



Discussion Paper

PGO Review of the Professional Geoscientists Act

Professional Geoscientists Ontario (PGO) is seeking your input on how to clarify and further strengthen the [Professional Geoscientists Act, 2000](#) to help protect the public and the environment.

Overview

The Professional Geoscientists of Ontario (PGO) was established in 2000 through the Professional Geoscientists Act, 2000 (PGA). PGO is responsible for regulating the practice of geoscience in Ontario for the purpose of protecting the public interest and the environment. This is accomplished by ensuring high standards of qualification (knowledge and experience), ethical behaviour and continuing professional development.

The PGA prohibits individuals from practicing geoscience or using the designation “professional geoscientist” or “P. Geo” unless they meet those standards of qualification and are registered with PGO. As of November 2022, there are 3,403 registered geoscientists and “geoscientists in training” in Ontario. These professionals are regularly called on to provide advice and make decisions regarding the province’s natural resources, including the development of mineral deposits, the management of excess soil, protecting sources of drinking water, ensuring the proper clean-up of contaminated sites and other matters crucial to ensuring protection of the public and the natural environment.

A properly equipped and effective regulator together with a modern, clear regulatory framework are critical parts of maintaining attractive and competitive urban development and mining sectors, as it helps instill confidence in the business community, prospectors, and investors. It lets all those who retain and employ geoscientists know that they are qualified, competent, and are held accountable when they perform these important tasks.

Project Overview

PGO is soliciting feedback on its proposed changes to the Professional Geoscientists Act, 2000 to assess its effectiveness in regulating the practice of professional geoscience in Ontario and protecting public interest and safety.

Your feedback is important to PGO and will be used as part of PGO's recommendations to the Ministry of Mines for proposed legislative changes and opportunities to better regulate the profession. We are seeking to identify a range of potential solutions to strengthen both the profession as well as Ontario's position as a mining and environmental leader.

Project Benefits

Proposed changes would provide the public, PGO, the Ministry of Mines, municipalities, the mining sector, environmental sciences sector, and urban development sector increased appreciation and understanding of the roles, responsibilities and accountability of individuals practicing geoscience. This opportunity for recommendations would include strong stakeholder engagement and feedback incorporated in any recommendations brought forward to the Ministry of Mines.

Changes to the PGA would help better protect the public and support a strong and vibrant professional geoscience community in Ontario now and into the future by:

- Improving the ability of PGO to regulate professional geoscientists and more effectively address the problem of unlicensed practitioners who practice without standards or accountability.
- Clarifying titles and terms for sub-specialties within the practice of geoscience.
- Ensure prospectors, mining companies, investors, municipalities, indigenous organizations, and the public can obtain advice and services from a professional geoscientist while protecting the public interest and the natural environment.
- Enhancing the ability of government to rely on self-regulated geoscientists reducing the need for overly prescriptive legislation, regulation, and policy.
- Continuing to protect the broader public interest as both a key part of Ontario's world-class mining, environment and urban development sectors and underpinning new infrastructure and environmental projects for our growing population.

Summary

PGO is looking for your comments on and suggestions for recommended changes the Ministry of Mines could consider to modernize the PGA which would result in improvement to the practice of geoscience in Ontario, without increasing taxpayer costs or unnecessary regulatory burden on industry.

PGO is planning to make recommendations to the Ministry of Mines to modernize the PGA in the following areas:

Definition of the Practice of Geoscience

PGO wishes to propose changes to the definition of “the practice of geoscience” under section 2(1) of the PGA. Proposed changes would clarify the definition and provide greater certainty regarding what geoscience is and what activities are included in the practice of geoscience. These changes would not add any administrative burden on business or affect Professional Geoscientists currently registered with PGO, but would inform users of Crown Lands, landowners, and the broader public about the importance of using licensed Professional Geoscientists in delivering natural resource management and improving approaches to addressing illegal practice.

Protected Titles and Terms

PGO wishes to propose changes that would add to the list of protected titles and terms under section 5(1) of the PGA. Any proposed changes should ensure that any individual involved in the practice of geoscience, hired, or employed by individuals, businesses, or municipalities are properly qualified and regulated to ensure the public interest is protected. Changes would not add any administrative burden on business or affect Professional Geoscientists currently registered with PGO.

Why are changes being proposed?

1. To ensure all individuals practicing geoscience in Ontario are licensed and properly regulated to protect industry and the public.

Broadly speaking there are two categories of individuals practicing geoscience in Ontario. The first category comprises individuals who undergo the necessary process of education and specialized training, are registered with PGO, and possess a Professional Geoscientist (P. Geo.) designation. Being registered with PGO means that individuals meet standards of practice and are held accountable to them. The second category comprise individuals who allegedly practice geoscience illegally without going through the process of registration as outlined above. They are not subject to professional standards of practice and accountability and, therefore, may represent a significant risk to those who hire them and to the public.

PGO has made significant progress in addressing the issue of illegal practice employing non-legislative procedures, however, the limitations in the current PGA mean that practice without registration persists. Specifically, PGO currently has close to 400 active files on individuals believed to be practicing geoscience without the required Professional Geoscience designation. PGO estimates that many of these individuals are performing tasks that pose a risk to public safety including providing technical services to mineral exploration projects, conducting an environmental record of site condition assessments and environmental risk assessments critical to the permitting process for the development of projects (e.g., commercial and residential

buildings) analysing sources of drinking water, and providing advice on the proper clean-up of contaminated soil.

While PGO has identified individuals who are believed to be practicing without a license the current broad definition of geoscience under the PGA makes enforcing registration requirements difficult legally. This means that the problems industry and organizations face related to the service and advice provided by unregulated practitioners cannot be easily resolved and puts the broader public at risk.

2. To reflect important advances in the field of geoscience and the environment, to increase clarity, to capture the current scope of practice more accurately, and to align Ontario's regulatory capabilities with those of other Canadian jurisdictions.

The PGA has not received any significant updates since its proclamation in 2000, such that it is now in need of modernization to reflect the important advances in geoscience and the environment in which the profession operates, and to ensure the public and environment remain protected. It is the view of PGO that the PGA contains some vague, outdated, and confusing wording, particularly related to the definition of "geoscience" which limit PGO's effectiveness in regulating Professional Geoscientists and addressing the issue of illegal practice.

The definition in the PGA allows many activities, both trivial and significant, to be included in the 'practice of geoscience'. This makes it difficult for PGO to ascertain and define which activities are within the practice of geoscience, as well as enforce the PGA against unqualified or unlicensed practitioners.

Ontario's definition of "the practice of geoscience" under the PGA broadly refers to activities that require the application of the principles of geoscience:

Practice of professional geoscience

2 (1) An individual practises professional geoscience when he or she performs an activity that requires the knowledge, understanding and application of the principles of geoscience and that concerns the safeguarding of the welfare of the public or the safeguarding of life, health or property including the natural environment.

By comparison, the definitions found in Professional Geoscience legislation in of other Canadian jurisdictions include reference to specific disciplines such as earth sciences, geology, geophysics, geochemistry, geomorphology and hydrogeology; and refer to specific activities such as sampling, analyzing, interpreting, reporting or providing an opinion on the exploration, discovery, development or management of oil, natural gas, metallic or non-metallic minerals, precious stones, water or other natural resources on the surface or in the subsurface of the earth or the storage, management or disposal of waste materials or other materials.

The vagueness of the current definition ultimately exposes the public to loss or danger by unlicensed practitioners, lack of flexibility to enforce registration, and lengthy and costly legal cases to enforce the act and protect the public, with low probability of success. It also exposes the professional geoscientist community and PGO itself to reputational risk.

3. To provide certainty to individuals, businesses, organizations, and governments who hire or rely on geoscience sub-specialties that individuals providing advice or services in those fields are properly regulated, accountable and practice to accepted standards.

Professional titles are a cornerstone of public protection as they denote which individuals have the necessary education, work experience, and other credentials to perform a specific role. The current wording in the PGA, however, refers to only two protected terms for the profession: “Professional Geoscientist” and the designation “P. Geo”. It is silent on other terms related to geoscience sub-specialties, permitting individuals in Ontario to use job titles such as: Geologist; Hydrogeologist; Geophysicist; Geological Engineer, etc., implying professional registration but without being registered with PGO, qualify as a Professional Geoscientist, and be held accountable for the quality and safety of their work under the PGA.

Having potentially unqualified people claiming to be licensed Professional Geoscientists and qualified to conduct critical tasks like mineral exploration and development, resource valuation, analysis of groundwater quality and quantity, brownfield remediation, natural hazard assessment, excess soil permitting and financial disclosures that could greatly impacts people’s lives, exposes the public to potential harm and damages the reputation of the professional geoscientist community in Ontario.

The public expects regulated professionals to possess specific knowledge, skills, and training to meet or exceed the requirements and to do so from a position of trust. Ensuring that the roles and responsibilities are clear, will allow Professional Geoscientists to carry out their work and serve the public interest effectively.

Summary

Responsible mining, environmental stewardship, urban development, and natural hazards management require reliable, qualified technical advice which industry can trust, and the public can rely on. A clear, modern description of what professional geoscience is and who can undertake this work will ensure that professional geoscience is better governed to protect the health and safety of Ontarians, while also serving the needs of industry, organizations, and governments.

The objective of any proposed changes is to provide clarity and certainty to those who hire or rely on geoscientific advice or services, that any individual practicing in the field is properly regulated and can be held accountable. A revised definition of “the practice of geoscience” and updated list of protected titles and terms which reflects advances in the field would ensure

those practicing in the field today are subject to appropriate standards of practice and accountability.

PGO is looking for your comments and suggestions for changes to the PGA which would result in improvement to the practice of geoscience in Ontario, without increasing taxpayer costs or unnecessary regulatory burden on industry.

How you can be involved

We are asking for your thoughts, support, concerns, and suggestions on changes that may be considered to deal with the issues described above.

For example:

- Do you agree that the current definition of “the practice of geoscience” is too broad and why? If you don’t agree, please explain why.
- Do you believe improvements need to be made to the Professional Geoscientist Act to clarify the definition of “the practice of geoscience”?
- Do you agree that additional titles should be added to the list of protected titles under the PGA and if so which ones?
- Are there other improvements and/or concerns regarding the PGA of which you would like to inform PGO for future consideration?

To provide your feedback to PGO please email your comments to pgaconsultation@pgo.ca with “Consultation Feedback” as the subject line by March 10, 2023.

Please note that the Government of Ontario is responsible for any changes to provincial legislation and regulation.