

Ethical Considerations in the Professional Practise of Geoscience

June 2022



Preface

About Geoscientists Canada

Geoscientists Canada is the national organisation of the provincial and territorial regulatory bodies that govern the practice of geoscience in Canada and license the country's greater than 14,000 professional geoscientists.

Disclaimer

Geoscientists Canada's Statements and Guidance Documents are developed by geoscientists in collaboration with the provincial and territorial geoscience regulators. These documents provide general information and guidance on topics related to the practice and regulation of geoscience in Canada.

Geoscientists Canada Statements and Guidance Documents do not establish a legal standard of care or conduct, and they do not include or constitute legal or professional advice.

In Canada, geoscience is regulated under provincial and territorial law by the [geoscience regulators](#). The ultimate authority regarding the propriety of any specific practice or course of conduct lies with the geoscience regulator in the province or territory where the geoscientist is licensed to perform the geoscience work conducted.

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Ethical Considerations in the Professional Practise of Geoscience

About this Document

The Geoscientists Canada *Ethical Considerations in the Professional Practise of Geoscience* document was prepared by the Geoscientists Canada Professional Practice Committee to provide general guidance on the daily practise of professional geoscience. Canada's geoscience professionals should consult the regulators' related geoscience acts, regulations, bylaws, standards, and guidelines for the relevant requirements applicable to the professional's activities .

The Geoscientists Canada *Ethical Considerations in the Professional Practise of Geoscience* and guidance does not establish a legal standard of care or conduct and does not include or constitute legal or professional advice.

Professional geoscientists in Canada are responsible to the Code(s) of Ethics of the geoscience regulated provinces and territories in which they are licensed (registered). Provincial and territorial Codes of Ethics are available on the regulators' websites:

[Engineers and Geoscientists British Columbia](#)

[Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists](#)

[Association of Professional Engineers and Geoscientists of Alberta](#)

[Association of Professional Engineers and Geoscientists of Saskatchewan](#)

[Engineers Geoscientists Manitoba](#)

[Professional Geoscientists Ontario](#)

[Engineers and Geoscientists New Brunswick](#)

[Geoscientists Nova Scotia](#)

[Professional Engineers and Geoscientists Newfoundland and Labrador](#)

[Ordre des géologues du Québec](#) (Not currently a member of Geoscientists Canada)

1. Fundamental Principles

Ethics is generally understood as the discipline or field of study dealing with moral duty or obligation. This study of moral duty or obligation typically results in a set of governing principles or values which in turn are used to judge the appropriateness of conduct or behaviour. In the Canadian professional geoscience context, these governing principles are usually established in jurisdictional (provincial or territorial) regulation or bylaw as Codes of Ethics, thereby facilitating public protection by making them enforceable. An appropriate use by geoscientists is to interpret and incorporate these ethical principles within their daily decision-making situations in a dynamic manner, responsive to the needs of the situation. Professional ethics are more than a minimum standard of conduct; but rather a set of principles which should guide geoscientists in their daily work and relationships.

The geoscience profession is founded on a continually renewed relationship of trust between geoscientists and society. The Geoscientists Canada *Ethical Considerations in the Professional Practise of Geoscience* expresses the expectations from Canadian professional geoscientists as they discharge their professional responsibilities. The Ethical Principles noted are based on broad moral values such as personal integrity, professional conduct, and respect for human life and welfare and the natural environment. Ethical behaviour as a fundamental obligation within the geoscience profession. **The ultimate authority regarding the appropriateness of any specific practice or course of conduct lies with the geoscience regulator in the provinces or territories where the geoscientist is licensed to perform the geoscience work conducted; and the appropriate regulators' related geoscience acts, regulations, bylaws, standards, and guidelines should be consulted.**

In this document, the term geoscientist includes all those who practise as geoscience professionals. The licensed professionals in Canada hold the designations professional geoscientist, professional geoscientist (limited), professional licensee (geoscience), geoscience licensee, or professional geoscientist (temporary), depending on the type of license and the jurisdiction or jurisdictions in which the geoscientist is licensed to practise. Geoscientists-in-training, members-in-training, geoscience interns, and student members should also incorporate these ethics principles into their daily lives.

2. Ethics Principles

Geoscientists should conduct themselves with integrity, and in an honourable and ethical manner. Geoscientists should uphold the values of truth, honesty, and trustworthiness while safeguarding human life and welfare and the natural environment.

In day-to-day practise geoscientists should:

1. Above all else, uphold the health, safety, and welfare of the public.
2. Guide responsible stewardship of the Earth and its environment by communicating benefits and impacts of human activities and natural processes.
3. Undertake and accept work, and provide opinion, only when competent to do so by knowledge and experience.
4. Continue professional development and growth.
5. Be accountable, honest, and act responsibly and with integrity.
6. Uphold the honour, dignity, and reputation of the geoscience profession.
7. Avoid conflicts of interest but where such conflict arises, disclose to the appropriate parties without delay.
8. Respect confidentiality except when disclosure is required by law and/or there is an imminent threat to public health and safety.
9. Encourage and assist in the development of a safe, diverse, and inclusive practice.
10. Treat all persons with respect, fairness, and equality.
11. Responsibly inform employers, clients, and the public about earth sciences which includes natural resources, the environment, and geoscience risks and benefits.
12. Clearly present to stakeholders any known implications of disregarding professional counsel.
13. Acknowledge limitations to knowledge and understanding in the field of geoscience.

14. Present professional work, reports, and opinions in an objective and truthful manner.
15. Distinguish facts and observations from interpretations, and explicitly state any assumptions, when reporting or presenting.
16. Cite authorship and sources, and acknowledge the contributions of others. Do not plagiarise.
17. Organise, document, and archive data and work products using best management practices.
18. Sample responsibly so that materials and sites are preserved for future study, and conduct work to minimise environmental impact.
19. Report incompetent, illegal, negligent, or unethical practice of geoscience to the appropriate authority.
20. Comply with all applicable laws of the jurisdiction where geoscience work is practised.
21. Observe the code of ethics that applies where geoscience work is practised if it meets or exceeds these stated ethics principles.

3. Guidance on the Ethics Principles

The ethics of the geoscience profession are an integrated whole and cannot be reduced to simple, fixed rules. In this section, common issues and topics arising from the 21 Ethics Principles are discussed to demonstrate the interrelationship of the principles and to expand on the basic intent of the principles.

Geoscientists have a duty to practice in a careful and diligent manner and accept responsibility and accountability for their actions. This applies to all areas of practice and may extend into daily life situations.

1. Above all else uphold the health, safety, and welfare of the public.

This ethical principle sets out the essential expectation of geoscientists.

This principle is founded on the fundamental human right to be safe from harm and to maintain health. Article 3 of the *Universal Declaration of Human Rights* states that everyone has the right

to life, liberty, and security of person. These rights include physical, psychological, and social well-being, both for an individual and society as a whole.

The safety, health, and welfare of the public, which includes the work environment, are often dependent upon geoscience judgments, risk assessments, decisions, and practices. Therefore, geoscientists are obliged to ensure that work and projects they are involved with conform to accepted geoscience practice, standards, and applicable codes, and would be considered correct based on peer review. This obligation includes all situations that a geoscientist encounters and includes the duty to advise the appropriate authority if there is reason to believe that any geoscience activity, or its products, processes, etc., are not in compliance in a significant manner and pose a threat to the safety, health, and welfare of the public.

Because the well-being of both individuals and society are tied to a healthy environment, the geoscientist needs to consider impacts on the environment in conducting their work.

All other principles are subordinate to this core principle if substantive public interests are involved.

2. Guide responsible stewardship of the Earth and its environment by communicating benefits and impacts of human activities and natural processes.

The economic and societal benefits of projects must be balanced with the environmental consequences. Environmental stewardship helps protect the areas and ecosystems within which geoscientists operate. It is up to the geoscientist to stay involved and be aware of present or future issues within their area of practice.

3. Undertake and accept work, and provide opinion, only when competent to do so by knowledge and experience.

Any stakeholder seeking geoscientific input has the right to expect that the geoscientist is competent to undertake the work and that the geoscientist's work will conform to accepted geoscience practice, standards, and applicable codes, which would be considered correct based on peer review.

The stakeholder may be unaware of the requirements for completing a technical project or may not have the resources to do so themselves. The geoscientist has the responsibility to evaluate the project proposal and determine whether they personally have the knowledge and experience needed to successfully complete the project or whether they require additional services of a specialist or expert.

It is necessary for the geoscientist to communicate clearly with the stakeholder in interpreting assignments and in setting expected outcomes. If there is an unknown component, full

disclosure to all parties involved as to the level of uncertainty of any given activity should be made.

4. Continue professional development and growth.

An established minimum level of competence is required at entry to professional geoscience practice. Competence continues to build and develop through a combination of lifelong learning and experience. Geoscientists are responsible for maintaining their competence throughout their careers by keeping current in their area of expertise.

Geoscientists should actively participate in formal and informal learning opportunities that may include, but are not limited to, technical and professional development seminars, continuing education programs, and presentations at professional meetings. Depending upon the geoscientist's position and responsibilities, specific focus may be required in areas of communication and leadership, significant technological change, or changing regulatory environments.

In addition to actively participating in their own professional growth, geoscientists are encouraged to advance the body of knowledge within which they practice, and have an obligation to support the professional development of their subordinates and colleagues.

5. Be accountable, honest, and act responsibly and with integrity.

Honesty is the refusal to deceive in any way, while integrity implies trustworthiness and ethical behavior. Acting responsibly means behaving in a careful, honest, and ethical manner. These qualities apply to all activities related to business practices and interpersonal interactions with the public and other professional relationships.

The signing and sealing of geoscience documents demonstrates accountability for work performed by the geoscientist or by parties under the geoscientist's direct supervision. This practice is required for a wide range of geoscience undertakings as defined by the term professional geoscience¹, regardless of where or for whom the work is completed. This principle applies to work performed in private, public, government, and non-governmental organisations. The signing and sealing of professionally prepared documents is fundamental to the assumption of responsibility by the geoscientist whenever geoscience principles have been used in their preparation and public welfare may be affected.

¹ Geoscientists Canada's general model definition of the practice of professional geoscience is:

The performing of any activity that requires application of the principles of the geological sciences, and that concerns the safeguarding of public welfare, life, health, property, or economic interests, including but not limited to:

- a) Investigations, interpretations, evaluations, consultations or management aimed at discovery or development of metallic or non-metallic minerals, rocks, nuclear or fossil fuels, precious stones and water resources;
- b) Investigations, interpretations, evaluations, consultations, or management relating to geoscientific properties, conditions or processes that may affect the well-being of the general public, including those pertaining to preservation of the natural environment.

Assuming responsibility for geoscience activity includes being accountable for one's own work and, in the case of a senior geoscience professional, accepting responsibility for the work of a designated geoscience team directed by the supervising geoscientist. Responsible supervision means the geoscientist is able to review, modify, and direct the entirety of the geoscience work. This concept requires setting reasonable limits on the activities, and number of team members (employees, subcontractors, etc.) whose work can be supervised by the responsible geoscience professional.

The practice of a 'symbolic' form of supervision or 'taking credit' is contrary to the intent of assuming professional responsibility. An example of symbolic responsibility or supervision is the situation where a geoscientist, for example a Chief Geologist or Exploration Manager, takes full responsibility for all geoscience on behalf of a large corporation or government agency or department, even though the geoscientist may not be aware of many of the geoscience activities or decisions being made daily throughout the organisation.

6. Uphold the honour, dignity, and reputation of the geoscience profession.

This principle is intended to represent a higher level of consideration that complements and does not conflict with other principles or codes that apply locally and internationally. Geoscience professionals are expected, and even required, to uphold the reputation of the profession at all times. Geoscientists should always default to positive behaviours and there is no time at which a geoscientist is "off duty". Acting ethically is the minimum requirement of anyone working within the geosciences. Actions by geoscience professionals, including posts on social, business, or other media in the public domain, that are abusive, discriminatory, or defamatory, may bring not only the individual into dishonor but also the profession and erode public confidence. The profession is founded on a continually renewed relationship of trust between geoscientists and society.

This principle may be considered in a disciplinary enquiry if a professional criticises or is criticised in an adverse manner in the public domain.

Geoscientists should be careful when sharing advice or opinions about geoscience work, especially in social or informal settings (e.g., during dinners with friends). Geoscientists can still be held liable for advice or opinions offered to recipients who are not their client or employer. As such, geoscientists should avoid sharing casual advice or opinions with others, especially outside of a professional environment, when comments are neither based on a complete understanding of the facts or a supporting analysis, nor accompanied by a discussion of the assumptions and limitations. However, if geoscientists choose to offer gratuitous advice, they should clarify the inadequacy of their information and accompany any opinion with a disclaimer or note of caution.

7. Avoid conflicts of interest but where such conflict arises, disclose to the appropriate parties without delay.

A conflict of interest occurs when the geoscientist has an interest, such as an investment, be it personal, family, or business, that could impair or appear to impair the ability to act in the best interest of the client or the profession. The geoscientist should use good judgement and avoid even the appearance of conflict.

If the activity, investment, or interest could compromise or appear to compromise impartiality, the geoscientist has an obligation to disclose the conflict or perceived conflict promptly to all parties so that a clear path towards resolution can be found. Where possible, disclosure should be in writing and acknowledged by the receiving party (i.e., the client).

When the geoscientist is recommending a course of action, the sole concern should be the best interests of the client, public health and safety, and due regard for the environment. Considerations of self-interest, such as commissions or other payments for services, should have absolutely no bearing upon the advice to the client or prospective client. Seeking the advice of peers can be a useful tool in determining whether a conflict may exist.

8. Respect confidentiality except when disclosure is required by law and/or there is an imminent threat to public health and safety.

Confidentiality is the ethical obligation to protect private, restricted, or sensitive information. It is a moral imperative with only limited exceptions that relate to public health and safety, and when required by law. Confidentiality is founded on three principals:

- Respect for the right to privacy
- Respect for relationships in which confidential information is shared
- Expectations that those entrusted with confidential information will safeguard that information.

At a personal level, it is important to maintain privacy and security of information between individuals as a matter of basic human behaviour. Within an organisation, personnel, management, and organisational data (e.g., trade secrets and intellectual property) are deemed confidential. Organisational information may also originate by contract or arrangement from related third parties and must also be treated as confidential. In some cases, a mutual non-disclosure agreement may govern the terms of confidentiality. Confidential information leaked to outside parties, such as competitors or agencies of government, both domestic and foreign or the public, can negatively impact an organisation and its partners. Employees and their organisations must respect confidentiality and comply with ethical and legal obligations.

Despite the critical importance of maintaining confidentiality, should the health and safety of the public be at risk, the geoscientist may, if appropriate to the circumstance, disclose information to an appropriate authority, possibly in confidence. The inclusion of the expectation of confidentiality in a contract may not be applicable where the confidentiality or

information conflicts with the law. For example, a geoscientist is compelled to report conditions that threaten the health, safety, or welfare of the public.

9. Encourage and assist in the development of a safe, diverse, and inclusive practice.

Diversity in the workplace refers to building an inclusive team or organisation where individuals are of different genders, religions, race, ages, ethnicities, sexual orientation, or educational levels. By supporting and promoting diversity and inclusion within the geoscience practice, the profession is broadened and strengthened by accessing a wide talent pool and gaining new perspectives. A diverse and inclusive workplace, where individuals feel safe and free to express themselves and are not stifled by a homogeneous culture, leads to better employee performance. Input from multiple viewpoints during geoscientific work provides the best results for a project.

Promotion of diversity in the workplace can meet resistance and the geoscience professional should strive to inform others about the importance, appropriateness, and benefits of diversity in the workplace. Geoscientists must uphold human rights and constantly endeavour to prevent discrimination.

10. Treat persons with respect, fairness, and equality.

Geoscientists must comply with human rights legislation prohibiting discriminatory behaviour and treatment based on race, national or ethnic origin, colour, religion, age, sex, sexual orientation, gender, marital status, disability, or other grounds. In addition to treating all equally, the treatment must be equitable and fair.

Equality in the workplace aims to ensure that all individuals have an equal opportunity to succeed and prevents people from being discriminated against or treated differently due to certain personality or physical characteristics. Equality and fairness are unambiguous terms, and it is typically obvious when actions are fair and equal. This differs from diversity which appreciates the difference between individuals and ensures that their varying attributes and characteristics are valued.

Respect is a way of treating or thinking about something or someone. It takes into consideration the viewpoints, background, culture, etc. of those with whom the geoscientist interacts. Public trust in the geoscience profession increases when geoscientists treat all persons with respect, fairness, and equality.

11. Responsibly inform employers, clients, and the public about earth sciences including natural resources, the environment, and geoscience risks and benefits.

As a part of the development of a professional, a body of knowledge and skills must be learned and mastered. This knowledge and training is to be used in the service of others and, as a primary principle, the safety, health, and welfare of the public must be continually considered.

A part of this obligation is a responsibility to inform the public about natural resources, hazards, and other geoscience phenomena with clarity and accuracy. The recognition of natural hazards is one of the areas where the geoscientist's training may far exceed that of the public. It is important that the geoscientist properly communicate the risks. This responsibility extends to include all situations where hazards exist, including advising the impacted public or an appropriate authority where failing to inform people would result in a situation in which the untrained public may be in danger. Information that is 'about a risk of significant harm to the environment or to the health or safety of the public or a group of people' or information that 'the disclosure of which is, for any other reason, clearly in the public interest' are also considerations.

This obligation to the safety, health, and welfare of the public, and which also extends to the geoscientist's own work environment, is often dependent upon the professional's judgements, risk assessments, decisions, and practices. Therefore, geoscientists must ensure that works in which they are involved conform with accepted practice, standards, and applicable codes, and would be considered "safe" based on peer review.

12. Clearly present to stakeholders any known implications of disregarding professional counsel.

Geoscience professionals have a duty to advise their employer and clients of the implications of overruling of a geoscience professional's decision and direction. This is particularly important if, for instance, the work is complex or the employer or client lacks expertise.

Initial attempts to inform the employer and clients can be done verbally, but if the advice continues to be discounted, written messages documenting the exchange of information should be used. In situations where there may be imminent danger to the safety, health, and welfare of the public, both the geoscience professional's regulator and the appropriate authorities should be informed.

13. Acknowledge limitations to knowledge and understanding in the field of geoscience.

The geoscientist must present professional opinion and counsel to any recipient in the context of the limitations to knowledge and the uncertainty in the field of geoscience, and the resulting effect on the work product and the counsel provided. As part of the work product, the stakeholder is to be informed by the geoscientist, in simple but accurate language, of the limitations to knowledge and the potential implications to the work product.

In addition to geoscience knowledge limitations, an analysis or opinion will involve accuracy limitations. Characterisation of geological attributes may involve extrapolations, inferences, and interpretations. These projections can lead to a wide range of potential outcomes. For example, controls on the spatial distribution and concentrations of mineral resources are complex and are subject to the type of measurement as well as its interpretation.

The geoscientist can express this uncertainty in the form of a sensitivity analysis to provide a range of outcomes for specific parameters included in the projection analysis. The geoscientist must convey these limitations, complexities, and the measurement accuracy to the stakeholder, with an assessment of risks and benefits, simply and accurately.

14. Present professional work, reports, and opinions in an objective and truthful manner.

The geoscience professional is charged with the responsibility of the health, safety, and welfare of the public. This responsibility relies on the presentation of work products, reports, and opinions in a manner that informs but does not promote. All opinions are supported by an analysis of all available facts. Professional work is presented in a careful, unbiased analysis, discussion, and summary.

Reports and opinions of a geoscientist should be characterised by objective analysis, not by advocacy.

15. Distinguish facts and observations from interpretations, and explicitly state any assumptions, when reporting or presenting.

The geoscientist functions in a wide range of roles and capacities, either independently or together with other professions/professionals. The geoscientist is required to provide independent analyses or opinions that are used by others.

The geoscientist may rely on data, facts, and observations provided by others or may generate this information independently. These data, facts, and observations are used to produce the professional opinion, work product, or report. The source of facts, observations, and potential interpretations relied upon in carrying out of the geoscientist's assignment must be clearly identified.

A geoscientist's conclusions rely on objectivity in data collection and analysis. The final work product and its presentation must include the information relied upon – or in some instances, not relied upon – and the rationale for inclusion or exclusion. Preparation of an unbiased presentation of the work requires the geoscientist to clearly present facts and observations, and distinguish them from interpretations and opinions. Assumptions, potential sources of error, and probable outcomes should be identified.

16. Cite authorship and sources, and acknowledge the contributions of others. Do not plagiarise.

Plagiarism is the act of presenting words, ideas, or images of another as your own work, whether under seal or not. The process of plagiarism denies giving the actual authors credit where it is due. Ideas that are copied may also not be within the geoscientist's area of expertise and could therefore constitute poor advice.

To avoid plagiarism, it is key to properly cite another's work where it has been used or referenced. In written reports, original content needs to be acknowledged within the body of

the text and within a reference section at the end of the paper. Citation should also be made clear when doing verbal or graphical presentations.

17. Organise, document, and archive data and work products using best management practices.

The work of geoscientists may be carried out for public or private interests. Regardless of the stakeholder, all data and work products should be organised, stored, and preserved for future use by ensuring that best information management practices are followed. This applies to physical samples and field sites, but also to files (digital and hard copy) such as lab tests, maps, computer analyses, reports, etc.

It is important that a geoscientist use best management practices relevant to the data and work products. Proper file-naming protocols and file-management systems are critical. Warehousing of physical samples and cloud-storage of electronic files must be considered. Ownership of data is another key factor that should be addressed in a best practices management plan.

18. Sample responsibly so that materials and sites are preserved for future study, and conduct work to minimise environmental impact.

Inherent to geoscientific investigation sometimes there is the need to obtain data from a unique location or source. This data collection may be non-destructive, such as photographs and written descriptions, or may require destructive retrieval of samples from the field for further analyses in an office or laboratory setting. The desirable data collection method is non-destructive, minimises environmental impact, and leaves the collection site intact.

Field work is expensive and, in some cases, may not be replicable. Analysis of the retrieved samples should be done as efficiently as possible to avoid waste. Preservation of the sampled materials, to whatever degree possible, will allow for future research.

19. Report incompetent, negligent, unethical, or illegal practice of geoscience to the appropriate authority.

The public typically does not have sufficient knowledge and experience to recognise incompetent or unethical geoscience practice and trusts that geoscience professionals will hold their colleagues accountable for their work. Geoscientists have a responsibility to safeguard public health and safety by reporting incompetent, negligent, or unethical practice to the regulatory body.

Incompetent practice is not having the required knowledge or skills. Negligent practice implies that the geoscientist failed to act in an appropriately careful and diligent manner although the geoscientist may technically be competent. Unethical practice is assessed against the code of ethics where the geoscience work is performed and/or the code or codes to which the geoscientist is legally held to account. Illegal practice is defined as a violation of the applicable law, regulations, or statutes. Health and safety violations would be considered illegal practice.

Concerns of incompetent, unethical, or illegal practice should first be made known to the person conducting the questionable practice. A peer-to-peer discussion is a good first step to broach the subject with a colleague who has shown incompetent, unethical, or illegal behaviour. If the situation is not corrected, there usually is an established process for reporting and handling incompetent, unethical, or illegal practice within each employment setting such that reporting can go through official channels without causing fear of reprisal for the geoscientist complainant. Written documentation of the observed practices or behaviors, and any available supporting evidence, must be available to the appropriate authorities.

If the incompetent, unethical, or illegal activity is not corrected within the employment setting and continues to jeopardise public health and safety, the problem should be reported to other appropriate authorities such as the jurisdiction's geoscience practice regulator. If there is imminent danger to public safety, appropriate emergency authorities must be contacted.

Whistle-blower protection indemnifying the geoscientist complainant from reprisals may be available in some jurisdictions. Maintaining appropriate confidentiality and operating in good faith by engaging only with appropriate authorities should provide the whistle-blower protection from reprisal by the offending practitioner.

20. Comply with all applicable laws of the jurisdiction where geoscience work is practised.

Upholding the health, safety, and welfare of the public is the foundational expectation of geoscientist professionals. Laws, regardless of the jurisdiction, are ideally created for that same purpose. An integral part of competent practice is an awareness of, and compliance with, applicable laws of the jurisdiction where the practitioner is working.

As well, geoscientists are expected to respect the law in their personal conduct and must not engage in acts that compromise their professional reputation or bring discredit to their profession.

Local laws where the geoscientist is working take precedent over laws of the practitioner's home jurisdiction, but the licensed geoscientist is also always accountable to the laws and standards of the geoscience practice regulation of the jurisdiction(s) in which they are licensed. Always be sensitive to local customs.

21. Observe the code of ethics that applies where geoscience work is practised if it meets or exceeds these stated ethics principles.

Geoscientists must comply with the laws and ethical requirements of the jurisdiction in which work is conducted. In cases where there are no rules of professional conduct, then the more rigorous of the professional ethics code to which the geoscientist is bound or these stated ethics principles should be followed. If the local professional rules do not meet the minimum

expectations of these stated ethics principles, then geoscientists should strive to meet these stated principles.

Each situation requires careful legal and risk analysis. Being open, honest, and transparent about such considerations and resulting decisions will assist the geoscientist in developing policies and procedures operating in other jurisdictions.

References & Resources

Canadian Professional Engineering and Geoscience Practice and Ethics, 5th and 6th (2019) Editions, Gordon C. Andrews, Patricia Shaw, John McPhee

APEGA Guideline for Ethical Practice v2.2, February 2013; https://www.apega.ca/docs/default-source/pdfs/standards-guidelines/ethical-practice.pdf?sfvrsn=78261e0b_8

APEGBC Code of Ethics Guidelines (pre-2021);
<https://www.yumpu.com/en/document/read/11720582/code-of-ethics-guidelines-apegbc>
(subsequently replaced by EGBC Guide to the Code of Ethics; March 2021;
<https://www.egbc.ca/getmedia/33d03861-5d04-43e9-b76b-ff57ba8b9bdb/EGBC-Guide-to-the-Code-of-Ethics-V2-0.pdf.aspx>)

Engineers Canada – Public Guideline on the Code of Ethics, March 2016;
<https://engineerscanada.ca/publications/public-guideline-on-the-code-of-ethics>

American Geosciences Institute (AGI) Guidelines for Ethical Professional Conduct, April 2015;
<https://www.americangeosciences.org/community/agi-guidelines-ethical-professional-conduct>

International Association for Promoting Geoethics (IAPG) Teaching Geoethics – Resources for Higher Education; Various Authors; A Geoethics Outcomes and Awareness Learning (GOAL) Project, 2020; <http://igi.ie/assets/uploads/2016/01/Code-of-Ethics.pdf>

Institute of Geologists of Ireland (IGI) Code of Ethics and Conduct, 2000;
<http://igi.ie/assets/uploads/2016/01/Code-of-Ethics.pdf>

Association of Professional Engineers and Geoscientists of Alberta (APEGA) Code of Ethics;
<https://www.apega.ca/members/legal-obligations>

APEGNB Code of Ethics, 2021; <https://www.apegnb.com/wp-content/uploads/By-Laws-2021-3.pdf>

Association of Professional Geoscientists of Nova Scotia (APGNS) Code of Ethics;
<https://www.geoscientistsns.ca/code-of-ethics/>

Association of Professional Engineers Yukon (APEY – Engineers Yukon) Code of Ethics;
<https://www.apey.yk.ca/code-of-ethics.php>

Engineers Geoscientists British Columbia (EGBC) Code of Ethics;
<https://www.egbc.ca/Complaints-Discipline/Code-of-Ethics/Code-of-Ethics>

Engineers PEI By-laws and Code of Ethics, 2013;
<https://www.engineerspei.com/sites/www.engineerspei.com/files/ByLaws-Code%20of%20Ethics%20-%20Final%20-website%20version%202014.pdf>

NAPEG Code of Ethics (NAPEG Bylaws Part II), 2019; <https://www.napeg.nt.ca/wp-content/uploads/2021/01/NAPEGCodeofEthics-Approved-March-13-2019-2.pdf>

Ordre des géologues du Québec (OGQ) Code of Ethics of Geologists, 2013; http://www.ogq.qc.ca/files/media/pdf/lois/code_deontologie_fe.pdf

Ordre des ingénieurs du Québec (OIQ) Code of Ethics of Engineers; <http://oiq.qc.ca/Documents/DAJ/Lois/TheCodeofEthicsofEngineers.pdf>

Professional Engineers Geoscientists Newfoundland and Labrador (PEGNL) Code of Ethics; https://www.pegnl.ca//documents/bylaw3_final%20code%20of%20ethics%20may%2013%202010.pdf

American Institute of Professional Geologists (AIPG) Code of Ethics, 2019; <https://aipg.org/page/Ethics>

American Association of Professional Geologists (AAPG) Code of Ethics; <https://www.aapg.org/about/aapg/overview#2474265-code-of-ethics>

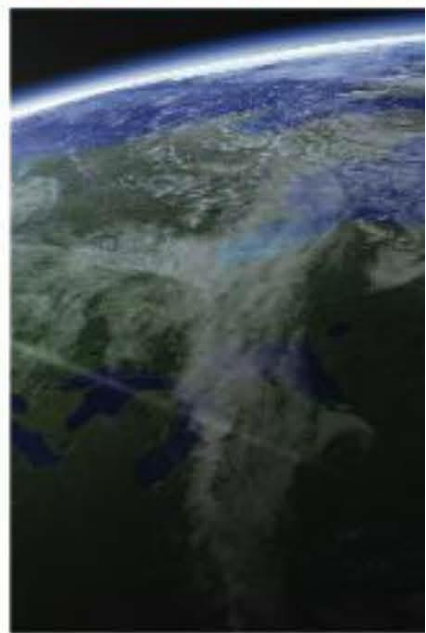
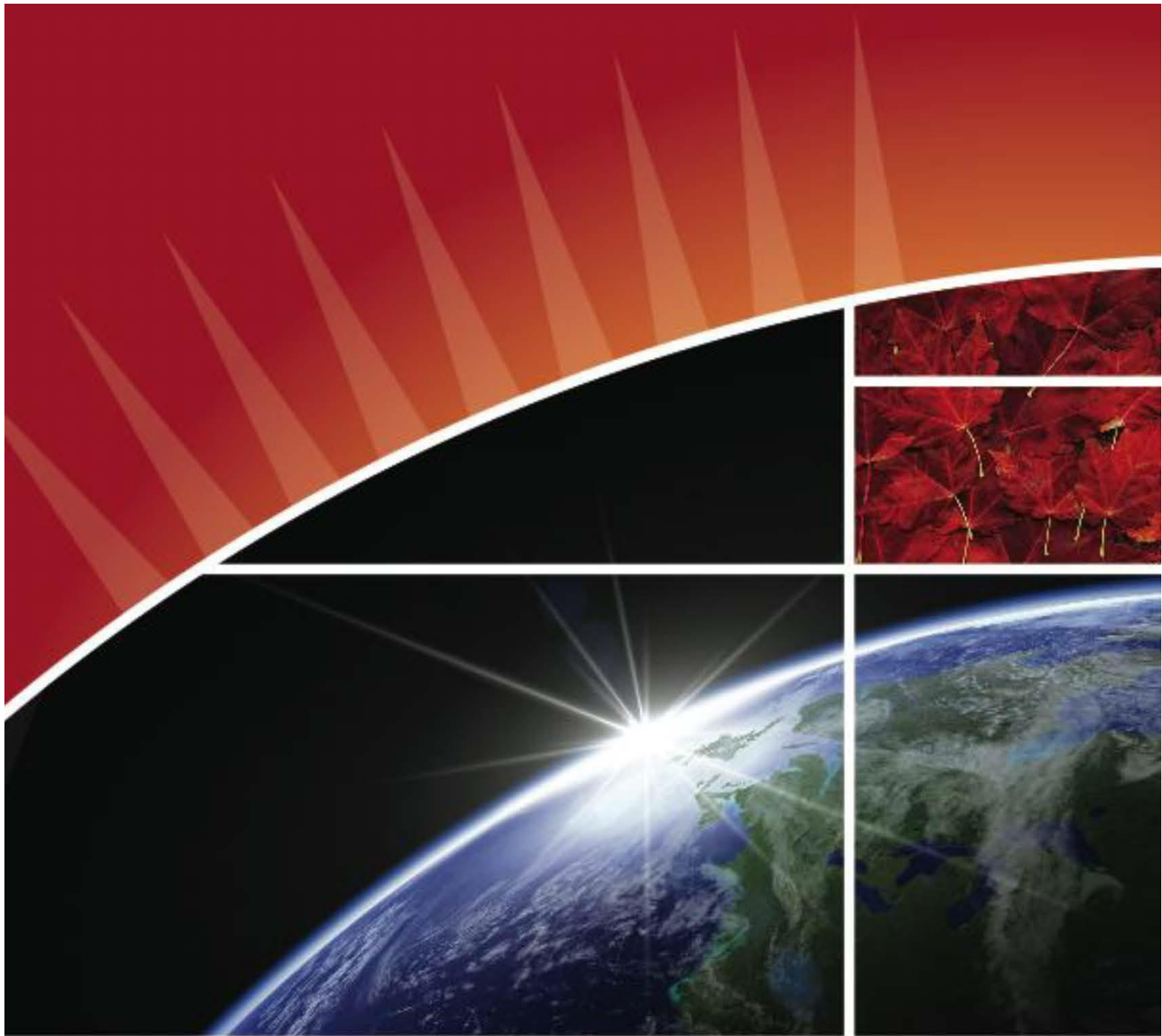
Australian Institute of Geoscientists (AIG) Code of Ethics, 2019; <https://www.aig.org.au/about-aig/geoscience-news/code-of-ethics/>

Australian Institute of Mining and Metallurgy (AusIMM) Code of Ethics, 2018; https://www.ausimm.com/globalassets/about-us/ausimm_code_of_ethics_22042020.pdf

European Federation of Geologists (EFG); Regulations – Code of Ethics; c1, Issue Ver 6; 11/2016; <https://eurogeologists.eu/wp-content/uploads/2017/07/Reg-C1-Ver-6-Nov-2016.pdf>

Geological Society of London (GSL); Fellowship & Professional Regulations Codes of Conduct; FP-07, Issue 10, 17/06/2020 - <https://www.geolsoc.org.uk/~media/shared/documents/society/Governance/Regulations/rfp07%20codes%20of%20conduct%20agreed%2017%20june%202020.pdf?la=en>

South African Council for Natural Scientific Professions (SACNASP) Code of Conduct, 2019; <https://www.sacnasp.org.za/uploads/files/SACNASP-reviewed-Code-of-Conduct.pdf>



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