

Job Titles

The APGO considers the following examples of job titles to represent to the public that an individual is offering or providing professional geoscience services:

Geoscientist
Geologist
Geomorphologist
Geophysicist
Geochemist
Earth Scientist
Hydrogeologist
Environmental Geologist
Environmental Geoscientist
Vice President, Director or Manager of Exploration

The use of these job titles, and any other job titles not listed above, that suggest to the public that an individual is trained in the geosciences and is holding himself or herself out to be a professional geoscientist, is illegal unless such job title is used by an individual who is registered to practice as a professional geoscientist under the *Professional Geoscientists Act, 2000*, except as specifically exempted in the Act.



Adopted by APGO Council on September 24, 2004

Revised April 12, 2010



Interpretation, Explanation
and Selected Examples of
“Professional Geoscience” As
Defined in the *Professional
Geoscientists Act, 2000*



Association of Professional Geoscientists of Ontario

60 St. Clair Avenue East, Suite 913
Toronto, ON M4T 1N5
Phone: 416-203-2746
Toll Free: 1-877-557-APGO (2746)
Fax: 416-203-6181
www.apgo.net

Prepared by the Professional Practice
Committee of the Association of
Professional Geoscientists of Ontario

Interpretation, Explanation and Selected Examples of “Professional Geoscience” as defined in the Professional Geoscientists Act, 2000

The practice of “professional geoscience” is defined in the *Professional Geoscientists Act, 2000* as follows:

“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.”

The following Interpretation, Explanation and Selected Examples of what constitutes the practice of professional geoscience under this definition are provided by the Association of Professional Geoscientists of Ontario (“APGO”) in the form of guidelines to all providers of geoscience services as well as to all users of geoscience services, including the general public.

Interpretation

There are three elements to the definition of “professional geoscience”. They are:

- **An activity**
- Use of knowledge, understanding and application of the **principles of geoscience**, and
- **Safeguarding** of the public, property and the environment

Explanation

Activity

The APGO considers activities whose undertaking requires application of the principles of geoscience to include, but not to be limited to:

advising, planning, designing, collecting, sampling, mapping, logging, surveying, acquiring, examining, investigating, interpreting, processing, analyzing, reporting, evaluating, opining, consulting, certifying, directing, supervising, administering or managing

EITHER: aimed at discovery, development or production of metallic or non-metallic minerals, rocks, nuclear or fossil fuels, precious stones and water resources;

OR: relating to geoscientific properties, and conditions or processes that may affect the well-being of the general public, including those pertaining to preservation of the

natural environment such as, but not limited to, assessing potential impacts of activities and developments on groundwater and other natural systems, and investigating, evaluating, remediating groundwater, soil, overburden sediment and bedrock conditions.

Activities involving geoscience, such as those listed above, may also be carried out by a person who is training to be a geoscientist or who is registered with the APGO as a Geoscientist-in-Training and who is under the direct supervision of a professional geoscientist, where the professional geoscientist is taking full responsibility for the work as if it were his or her own work. In addition, some of the activities listed may be carried out as part of the work of a technician or technologist trained in aspects of the geosciences who may be working independently, but whose work in geoscience closely follows prescribed procedures and is conducted with close reference to pre-established standards and norms and is supervised by a professional geoscientist.

Principles of Geoscience

Geoscience is defined as the study of the Earth and its systems. Practice in geoscience encompasses the use, understanding and application of the principles involved in the study of the Earth and its system. These include, but are not limited to, such activities as are listed as examples under the section on Activity which appears above.

This is reflected in the educational and experience requirements of licensure for geoscientists, as specified in the Regulations to the *Professional Geoscientists Act, 2000*.

Safeguarding of Life, Property and the Environment

Because the work of a geoscientist involves activities that lead to the generation of information which others use, and upon which decisions are made by others that may affect life, property and the natural environment, the APGO interprets all geoscience activity to require “*the safeguarding of the welfare of the public or the safeguarding of life, health or property including the natural environment*”.

Selected Examples

Examples of activities undertaken by professional geoscientists which require licensure to carry out include, but are not limited to:

- Surface mapping and sampling
- Underground mapping and sampling
- Three-dimensional geoscientific interpretation and modeling
- Remote sensing interpretation



- Terrain and terrain stability analysis
- Seismicity and vulcanism
- Geological surveys
- Geochemical surveys
- Geophysical surveys
- Geomorphological surveys
- Petrology and mineralogy
- Mineral exploration
- Mineral property valuation
- Oil and gas exploration
- Coal exploration
- Resource and reserve estimation
- Groundwater studies
- Environmental assessment
- Site remediation
- Closure and reclamation
- Reporting under regulatory requirements
- Expert testimony
- Teaching of geoscience and supervision of geoscience students
- Academic research in the geosciences, that may or will be relied upon by other professionals or the public

These activities could be carried out by, or for, a number of proponents, including but not limited to:

Companies, partnerships and individuals
Financial institutions and financial advisors
Federal government agencies
Provincial government agencies
Municipalities
Non-government organizations
First Nations
Educational institutions