PHASE 2

Advisory Task Force on Corporate Practice

PHASE 2 REPORT TO COUNCIL

Recommended Model for the Regulation of Engineering and Geoscience Organizations

June 5, 2018

ENGINEERS & GEOSCIENTISTS BRITISH COLUMBIA

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ADVISORY TASK FORCE ON CORPORATE PRACTICE

PHASE 2 REPORT – RECOMMENDED MODEL FOR THE REGULATION OF ENGINEERING AND GEOSCIENCE ORGANIZATIONS

June 5, 2018

Dear Engineers and Geoscientists BC Council Members,

I am pleased to report that the Advisory Task Force on Corporate Practice has concluded Phase 2 with unanimous consensus on a recommended model for the regulation of engineering and geoscience organizations in BC.

This report follows the Phase 1 report in which the task force recommended that Engineers and Geoscientists BC pursue regulatory oversight of organizations who practise professional engineering and/or professional geoscience. In accepting the Phase 1 report, Council directed the task force in Phase 2 to further develop options for corporate practice oversight and recommend a model which:

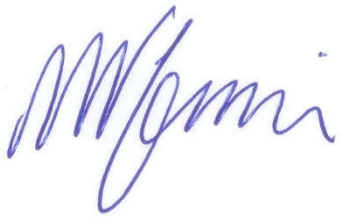
- demonstrates positive impacts to protect the public interest and the environment;
- provides benefit to the regulated organizations and professionals that they employ; and
- is scalable to accommodate the size and nature of organizations and be administratively efficient.

Section 3 of this report outlines recommendations from the task force covering 7 key components. The task force feels that these recommendations are consistent with the direction provided by Council. In summary, the task force recommends implementation of a quality management focused model that is consistent with the APEGA program, yet represents a “made in BC” program that reflects our unique situation.

Section 4 outlines a number of important implementation considerations that the task force hopes will assist the Association in moving forward with a regulatory program.

On behalf of the task force, I look forward to discussing this report with Council at its upcoming meetings.

Sincerely,



Mike V. Currie, P.Eng., FEC

Chair, Advisory Task Force on Corporate Practice

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ADVISORY TASK FORCE ON CORPORATE PRACTICE

PHASE 2 REPORT TO COUNCIL

1 INTRODUCTION

This report documents the Phase 2 recommendations of the Advisory Task Force on Corporate Practice, as appointed by the Engineers and Geoscientists British Columbia Council.

Engineers and Geoscientists British Columbia is the regulatory body that oversees the practice of professional engineering and geoscience in BC. It is the duty of Engineers and Geoscientists BC to uphold and protect the public interest respecting the practice of professional engineering and the practice of professional geoscience (*Engineers and Geoscientists Act*, Section 4.1 (1)(a)). In fall 2015, Engineers and Geoscientists BC Council established an advisory task force of Engineers and Geoscientists BC members to lead a three phase examination of corporate practice and corporate regulation:

- Phase 1 – Strategic consultation and recommendation on whether to pursue regulatory authority for corporate practice;
- Phase 2 – Recommend a model for corporate practice oversight; and
- Phase 3 – Develop a Business Plan.

The terms of reference for the task force are included in Appendix A.

The task force is made up of a diverse cross-section of representatives from the engineering and geoscience sectors, comprising Engineers and Geoscientists BC members from industry, government, manufacturing, and construction. Engineers and Geoscientists BC Council appointed two members of Council to the task force. The Association of Consulting Engineering Companies – BC (ACEC-BC) appointed an official representative to the task force, and several other task force members are employed by ACEC-BC member firms. The task force approached its work based on what would be in the best interest of the public and the professions in BC, not as spokespeople or advocates for the organizations or firms with which task force members are affiliated.

What is Corporate Practice and Corporate Regulation?

The term **corporate** in this document and initiative is used in a broad sense to refer to *all organizations* in both the private and public sectors, including any type of private entity formed for business purposes (e.g., corporations, partnerships) and any type of public entity (e.g., municipalities, crown corporations, ministries). The term **corporate practice** refers to the provision of engineering or geoscience services and products by organizations. The term **corporate regulation** refers to the potential licensing and regulation of organizations that could be authorized under legislation.

Corporate regulation would likely involve the prohibition of organizations practising professional engineering and geoscience in BC unless they have a permit from Engineers and Geoscientists BC, or are a type of organization that is not required to have a permit. For most jurisdictions in Canada, such permits mean that regulated organizations need to comply with the engineering or geoscience legislation of the jurisdiction, and the Code of Ethics and bylaws issued by the regulating authority. Across jurisdictions, there are also a variety of other requirements and responsibilities of permit holders.

Section 2 of this report provides an overview of the task force process to date. Section 3 details the task force recommendations for an approach to corporate regulation. Section 4 provides further considerations and advice for Engineers and Geoscientists BC as it advances the development and implementation of regulatory oversight

over corporate practice. Section 5 provides important background context that informed the task force's recommendations.

It should be emphasized that throughout this report, whenever there is a reference to professional services or the "practice of professional engineering" or the "practice of professional geoscience," these terms are defined in their broadest sense according to the definitions in the *Engineers and Geoscientists Act* (Section 1(1)) and these definitions are repeated below for easy reference.

> ***"practice of professional engineering"*** *means the carrying on of chemical, civil, electrical, forest, geological, mechanical, metallurgical, mining or structural engineering, and other disciplines of engineering that may be designated by the council and for which university engineering programs have been accredited by the Canadian Engineering Accreditation Board or by a body which, in the opinion of the council, is its equivalent, and includes reporting on, designing, or directing the construction of any works that require for their design, or the supervision of their construction, or the supervision of their maintenance, such experience and technical knowledge as are required under this Act for the admission by examination to membership in the association, and, without limitation, includes reporting on, designing or directing the construction of public utilities, industrial works, railways, bridges, highways, canals, harbour works, river improvements, lighthouses, wet docks, dry docks, floating docks, launch ways, marine ways, steam engines, turbines, pumps, internal combustion engines, airships and airplanes, electrical machinery and apparatus, chemical operations, machinery, and works for the development, transmission or application of power, light and heat, grain elevators, municipal works, irrigation works, sewage disposal works, drainage works, incinerators, hydraulic works, and all other engineering works, and all buildings necessary to the proper housing, installation and of the engineering works embraced in this definition*[1]*;*
>
> ***"practice of professional geoscience"*** *means reporting, advising, acquiring, processing, evaluating, interpreting, surveying, sampling or examining related to any activity that Potential Criteria for determining regulatory coverage (a) is directed towards the discovery or development of oil, natural gas, coal, metallic or nonmetallic minerals, precious stones, other natural resources or water, or the investigation of surface or subsurface geological conditions, and (b) requires the professional application of the principles of geology, geophysics or geochemistry;*

The term "engineering and geoscience professionals" is used in this report to include professional engineers, professional geoscientists, engineering licensees, and geoscience licensees.

[1] *"For the purposes of the definition of "practice of professional engineering" […], the performance as a contractor of work designed by a professional engineer, the supervision of construction of work as foreperson or superintendent or as an inspector, or as a roadmaster, trackmaster, bridge or building master, or superintendent of maintenance, is deemed not to be the practice of professional engineering within the meaning of this Act."* (as per Section 1(2) of the Act).

2 TASK FORCE PROCESS

The task force was established in the fall of 2015 to provide a recommendation to Council on whether Engineers and Geoscientists BC should pursue regulatory authority over corporate practice. The Phase 1 process included a detailed review of corporate regulatory models across Canada, and comprehensive engagement with members and stakeholders. The task force completed Phase 1 in April 2017 with the submission of its Phase 1 Recommendations Report to Council, which stated that the task force reached consensus in support of Engineers and Geoscientists BC pursuing regulatory authority over corporate practice.

The main reasons leading to the task force recommendation in favour of corporate regulation are outlined below.

1. **Corporate regulation would enhance protection of the public interest and the environment by improving the practice of professional engineering and professional geoscience.**

   It would:

   - Align organizational responsibilities with individual professional responsibilities, thereby reducing the potential for conflicts of interest between organizational interests and professional practice obligations.
   - Provide confirmation that organizations employ engineering and/or geoscience professionals that are competent for all areas of practice within the organization.
   - Enable Engineers and Geoscientists BC to establish more specific guidelines for professional practice at the corporate level.

2. **Corporate regulation would increase government and public confidence in the self-regulatory system administered by Engineers and Geoscientists BC on behalf of the professions.**

   It would:

   - Be a proactive effort to develop a self-determined approach to corporate regulation that will work for the professions in BC.
   - Implement a regulatory mechanism that is used in most Canadian and US jurisdictions for the engineering and geoscience professions, thereby reducing the perception of a regulatory gap in BC's engineering and geoscience professions.
   - Increase the quality of professional practice performed within regulated organizations.
   - Enable Engineers and Geoscientists BC to investigate and hold engineering and geoscience organizations accountable in the event of a complaint or occurrence of a project incident/failure.
   - Increase consistency with other professional sectors in BC where there has been a trend towards corporate regulation (e.g., law, architecture, land surveying, public accounting, as well as a number of medical disciplines).

3. **Corporate regulation would provide value to organizations and the professionals they employ.**

   It would:

   - Increase awareness and support from organizations on the responsibilities of practising professionals.
   - Increase awareness and support from organizations on the importance of maintaining good standards for professional practice.
   - Establish a mechanism to hold organizations accountable if they are pressuring professionals to act in contravention of the *Act*, Code of Ethics, and Bylaws.
   - Help to increase public confidence and the value that society places on the engineering and geoscience professions.

Phase 2 of the task force process began in fall 2017 with direction from Council to further develop options for corporate practice oversight and recommend a model which:

- demonstrates positive impacts to protect the public interest and the environment;
- provides benefit to the regulated organizations and professionals that they employ; and
- is scalable to accommodate the size and nature of organizations and be administratively efficient.

Council also directed the task force to give further consideration to the types of entities that should be subject to regulatory oversight.

The process undertaken by the task force in Phase 2 to develop a recommended approach for corporate practice oversight included the following steps:

1. identifying the potential components of an approach to corporate regulation and options for each component;
2. surveying members on which options are most supported;
3. conducting further discussions with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) to seek information on the state of its corporate regulatory program;
4. consulting with the Association of Consulting Engineering Companies-BC (ACEC-BC) and reviewing its Phase 2 submission, included as Appendix B; and
5. deliberating on a recommended corporate regulatory model that meets the direction of Council.

Through the survey of task force members, it was recognized that many of the options receiving broad support from task force members were similar to components of either the APEGA regulatory model or the voluntary Organizational Quality Management (OQM) Program. This focused the task force's attention on bringing the best elements of these models together to meet Council's direction.

The survey also demonstrated that task force members unanimously agreed to a set of principles to guide the development of a regulatory model. These principles state that the model should require organizations to:

- maintain effective professional practice standards in accordance with the Engineers and Geoscientists Act, Code of Ethics, and professional practice guidelines;
- ensure that all professional engineering and geoscience work is performed under the direction of an appropriately qualified professional engineer or geoscientist;
- ensure appropriate use of professional engineers/geoscientists' seals within the organization;
- provide appropriate professional development opportunities for engineering and geoscience employees;
- comply with anti-corruption measures; and
- adhere to ethical business practices.

Agreement on these guiding principles and agreement that a BC approach to corporate regulation should build on the best elements of the APEGA and OQM programs provided the foundation for the task force's Phase 2 recommendations. The task force reached consensus on all of its recommendations for corporate regulation at its meeting on May 9, 2018.

3 RECOMMENDATIONS

The task force has identified seven key components to an approach for regulating corporate practice and provides recommendations on each of these components directly below. The reasons for these recommendations along with further advice on their implementation are provided in the numbered sections that follow.

1. **Regulatory Coverage:** The corporate practice program should include **all organizations** in the private and public sectors that provide products and/or services in BC requiring the practice of professional engineering and/or professional geoscience.
    a. **"Organizations"** includes all corporations, partnerships, sole proprietors and other public and private entities that provide products and/or services in BC requiring the practice of professional engineering and/or geoscience.
    b. With respect to sole proprietors (i.e. unincorporated sole practitioners), the Association should conduct additional consultation on whether corporate regulatory requirements and fees would differ from other regulated organizations.

2. **Regulatory Model:** A corporate regulatory model should be based on three pillars:

    a. **Ethics**: Regulated organizations must:
        i. Provide an environment that ensures the practice of professional engineering and geoscience is conducted in accordance with the Code of Ethics for Engineers and Geoscientists BC.
        ii. Adhere to the association's Professional Practice Guidelines on human rights and diversity.
        iii. Adhere to ethical business practices addressing corruption, conflict of interest, and contractual matters.

    b. **Quality Management:** Regulated organizations must have documented policies and procedures consistent with the quality management requirements in the *Engineers and Geoscientists Act* and Bylaws that apply to their area(s) of practice of professional engineering and geoscience.

    c. **Professional Development**: Regulated organizations must have a documented professional development policy for engineering and geoscience employees that is appropriate for the professional products and/or services provided by the organization.

3. **Documentation:** All regulated organizations must have a Professional Practice Management Plan (PPMP) in place and available for review upon request by Engineers and Geoscientists BC. The PPMP will document the organization's policies and procedures with respect to addressing the three pillars of ethics, quality management and professional development.

4. **Compliance and Enforcement:** A range of mechanisms need to be available to the association to deliver effective and proportional compliance and enforcement of corporate practice requirements, including audits, production of documents, public notices, fines, negotiated consent orders, investigations, public complaint process, and practice restrictions. Audits of regulated organizations should be performed on a regular basis to support regulated organizations in meeting professional responsibilities.

5. **Cost-Recovery:** The corporate practice program should be funded through a cost-recovery model that is scaled in proportion to the number of engineering and geoscience professionals that are employed by an organization and that are licensed to practice in BC. This would include reviewing the cost-recovery funding formula on a periodic basis.

6. **Legislation:** The current provisions in the *Engineers and Geoscientists Act* with respect to Certificates of Authorization should be revised as appropriate to reflect the recommendations above. The term "Certificate of Authorization" should be replaced with "Permit to Practice."

7. **Organizational Quality Management Program:** The Organizational Quality Management Program should continue as a value-added and voluntary certification program. To ensure efficiency between the OQM program and the corporate regulatory program, the task force recommends the following:

   a. Corporate regulatory fees for OQM-certified organizations are to be reduced based on a cost-recovery model that considers cost efficiencies for administering the OQM program and the corporate regulatory program.

   b. An OQM certified organization can refer to the quality management policies and procedures established for OQM certification to meet the quality management requirements of its Professional Practice Management Plan.

   c. Audits for OQM and corporate regulation must be done in an integrated manner.

3.1 Regulatory Coverage

The task force recommends regulation of all organizations in the private and public sectors that provide products and/or services in BC requiring the practice of professional engineering and/or professional geoscience. "Organizations" is defined broadly here to be any corporation, partnership, sole proprietor (i.e. unincorporated sole practitioner) or other public or private entity. This definition of regulatory coverage would **exclude organizations** that employ engineering and/or geoscience professionals but do not practise professional engineering or geoscience and would also exclude non-practising engineering and geoscience professionals that are self-employed.

Terminology Note – Sole Proprietors / Sole Practitioners

The term "sole practitioners" is used in this report to refer to any professional engineer or professional geoscientist that practises on their own. Sole practitioners can either be incorporated or unincorporated. When sole practitioners are unincorporated, they are considered a "sole proprietor", meaning there is no legal distinction between the individual and the business entity. When sole practitioners are incorporated, they are considered a "corporation", meaning their business is a separate legal entity from the individual practitioner.

The task force believes that this position is consistent with the provisions of the *Engineers and Geoscientists Act.* Since the *Act* has no exemptions for individuals that practise professional engineering and geoscience, the *Act* should not have exemptions for organizations that practise professional engineering and geoscience. Furthermore, it is in the public interest for all organizations that practise professional engineering and geoscience to be subject to regulatory oversight by Engineers and Geoscientists BC for the following reasons:

- All organizations that practise professional engineering and geoscience need to have responsibilities that are aligned with the responsibilities of engineering and geoscience professionals that work in those organizations.
- All organizations that practise professional engineering and geoscience must be treated in a consistent manner to avoid different standards of professional practice within BC.
- No other regulatory process exists that requires such organizations to adhere to the Associationassociation's Code of Ethics and quality management requirements in the *Engineers and Geoscientists Act* and Bylaws.
- Evidence of the higher number of public complaints and disciplinary cases for sole practitioners in BC and other jurisdictions demonstrates that additional oversight over these types of entities is necessary to uphold professional practice standards and protect the public interest and the environment.

Sole Practitioners

The task force discussed a range of options for addressing the higher risk of sole practitioners, from including sole practitioners in the corporate regulatory program with the same requirements as all other regulated organizations to excluding them entirely. The task force heard from the association that a key challenge with the current system is the lack of authority for the association to require the identification of sole practitioners so that these professionals can be focused on for additional oversight or support (e.g., through practice reviews). By requiring sole practitioners that provide professional services in BC to register with the association, corporate regulation will address this key issue in a way that is not possible through the regulatory framework for individual professionals.

While all task force members voted in support of treating all corporations the same, regardless of how many professionals are part of the corporation, the task force had mixed opinions on the regulatory requirements for unincorporated sole practitioners (i.e. sole proprietors) beyond the requirement to register with the association as a business entity. The task force expects that a key concern of sole proprietors will be that they are being subject to 'double regulation' as there is no legal distinction between the individual and the business entity. The task force believes these concerns can be addressed through developing a corporate regulatory program that is complementary to the individual professional regulatory program and through setting corporate regulatory fees for sole proprietors at zero or very low to reflect that they are already paying individual membership fees. To ensure a fair, effective and efficient regulatory framework is in place, the task force recommends additional consultation with members on the requirements and fees for sole proprietors within a corporate regulatory program.

Additional discussion on sole practitioners and sole proprietors is included in Section 4.4 of this report.

Implementation Challenges for Regulatory Coverage

The task force recognizes two challenges that would arise in regulating all organizations in the private and public sectors that provide products and/or services in BC requiring the practice of professional engineering and geoscience:

(1) There are grey areas in what activities fall under the definition of "providing products and/or services in BC requiring the practice of professional engineering and/or professional geoscience".

(2) There may be legal barriers to the association having legal authority over certain entities, for instance federal government and First Nations entities.

To address the first challenge, the task force suggests that a transparent process is developed and administered by the association to review whether an organization is providing products and/or services in BC requiring the practice of professional engineering and/or professional geoscience as defined by the *Act*. The association should also maintain up to date guidance on which types of organizations are covered and not covered and maintain a public list of all regulated organizations. Examples of types of organizations that may be in a grey area include:

- pure research and development companies that are working on technologies or products that require the practice of professional engineering or geoscience but that are not yet making those technologies or products available to the BC market;
- research groups at universities; and
- organizations that are developing products or instruments of service in BC requiring the practice of professional engineering or geoscience but that are selling those products or instruments of service only to customers outside of BC.

To address the second challenge, the task force suggests that in the process to revise the *Act,* Engineers and Geoscientists BC should work with federal and provincial governments to clarify any legal barriers to the regulation of public entities. For any public entities that practise professional engineering and/or geoscience but are excluded from regulatory oversight, Engineers and Geoscientists BC should encourage voluntary

participation in the corporate regulatory program to demonstrate that public entities are holding their practice of professional engineering and geoscience to the same standard as required by regulation.

3.2 Regulatory Model

At the initial stages of Phase 2, the task force agreed to a set of principles to guide the development of a corporate regulatory model. These principles state that the model should require regulated organizations to:

- maintain effective professional practice standards in accordance with the *Engineers and Geoscientists Act*, Code of Ethics, and professional practice guidelines;
- ensure that all professional engineering and geoscience work is performed under the direction of an appropriately qualified professional engineer or geoscientist;
- ensure appropriate use of professional engineers/geoscientists' seals within the organization;
- provide appropriate professional development opportunities for engineering and geoscience employees;
- comply with anti-corruption measures; and
- adhere to ethical business practices.

The guiding principles form the basis for a regulatory model that is supported by three pillars:

1. ethics;
2. quality management; and
3. professional development.

The task force's recommendations with respect to these three pillars follow.

3.2.1 Ethics

Engineering and geoscience professionals are required to adhere to the Code of Ethics (reproduced in the box below) to fulfill their duty to the public, to the profession and to fellow members. The organizations in which professional members work have an important role in supporting and enabling members to meet their ethical commitments. To align the responsibilities of regulated organizations with the ethical obligations of individual professionals, **the task force recommends that regulated organizations must:**

- **Provide an environment that ensures the practice of professional engineering and geoscience is conducted in accordance with the Code of Ethics for Engineers and Geoscientists BC.**
- **Adhere to the association's Professional Practice Guidelines on human rights and diversity.**
- **Adhere to ethical business practices addressing corruption, conflict of interest, and contractual matters.**

To implement this recommendation, the task force suggests that the association develop some form of organizational commitment that could be included in the registration documentation and could be addressed in corporate practice guidelines.

Other topics related to ethics in business practices on which Engineers and Geoscientists BC may provide direction to regulated organizations could include:

- consultant selection (with the intent that cost competition among consulting engineers and geoscientists does not lead to increased risk to the client and public);
- contractual matters;
- intellectual property rights, ownership of work products, and instruments of service; and
- professional liability insurance.

The task force recognizes that the association may be limited in its authority to fully mandate requirements in the above business practice areas. However, the task force thinks the association can influence industry standards and expectations through issuing and advocating for best practices with respect to these business areas as they relate to ethics and quality in the practice of professional engineering and geoscience.

Code of Ethics

The purpose of the Code of Ethics is to give general statements of the principles of ethical conduct in order that members and licensees may fulfill their duty to the public, to the profession and their fellow members and licensees.

Members and licensees shall act at all times with fairness, courtesy and good faith to their associates, employers, employees and clients, and with fidelity to the public needs. They shall uphold the values of truth, honesty and trustworthiness and safeguard human life and welfare and the environment. In keeping with these basic tenets, members and licensees shall:

(1) Hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace;

(2) Undertake and accept responsibility for professional assignments only when qualified by training or experience;

(3) Provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction;

(4) Act as faithful agents of their clients or employers, maintain confidentiality and avoid a conflict of interest but, where such conflict arises, fully disclose the circumstances without delay to the employer or client;

(5) Uphold the principle of appropriate and adequate compensation for the performance of engineering and geoscience work;

(6) Keep themselves informed in order to maintain their competence, strive to advance the body of knowledge within which they practice and provide opportunities for the professional development of their associates;

(7) Conduct themselves with fairness, courtesy and good faith towards clients, colleagues and others, give credit where it is due and accept, as well as give, honest and fair professional comment;

(8) Present clearly to employers and clients the possible consequences if professional decisions or judgments are overruled or disregarded;

(9) Report to their association or other appropriate agencies any hazardous, illegal or unethical professional decisions or practices by engineers, geoscientists, or others; and

(10) Extend public knowledge and appreciation of engineering and geoscience and protect the profession from misrepresentation and misunderstanding.

3.2.2 Quality Management

Engineering and geoscience professionals must follow quality management requirements of the *Engineers and Geoscientists Act* and Bylaws. To align the responsibilities of regulated organizations with the quality management responsibilities of individual professionals, **the task force recommends that regulated organizations must have documented policies and procedures consistent with the quality management requirements in the *Engineers and Geoscientists Act* and Bylaws that apply to their area(s) of practice of professional engineering and geoscience.**

To make this requirement administratively efficient and scalable to the size and nature of an organization, the task force recommends that any quality management system can be referenced as long as it meets the quality management requirements of the *Engineers and Geoscientists Act* and Bylaws. These are:

- direct supervision;
- documented checks of engineering and geoscience work;
- documented independent review of structural designs;
- documented field reviews during implementation or construction;
- retention of project documentation; and
- use of seal.

This approach would allow organizations to reference quality management systems such as ISO and OQM to meet the above quality management requirements in whole or in part (supplementing if necessary to fill any gaps). This approach would also allow organizations in niche fields where third-party quality management systems are not available to identify their own quality management procedures consistent with the quality management requirements in the *Engineers and Geoscientists Act* and Bylaws.

3.2.3 Professional Development

The Code of Ethics requires engineering and geoscience professionals to "keep themselves informed in order to maintain their competence, strive to advance the body of knowledge within which they practise and provide opportunities for the professional development of their associates". The culture and practices of an organization can have a significant influence on a professional's ability to fulfil this requirement.

Regulated organizations need to ensure that their organizational culture and practices support and do not impede professionals in meeting this requirement to maintain competence in their field of practice. To this end, **the task force recommends that regulated organizations must have a documented professional development policy for engineering and geoscience employees that is appropriate for the types of products and/or services provided by the organization.** Regulated organizations should support professionals in implementing this policy. The appropriate means of support are to be determined by the regulated organization. Possible ways that regulated organizations could provide this support include: fostering a culture of professional development within the organization, and providing time off and/or funds to attend courses.

The task force supports this approach because it means that professional development activities will be scalable to the nature of an organization's practise of professional engineering and geoscience. Organizations will be able to take a risk management approach to identifying the necessary ethical and technical professional development activities that best support their professionals in maintaining competency in their relevant areas of practice. For instance, a professional engineer who is responsible for a repetitive field review function could have a different need for professional development than a professional engineer doing complex structural design for high rise buildings.

3.3 Documentation

Professional requirements around ethics, quality management and professional development need to be in the forefront of any organization that practises professional engineering and/or geoscience. To reinforce understanding of professional requirements and to facilitate training and development in those requirements, **the task force recommends that all regulated organizations must have a Professional Practice Management Plan (PPMP) in place and available for review upon request by Engineers and Geoscientists BC.** The PPMP will document the organization's policies and procedures with respect to addressing the three pillars of ethics, quality management and professional development. In many situations, such a Plan will codify and clearly communicate what these organizations already do in support of professional practice.

A PPMP is a regulatory tool used by APEGA to reinforce professional requirements in organizations. APEGA has advised the task force that PPMPs have proven to be effective in gaining a higher level of understanding among organizations on their professional requirements. In the event of an issue or complaint, APEGA reviews an

organization's PPMP with the regulated organization and discusses methods for resolving the issue. This review process often serves to resolve an issue with no further action needed on the part of APEGA.

The task force recognizes that the preparation of a PPMP will require some effort on the part of regulated organizations, but believes this effort is necessary for ensuring that an organization understands its responsibilities in relation to the *Act,* Bylaws, and Code of Ethics. The task force expects that PPMPs will vary considerably in complexity and degree of detail depending on the size and nature of the professional organization.

The task force believes that there needs to be a balance between ensuring that organizations understand their professional responsibilities and the administrative efficiency of the corporate practice regulatory program. With this balance in mind, the task force recommends the following implementation approach for PPMPs:

- Regulated organizations would be given one year to complete a PPMP once corporate regulation is in place, and the association provides training and guidance to facilitate development of PPMPs.
- Regulated organizations could refer to third-party quality management systems (e.g., ISO, OQM) in the quality management section of the PPMP if these systems help meet the quality management requirements in the association's *Act* and Bylaws (supplemental provisions may be necessary).
- Regulated organizations must produce their PPMP for review upon request by the association in the event of an audit, complaint or any other relevant circumstance.
- The association would audit the PPMPs of regulated organizations on a regular basis. This audit would serve as a proactive compliance mechanism to verify that regulated organizations have appropriate policies and procedures to meet the intent of professional responsibilities as prescribed by the *Act*, Bylaws, and Code of Ethics and their practices meet the provisions of their PPMP.
- The PPMP template for Engineers and Geoscientists BC would be aligned with APEGA's PPMP template to avoid duplication of effort for organizations that practise in both BC and AB. The task force thinks this will be possible since APEGA's PPMP also addresses the three pillars of ethics, quality management and professional development.

3.4 Compliance and Enforcement

A range of mechanisms need to be available to the association to deliver effective and proportional compliance and enforcement of corporate practice requirements, including audits, production of documents, public notices, fines, negotiated consent orders, investigations, public complaint process, and practice restrictions. Audits of regulated organizations should be done on a regular basis to support regulated organizations in meeting professional responsibilities.

Generally speaking, there are two types of compliance and enforcement mechanisms – reactive and proactive. Reactive mechanisms depend on complaints and investigations regarding events that have already happened. They serve to make an example of poor conduct to encourage better conduct in the future but do little to rectify an event that happened. Proactive mechanisms, such as audits, aim at preventing problems from occurring due to poor practice or misconduct. Audits can identify areas of non-compliance and identify measures to bring an organization into compliance. Audits *do not* result in disciplinary actions. Rather, they serve to support regulated organizations in meeting professional responsibilities. The task force thinks the association needs both reactive and proactive enforcement mechanisms for the corporate regulatory program, and emphasizes the need for proportional disciplinary measures. For example, minor non-compliance issues should be resolved through demonstrated efforts by a regulated organization to improve and come into compliance, while serious cases of misconduct and negligence would involve disciplinary measures such as fines, public notices, and practice restrictions commensurate with the specific situation.

The details of an auditing process should be determined in the implementation phase. The task force expects that the BC corporate regulatory program would use a similar auditing process as is used by APEGA and the OQM program. APEGA's audit process is focused on reviewing a regulated organization's PPMP, ensuring that it contains the appropriate policies and procedures for an organization's areas of practice, and then verifying that

policies and procedures are being implemented. The OQM program has a similar auditing process focused on reviewing the implementation of quality management policies and procedures.

3.5 Cost Recovery

The establishment of fees to support the corporate practice program must be fair and transparent. **The task force recommends fees be determined through a cost-recovery model that is scaled in proportion to the number of engineering and geoscience professionals that are employed by an organization and that are licensed to practise in BC.** The OQM model uses a similar model for determining its fees and it is widely supported by OQM certified organizations.[2] The task force also recommends that the cost-recovery funding formula is reviewed on a periodic basis.

3.6 Legislation

The current provisions in the *Engineers and Geoscientists Act* with respect to Certificates of Authorization (Section 14 of the *Act*) should be revised as appropriate to reflect the task force recommendations and the implementation plan developed by the association. The term "Certificate of Authorization" should be replaced with "Permit to Practice" to align terminology with other jurisdictions where BC organizations commonly practice.

In its submission to the task force, ACEC-BC stated that to ensure clarity and consistency, the requirement to regulate organizations that practise professional engineering and geoscience beyond consulting firms should be embedded in legislation. The task force notes that pertinent legislation in other provinces typically includes the definition of what entities are covered directly in the legislation and so it should be possible to meet this request by ACEC-BC.

3.7 Organizational Quality Management Program

Council requested the task force to develop a model that would be complementary to the OQM Program. The key difference between the OQM program and the recommended corporate regulatory model is that the OQM program focuses solely on quality management and includes a certification process whereby the Association reviews the quality management policies and procedures of organizations and certifies that they meet the intent of the Association's organizational quality management guidelines. The corporate regulatory model recommended by the task force covers a broader range of corporate practice issues such as ethics, quality management, and professional development, and does not include a certification process for quality management.

The task force thinks the Organizational Quality Management Program should continue as a value-added and voluntary certification program. To ensure efficiency between the OQM program and the corporate regulatory program, the task force recommends the following:

- Corporate regulatory fees for OQM-certified organizations are to be reduced based on a cost-recovery model that considers cost efficiencies for administering the OQM program and the corporate regulatory program.
- OQM certified organizations can refer to the quality management policies and procedures established for their OQM certification to meet the quality management requirements of its Professional Practice Management Plan.
- Audits for OQM and corporate regulation must be done in an integrated manner.

[2] The OQM funding formula is *200*square root of N* where *N* is the number of engineering and geoscience professionals registered in BC that are employed by the organization and work in the organization's BC's offices.

4 IMPLEMENTATION CONSIDERATIONS

Over the course of Phase 2 deliberations, the task force has identified topics related to a corporate practice regulatory program that could not be addressed in the Phase 2 timeframe but should be subject to further work by the association. These topics include:

- the governance structure for the corporate regulatory program (oversight by a regulatory board or a regulatory officer);
- development of the necessary registration process and forms to implement the recommended model;
- development of a template for Professional Practice Management Plans (PPMPs) and appropriate guidance to support regulated organizations in developing PPMPs;
- the treatment of unincorporated sole practitioners (i.e. sole proprietors) within a corporate regulatory program;
- procurement of professional engineering and geoscience services and issues related to meeting professional requirements for ethics and quality management in the context of low cost competition;
- performance indicators for a corporate regulatory program; and
- ongoing communication with members, regulated organizations and other stakeholders.

The task force provides further discussion on these topics in the sections below and asks the association to further consider these matters and engage the task force and/or membership as appropriate to seek advice where necessary.

4.1 Governance Structure for Corporate Practice Regulatory Program

The task force considered two options for governance of the corporate practice regulatory program:

1. Council appoints a Regulatory Board to oversee the regulation of corporate practice. The Regulatory Board would include members representing a wide range of organization types and report to the Chief Regulatory Officer.

2. The Chief Regulatory Officer oversees the regulation of corporate practice.

The task force had mixed support for these options. Those who supported Option 1 thought that it would be valuable to have input from many perspectives and that the corporate regulatory program is too important for it to be overseen by just one individual. Those who supported Option 2 felt that a further layer of oversight is not necessary for the program to work as intended and thought the CRO working with Council through regular channels would be sufficient. Under either option the governance of the corporate regulatory program needs to be incorporated into Engineers & Geoscientist BC's overall governance model.

4.2 Corporate Practice Registration Process and Forms

If the provincial government decides to amend the *Act* to give the association the authority to regulate organizations, the first step of implementing corporate regulation will be for all organizations that practise professional engineering and geoscience to register with the association. Common registration requirements of other corporate regulatory programs across Canada with respect to professional engineering and geoscience are that organizations provide the following:

- Declaration by a **Chief Operating Officer (or other designated senior officer)**. Declaration reads: "I [name] occupy the position of [title] in the applicant's organization and in that position have authority and undertake to maintain an organization in which the practice of the professions indicated above **can be conducted** in accordance with requirements described in the *Engineers and Geoscientists Act,* Bylaws, and Code of Ethics."

- Declaration of **Responsible Member**(s) that reads: "I [legal name],[prof. designation], occupy the position of [job title] at [legal name of Organization] declare that I am a professional member or licensee of [association name] and as such undertake to provide responsible direction and personal supervision to that portion of the applicant's professional practice performed by the organization unit described below [Describe what aspect(s) of professional practice you are taking responsibility for)].
- Identification of the **areas of professional practice** within the organization.
- Identification of the **number of engineering and geoscience professionals employed** by the organization who are licensed to practise in BC (both resident in BC and non-resident) at the time of registration.

Chief Operating Officer and Responsible Member

The task force supports the requirement in many other jurisdictions to have a Chief Operating Officer (COO) (or other designated senior officer) declare that they will maintain an organization in which the practice of the professions can be conducted in accordance with requirements of the *Act,* Bylaws, and Code of Ethics. The COO does not have to be a professional engineer or professional geoscientist, but must have legal decision - making authority for the organization.

The task force supports the concept of a Responsible Member who must be a professional engineer or professional geoscientist to:

- support the COO in meeting the requirements of corporate regulation;
- provide responsible direction and personal supervision to the organization's professional practice; and
- serve as a point of contact with the association.

For large or complex organizations, it may be appropriate to have more than one responsible member for different areas of practice.

Identification of the Number of Professionals Employed

Identification of the number of professionals employed by an organization, and who practise in BC (resident or non-resident), is a necessary step to implementing the recommended approach to setting fees that are scaled to the size of an organization's professional practice in BC. Some task force members raised concerns that identifying all professionals employed may be an onerous process for larger organizations and questioned whether this requirement would be sufficiently value-added to justify the effort. One suggestion to address this is to allow organizations with more than 10 professionals that practise in BC to identify the range of professionals that they employ, for instance, 10-20, 21-30, 31-50, 51-100 and then have a fee associated with each range.

4.3 PPMP Template and Guidance

A significant number of organizations practise in both BC and Alberta. Given that the recommended corporate regulatory program for BC is founded on similar principles as the corporate regulatory program administered by APEGA, a PPMP template should be prepared that parallels the existing program in Alberta. Over time, the BC and Alberta associations should work cooperatively to update such template(s) in tandem.

4.4 Sole Practitioners

The Phase 1 task force Recommendations Report stated that the "fundamental issue underlying corporate regulation is that there are two main influences on the quality of professional practice – the influence of the individual practicing professional and the influence of the organization within which that individual carries out their practice". With this understanding of why regulation of corporate practice is needed, a key question that the task force faced was "is there an organizational influence on a sole practitioner's professional practice and therefore should a sole practitioner be subject to corporate regulation?"

The Phase 1 Report recommended that incorporated sole practitioners be subject to corporate regulation but that "unincorporated sole practitioners (i.e., sole proprietors) who provide consulting professional engineering and geoscience services should not be subject to corporate regulation, as they are regulated as individuals under the existing *Act* and are also subject to Engineers and Geoscientists BC's Practice Review Program."

The task force made the distinction between incorporated and unincorporated sole practitioners for the following reasons:

- When individual practitioners incorporate, their businesses become separate legal entities from themselves. For example, contracts are signed between a client and the corporation. Becoming a corporation, i.e. becoming a separate legal entity, is a logical 'line in the sand' to draw when organizational influence on professional practice begins.
- An incorporated sole practitioner can easily expand to include more professionals, members-in-training or other employees and thus may fluctuate between being an incorporated sole practitioner and being a small corporation. Regulation of all corporations, regardless of how many people are employed, will be simpler and more effective from an enforcement perspective.
- An incorporated sole practitioner has a corporate name and has the optics of being the same as a small company.

In Alberta, partnerships, corporations and other such entities which practise engineering or geoscience require a Permit to Practice. This means that incorporated sole practitioners that provide consulting professional engineering and geoscience services must obtain a Permit to Practice, but unincorporated sole practitioners (i.e. sole proprietors) do not need to obtain a Permit to Practice. APEGA stated that a key reason for this distinction was that an incorporated sole practitioner business is a separate legal entity from the unincorporated sole practitioner. In the Phase 1 jurisdictional review conducted by the task force, at least five other Canadian jurisdictions were identified that exclude unincorporated sole practitioners (i.e. sole proprietors) from requiring a certificate of authorization or permit to practice: (Saskatchewan, Manitoba, New Brunswick, NWT, Nunavut). The corporate regulatory programs in Ontario, Yukon and Newfoundland regulate unincorporated sole practitioners. For example, Ontario's *Professional Engineers Act* states "No person shall offer to the public or engage in the business of providing to the public services that are within the practice of professional engineering except under and in accordance with a certificate of authorization."

Since April 2017, the following has occurred to justify reconsideration of the task force's Phase 1 recommendation to regulate incorporated sole practitioners but not unincorporated sole practitioners:

- The Director of Legislation, Ethics and Compliance at Engineers and Geoscientists of BC questioned the rationale for treating incorporated and unincorporated sole practitioners differently, stating that sole practitioners incorporate for tax and liability purposes and that the risk to public safety is no different between unincorporated sole practitioners and incorporated sole practitioners.
- APEGA is now moving toward regulating unincorporated as well as incorporated sole practitioners for the following reasons:
    - APEGA has observed that sole practitioners, regardless of their status of incorporated or unincorporated, tend to have a practice that is higher risk to public safety (since sole practitioners tend to practise with relatively little interaction with other professionals in their field, they tend to be less exposed to new information relevant to their practice and have less checking, review or scrutiny of their work); and
    - exempting unincorporated sole practitioner businesses from needing Permits to Practice means there is an incentive for sole practitioners to remain or become unincorporated to avoid corporate regulation.
- The Director of Professional Practice at Engineers and Geoscientists of BC has provided the following information to the task force:
    - the experience in BC is that sole practitioners pose a higher risk to public safety for similar reasons as described by APEGA above; and

- the Practice Review program is a tool by which the association can proactively review the practise of individual professionals, however, the application of this tool to higher risk sole practitioners is hampered because the association does not currently have the authority to require sole practitioners that provide professional services to identify themselves to the association.

The issue of how to treat sole practitioners within a corporate regulatory model of engineering and geoscience organizations is challenging in part because there are actually two problems or risks to the public interest that are attempting to be managed:

(1) the potential for conflict of interest between a business or organization's interests and the requirements of professional practice; and

(2) the heightened public safety risk of sole practitioners (unincorporated or incorporated) who tend to practise in isolation with little input or review by others in their area of practice.

In making its recommendation on regulatory coverage, the task force considered both of these problems and the gaps and issues with the current regulatory framework for addressing these problems. The task force has recommended to treat all corporations the same in regard to regulatory requirements and to scale fees in proportion to the number of engineering and geoscience professionals within an organization that are licensed to practise in BC. With respect to unincorporated sole practitioners (i.e. sole proprietors), the task force recommends that they be included in the corporate regulatory program, but that additional consultation should be conducted to determine if regulatory requirements and fees for this group should differ from other regulated organizations. The intent of this consultation is to examine the regulatory framework for individual professionals and the proposed corporate regulatory program to determine what changes need to be made to ensure an effective and efficient regulatory framework is in place.

4.5 Procurement of Professional Engineering and Geoscience Services

Throughout the task force's review of corporate practice, ACEC-BC has consistently raised the issue of meeting professional requirements for ethics and quality management in an environment where clients seem to be increasingly prioritizing the lowest cost proposal rather than the best qualified proposal. Corporate regulation of organizations providing professional engineering and geoscience services will help to address this issue, but the task force thinks broader leadership from the association on this issue is warranted. Although this issue may be perceived as only a cost competition pricing issue, it directly relates to quality management of how services are provided as well as a number of elements in the Code of Ethics.

In particular, ACEC-BC is interested in solutions that put requirements on the clients that are procuring professional engineering and geoscience services, for instance, qualification-based selection (QBS) processes. In its submission to the task force, ACEC-BC states that QBS is the most appropriate method for selecting a design professional as it not only ensures the most qualified professional is selected but it also ensures clarity about scope, thereby enabling that the appropriate technical facilities and resources are maintained, communicated, and available—commensurate with the professional services being provided.

In 2013, APEGA published a guideline for selecting engineering and geoscience consultants that puts forward a qualification based selection process.[3] The guideline states:

> *The primary objective of selecting professional consulting services is to retain the right Consultant to provide the right services for the right reasons for the right budget. To achieve these objectives, Clients need to use a proven selection method. The acquisition of most commodities in industry uses a tendering process, with the objective of identifying the vendor with the lowest price for the commodity. Consulting services are not commodities and their*

[3] https://www.apega.ca/assets/PDFs/consultants.pdf

procurement cannot effectively be obtained in using this manner. Therefore, APEGA recommends Consultant selection based upon qualifications.

This APEGA guideline provides advice to clients. APEGA does not have the authority to regulate clients that procure professional engineering and geoscience services. The guideline states: "Although APEGA supports the notion of fair compensation commensurate with the level of professional services provided, the Consultant and Client are free to reach their own agreements on what 'fair' means (including pro bono)."

Leadership from the association to address this issue could involve the following types of activities:

- development and promotion of a BC guideline for the selection of consulting engineering and geoscience professionals;
- investigation into the extent and nature of issues in BC caused by competitive processes driven mostly by cost rather than qualifications;
- engagement of APEGA and other regulatory associations on effective solutions to this issue; and
- participation with other organizations in seeking legislative and/or procedural changes in procurement systems used in BC.

4.6 Performance Indicators

In its submission to the task force, ACEC-BC suggested that the association establish measurable performance indicators to verify/evaluate the successful implementation of the corporate regulatory program. It suggested that these performance indicators would provide comfort to members that public safety is in fact enhanced by the regulatory program and that this is not regulation just for the sake of regulation.

The task force fully supports this suggestion and notes that the OQM program and Practice Review program already have established tracking and reporting of performance indicators related to the number of non-conformances identified through an organizational audit or practice review.

Other corporate performance systems involve reporting by the participating or regulated organizations on a set of indicators. A task force member identified the Towards Sustainable Mining program as a particularly effective performance tracking system to encourage responsible mining practices and suggested that the association could learn from the Mining Association of Canada's design and implementation of this program.

Other committees, divisions and groups within the association could also be useful resources for providing input on these performance indicators, such as the Practice Review Committee, Discipline Committee, the 30 by 30 Champion network (supporting women in engineering and science) and the climate change advisory group.

4.7 Communication

In implementing the corporate regulatory program, it is important that the association continue to communicate effectively with individual members, regulated organizations and stakeholders. Key points for communication could include the following:

- ensure that the intent of corporate regulation is clearly communicated;
- obtain input to assist in refining the program moving forward;
- confirm the continued cost neutrality of the program; and
- convey key performance indicator results.

The responsibility for communication would best rest with the position or body assigned with governance oversight of the regulatory program.

5 BACKGROUND AND CONTEXT

This section provides background on key topics that informed the task force's recommendations, including:

- history of the regulation of engineering and geoscience organizations in BC;
- Engineers and Geoscientists BC Organizational Quality Management Program;
- the basic model of corporate regulation implemented in most Canadian jurisdictions; and
- regulatory model for engineering and geoscience organizations implemented in Alberta.

5.1 History of the Regulation of Engineering and Geoscience Organizations in BC

BC and Quebec[4] are the only jurisdictions in Canada where engineering and geoscience organizations remain unregulated. In BC, other professions that regulate organizations include architecture, land surveying, public accounting, as well as a number of the medical professions. The Law Society of BC has also recently been granted the authority by the Provincial Government to regulate law firms and is currently undertaking a pilot project regarding corporate regulation.

An early consideration of possible corporate regulation of the engineering and geoscience professions in BC arose from the Closkey Commission, which reviewed the roof collapse on April 23, 1988 at Station Square Mall in Burnaby. The Commission made a series of recommendations[5] including the following two specific recommendations pertaining to the registration of engineering firms:

> *5. Companies, partnerships, firms and other associations that provide professional engineering services to the public should be required under the Engineers Act to be registered in addition to registration of individual engineers. Such registration should apply to all engineering disciplines.*
>
> *6. Such companies, partnerships, firms and other associations should face deregistration for unethical, unprofessional or incompetent practice. Such measures should be in addition to disciplinary proceedings taken against individual members.*

As a result, Engineers and Geoscientists BC established a Special Review Committee which developed a response to the recommendations in the Closkey Commission Report. The report of the Special Review Committee, published in the *BC Professional Engineer* in June 1991 (Engineers and Geoscientists BC's professional journal), recommended that:

> *Companies, partnerships, firms and other organizations that provide professional engineering services must be registered under the Engineers and Geoscientists Act and that the Engineers and Geoscientists Act be amended accordingly and that they must face deregistration for incompetence, negligence or unprofessional conduct.*

A letter ballot was issued to Engineers and Geoscientists BC members in 1991 and 28% of the membership participated. The results of the letter ballot were:

- 92.8% voted in favour of the following recommendation: "organizations that provide professional engineering services must be registered"; and

[4] Note that in July 2016, the Ordre des ingénieurs du Québec was placed under trusteeship of the provincial government; accordingly, it is no longer a self-governing body for its 60,000 members.

[5] *Report of the Commissioner Inquiry, Station Square Development, Burnaby, British Columbia*, Dan J. Closkey, P. Admin., Inquiry Commissioner, August 1988.

- 93.2% supported the recommendation that “organizations that provide professional engineering services must face deregistration for incompetence, negligence, or unprofessional conduct.”

In 1993, Section 10.1 (now Section 14) entitled “Issue of Certificates of Authorization” (CoA) was added to the *Engineers and Geoscientists Act*.

At the time the CoA was proposed, Engineers and Geoscientists BC also proposed an addition to Section 18, Prohibition on Practice. This provision would have made it illegal for companies to practise professional engineering or geoscience unless they held a CoA. The amendment to this section was not included when Section 10.1 was added to the *Act* in 1993 because of a lack of agreement over what type of companies or other legal entities would be required to hold a CoA. Section 14 on Certificates of Authorization sill remains in the *Act* and is provided in the text box below for reference.

Engineers and Geoscientists Act, Section 14, Certificates of Authorization

14 (1) *The council must issue a certificate of authorization to a corporation, partnership or other legal entity for the practice of professional engineering or for the practice of professional geoscience if the council is satisfied that the corporation, partnership or other legal entity*

> *(a) has on its active staff members or licensees who directly supervise and assume responsibility for the practice of professional engineering or for the practice of professional geoscience undertaken by the corporation, partnership or other legal entity, and*
>
> *(b) has satisfied the requirements of this section and the bylaws of the association.*

(2) *An application for a certificate of authorization, on a form provided by the council, must be filed with the registrar, together with the application fee specified by the council, and, to remain valid, the certificate holder must pay all fees specified by the council for certificate holders.*

(3) *If the practice of professional engineering or the practice of professional geoscience is carried on by a certificate holder as permitted under subsection (1), the estimates, specifications, reports, documents or plans prepared and delivered must*

> *(a) be signed and dated by, and sealed with the stamp of, the member or licensee of the association who is responsible for them and who supervised the preparation of them, and*
>
> *(b) show in a manner specified by the council the words "APEGBC CERTIFICATE OF AUTHORIZATION", together with the certificate number and expiry date.*

(4) *A certificate holder engaged in the practice of professional engineering or in the practice of professional geoscience in its own name as permitted under subsection (1) must keep the association advised of the names of the members or licensees of the association who are on the active staff of the certificate holder and who are directly supervising and assuming responsibility for the practice of professional engineering or for the practice of professional geoscience.*

(5) *The members or licensees named for the purposes of subsection (4) by a certificate holder*

> *(a) are the authorized representatives of the certificate holder for all purposes under this Act,*
>
> *(b) are subject to any inquiries under the Act, and*

(c) must immediately advise the registrar on relinquishing for any reason this responsibility for the certificate holder.

(6) *A certificate of authorization issued to a corporation, partnership or other legal entity is valid for the calendar year for which it was issued provided the certificate holder complies with this Act and the bylaws governing certificate holders.*

(7) *A corporation, partnership or other legal entity that holds a certificate of authorization must be registered by the registrar as a certificate holder but not as a member or licensee.*

(8) *Despite subsection (1), the council may refuse to issue or renew a certificate of authorization if the applicant for the certificate of authorization or the certificate holder, as the case may be, or a member or licensee described in subsection (1) (a),*

(a) has been convicted in Canada or elsewhere of an offence that, if committed in British Columbia, would be an offence under an enactment of the Province or of Canada and, in the circumstances, renders the person unsuitable for the practice of professional engineering or for the practice of professional geoscience,

(b) has contravened this Act, the bylaws or the code of ethics of the association, or

(c) has demonstrated incompetence, negligence or unprofessional conduct.

In 1996, Engineers and Geoscientists BC engaged in extensive consultations and recommended to the BC government that, at a minimum, corporations, partnerships or other legal entities should be prohibited from practice unless they held a CoA specific to the following fields:

- consulting engineering or consulting geoscience;
- designing and manufacturing custom design engineered products, structures, processes or facilities; and
- engineering and/or geoscience testing and assessment.

In 2002, after discussions with stakeholders, the BC Government stated that it would not implement the Engineers and Geoscientists BC recommendations. Since then, the issue of corporate regulation has periodically been raised by members and organizations that look to Engineers and Geoscientists BC to protect the public.

Engineers and Geoscientists BC occasionally conducts public opinion polls to assess awareness of Engineers and Geoscientists BC, and to determine which activities are viewed as most important. In its most recent poll in 2014, of those surveyed, 81% indicated that an important function of Engineers and Geoscientists BC was to regulate firms to ensure they have qualified professionals and set standards for quality assurance.

After the Mount Polley Dam incident in 2014, renewed questions were raised surrounding the lack of regulation of organizations that practise engineering and geoscience in BC. The BC Ministry of Energy and Mines contacted Engineers and Geoscientists BC to request a summary of issues related to the potential regulation of companies that carry out professional engineering and geoscience. Motivated by this incident, government's request, and Engineers and Geoscientists BC's responsibility to uphold and protect the public interest respecting the practice of professional engineering and geoscience, Council initiated examination of corporate practice and corporate regulation through the task force. Government has expressed strong support for Engineers and Geoscientists BC's evaluation of this issue.

5.2 Engineers and Geoscientists BC's Organizational Quality Management Program

In the absence of corporate regulation, Engineers and Geoscientists BC established a voluntary certification program for engineering and geoscience organizations called the Organizational Quality Management (OQM) Program. Specifically, this program was developed in response to recommendations contained in the Professional Renewal task force Report published by Engineers and Geoscientists BC in 2009. The relevant

recommendations in this report identified the significant level of influence that organizations employing engineering and geoscience professionals can have on the quality management of the practice of the professions.

OQM is a voluntary program for organizations that employ engineering and geoscience professionals in BC and provide products or services requiring the application of professional engineering or professional geoscience. The purpose of the program is to help organizations improve their quality management practices, reduce risk and support their professional employees. Engineers and Geoscientists BC is the only regulatory association in Canada that offers a *voluntary* quality management program for organizations.

Through the OQM program, organizations agree to implement processes and procedures in seven areas: (1) Engineers and Geoscientists BC practice guidelines, (2) retaining project documentation, (3) checking engineering and geoscience work, (4) independent review of structural designs, (5) use of Engineers and Geoscientists BC seal, (6) direct supervision, and (7) field reviews.

Organizations are then audited on how well they are implementing the quality management processes and procedures. Similar to individual practice reviews, the audits function as a proactive mechanism to identify and address any quality management issues before any harm results. As of July 2016, there have been 44 audits. While the audit results have generally been good. there have been a total of 40 non-conformances with quality management processes and procedures since the OQM program began certifying organizations in 2014. These non-conformances were in the following areas:

- Use of seal issues – 19 non-conformances;
- Lack of knowledge around professional practice guidelines – 9 non-conformances;
- Issues around documenting the checks of engineering and geoscience work – 6 non-conformances;
- Issues around retention of documents – 5 non-conformances; and
- General knowledge of OQM – 1 non-conformance.

Engineers and Geoscientists BC reported to the task force that the OQM audit helps organizations identify where quality management practices can be improved, and provides a framework for making those improvements. This, in turn, helps organizations to increase efficiencies and customer satisfaction, reduce risk, and support their professionals in meeting their professional requirements. In addition, auditors frequently receive positive feedback on the audit process from organizations and are regularly asked by organizations to conduct additional audits.

As of April 2018, 285 organizations are OQM certified and an additional 131 organizations are in progress to becoming certified. Organizations of all sizes have received OQM certification—34% are sole practitioners, 29% have 2-5 professionals, 20% have 6-20 professionals, 14% have 21-100 professionals, and 3% have 100+ professionals. The types of organizations participating in the OQM program include consulting engineering firms, provincial government ministries, local municipal governments, aerospace, construction, manufacturing, heavy industry, heavy industry, natural resources, operations, R & D, and utilities. Engineers and Geoscientists BC estimates that about a quarter of organizations practising engineering and geoscience in BC are now in various stages of the OQM process.

The OQM Program in BC is a unique consideration for the issue of regulatory oversight for corporate practice. The program is seen by certified firms, Engineers and Geoscientists BC, and outside parties as highly effective. In March 2016 Engineers Canada approached Engineers and Geoscientists BC to express interest in making OQM a national program that would be offered on a voluntary basis to organizations employing professional engineers. As a result, in July 2016 Engineers Canada and Engineers and Geoscientists BC organized a meeting with staff from two constituent engineering associations and 8 engineering firms located outside of BC. A pilot program is currently underway to evaluate the merits of making OQM a national program. This is a coordinated initiative between Engineers and Geoscientists BC and Engineers Canada with the participation of engineering firms in New Brunswick and Ontario.

It is noted that some firms participate in external certification programs, such as ISO 9000, that also have merit in providing a high standard of quality management.

5.3 The Basic Model

Most Canadian jurisdictions apply a similar model for engineering and geoscience organizations that can be considered the 'basic model' (e.g., SK, MB, YK, NWT & NU, ON, PEI, NL, NB). The requirements to receive a permit/certificate in a basic model are completion of an application form and payment of a fee. A few jurisdictions also require the submission of supporting documents. The basic model provides the following functions:

- **Prohibits the practice of professional engineering and/or geoscience by regulated organizations unless they obtain a permit/certificate.** This provides an entry barrier to the practice of the professions by regulated organizations.
- **Provides for a registry of regulated organizations practising engineering and geoscience in the jurisdiction.** A number of the regulatory associations publish this registry on their websites to allow members of the public to verify whether an organization is registered and has a permit/certificate. This registry also provides a means for the regulatory association to communicate relevant information about the professions.
- **Ensures regulated organizations employ professional engineers, geoscientists, and/or licensees.** Having at least one professional engineer, geoscientist or licensee on staff is a prerequisite to obtaining a permit/certificate and being registered. This system provides some checks to prevent regulated organizations from practising engineering and geoscience without a qualified professional on staff. Some regulatory associations (e.g., Newfoundland) ask for corporate representatives to be identified for each discipline practised by the organization, which provides an additional check that organizations are employing professionals with the appropriate qualifications.
- **Specifies the responsibility of regulated organizations to comply with the Act regulating engineering and geoscience in the jurisdiction, and the Bylaws and Code of Ethics of the regulatory authority.** In theory, this responsibility is supposed to address any conflicts of interest within an organization that would compromise the practice of the profession for achieving another organizational objective. However, this responsibility is typically conveyed to organizations only at a high-level with little guidance around what it means to adequately fulfill this responsibility.
- **Designates corporate representatives that assume some responsibility for supporting corporate practice that complies with the Act, Bylaws and Code of Ethics.** Each jurisdiction requires that corporate representatives be named, but describes the responsibilities of corporate representatives differently. At a minimum, they serve as a key point of contact between the regulatory authority and the organization. They can also take on responsibilities for the personal supervision and responsible direction of a specific portion of the organization's professional practice.
- **Provides the regulatory association the authority to investigate regulated organizations in the event of an incident or complaint and the authority to require the production of relevant documents to inform the investigation.** While other legal mechanisms exist that can be used to investigate organizations implicated in a major incident, these mechanisms are not undertaken from the perspective of the engineering and geoscience professions' duty to protect the public and the documents in these investigations are not always available to regulators (e.g., sometimes a settlement is reached and the documents are confidential).

The basic model can be described as a reactive approach to public protection. It provides a disciplinary system in the event of a public incident or complaint regarding violations of the Act, Bylaws and Code of Ethics. The disciplinary system provides a deterrent to poor practice but does not actively encourage good practice.

5.4 Regulatory Model for Engineering and Geoscience Organizations in Alberta

The only corporate regulatory model in Canada for engineering and geoscience organizations that goes beyond the basic model described above is in Alberta.

For regulated organizations to obtain a Permit to Practice from the Association of Professional Engineers and Geoscientists of Alberta (APEGA), they must develop and submit a Professional Practice Management Plan

(PPMP).[6] A PPMP is a written description of corporate policies, procedures and systems used to ensure that appropriate standards of professional practice are maintained. APEGA requires a Professional Practice Management Plan to address the following five elements:

(1) **Management, Organization, and Responsibilities** - ensuring that it is conducive to professional practice.

(2) **Ethical standards –** ensuring that the professional practice of the organization is defined, communicated, and implemented in accordance with the Code of Ethics and that due diligence is fulfilled.

(3) **Professional and Technical Resources** - ensuring that the work is carried out by appropriately qualified professionals and that appropriate technical facilities and resources are maintained, communicated, and available - commensurate with the professional services being provided. This would include items such as establishing clear lines of professional responsibility, assignment of appropriately skilled staff, and continuing competence of professionals.

(4) **Quality Control** - ensuring that the permit holder has adequate supervision and controls of all the professional work to ensure that it is done competently and with due diligence. It may include: definition of project scope and objectives, use of codes and standards, checking work for accuracy, independent reviews, conformance with current acceptable professional practices, coordination of multidisciplinary teams, and possible presence of a formal quality management plan.

(5) **Professional Documents and Records** - ensuring that appropriate and sufficient records are produced, maintained, and available as required.

Aside from prescribing that the Plan must cover these five elements, APEGA does not prescribe the content for the plan. It is the responsibility of the regulated organization to develop a Professional Practice Management Plan that is appropriate to their industry and practice discipline.

In its practice guideline for PPMP's, APEGA describes the rationale for these plans as follows:

> *If the public is to have confidence in the quality of the services of professional engineers and geoscientists, there needs to be a structured process in place for managing professional practice. As the regulator of the professions of engineering or geoscience, one of APEGA's roles is to maintain appropriate standards of professional practice with a view to protection of the public. The requirement for PPMPs is one means of fulfilling that role.*

APEGA recognizes that PPMPs vary considerably in complexity and degree of detail depending on the size and nature of the professional organization. APEGA states that the PPMP should be sufficiently inclusive, explicit, and readable to allow for:

- Management and staff to understand the priority which management places on quality practice management activities, the established quality policies and procedures, and their respective quality-related roles and responsibilities.
- An assessment of the suitability and effectiveness of the organization's professional practice management system to enable management to determine if the professional practice management system meets the needs of the organization.

In early 2018, APEGA and Engineers and Geoscientists BC met to exchange information on directions for corporate regulation and recognized that both associations had an interest in a corporate regulatory model that addresses three pillars: ethics, quality management and professional development. APEGA was also interested

[6] Link to APEGA guideline on PPMPs: https://www.apega.ca/assets/PDFs/professional-practice-management-plans.pdf

in learning more about the OQM program and in particular the use of audits in the OQM program to promote understanding and compliance with program requirements. At this meeting, it was also recognized that consistent corporate regulation as it applies to engineering and geoscience practice across provincial borders may offer significant benefits to a variety of stakeholders (i.e., the public, provincial governments, regulators, corporations, and members). APEGA is currently reviewing its corporate regulatory practices and Engineers and Geoscientists BC is currently developing a framework for corporate regulation. As a result, there is a unique opportunity to explore synergies between the two associations with regards to corporate regulation. The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) is also currently talking with APEGA about its program and exploring opportunities for alignment.

APPENDIX A - Terms of Reference for Advisory Task Force on Corporate Practice

ENGINEERS & GEOSCIENTISTS BRITISH COLUMBIA

TERMS OF REFERENCE

1. Name:
Advisory Task Force on Corporate Practice

2. Type/Reporting Relationship:
2.1 Task Force

2.2 Reporting Relationship:
The Task Force is appointed by Council and reports to Council.

3. Purpose:
Through consultation with members and stakeholders, to examine the issue of regulating companies, organizations, and sole practitioners that provide professional engineering and geoscience services, to deliver recommendations to Council on whether Engineers and Geoscientists BC should pursue regulatory authority in this area, and to propose business model that would support this regulatory framework.

4. Authorities of the Committee/Task Force:
The Task Force is authorized to provide advice, guidance, and recommendations to Engineers and Geoscientists BC Council. Recommendations to Council will be based on a majority vote of all Task Force members.

5. Function/Deliverables:
5.1 Implement the following collaborative, three-phased approach to evaluate the regulation of engineering and geoscience organizations employing professional engineers, professional geoscientists, and licensees including sole proprietorships:

5.1.1 Phase 1 – Strategic Consultation and Recommendation

- Guide consultation and consider member and stakeholder feedback in order to develop an informed opinion on whether Engineers and Geoscientists BC should pursue regulatory authority for corporate practice.
- Document options identified through the consultation process that could inform a potential approach to corporate practice oversight.
- Upon completion of Phase 1, provide a recommendation to Council on whether to pursue regulatory authority for corporate practice. Council may consider the recommendation and determine how to proceed.

5.1.2 Phase 2 – Recommend a Model for Corporate Practice Oversight

- Propose a corporate regulatory model which demonstrates positive impacts to protect the public interest and the environment, and provides benefit to the regulated organizations and professionals they employ.

- Consider changes of legislative elements (Act, regulations, bylaws, etc.) which may be required to implement the business model.
- Guide consultation with stakeholders on matters deemed appropriate by the Task Force.
- Further develop options for corporate practice oversight.
- Consider regulatory measures that would not be detrimental to OQM but compliment and support it.
- Keep relevant Engineers and Geoscientists BC volunteer groups informed.
- Define the types of entities that should be subject to Engineers and Geoscientists BC regulatory oversight.
- Ensure that the proposed corporate regulatory model is scalable to accommodate the size and nature of organizations, and be administratively efficient.
- Review and comment on the current authority in the Act to regulate corporate practice.
- Obtain a legal review of the preliminary regulatory model, and a suggested legislative framework to support the proposed model.
- Make a recommendation to Council on the proposed regulatory model, including legislative framework.

5.1.3 Phase 3 (Subject to Council Approval of Phase 2) – Develop a Business Plan

- Identify resource requirements to implement the regulatory model approved by Council.
- Develop a business plan with timelines.

6. Resources:

6.1 Funding for the work of the Task Force will be allocated by Council upon receipt of a request from the Task Force.

7. Membership:

7.1 A maximum of 19 members, with representation invited from the following groups/sectors:

- ACEC-BC
- Non-ACEC-BC consulting firm
- OQM-certified organization
- Investigation or Discipline committee
- Professional Practice Committee
- Council member sitting as a government appointee (Council representative)
- Manufacturing industry
- Hi-tech industry
- Mining industry
- Construction industry
- Municipal government
- Provincial government
- Federal government
- Sole practitioner
- Small organization with less than five Engineers and Geoscientists BC professionals
- A major consumer of engineering or geoscience services

7.2 If Engineers and Geoscientists BC members are not available as representatives from the sectors above, non-members may be appointed.

7.3 Failure to obtain a Task Force member from any of the sectors above does not invalidate the Task Force activity.

7.4 At least two members of the Task Force must be current members of Council.

7.5 In the event that a Task Force member is absent for three consecutive meetings, or resigns from the Task Force, the Task Force Chair may propose a replacement Task Force member to Council for consideration.

8. Term of Office:
8.1 The terms of office are until December 2018 or later as directed by Council.

9. Selection of Officers:
9.1 The Chair is appointed by Council.

10. Quorum:
10.1 Majority of members.

11. Frequency of Meetings:
11.1 Meetings are at the call of the Chair.

12. Conduct of Meetings:
12.1 The Task Force may meet in person and/or by telephone conference, webcast or other electronic communications media where all members may simultaneously hear each other and participate during the meeting. Generally the latest edition of Robert's Rules should be adopted for the conduct of meetings.

12.2 The Task Force Chair may communicate with Task Force members by e-mail as appropriate.

12.3 The Task Force Chair may use e-mail to propose and call for a consent resolution. The Task Force Chair may or may not allow limited e-mail discussion on the matter. Beyond this, Task Force members have the option of responding by moving, seconding or supporting the motion, or requesting that it be considered further at a meeting of the Task Force. A consent resolution is deemed to have been achieved if there are no negative votes or calls for in-person discussion, and the number of support votes are equal to or greater than the number required for a quorum. In the case where a member so requests, the motion is not carried, but instead may be brought forward for consideration at a subsequent meeting of the Task Force. (In the case of an urgent matter, this may occur at a special meeting conducted by telephone where the normal requirements for a quorum will prevail.) Any motion so carried is considered to take effect immediately, and should be ratified at the subsequent Task Force meeting and recorded in the minutes of that meeting.

12.4 Information circulated and discussed at meetings is non-confidential unless communicated otherwise.

13. Minutes:
13.1 Minutes, notes or recording of decisions are the responsibility of staff support.

14. Periodic Reporting and Review of Terms of Reference:

14.1 The Task Force Chair shall periodically report to Council on the progress of the Task Force.

14.2 The Task Force shall review its Terms of Reference on commencement of each phase and shall recommend any changes to the Terms of Reference (through the Governance Committee).

15. Staff Support:

Director, Professional Practice, Standards and Development with participation of the Director, Communications and Stakeholder Engagement.

Approved by Council: October 15, 2015 (CO-15-94)

Revised and Approved by Council: June 17, 2016 (CO-16-58)

Revised and Approved by Council: April 27, 2018 (CO-18-33)

APPENDIX B - Submission from ACEC-BC, April 2018

ACEC-BC's Submission to EGBC's Advisory Task Force on Corporate Practice Stage Two

April 2018

Background

In the fall of 2015, a task force was appointed by Engineers and Geoscientists BC's (EGBC) Council to evaluate and recommend if EGBC should pursue corporate regulation of engineering and geoscience practice by corporate entities. Over the course of 14 months, the evaluation included the review and assessment of corporate practice, regulation, and strategic consultation with members and stakeholders.

The Advisory Task Force on Corporate Practice presented its recommendations to Council in May 2017. The Phase 1 recommendations report can be viewed here: https://www.egbc.ca/getmedia/03f85a9f-c5c6-40fe-a7f0-1ebddd675cfe/RecommendationsReportonCorporate-Practice_20170528.pdf.aspx.

The task force recommended that the association seek the authority to regulate practice by corporate entities, and that the corporate regulatory model be developed to demonstrate positive impacts to protect the public interest and the environment and provide benefit to the regulated organizations and the professionals that they employ. In addition, it was recommended the corporate regulatory model be scaled according to the size and nature of the organization and be administered efficiently.

The following types of organizations were recommended for regulation:

- consulting firms providing professional engineering or geoscience services (including incorporated sole practitioners);
- engineering and geoscience testing and assessment companies;
- private sector organizations that carry out the "practice of professional engineering or geoscience" for internal or external purposes; and
- public sector organizations that carry out the "practice of professional engineering or geoscience" for internal or external purposes.

Council accepted the task force's recommendations and directed it to proceed with Phase 2 of the initiative, with the objective of recommending a model for corporate regulation.

The task force is considering a number of key questions as part of its Phase 2 work.

- What types of information and documentation should be provided by regulated organizations during the initial registration process?
- Should an audit process be included in the model to promote compliance and understanding of the regulatory requirements?

- How might the association's Organizational Quality Management Program best be integrated into a corporate regulation model?
- How could the regulatory program help support ethical business practices in BC (procurement contracts, conflict of interest, etc.)?
- Would a regulated organization be required to meet a minimum standard in order to practice professional engineering or geoscience?

The Association of Consulting Engineering Companies of BC is keenly interested in the topic of corporate regulation. As ACEC-BC represents 85 of BC's consulting engineering companies that provide engineering and other technology-based intellectual services to the public and private sectors, any change in the regulatory environment will impact our membership.

In its submission to the Task Force in Phase one, ACEC-BC made the following recommendations:

1. That all entities that employ professional engineers and geoscientists who directly affect public safety and the environment through their professional activities must be regulated by EGBC.

   This would hold such entities that undertake in-house engineering and geoscience services, which would include private and public sector resource companies, utilities, government funded engineering or geoscience entities, developers and contractors. It would allow EGBC to investigate organizations, including owner and client groups if required.

2. That all entities who meet the following criteria must engage in best practices that protect public interests and support the professional integrity of engineers and geoscientists alike;

   1. Have in-house professional engineers and geoscientists as a requirement of employment to plan and execute the activities of the entity;

   2. Carry out activities that affect safety of the public and the environment; and

   3. Procure the services of professional engineers and geoscientists.

   Best practices include but are not limited to the mandatory use of Qualification Based Selection in competitive selection processes and use of accepted standard contracts such as CCDC documents, MMCD or ACEC documents.

   This recommendation would hold client entities responsible for accepting engineering proposals which are inadequately low in price and scope, as well as applying pressure for unwise

shortcuts. Moreover, it would allow EGBC to actively investigate organizations, including owner and client groups if required.

Guiding Considerations for Corporate Regulatory Model

The ability of Engineers and Geoscientists of BC to regulate corporate entities as well as individuals is contentious within the consulting community. There are some who would view this extension as an unwarranted intrusion into company business practices while serving the public interest to little or no benefit. It will be important, therefore, for EGBC to ensure that the intent and ramifications of corporate regulation are clearly outlined, and that there are assurances in place that corporate regulation is transparent, equitable and effective without adding unnecessary costs or complexity.

Consistent with Other Jurisdictions

As noted many times, BC is the only self-regulated jurisdiction that does not have corporate regulation. The Province of Quebec regulates the engineering community and does not have corporate regulation. It is therefore important that the proposed corporate regulation model for BC is also consistent with existing models across Canada to avoid unnecessary complexities for firms already operating in other jurisdictions.

As outlined in the Corporate Practice Discussion Paper of the First phase of the Task Force, there is a range of options for the type of corporate regulatory models applied in other jurisdictions, ranging from minimum to maximum coverages. The range of corporate regulatory coverage can be characterized as follows:

- Minimum coverage: The minimum level of corporate regulatory coverage, which requires consulting organizations that provide engineering and geoscience services to the public to obtain a certificate/permit and excluding sole practitioners from needing a license. All jurisdictions in Canada that regulate engineering and geoscience organizations have at least this level of minimum coverage.
- Maximum coverage: The maximum level of regulatory coverage is requiring all organizations that practice engineering and geoscience to obtain a certificate/permit, including sole practitioners. Note that there's a clear distinction between organizations that practice engineering/geoscience and organizations that have P.Eng/P.Geo on staff. Regulating all organizations that practice engineering and geoscience would include consulting organizations (including sole practitioners), businesses that practice for internal consumption purposes only (organizations that consume engineering and/or geoscience services internally for the production of a product—e.g., engineered product companies, resource companies), and public sector organizations (e.g., provincial crown corporations, public utilities, municipal governments and provincial agencies). The rationale for regulating all organizations that practice engineering/geoscience is that any

practice of engineering/geoscience has implications for public protection and should be in compliance with the Act, Bylaws, and Code of Ethics.

Members of ACEC-BC do work across Canada and around the world. Many employees of ACEC-BC are registered in multiple jurisdictions. A proliferation of different standards and obligations would be confusing and inefficient.

Adoption of Maximum Coverage

Given ACEC-BC's previous submission, we are supportive of a Maximum Coverage model for BC. This would be more consistent with the Alberta model and would support ACEC-BC's recommendation that all entities that employ professional engineers and geoscientists who directly affect public safety and the environment through their professional activities must be regulated by EGBC.

ACEC-BC recommends that the maximum coverage model includes regulation for both incorporated and unincorporated sole practitioners who are providing engineering services. Both entities may include more than one employee and therefore should qualify for corporate regulation.

Authority to Investigate

As outlined above the range of regulatory coverage can vary. One benefit of corporate regulation is that it would allow for EGBC to undertake responsible investigation where required. Currently, EGBC can only investigate the actions of licensed individuals. One benefit of implementing maximum coverage is that it would allow for broader investigations, beyond the individual and consulting firms.

Sanctions

The discussion of what sanctions, if any, should be available to EGBC that could be levied against a corporation deemed to have fallen afoul of appropriate conduct is of interest to ACEC-BC member firms. The average member of ACEC-BC employs over 100 individuals, one third of which are professional engineers or geoscientists. Other firms that practice engineering and geoscience, such as municipalities or other organizations, employ considerably more. It is unlikely that the public interest would be served by prohibiting these entities from operating in the event of a transgression. Therefore ACEC-BC strongly recommends that EGBC not be given the authority to withhold or revoke a licence to operate from an entity unless they no longer employ a Professional Engineer or Geoscientist.

There are alternative sanctions that could be considered to better serve the public interest. Examples include:

1. Increased supervision whereby the entity would be subject to frequent audits by EGBC to ensure compliance as well as fines to cover the additional EGBC costs for such supervision.

2. Enforced supervision whereby any engineering or geoscientist work would need to be reviewed and signed off by an independent third party engineer or geoscientist as well as fines to address the additional EGBC costs for such oversight.

Any regulation should incorporate a stepped process of disciplinary notifications to public notifications.

Legislation

In order to ensure clarity and consistency, the obligation to regulate companies that practice engineering and geoscience beyond consulting firms should be embedded in legislation through amendments to the Engineers and Geoscientists Act.

Requirements for Regulation

A desired outcome of Corporate Regulation is an enhanced service to the public, through steps to improve quality of services and professional conduct of engineering entities.

Consideration could be given to requiring Corporate Registrants to be "OQM Certified" by EGBC or alternatively being required to follow a **Professional Practice Management Plan (PPMP),** similar to APEGA. A PPMP may include a written description of a permit holder's corporate policies, procedures and systems used to ensure that appropriate standards of professional practice are maintained.

It should be noted that the Guideline for Professional Practice Management Plans issued by APEGA states "that the professional practice of the organization is defined, communicated, and implemented in accordance with the **Code of Ethics** and that due diligence is fulfilled." It further states that a PPMP will ensure

> "that the work is carried out by appropriately qualified professionals and that appropriate technical facilities and resources are maintained, communicated, and available - commensurate with the professional services being provided. This would include items such as establishing clear lines of professional responsibility, assignment of appropriately skilled staff, and continuing competence of professionals."

ACEC-BC notes that under the Code of Ethics which establishes the general principles and specific duties that govern how Engineers and Geoscientists BC members and licensees must conduct themselves, it is required that they **"uphold the principle of appropriate and adequate compensation for the performance of engineering and geoscience work**."

Where a competitive procurement process is used, ACEC-BC suggests that Qualification Based Selection is the most appropriate method for selecting a design professional as it not only ensures the most qualified professional is selected but it also ensures clarity about scope, thereby enabling "appropriate

technical facilities and resources are maintained, communicated, and available - commensurate with the professional services being provided."

Implementation

ACEC-BC suggests that EGBC ensure there are measureable performance indicators to verify/evaluate the successful implementation of any regulations. This will provide members some form of comfort with respect to the regulatory program, that public safety is in fact enhanced by the regulations and that this is not regulations just for the sake of regulations.

ACEC-BC also suggests that EGBC should actively engage stakeholder and the general business community to explain and promote the new regulatory requirements once they are implemented, as this would enhance and improve the brand of engineers. Possible venues would include UBCM, Greater Vancouver Board of Trade, and similar organizations.

ACEC-BC also strongly recommends that an advisory council be created by EGBC to specifically monitor and provide guidance and recommendations to EGBC and that all actions regarding the new requirements must be vetted and approved by this council. The council would be comprised of stakeholders, including a strong representation from ACEC-BC.

Summary

1. It will be important, therefore, for EGBC to ensure that the intent and ramifications of corporate regulation are clearly outlined, and that there are assurances in place that corporate regulation is transparent, equitable and effective without adding unnecessary costs or complexity
2. It is important that the proposed corporate regulation model for BC is also consistent with existing models across Canada to avoid unnecessary complexities for firms already operating in other jurisdictions.
3. Given ACEC-BC's previous submission, we are supportive of a Maximum Coverage model for BC, and further recommends that the model includes regulation for both incorporated and unincorporated sole practitioners who are providing engineering services.
4. One benefit of corporate regulation is that it would allow for EGBC to undertake responsible investigation where required.
5. ACEC-BC strongly recommends that EGBC not be given the authority to withhold or revoke a licence to operate from an entity unless they no longer employ a Professional Engineer or Geoscientist.
6. Any regulation should incorporate a stepped process of disciplinary notifications to public notifications.
7. The obligation to regulate companies that practice engineering and geoscience beyond consulting firms should be embedded in legislation through amendments to the Engineers and Geoscientists Act.

8. Consideration could be given to requiring Corporate Registrants to be “OQM Certified” by EGBC or alternatively being required to follow a Professional Practice Management Plan (PPMP), similar to APEGA.
9. Where a competitive procurement process is used, ACEC-BC suggests that Qualification Based Selection is the most appropriate method for selecting a design professional as it not only ensures the most qualified professional is selected but it also ensures clarity about scope, thereby enabling “appropriate technical facilities and resources are maintained, communicated, and available - commensurate with the professional services being provided.”
10. ACEC-BC suggests that EGBC ensure there are measureable performance indicators to verify/evaluate the successful implementation of any regulations.
11. ACEC-BC also suggests that EGBC should actively engage stakeholder and the general business community to explain and promote the new regulatory requirements once they are implemented, as this would enhance and improve the brand of engineers
12. ACEC-BC also strongly recommends that an advisory council be created by EGBC to specifically monitor and provide guidance and recommendations to EGBC and that all actions regarding the new requirements must be vetted and approved by this council.