *discipline* meets the input requirements for other *disciplines*, if applicable to the work

3.1.2.2 Adherence to Applicable Regulatory Requirements, Standards, and Codes

A *thorough review* must verify compliance with applicable regulatory requirements, standards, and codes.

At a minimum, this includes:

- the *EGP Act* and the *General Regulation*
- APEGA practice standards, bulletins, and guidelines
- contractual requirements to meet project-specific regulatory approvals or permit requirements

3.1.2.3 Adherence to Quality Control and Assurance Processes

A thorough review must verify:

- that PWP's are produced following adequate quality control and assurance processes that are acceptable and suitable for the scope of engineering or geoscience work. For *permit holders*, the quality control and assurance processes are defined in their PPMP
- deliverables are clear, readable, consistent, and complete

3.2 Relying on Other Work Products

When APEGA *licensed professionals* or *permit holders* rely on previously authenticated PWP's, they must use their professional judgement to ensure the PWP's modified or produced are fit for use for their intended purpose. For example, *licensed professionals* must ensure the PWP's align with current regulations, standards, and codes, and that they meet any other applicable requirements.

When APEGA *licensed professionals* or *permit holders* rely on work products that are not authenticated, they must exercise *due diligence*. If the work product meets the definition of a PWP as defined in the standard *Authenticating Professional Work Products*, *licensed professionals* must ensure the work product is authenticated and validated as required. If such work products do not meet the definition of PWP's on their own, *licensed professionals* must exercise *due diligence* to ensure the reliability, accuracy, and validity of such products when they are incorporated into another PWP, and they must authenticate the final, integrated PWP.

3.3 Procuring Professional Services

When *permit holders* procure *professional services* outside of their *Permit(s) to Practice*, or when *sole proprietors* or *licensed professionals* procure *professional services* outside of the proprietorships or their organizations, it is defined as *outsourcing*.

All PWP's produced by *outsourced entities* must be authenticated and validated by APEGA *licensed professionals* to conform to the standard *Authenticating Professional Work Products*.

- when *outsourcing professional services* to APEGA *licensed professionals* or *permit holders*, *outsourcing entities* must exercise *due diligence* by following an *outsourcing process* as described in Section 4.1 of this standard
- when *outsourcing professional services* to an entity not licensed by APEGA, the *outsourcing entity* must develop and execute an *outsourcing plan* for each *professional service* produced. *Outsourcing plan* requirements are described in Section 5.1 of this standard

4.0 OUTSOURCING TO AN APEGA LICENSED PROFESSIONAL OR PERMIT HOLDER

When an APEGA *licensed professional* or *permit holder* outsources work to another APEGA *licensed professional* or *permit holder* not listed under its *Permit(s) to Practice*, the *outsourcing licensed professional* or *permit holder*

can rely on the authenticated *professional work products (PWP)* produced. However, *due diligence* must be undertaken to ensure that the *professional services* procured are produced following an acceptable *outsourcing* process. For *permit holders*, the *outsourcing* process must be defined in the *outsourcing entity's Professional Practice Management (PPMP)*. *Sole proprietors* must define and follow an equivalent *outsourcing* process to conform with the requirements in this section.

4.1 The Outsourcing Process

An *outsourcing* process must include the requirements listed in the following sections.

4.1.1 Scope of Work

The *outsourcing entity* must clearly define the scope of the professional service being outsourced to entities licensed by APEGA.

4.1.2 Selection Process

The *outsourcing entity* must consider and accept the *outsourced entity's*:

- previous experience demonstrating competency in delivering similar *professional services* defined in the scope of work
- professional reputation and licensure status with APEGA and whether there are any outstanding disciplinary orders

4.1.3 Compliance Requirements

All compliance obligations must be communicated and accepted between the *outsourcing entity* and the *outsourced entity*, including:

- relevant statutes, regulations, bylaws, standards, and codes
- project-specific requirements, including regulatory and permitting requirements

4.1.4 Quality Control and Assurance

The *outsourcing entity* must confirm that the *outsourced entity* has the following documented processes that are acceptable and adequate to the *outsourcing entity* and that the processes will be followed:

- quality control and assurance
- *authentication, validation, and outsourcing*, if subsequent *outsourcing* will be done by the *outsourced entity*

For *permit holders*, these can be confirmed by checking appropriate sections in their *PPMP*.

4.1.5 Management of Change

The *outsourcing entity* must confirm that an acceptable, adequate, and documented management of change process related to the specific scope of the outsourced work exists and will be followed. This includes the process for how changes are appropriately authenticated and validated to conform to the practice standard *Authenticating Professional Work Products*, such as changes to *PWPs* that may occur during field implementation.

For *permit holders*, this can be confirmed by checking the appropriate sections of their *PPMP*. The management of change process must also describe how the *outsourced entity* will be engaged in making such changes.

4.1.6 Interface Management

When multiple *outsourced entities* are engaged in a project, an acceptable and adequate interface management process must be in place and followed to mitigate risks.

The interface management process must include:

- the responsibilities of the *outsourcing entity*
- the responsibilities of each *outsourced entity*
- protocols to manage changes in the scope of work of each *outsourced entity* that may affect another *outsourced entity's* work
- the procedure for integrating multiple *PWPs* as required to ensure *authentication* and *validation* conform to the practice standard *Authenticating Professional Work Products*

When a *permit holder* or a *licensed professional* is directly *outsourcing* to multiple *outsourced entities*, the *permit holder* or the *licensed professional* is responsible to develop and manage the interface management process. If the interface management work itself is being *outsourced* to a *permit holder* or *licensed professional*, the *outsourced entity* is responsible to manage the process. However, it is the *outsourcing entity's* responsibility to ensure an acceptable and adequate process exists and is followed, and if applicable, the final integrated *PWPs* are authenticated and validated.

5.0 OUTSOURCING TO AN ENTITY NOT LICENSED BY APEGA

When APEGA *licensed professionals* or *permit holders* *outsource professional services* to an entity not licensed by APEGA, they must exercise *due diligence* and develop and document an *outsourcing plan* for each professional service rendered. For *permit holders*, the process to develop an *outsourcing plan* must be described in their *Professional Practice Management Plan*. APEGA *licensed professionals* and *permit holders* are professionally responsible for the *professional services* imported to Alberta.

In the case of multiple and frequent *professional services* relating to a specific scope of work procured from the same *outsourced entity*, *licensed professionals* or *permit holders* can use their professional judgement to determine whether a separate *outsourcing plan* is required each time. However, it is the *permit holder's* or *licensed professional's* responsibility to ensure all the requirements below are met.

5.1 The Outsourcing Plan

To ensure all requirements are met, APEGA *licensed professionals* and *permit holders* must substantially complete the *outsourcing plan* before *outsourcing professional services*. Each *outsourcing plan* must include the requirements listed in the following sections.

5.1.1 Scope of Work

The *outsourcing plan* must clearly define the scope of the *professional service* being outsourced to entities not licensed by APEGA.

The scope of work must:

- describe the required professional service, including all technical and functional requirements
- describe the scope of work boundaries, including whether the *outsourced entity* is permitted to undertake subsequent *outsourcing* and if so, for what scope of work
- list the *professional work products (PWP)*s that will be created by the *outsourced entity*. All *PWP*s require *authentication* and *validation* to comply with the practice standard *Authenticating Professional Work Products*
- list work products the *outsourced entity* will rely on, including those provided by the *outsourcing entity*, such as preliminary engineering work

5.1.2 Selection Process

The *outsourcing entity* must consider and accept the *outsourced entity*'s:

- previous experience demonstrating competency to provide the *professional services* defined in the scope of work
- professional reputation, including previous incidents resulting from the *professional services* rendered that may have caused concerns to the safety of infrastructure, the environment, or the public
- quality control and assurance processes for performing engineering or geoscience work
- knowledge of Alberta and Canadian statutes and regulations, APEGA standards, and all other applicable statutes, regulations, bylaws, standards, and codes
- plan for the procurement, management, and quality control of any further *outsourcing* or subcontracting of *professional services* related to the defined scope of work

5.1.3 Due Dilligence in Authentication and Validation of PWP

Licensed professionals and *permit holders* must ensure that outsourced *PWP*s are authenticated by APEGA *licensed professionals* and, if applicable, are validated by *Responsible Members*, to conform with the standard *Authenticating Professional Work Products*. This requirement applies under all circumstances, even when the *outsourcing entity* does not have the in-house expertise to authenticate the *PWP*s from the *professional services*. Therefore, *outsourcing entities* must assign *licensed professionals* and *Responsible Members* (if applicable) in the *outsourcing plan* to ensure this requirement is met.

5.1.3.1 Authentication of PWP When the Expertise is Available In-House

If an *outsourcing entity* has in-house expertise in the scope of the outsourced work, they can authenticate and take professional responsibility for the *PWP*s produced by the *outsourced entity*. However, for the *licensed professionals* to do so, they must either provide *direct supervision and control* over the *PWP*s' preparation or conduct a *thorough review* of the *PWP*s. If the *outsourcing entity* is a *permit holder*, the *PWP*s also require *validation* by *Responsible Members*.

5.1.3.2 Authentication of PWPs When the Expertise is Not Available In-House

When an *outsourcing entity* does not have the in-house expertise to take professional responsibility for the *PWPs* produced by an entity not licensed by APEGA, the *outsourcing entity* must provide adequate *due diligence* to ensure that APEGA licensed professionals authenticate and validate (in case of a *permit holder*) the *PWPs* produced.

Outsourcing entities can use one of the following approaches to ensure *PWPs* are authenticated and validated to conform to the practice standard *Authenticating Professional Work Products*:

- have the *outsourced entity* obtain a *Permit to Practice* from APEGA so it can deliver authenticated and validated *PWPs*
- outsource the *authentication* and *validation* of *PWPs* to another entity licensed by APEGA
- provide training to *licensed professionals* working under their *Permit(s) to Practice* so they can authenticate and validate *PWPs*

5.1.4 Compliance Requirements

All compliance obligations must be communicated and accepted between the *outsourcing entity* and the *outsourced entity*. The *outsourcing entity* must confirm the *outsourced entity* is aware of and meets compliance obligations, including:

- relevant statutes, regulations, bylaws, standards, codes, and APEGA practice standards
- project-specific requirements, including regulatory and permit requirements
- local environmental and design conditions and constraints

5.1.5 Quality Control and Assurance

The *outsourcing entity* must document the *due diligence* undertaken to ensure that *PWPs* or *professional services* procured from an entity not licensed by APEGA are created following adequate quality control and assurance processes acceptable to the *outsourcing entity*.

5.1.6 Management of Change

The *outsourcing entity* must ensure that a documented management of change process related to the scope of outsourced work exists that is acceptable and adequate to the *outsourcing entity* and will be followed by the *outsourced entity*. This includes the process for how changes are appropriately authenticated and validated to conform to the practice standard *Authenticating Professional Work Products*, such as changes to *PWPs* that may occur during field implementation. The management of change process must also describe how the *outsourced entity* will be engaged in making such changes.

5.1.7 Interface Management

When multiple *outsourced entities* are engaged in a project, an adequate interface management process must be in place and followed to mitigate risks.

The interface management process must include:

- the responsibilities of the *outsourcing entity*
- the responsibilities of each *outsourced entity*
- protocols to manage changes in the scope of work of each *outsourced entity* that may affect another *outsourced entity's* work
- the procedure for integrating multiple *PWPs* as required to ensure *authentication* and *validation* conform to the practice standard *Authenticating Professional Work Products*

When a *permit holder* or a *licensed professional* is directly *outsourcing* to multiple *outsourced entities*, the *permit holder* or the *licensed professional* is responsible to develop and manage the interface management process. If the interface management work itself is being *outsourced*, that *outsourced entity* is responsible to manage the process. However, it is the *outsourcing entity's* responsibility to ensure such a process exists and is followed, and if applicable, the final integrated *PWPs* are authenticated and validated.