PROFESSIONAL ENGINEERS & GEOSCIENTISTS NEWFOUNDLAND & LABRADOR
professional excellence. public trust.

Practice Guideline on the PEGNL Code of Ethics (By-Law #3)

Professional Engineers & Geoscientists

Newfoundland and Labrador

Approved by PEGNL Board September 2023

Revision History

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1	May 15, 2023	Initial Release – For Member Consultation	B. Hunt
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Table of Contents

1.0 Introduction

1.1 PEGNL

Professional Engineers and Geoscientists Newfoundland & Labrador (PEGNL) is mandated to regulate the practices of engineering and geoscience in the public interest. PEGNL exists so that there will be competent and ethical practice of engineering and geoscience in Newfoundland and Labrador, and to instill public confidence in the professions. To practice Engineering or Geoscience in Newfoundland and Labrador one must be registered, and in good standing, with PEGNL.

The Newfoundland and Labrador ***Engineers and Geoscientists Act, 2008 (Act)*** and the associated ***Engineers and Geoscientists Regulations, 2011 (Regulations)*** under that Act govern the practices of engineering and geoscience in the Province. PEGNL is the authority that licenses practitioners under the Act and administers all aspects of that legislation and strives to ensure the ethical conduct of professional members.

Under Section 36 of the *Regulations*, PEGNL can produce publications for the purpose of promoting high standards of professional services and for the maintenance and improvement of the competence of members. These publications inform and educate professional members, permit holders, and the public, in matters of professional practice and:

- make PEGNL professional members aware of their duties in performing specific components of their professional roles in accordance with the current *Act, Regulations and By-Laws*; and
- help the public, especially clients, contractors and suppliers, understand the role of PEGNL professional members and the responsibilities professional members have when performing professional services.

Professional members adhering to this Guideline are following best practices in conforming to the legislation and ethical practices applicable to this guideline.

Questions or concerns relating to this document should be addressed to the Professional Standards Director at PEGNL.

1.2 Background

PEGNL acknowledges and thanks Engineers and Geoscientists British Columbia for allowing PEGNL to use the concepts and content of their Code of Ethics Guidelines (2003) throughout this document.
Professional engineers and geoscientists registered with PEGNL must comply with the Code of Ethics (By-Law #3). They are held accountable for their professional practice and should exercise professional oversight for those under their supervision. They have an obligation to

conduct themselves, and practice their professions, in accordance with established and commonly accepted ethical standards. Professionals must demonstrate technical competence and ethical practice in the performance of their work to maintain the confidence and trust of: (a) the public, (b) their professional regulator (PEGNL), and (c) their client or employer. This responsibility forms part of their obligations to society.

The Board of PEGNL felt it would be useful to develop this Guideline to clarify what is normally expected of a reasonable and prudent professional licensee. However, it is not a comprehensive guide of what constitutes substantive engineering or geoscience practice. This guideline contains hypothetical examples to provide illustrations of the types of situations where the Code may be compromised; any similarity to actual persons or events is coincidental.

1.3 Definitions

Act
The Newfoundland and Labrador *Engineers and Geoscientists Act, 2008*
Discrimination
Treatment or consideration of or making a distinction in favor of or against, a person or thing based on the group, class or category to which that person or thing belongs rather than on individual merit[1].
Diversity
Including different types of people—such as people of different genders, sexual orientations, races, cultures, religions, physical, or mental ability—in a group or organization.
Equity
Freedom from bias or favoritism.
Harassment
A particular type of discrimination that occurs when a person is subjected to any unwanted behaviour that offends, demeans, or humiliates. Harassment can involve a single serious incident, but more often consists of a series of unwanted incidents over time. See also *sexual harassment.*
Member in Responsible Charge
A professional member who is responsible for ensuring that the practice of engineering or geoscience occurring within the permit holding entity meets professional standards and conforms with legislation, including the code of ethics.
PEGNL
Professional Engineers and Geoscientists Newfoundland and Labrador
Permit Holder
A corporation, person or an association of persons that holds a permit to practice under the *Act.* A permit holder has a *permit number* issued by PEGNL to engage in the practice of engineering or geoscience. **Person**

[1] Webster's Encyclopedic Unabridged Dictionary of the English Language (1989)

An individual, as well as a corporation, company, association, firm, partnership, society or other organization.

Professional Member

A professional engineer, professional geoscientist, limited licensee (engineering), or limited licensee (geoscience) entitled to engage in the practice of engineering or geoscience under the *Act.*

Reasonable accommodation

Changes to work responsibilities, the work environment or the way things are usually done to allow an individual with a permanent or temporary disability or other specific requirement to apply for a job, perform job functions, or enjoy equal access to benefits available to other individuals in the workplace, in a manner that does not materially impede the overall achievement of the work or result in an unsafe situation.

Regulations

The *Engineers and Geoscientists Regulations, 2011*

Sexual harassment

Unwanted sexual advances, unwanted requests for sexual favours, and other unwanted verbal or physical conduct of a sexual nature that offends, demeans, or humiliates an individual based on gender. Sexual harassment can involve a single serious incident, but more often consists of a series of unwanted incidents over time. See also *harassment.*

Workplace environment

All the objects, people, circumstances, and the mental, moral, or physical atmosphere surrounding a person in the performance of the job.

1.4 Responsibilities of Professional Members and Permit Holders

Professional members and permit holders are responsible for practicing in accordance with the Act, Regulations and By-laws (which include the PEGNL Code of Ethics).

A permit holder is corporately responsible for the integrity of its projects. A permit holder is responsible to put in place a quality management system enabling engineering or geoscience practice to be carried out competently and ethically by professionals with appropriate training and experience, which includes facilitating their compliance with this guideline.

While PEGNL has no authority to determine legal liability, as that rests with the courts, PEGNL does have jurisdiction and responsibility to administer the Act, Regulations and By-Laws. Not following this guideline without the ability to provide documented, sound professional justification may contravene the requirements of the Act, Regulations and By-Laws and could lead to discipline proceedings.

2.0 Interpretation of Code of Ethics Tenets

2.1 General

The PEGNL Code of Ethics By-Law consists primarily of eight (8) tenets (principles) of conduct. It also includes:

- definitions of professional misconduct, conduct unbecoming a professional member or permit holder, professional incompetence and incapacity or unfitness to practice, and;
- rules around conflict of interest and advertising of services.

Clause 1.2 of the PEGNL Code of Ethics states, "*Professional engineers and geoscientists shall recognize that professional ethics are founded upon integrity, competence and devotion to service and to the advancement of human welfare. This concept shall guide professional engineers and geoscientists at all times. Professional engineers and geoscientists shall conduct themselves in an honourable and ethical manner, uphold the values of truth, honesty and trustworthiness, and safeguard human life and welfare and the environment.*"

This clause provides the basic principles that serve as the foundation for interpretation of the eight tenets, which is intended to clarify and broaden the understanding of the Code.

The cases presented below are hypothetical illustrations of potential ethics violations and any resemblance to an actual life scenario is purely coincidental. While you may find more than one tenet violated in an example, the heading it is presented under reflects to most appropriate tenet.

2.2 Tenet 1- Safety, Welfare and Protection of Public (Section 1.2(a), By-Law #3)

"Professional engineers and geoscientists shall hold paramount the safety, health and welfare of the public and the protection of the environment and promote health and safety within the workplace"

PEGNL Interpretation:

Compliance with this obligation will often involve professional judgements and risk assessments. Professional members must ensure that works with which they are involved conform to accepted professional practice, standards, and applicable codes, and that those works would be considered "safe" and appropriate for the intended purpose based on peer adjudication. A professional also has an obligation to advise the appropriate authority if there is reason to believe that any activity, product, process, or device may not be in compliance with accepted standards.

The use of the word "paramount" in this basic tenet means that all other requirements of the Code are subordinate when protection of public safety, health and welfare of the public, protection of the environment or health and safety in the workplace are involved.

It is understood that any action or construction undertaken may necessarily involve some risk to safety, health, and welfare, and have some impact on the environment. To "hold paramount" in this context means to give diligent regard to; to stand ahead of the other seven tenets; and to rank ahead of either expediency or economic gain to either the client or oneself. Once this tenet is addressed in a substantive way, the other tenets may be considered.

Professional members should take appropriate action or notify proper authorities of any instance where, in their professional opinion, they believe that public safety or welfare may be endangered, or the physical environment may be adversely affected (see also Tenet 7 - Duty to Report).

Professional members should not complete, sign or stamp plans or other documents that, in their professional opinion, would result in conditions detrimental to human welfare including the environment or would not conform to current engineering or geoscience standards. If clients or employers insist on such conduct, and the member is unable to dissuade them, then the guidance regarding Tenet 6 - Duty to Inform should be followed.

Professional members should understand their obligations respecting applicable regulations regarding public safety and welfare, including industrial and construction safety legislation and current building codes.

Professional members should maintain an awareness of the immediate and long-term effects of the practices and technologies that affect public welfare (e.g., automation and artificial intelligence). A member's duty to their clients or employers is secondary to their duty to the safety and welfare of the public.

A professional member's obligation to protect the environment, which includes consideration for potential climate impacts, means that they are expected to consider any impact of their work on the climate and stay current science-driven, knowledge-based approaches to future climate impacts. They should also be aware that future climate predictions may necessitate projecting and designing beyond current code requirements.

Tenet 1 – Case 1

A geoscientist working as a government hydrogeologist was asked to review a groundwater supply assessment for a new, un-serviced housing subdivision in a rural area. Under the regulations, the developer was required to drill two wells and conduct pumping tests to prove that there was enough water to service the lots planned for the development. Of the two wells drilled, one had no water and the other had minimal water. The geoscientist wrote a memo rejecting the application to subdivide the land, based on the lack of water, and recommended that the developer drill more wells if they wished to continue to pursue the application. After a period of time, a senior government official approached the geoscientist and asked that the decision be changed as the developer had a lot of money invested in the land. When the geoscientist explained that people purchasing the lots would not have sufficient water (as obligated to do under Tenet 6 - Duty to Inform), the official stepped closer, smiled and strongly suggested that the decision be changed. What should the geoscientist do?

The geoscientist should stand by the decision. The welfare of the eventual homeowners must take priority over the developer's profit. This is a difficult situation as the geoscientist is expected to be a faithful agent to the employer (Tenet 3) and there could be employment repercussions. Nevertheless, if the senior government official overrules the decision, the geoscientist may need to report the matter to a

higher government official. If the situation cannot be resolved internally, it may also need to be reported to other authorities, including PEGNL (Tenet 7).

It is important to note that professional members licensed with PEGNL automatically have secondary professional liability insurance coverage through Engineers Canada that covers them in whistleblowing cases (reporting unethical behaviour) which result in termination of their employment. The insurance provides coverage (within established limits) for legal advice, loss of income and assistance in finding new employment.

Tenet 1 – Case 2

An engineer was superintendent of a plant that used toxic chemicals to reduce ores and prevention of a chemical release to the environment depended on good operating practices in the plant. An operating manual was in place and operators had been well-trained. However, the attitude of plant management, including the engineer, was sloppy, and infractions of the manual's operating procedures were widespread. As a result, toxic material occasionally escaped the system and entered the outside environment. Fish in a creek were killed, as were birds in a downstream marsh and a rancher had to take special measures to provide water to his stock. What was the engineer's responsibility in this situation?

The engineer clearly failed in his duty to hold paramount the safety, health and welfare of the public and the protection of the environment. The need for strict adherence to the operating manual should have been instilled in both the workers and plant management. The engineer should also have considered a system redesigned so that it relied less on the human element to prevent releases to the environment.

Tenet 1 – Case 3

An experienced software engineer is designing software used in controlling an experimental search and rescue helicopter. Early simulation testing revealed that, under certain conditions, instabilities would arise that could cause the helicopter to crash. The software was patched to eliminate the specific problems uncovered by the tests. After these repairs, the software passed all the simulation tests.

The software engineer is not convinced that the software is safe and is worried that the problems uncovered by the simulation testing were symptomatic of a design flaw that could only be eliminated by an extensive redesign of the software. The engineer is convinced that the patch that was applied to remedy the specific tests in the simulation did not address the underlying problem. But, when the engineer's concerns are brought to management, they assure the engineer that the problem has been resolved. They further inform the engineer that any major redesign effort would introduce unacceptable delays, resulting in costly penalties to the company.

There is a great deal of pressure on the engineer to sign off on the system and to allow it to be flight tested. It has even been hinted that, if the system deployment is delayed, the engineer's employment may be impacted. What should the engineer do next?

The engineer should reiterate their concern to management, clearly pointing out the possible consequences should their software cause a crash. Given their concerns, they should explain that, as a professional engineer with a primary duty to serve the public interest, they are unable to sign off on the software and assume responsibility for it. The engineer should clearly set out the steps that must be taken before software certification is possible, and advise the company that a professional engineer has an ethical obligation to report public safety issues to the appropriate authorities should the company find another engineer to sign off on the software,

2.3 Tenet 2 – Competence and Diligence - (Section 1.2(b), By-Law #3)

"Professional engineers and geoscientists shall offer services or advise on or undertake assignments only in areas of their competence and practice in a careful and diligent manner"

PEGNL Interpretation

Professionals should exercise care and communicate clearly and honestly when accepting or interpreting assignments, and when setting expected outcomes. Professional members must not misrepresent their qualifications to their clients or their employers or undertake any part of an assignment outside their area of competence. If for any reason, during execution of an assignment, they discover an element that is not within their area of competence, they must ensure that work is addressed by another qualified person.

Professionals have a responsibility to involve experts and specialists when, in their judgment, such services are in their client's or employer's best interest, or when they are not fully competent in the applicable area of work. With rapidly expanding technologies and new concepts and theories, professional members are not expected to be conversant with every new technical development. Thus, members have increased responsibility to employ the services of others who have expertise to supplement their own capabilities.

Professional members should clearly distinguish between facts, assumptions and opinions in reference to engineering or geoscience in the preparation of documents and in discussions with clients and colleagues. They should ensure, to the best of their ability, that statements on engineering or geoscience matters attributed to them properly reflect their professional opinion.

The requirement to practice in a careful and diligent manner requires honesty with one's client or employer, and with oneself.

Tenet 2 – Case 1

A very busy engineer reluctantly agreed to provide a report on a proposed plant layout for an old friend. The engineer assigned the task to a technician who was experienced in mechanical construction but had little background in plant layout. The technician did

their best but was unable to get advice from the engineer in areas of uncertainty since the engineer was too busy. The technician completed the report to draft stage and added a short memo stating a lack of confidence in the report and advised the engineer to give it detailed review.

Still very busy, the engineer simply had the draft report produced in final format and signed and stamped it without properly reviewing it. When the client received the report, they refused to pay for it and told the engineer's business partner that they would never hire the firm again. What should the engineer have done differently?

Knowing they were not capable of practicing in a careful and diligent manner under the current workload, the engineer should have either:

1. declined the assignment; or
2. rearranged the current priorities to give the report proper attention.

Tenet 2 - Case 2

An engineer had several years experience in the design of water and sewer systems and municipal streets, but no experience in designing retaining walls. A citizen who was building a large lakeview house on the lower slopes of a hill asked the engineer to design a retaining wall 3m high and 50m long to provide a flat lawn area in front of the house. As the engineer had studied retaining wall design in university, they accepted the assignment and relied on a manual of standard concrete designs to produce drawings and specifications for the contractor. Soon after construction was completed, the wall failed by sliding. What did the engineer do wrong?

The engineer clearly accepted an assignment outside their current area of competence. The university program may have included retaining wall design, and even some material on failure by sliding, but the engineer had not developed competency in this area either through practice or through continuing professional development. The failure indicates no investigation was performed to determine the ability of the soil to hold the retaining wall and no provision was made in the design to resist sliding. In short, the engineer provided little of the work the client was paying for, while allowing the client to believe it would be performed properly.

Tenet 2 -Case 3

An engineer, who recently moved to British Columbia from Newfoundland and Labrador, learned from a classmate at a reunion that a mining company had a prospect at tidewater on the coast and needed a design for a short bridge over a creek. The engineer had once designed a single-lane timber logging bridge over a creek in northwestern Ontario but had no other bridge experience. The engineer, who claimed to have extensive experience in bridge engineering, was awarded the assignment for the design by the mining company. The site was at the head of a steep fan of about 15% slope composed of unsorted blocky material. No flow records were available, so the engineer selected a clear waterway area based on high-water marks, feeling that

the site was straightforward and did not require a geotechnical investigation or advice. The bridge was a standard 15m span concrete box girder with H pile abutments and the construction went well except for a little difficulty in driving the piles. The bridge served well for six years and was then destroyed by a debris torrent. Did the engineer violate this ethical tenet?

The engineer clearly misrepresented their qualifications to the client as they had minimal bridge design experience especially in areas subject to debris torrents. This deficiency was then compounded by not engaging another engineer to provide geotechnical advice. An engineer experienced in bridges or geotechnical work would have noted the blocky unsorted material in the fan and concluded it was likely deposited by debris torrents. That issue could then have been addressed by relocation of site, provision of debris basin or greater vertical clearance.

2.4 Tenet 3 – Faithful Agents/Conflict of Interest (Section 1.2(c) – Bylaw #3)

"Professional engineers and geoscientists shall act as faithful agents of their clients or employers, maintain confidentiality and avoid conflicts of interest"

PEGNL Interpretation:

In providing services to a client, professional members should act as if they were members of the client's organization or team, holding high regard for the client's interests. This is implicit in the term "faithful agent" which forms the basis of the member/client or member/employer relationship.

If professional members become aware of errors or omissions in their services, they should report these to their superiors or clients immediately and work proactively to remedy such errors and omissions. Professional members have an obligation to provide timely notification and advice to their clients and employers when they believe a project or project component will not be successful.

Professional members involved in project management, contract supervision and field services should spend sufficient time on the job site to ascertain that the work is proceeding properly and expeditiously and especially with due regard for safety and the environment. Reports and progress estimates should reflect actual site conditions and progress. The interpretation of agreements and contract documents should be undertaken with fairness and impartiality.

Professional members should not engage in any outside activity likely to adversely affect their employers' businesses (legal job action excepted).

Being a faithful agent includes the obligation of advising clients or employers of the need to involve experts or specialists when such services are deemed to be in the client's or employer's best interests. It also means being accurate, objective and truthful in making public statements on behalf of the client or employer when required to do so, while respecting the client's and employer's rights of confidentiality and proprietary information.

All information received from a client or employer is considered confidential and should not be used without their permission, unless it is already in the public domain, there is a legal duty requiring disclosure (duty of a witness at trial), or there is a duty to report under tenet 7. Confidential information is proprietary and provided to Professional Members to facilitate their work.

Clients and employers are entitled to assume that Professional Members will continue to maintain confidentiality after the conclusion of their business relationship, regardless of whether they have signed confidentiality agreements to reflect this. Therefore, Professional Members have a responsibility to keep client information confidential when acting on their behalf and drafting documents for publication. If Professional Members are ever unsure whether certain information is confidential, it is best to obtain approval from the client or employer before publishing or disclosing in any way. When professional members use designs supplied by clients, the designs remain the property of the clients and should not be duplicated by the members for others without express permission from the first client. Professional members should not use information coming to them confidentially, during their assignments, for personal gain. Having said that, general technical knowledge, experience and expertise gained by the professional members through involvement with a client or employer may be freely used in subsequent undertakings, without consent.

Professional members shall avoid conflict of interest situations with employers and clients but, should such conflict arise, it is the professional member's responsibility to fully disclose, without delay, the nature of the conflict to the party or parties with whom the conflict exists. In circumstances where full disclosure is insufficient, or seen to be insufficient, to protect all parties' interests, the professional members shall withdraw totally from the issue or use extraordinary means, involving independent parties, to monitor the situation. It is inappropriate to act as agent for both the provider and recipient of professional services

Most but not all conflicts of interest arise out of business activities. Professional members should be careful in their business relationships so that potential conflicts within their control are avoided. For example:

- a member with authority to recommend purchase of vehicles who holds an interest in an automobile supplier.

- a geoscientist in a management position in the exploration division of a major oil company who hold an interest in a seismic contractor.
- an engineer or geoscientist employed by a municipality who holds an interest in a land developer operating in that municipality.
- a member who actively participates in organizations, lobby groups or voluntary committees detrimental to their employer's image and competitive position.
- a member or an immediate an family member of the member have an interest in a company competing to provide services, or is under the employ of the competing company.

Tenet 3 – Case 1

A process engineer with many years' experience in process heat transfer has been approached by a lawyer who is representing the owner of a small industrial plant who suffered equipment losses when a portion of his plant overheated and caught fire. The engineer is asked to examine the damage and the process design to determine whether the design had been a factor in the accident. He makes a careful inspection of the equipment and its process design documents and concludes that there were flaws in the process design. Estimates of heat transfer in one of the reactors were underestimated and it is likely that this caused the fire. The lawyer has asked the engineer to testify as an expert witness for his client who is suing the process designer. He has appeared in court in similar cases and normally charges a fee of $2,000 to appear as an expert witness. The lawyer explains that his client is short on funds right now but can pay the engineer 10% of any funds that are awarded by the court. Should the engineer accept this arrangement?

It would be professionally inappropriate to accept a fee that is contingent on the trial having a certain outcome. The purpose of an expert witness in court is to help the judge, jury, and anyone else involved in a trial to understand technical details that are difficult for people without specialized training to comprehend. When engineers and geoscientists appear as experts in court, it is of fundamental importance that their testimony be unbiased and factual. They are not an advocate for the person who hires them. A contingency fee can influence the objectivity of an expert's testimony, even if only subconsciously, because there is a financial incentive to give an opinion that will help their client win.

Tenet 3 - Case 2

A sole civil engineer in a small town in a remote region had a broad background including sewer and water, roads, bridges, structural design and building construction and inspection. The engineer's life partner owned four commercial buildings in the area. A major earthquake caused widespread damage in the region with significant cracking and settlement in commercial buildings, many of which were of unreinforced masonry.

Immediate structural inspection was necessary before anyone could be allowed to occupy the buildings. The town administrator asked the engineer to undertake this

inspection work. The engineer responded that inspecting the life partner's properties would be a clear conflict and that inspecting and passing opinion on buildings owned by others would give the appearance of a conflict due to potential tenant competition. The administrator appreciated the situation but could not get outside help because the earthquake had impacted transportation and communications and because other engineers were addressing similar situations in other communities in the region. The engineer agreed to do the work and had to condemn two of the life partner's buildings as well as five others. An aftershock confirmed the assessment by further damaging all seven condemned buildings and some minor damage to one passed as habitable. Had the engineer acted correctly?

The engineer behaved correctly by trying to avoid an assignment that led to a potential conflict or the appearance of conflict. When it could not be avoided, the work was undertaken with the client's interest as the primary objective. Conflicts of interest can easily be avoided by not taking an assignment or by withdrawing when a conflict arises. In rare cases when conflicts cannot be avoided, they should be declared to all appropriate parties and the client/employer's needs given priority over those of the member. Most of these rare cases will either be where there is an unavoidable time constraint, the required expertise is narrow, or the depth of experience required results in a few qualified professional members.

Tenet 3 - Case 3

A civil engineer in private practice in a medium-sized town in central Newfoundland received an assignment from a nearby community for design and field services for two blocks of curb and gutter and an extension of the existing storm sewer. When the design and contract documents were completed, the engineer advised the town clerk that they had an interest in Construction Company A that wanted to bid on the project. The engineer recommended to the clerk that the town engage another engineer to review the bids, and to then provide field services should Construction Company A be successful in their bid. Council agreed, Construction Company A was the successful bidder, and the third-party engineer provided the field services. Was the original civil engineer in a conflict of interest?

The civil engineer was clearly in a conflict-of-interest bidding on construction of work they had designed. The conflict could easily have been avoided by either not taking on the design or not bidding on the construction as they could have chosen to do either the design or the construction, not both. Having made this error in judgement, the engineer did not compound it by remaining silent, but the actions taken by the engineer, while a step in the right direction, may not have been enough. In preparing the design, it would be possible for the engineer to provide an advantage to their construction company by specifying extruded curbs if their construction firm had the only curb extrusion machine in the area, leaving the competition at a competitive disadvantage. Members should be very careful about their personal investments so that they do not create conflict of interest situations.

Nothing here prevents businesses from vertical integration, design-build, etc. Where there is one competition (formal or informal) for one contract, there is no conflict. In design-build, the contractor bids or negotiates a contract with the owner which requires the contractor to carry out a design and then build to that design — all in one contract.

Tenet 3 - Case 4

An engineer managed a plant equipment maintenance division for a large corporation and was one of six members on the Specifications Committee, which approved all standards and specifications for the organization. The engineer did not participate in the purchasing of equipment, which was handled by the purchasing division.

The president of one of the few manufacturers of the plant equipment used by the engineer's company, invited the engineer and his partner on a week-long holiday in the Bahamas at the manufacturer's expense and the engineer accepted. Did the engineer act ethically?

The engineer acted unethically by accepting the paid vacation. While not directly involved in purchasing, in the Specifications Committee role, the engineer had the potential to influence decisions that could give a competitive advantage to the manufacturer.

Members should be very careful about accepting gifts from anyone. While a member may, at the time, have a position that has no connection with a supplier or contractor there is no guarantee that they will not be appointed to a future position that is connected. It is safest to decline all gifts so that all actual, potential and perceived conflicts of interest are avoided.

2.5 Tenet 4 – Continuing Competency – (Section 1.2(d) Bylaw #3)

"Professional engineers and geoscientists shall 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 subordinates"

PEGNL Interpretation:

Professional members should ensure that their competence is maintained throughout their careers by remaining abreast of developments and knowledge in their area of practice. This requires a personal commitment to ongoing professional development and continuing education. Should there be a technologically driven or individually motivated shift in technical activity, it is a member's duty to attain and maintain competence in all areas of involvement.

Where professional members render services based on computer programs, they should do so only after taking steps to thoroughly understand the program, its underlying assumptions and its limitations. The use of computer programs in design shall only be undertaken in areas where the professional member has the ability to verify the result using first engineering design principles (design calculations by hand)

In addition to maintaining their own competence, professional members are encouraged to contribute to the advancement of the body of knowledge of the professions and actively participate in technical and professional development seminars, continuing education programs and the presentation of papers at professional meetings. They are encouraged to contribute to the dialogue fostered by their professional journals and support instructional activities in their area of involvement.

Within the framework of the practice of their profession, professional members should strive to provide opportunities to further the professional development of their subordinates.

Professional members should contribute to professional growth of members-in-training by requesting thorough performance of assigned tasks and conducting a constructive review of the quality of their work and general performance. Duties assigned to members-in-training should make use of their training and experience and give them maximum exposure to the knowledge of experienced professional members, which would include informal discussions with senior professional members on ethical dilemmas, individual employment interests and professional growth to maintain an up-to-date and competitive capability to serve employers, clients and the public.

Members-in-training should be encouraged to participate in professional development seminars, continuing education programs and the presentation of papers at professional meetings. They should be assisted in their advancement through teaching and thoughtful supervision and encouraged to become registered when they demonstrate adequate qualifications.

Tenet 4 - Case #1

A structural engineer undertook to design a structure for a client using a methodology learned in university some 20 years prior. Since then, the widespread introduction of computers has enabled the introduction of a new design methodology which revealed the old methodology was overly conservative. The engineer's design produced a structure that was safe and serviceable but with larger structural members than the modern methodology would have produced, resulting in a higher than necessary cost for the client. Did the engineer act ethically?

Under this tenet, the engineer has a duty to keep up to date in their discipline by studying journals of learned societies, attending refresher courses and seminars and/or other methods to keep their knowledge current. The failure to do this has cost the client unnecessary capital.

Tenet 4 - Case 2

A professional geoscientist {Geoscientist 1} was the immediate supervisor of another geoscientist {Geoscientist 2} in a large consulting organization. Geoscientist 2 had recently been elected to the PEGNL Board of Directors and meeting locations varied. To get to some of the more distant meetings on time it was necessary for Geoscientist 2 to leave work early. On being elected, Geoscientist 2 asked Geoscientist 1 for

permission to leave work an hour early on those days and make up the time by working late on other days. The nature of Geoscientist 2's work was such that the employer's interest would not have suffered. In addition, the employer had a policy that professionals were to be encouraged to actively participate in their respective professional associations and learned societies up to and including allowing a reasonable amount of time off with pay. Nevertheless, Geoscientist 1 refused permission for Geoscientist 2 to leave early and make up the lost time. Did Geoscientist 1 act unethically or do they have the right to run the local office as they sees fit?

Under this tenet, Geoscientist 1 has a duty to provide professional development opportunities for Geoscientist 2, but not necessarily on company time. However, considering the employer's policy, as well as Geoscientist 2's willingness to forego the policy and make up lost time, Geoscientist 1 had no legitimate reason for the refusal and thus violated the tenet.

2.6 Tenet 5 – Professionalism (equity, fairness, courtesy & good faith) (Section 1.2(e) – Bylaw #3)

"Professional engineers and geoscientists shall conduct themselves with equity, 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 criticism"

PEGNL Interpretation:

This tenet implicitly prohibits discrimination under our Code of Ethics. Further, Section 15. (1) of the Canadian Charter of Rights and Freedoms (the Charter), provides a clear statement that explicitly prohibits discrimination: "*Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.*

The combination of Section 15. (1) of the Charter, and this tenet, prohibits discrimination by professional members in their business life as well as in their public life, and any discrimination by a member or permit holder that violates the Charter could result in charges of unethical or unprofessional conduct under the Engineers and Geoscientists Act. A review of the definition of discrimination is necessary to provide additional clarity on this statement.

This guideline defines Discrimination as: "*Treatment or consideration of, or making a distinction in favor of or against, a person or thing based on the group, class or category to which that person or thing belongs rather than on individual merit."* Obviously, while distinctions, treatments and considerations may be regularly justified in many work

situations, it is the basis upon which the distinction, treatment or consideration is made that is important.

If the distinction is made based on individual merit and ability, discrimination is not a factor; however, if it is made based on the race, national or ethnic origin, colour, religion, gender, age or mental or physical disability of the individual, discrimination is a factor. Further clarification on discrimination from a human rights and diversity perspective is provided in Appendix A at the end of the guideline.

Professional members should not maliciously injure the character or the business prospects of another member or other individual, being as careful with a colleague's reputation as they would be with their own. Professional members should not attempt to replace another member on a particular assignment after becoming aware that definite steps have been taken toward the other's engagement and they should not use the advantages of a salaried position or knowledge of another professional member's bid to compete unfairly.

Unless convinced that responsibility to the public demands it, they should not express professional opinions that reflect on the ability or integrity of another person or organization, and they should exercise restraint when commenting upon the work of another professional member.

Professional members shall not copy the designs of others and publish them as their own without the express written permission of the professional member who completed the original design.

They should advise the client or employer when it appears that a project will not be in the best interests of the client, employer or the public and they should acknowledge contributions of others for work with which the member is associated and name those who were individually responsible for designs, inventions, writings or other accomplishments. Professional members should be open and receptive to new approaches or criticisms offered in a positive vein, and not unduly defensive regarding preconceived positions.

Professional members may promote and advertise their work or abilities provided that the advertising preserves the public interest by reporting accurate and factual information which neither exaggerates nor misleads, does not impair the dignity of others or their professions, and the statements do not convey criticism of other members directly or indirectly. They should endeavour to provide prospective engineering or geoscience employees with complete information on working conditions and proposed status of employment and, after employment, keep them informed of any changes in such conditions or status.

When called upon to review another professional's work, there is an obligation to inform (or make every effort to inform) the other professional, whether they are still actively involved or not. Contacting a member whose work is to be reviewed is not only a professional courtesy but also provides the opportunity for the exchange of pertinent information that would assist in the review. If the results of such a review demonstrate safety or environmental concerns, it is recommended that these concerns be highlighted to provide

them with an opportunity to comment prior to further action. If a client requests a review of the work of a member and further stipulates that the original professional member not be contacted, the client should be advised that these instructions are contrary to the spirit and intent of the Code of Ethics. For an adequate review, it may be important to be aware of the nature and conditions attached to the assignment handled by the first member. Open communication should exist between the two members so that underlying assumptions are understood by the reviewing member, and so that the first member has an opportunity to respond to any comments or criticisms. The essence of evaluating is that the document be read in a critical manner and the statements be confirmed or rejected by the reviewer.

Tenet 5 – Case 1

A project involved two separate consulting firms working under separate contracts with no contractual relationship between the two, and the project ended up being recognized for a national award. In the submission for the award Company A's engineer described some of the work they did and then described the overall project which included the work done by company B. In the submission company A did not mention any of the work done by company B and Company A took credit for the overall project and all disciplines.

Should Company A have given credit to Company B for their work on this project and was Company a's engineer in violation of the code of ethics in accepting an award based in part on work done by another firm?

The engineer acted unethically by accepting the award for the work without recognizing the contribution of Company B. Under this tenet, you must give credit where credit is due.

Tenet 5 - Case 2

A contractor building a structure designed by an engineer felt that the design of part of the structure was not suitable. To assist in his approach to the engineer, the contractor engaged a third-party engineer to review the matter and prepare a report. The third-party engineer went to the site and spent some time there looking into the matter but made no attempt to notify the design engineer. Did third-party engineer act in accordance with this tenet?

The third-party engineer should advise the original design engineer (however briefly) in a courteous manner that they were reviewing some of the design engineer's work at the request of the contractor. If design engineer was not available, then the third-party engineer should have written a short note and sent it to design engineer prior to proceeding with the review.

Tenet 5 - Case 3

An engineer {Engineer 1} was undertaking design of a water system for a small municipality to improve water quality reliability. The engineer proposed to pump from a creek that had adequate flow to a reservoir that could gravity feed the town, since the river was subject to intermittent ice jams, which typically stopped the flow of

water for 6-12 hours each winter. In addition, electric power outages in the area were common and occurred on average once a year lasting up to 12 hours. The engineer planned to address this by installing diesel generators in the pumphouse so that, during a power outage, the pumps could continue to feed the reservoir. The engineer made a presentation to the municipal council early in the design stage and there was a detailed account of this in the weekly newspaper. On reading this, another engineer {Engineer 2}, who was not connected with the project or the municipality, concluded that, in a gravity feed scenario, the 48 hours supply in the reservoir would be more than adequate to take care of the loss of creek flow and the power supply failure even if both occurred simultaneously. Engineer 2 felt that Engineer 1 was putting the municipality through unnecessary expense and immediately wrote a stinging letter to the newspaper commenting on what potentially was an unnecessary and expensive duplication. Engineer 2 made no attempt to contact Engineer 1. Did Engineer 2 act properly?

Engineer 2 should have exhausted other avenues of communication before going to the newspaper, including first discussing it with Engineer 1 and hearing the rationale. If this did not resolve the matter, Engineer 2 should have invited Engineer 1 to a meeting with the appropriate municipal officials. If that meeting failed to settle the issue, then Engineer2 could have gone public after first informing the parties of their intentions. Members have a duty to attempt resolution before going public.

2.7 Tenet 6 – Duty to Inform (Section 1.2(f) Bylaw #3)

"Professional engineers and geoscientists shall present clearly to employers and clients the possible consequences if their professional decisions or judgments are overruled or disregarded"

PEGNL Interpretation:

Professional members have a duty to advise their employer and/or their clients in situations when the overruling of an engineering or geoscience decision may result in breaching their duty to safeguard the public. The initial action is to discuss the problem with the supervisor or employer. If the supervisor or employer does not adequately respond to the concern, it should be taken to the next appropriate level. If these attempts fail to rectify the situation, the professional member must, under the duty to report in tenet 7, present the concerns to the appropriate regulatory authority, even at the risk of employment consequences. As noted in Case 1 of Tenet 1, Engineers Canada provides whistleblower protection to both engineers and geoscientists registered with PEGNL.

When the disagreement is between two members, the duty of the individual who bears professional responsibility for the decision is to ensure that the facts and recommendations are correct and that the information and assumptions are laid out simply and lucidly. This should be done in writing for contentious issues, ensuring that receipt of the message is confirmed by the other party. If the senior member chooses to overrule the other member's decision, in full knowledge of its basis, the senior member consciously takes responsibility.

When members find themselves in a situation where their recommendation is being questioned by a non-member, an additional element of difficulty is introduced. The non-member may not fully understand both the rationale of the recommendation and the potential consequences of failure to accept the recommendation. In such instances the member should make an extra effort to explain, in plain terms, the rationale for the recommendation and the consequences of an inappropriate decision. The member remains the last line of defence for the public welfare.

When a client or employer makes a decision that adversely affects the public interest, and is contrary to the recommendation of the member, the client or employer should be informed of the consequences of the decision. If the client or employer is unavailable or unresponsive, the member should notify the appropriate Government regulatory authorities who can evaluate the concerns and the have the power to suspend activities until the technical issue is resolved.

Tenet 6 – Case 1

A water resource engineer was hired by a coastal Labrador town to review the design of a new desalination facility that will provide drinking water to the town. After a comprehensive assessment of the machinery that the town plans to purchase for the facility, the engineer concludes that the proposed facility will not be capable of adequately desalinating the water on a year-round basis. At a meeting with two of six Town Councilors, the engineer informed them that a substantially more expensive facility will need to be constructed to ensure the water is rendered safely drinkable. The facility, as currently proposed, cannot provide desalinated water year-round and that poses a potential public health risk. The Councilors thank the engineer and advised that, due to budgetary constraints, the project will need to proceed as originally planned. The engineer left the meeting, disappointed that their advice was being ignored. Has the engineer fulfilled their ethical duties?

Informing only two of six council members of the public hazard that the proposed facility will create does not fulfill the engineer's duty under this tenet.

The engineer should put their recommendation, as well as the possible consequences of not following it, into a clear and coherent report that is presented to the entire council. The engineer should also seek a response from council in writing, formally acknowledging that they have chosen to disregard the recommendations. If these steps are not taken, the engineer risks being held partially responsible for any public harm caused by the desalination project.

In addition, under Tenet 7, if the engineer is convinced the council will go ahead and build the desalination project, they have a duty to report to PEGNL or other appropriate agencies, the potential risks to the public.

Tenet 6 - Case 2

A long-established resource-based town was expanding because of the development of a new mine. The downtown area was rapidly changing, and the town wanted the

existing two-lane paved road with rudimentary drainage ditches replaced with a four-lane road with curb and gutter, storm sewer, and concrete sidewalks. Since the town's tax base would be low until the mine was in production, they decided to proceed on a staged basis over four years with all the storm sewer work completed in the first year.

A town engaged engineer designed the storm sewer to accommodate a one-hundred-year storm plus 35% based on the latest climate data available, but the preliminary cost estimate was more than the town could fund. The town explained the situation and asked the engineer to redesign it for a one-hundred-year storm. The engineer readily agreed, redesigned the storm sewer to the lower level of service that met the town's budget, and the storm sewer was built. The next year a rainstorm overwhelmed the storm sewer and the consequent flooding caused extensive property damage, forcing the town to make expensive settlements with the owners. Did the engineer act ethically in completing the design?

When the town asked the engineer to reduce the design capacity, the engineer accepted the decision without comment. It was the engineer's duty to warn the town of the consequences of their decision to lower the system capacity, which was a higher flood risk. The engineer should also have pointed out that designers tend to use storms with higher return periods as those using lower returns could potentially be held responsible for flood damages by the courts. Had the engineer fully informed the town and they insisted on the lower design level, the engineer would have discharged the duty to advise, and the town would have had the full information on which to base their decision.

2.8 Tenet 7 Duty to Report (Section 1.2(g) Bylaw #3)

"Professional engineers and geoscientists shall report to their association or other appropriate agencies any illegal or unethical engineering or geoscience decisions or practices by engineers, geoscientists or others"

PEGNL Interpretation:

Under the fairness tenet (Tenet 5), members should first attempt to redress any situation within their organization, if the matter is internal, through proper hierarchy channels. If the matter involves someone outside their organization, they should first contact the person, explain their concerns, and allow the person a chance to redress any concerns raised.

If the internal or external results are not satisfactory to the member, professional members are obliged to report to their regulator or other appropriate agency any illegal or unethical engineering decisions or practices by professional members or others.

If the immediate physical safety of the public is in jeopardy, speedy notification of the owner, operator or appropriate regulatory authorities is the immediate duty of the member. Notification to the Registrar of PEGNL is the member's next duty, so that a full investigation may either substantiate or dismiss the concern. Prompt notification is necessary to prevent potential harm to the public through the continuation of unacceptable engineering, or geoscience practices. Some hazards may worsen over time, such as chemical waste disposal.

Ignoring unprofessional practices, either for expediency or sympathy, may indirectly endanger the public and circumvent the responsibility of self-regulation that has been granted to PEGNL and its license holders. Intentionally refraining from reporting substantive breaches of the Code of Ethics on the part of another member of PEGNL constitutes unprofessional conduct.

Professional members, like every member of society, are bound by the general rules of litigation, including rules of privilege and disclosure. These rules do not permit members to disclose information received or developed when retained as an expert in litigation cases unless permission is given by the client or the information loses privilege after its use in litigation. If it is at all reasonably possible, the member should consult with their own lawyer for advice on whether the risk rises to the threshold of overriding client privilege or other duty of confidentiality.

Tenet 7 – Case 1

The Department of Environment (DoE) was seeking a firm to work on a series of municipal well rehabilitation projects, a long-term and potentially lucrative assignment. A geoscientist {Geoscientist 1} working at DoE suspects that ABC Geosciences will get the contract because they have the most impressive and relevant credentials of all candidates and have a reputation for excellence over many years working throughout the province. Geoscientist 1 has noticed that their supervisor who is also a geoscientist {Geoscientist 2}, has developed a personal relationship with WaterWorks Inc. who are also competing for the contract. Geoscientist 1's office is next to Geoscientist 2's, and Geoscientist 1 notices that every couple of days Geoscientist 2 receives a gift from WaterWorks Inc. (expensive wines, hockey tickets, and a nice watch). Despite ABC Geosciences' qualifications and proposal having been rated higher than WaterWorks Inc., Geoscientist 2 tells Geoscientist 1 that WaterWorks Inc. will be awarded the work. Geoscientist 1 is quite certain the decision was influenced by the gifts to Geoscientist 2 and possibly to other DoE employees. Should Geoscientist 1 report this even though it may impact their job?

When Geoscientist 2 tells Geoscientist 1 that the contract will be awarded to WaterWorks Inc., Geoscientist 1 should advise Geoscientist 2 that Geoscientist 1 will then be obligated to report Geoscientist 2's actions to both the employer and to PEGNL for investigation. If Geoscientist 2 proceeds with the award, Geoscientist 1 should report the suspected acceptance of a bribe to both Geoscientist 2's supervisor and to PEGNL, regardless of any personal repercussions Geoscientist 1 may endure. The acceptance of bribes is unethical and is also an offence under the Criminal Code. It could also be potentially hazardous if it turns out that WaterWorks Inc. was not fully qualified for the tasks they have been hired to do. Remaining silent could mean that Geoscientist 1 risks facing disciplinary action in the future for having been aware of unacceptable conduct and not reporting it.

Tenet 7 - Case 2

An acquaintance tells you that they do not trust the Town Engineer because the Town Engineer had persuaded the town council to widen the street to 4 lanes in front of the new shopping center at the full expense of the Town. This was contrary to Town policy requiring a cost sharing arrangement with developers. Your acquaintance also told you that, in return, the Town Engineer received stock in the shopping center company from the developer. Should you report this to PEGNL?

Typically, rumors and hearsay are communicated in generalities and not investigatable, but some of them may contain tangible statements that can be fact checked. In this case, the statements that "Town Engineer had persuaded council" (presumably in the face of a Town policy) and that "Town Engineer received stock" should be investigated further prior to reporting to PEGNL. The validity of these statements may be able to be confirmed through city and/or company records. If the statements are validated by another means, they may be investigatable as an allegation. If the statements are substantiated, you have a duty to report the apparent infraction to PEGNL.

2.9 Tenet 8 Interpretation to the Public (Section 1.2(h) Bylaw #3)

"Shall endeavour to interpret engineering and geoscience issues to the public in an objective and truthful manner"

PEGNL Interpretation:

Professional members should not make statements, criticisms or arguments inspired or paid for by private interests on matters relating to public policy, unless they indicate on whose behalf the statements are being made.

Professional members should clearly distinguish between facts, assumptions and opinions in reference to engineering or geoscience in the preparation of reports, in discussion with clients and colleagues, in statements to the media, in the publication of papers and articles and in discussion in a public forum.

It is incumbent upon professional members to express the results of their work clearly and accurately; to place an appropriate qualification on the result when a matter is only partially resolved; and to avoid bias due to political, economic or other non-technical factors. In both corporate and societal settings, they should focus discussion on the facts of the issue and do their best to ensure that their professional opinions are accurately represented. When presenting complex issues to a non-technical audience, members should simplify their discussion without losing the critical elements, to avoid misinterpretation by the audience.

Professional members who are called upon to provide opinion evidence for the purpose of litigation should be careful not to take a biased position. The member is not an advocate and should be willing to present the same factual opinion regardless of which side in a dispute has hired the member. Prior to providing an opinion, the member should advise the client

that payment of the account will be required regardless of whether or not the client likes the opinion expressed.

Members need not be devoid of personal or political interests; rather, they should separate their personal views from their professional activities and be impartial and factual when expressing professional opinions.

Tenet 8 – Case 1

An engineer wrote an article for a national magazine commenting on past road-building practices by a major forest company in an area where cutting ceased in the late 1970s. The engineer cited many examples of practices from that era that had led to erosion but did not clearly state in the article that the comments were based on the 1970s practices. In the article the engineer criticized the government and the forest company and called on readers to mount a write-in campaign. The magazine, noted for its bias, would not have published his article had the engineer focused on the fact that the issues noted were based on 50-year-old practices. This article was picked up by the local weekly newspaper which did a rehash implying the story was the result of an interview. In the story the engineer was quoted as having said the unacceptable roadbuilding practice was widespread throughout the province. Before publication, the reporter phoned the engineer and advised that the story, written from the magazine article content, was too long to read it all out. The reporter gave some highlights that did not include the "widespread" statement. The engineer expressed satisfaction with the story highlights from the reporter, which then appeared in the next issue of the paper and included the "widespread" statement. The engineer did not contact the newspaper publisher claiming the use of misquotes or improper context. Did the engineer violate this ethical tenet?

Clearly the engineer's behaviour violates this ethical tenet. By not being clear in the original article that the comments were based on 50-year-old practices, the engineer left it to the reader to assume that the poor road-building practice that had been observed, was still the practice of that forest company. In addition, by not getting details on the subsequent newspaper article prior to claiming satisfaction with it, the engineer left it open to further misinterpretation. This compounded the misleading perception the public would have of the forest company, and the government that allowed the poor road building practices. It is clear, in this case, that the engineer did not interpret this engineering issue to the public in an objective and truthful manner.

Tenet 8 - Case 2

A plant geoscientist for Nova Chrome Inc. knows that their manufacturing process results in periodic discharges of cadmium and chrome into Dead Fish Creek in concentrations which may cause serious long-term health effects for downstream water users. Because Nova Chrome Inc. is marginally profitable, management has made a policy decision to close the plant if and when wastewater controls are imposed

by the Government. When the plant geoscientist's boss, also a geoscientist, is questioned by the Department of the Environment, the plant geoscientist's boss understates the levels of chrome and cadmium discharged, and the plant geoscientist knows this. What are the plant geoscientist's ethical obligations.

The plant geoscientist realizes that the boss has violated this tenet of the code of ethics. The plant geoscientist has an obligation under Tenet 5 (good faith toward colleagues) to point out to the boss that the boss has an ethical obligation under the Code of Ethics to report in an objective and truthful manner and allow the boss the opportunity to correct the misreporting. The plant geoscientist should also advise the boss that if the reporting is not corrected, the plant geoscientist has an obligation under Tenets 1 (duty to the public and the environment) and 7 (duty to report unethical behavior), to report to PEGNL and the government.

Appendix A - Further Clarification of Discrimination from a Human Rights and Diversity Perspective

Background and Purpose

PEGNL recognizes the importance of fostering a *workplace environment* that welcomes all members of our society and facilitates their ability to develop their full potential. Licensees and permit holders should be proactive in improving the workplace environment for all employees, clients, and associates and in addressing issues such as *discrimination* and *harassment*.

PEGNL professional members and permit holders are expected to behave in a manner that exemplifies and supports the fair and courteous treatment of others, as required by Section 1.2(e) of the Code of Ethics.

The purpose of this Appendix is to provide further clarification regarding human rights and *diversity* issues that are relevant in professional practice.

Human Rights Legal Framework

All employers (including corporations, societies, partnerships, unions, and government entities) are governed by either the federal *Canadian Human Rights Act,* RSC 1985, c. H-6, or the Newfoundland and Labrador *Human Rights Act, 2010,* cH-13.1.

PEGNL Human Rights Statement

PEGNL affirms the fundamental principle that all persons have the intrinsic human right to be treated fairly and with dignity. Professional members and permit holders are expected to conduct themselves in a manner that promotes and encourages recognition of this right. Any discrimination, harassment, or intimidation that violates the human rights of others is improper and offensive. Any such action perpetrated or condoned by a professional member and permit holder entities is unacceptable and may constitute a breach of the Code of Ethics. Professional members and permit holder entities are encouraged to respect the human rights of others, and to:

- be proactive in understanding human rights issues;
- be familiar with applicable laws;
- act where appropriate to protect human rights; and
- be vigilant against discrimination and harassment.

Furthermore, all professional members and persons representing permit holders who are responsible for establishing organizational policies, or who can influence those policies, should act to:

- provide a workplace environment that fosters mutual respect and good interpersonal relations;
- establish human rights policies within their organizations;
- establish policies to prohibit discrimination and harassment;
- establish effective procedures to deal with incidents;

- foster diversity in the workplace environment; and
- provide effective education programs for all employees.

Human rights commission offices can be contacted for assistance with creating and implementing effective human rights policies.

Discrimination

Discrimination occurs in the workplace when people are treated differently because of a particular attribute such as race, gender, age, disability, culture or other attribute listed in the human rights codes. Within the workplace environment, discrimination may occur in many forms, some blatant, others subtle. A simple test for discrimination asks, "Would an individual be treated in this manner if they were not [e.g., Indigenous, female]?"

Grounds for Discrimination

The listed prohibited grounds of discrimination under the *Canadian Human Rights Act* and the *Newfoundland and Labrador Human Rights Act, 2010* include race, colour, nationality, ethnic origin, social origin, religious creed, religion, age, disability, disfigurement, sex, sexual orientation, gender identity, gender expression, marital status and family status.

Types of Discrimination

Prohibited discrimination may be in the form of:

- Direct discrimination,
- Adverse effect discrimination, or
- Systemic discrimination.

Each of these types of discrimination is discussed below.

Direct Discrimination

Direct discrimination means differential treatment based openly on a protected ground, where, for example, an employer expressly denies employment based on an individual's race or physical disability.

Adverse Effect Discrimination

Adverse effect discrimination results from a policy or rule that appears to treat all individuals equally but results in legally prohibited discrimination against an individual or group of individuals. Identifying adverse effect discrimination requires assessing the effect that the application of a policy or rule will have on individuals, beyond the express or apparent purpose of the policy or rule. An example could be instituting a hand-washing policy that adversely affects an employee with sensitive skin without assessing alternatives to accommodate that employee.

Systemic Discrimination

Systemic discrimination refers to patterns of behaviour or practices that are part of the structure of an organization and that cause discrimination. This type of discrimination is not random; it is based on established and often widely accepted behavioural norms. Denying employment opportunities to females in a typically male-dominated job is an example of this type of discrimination.

Harassment

Harassment is a particular type of discrimination. It occurs when a person is subjected to any unwanted behaviour that offends, demeans, or humiliates. It includes, but is not limited to, verbal abuse and intimidation, as well as the displaying of racist, sexist, or other offensive materials.

Harassment can take many forms, such as sexually suggestive comments or gestures or unwanted physical contact, including physical or sexual assault. *Sexual harassment* is particularly offensive when submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or when submission to or rejection of such conduct by an individual affects the individual's employment.

Harassment can involve a single serious incident, but more often consists of a series of unwanted incidents over time. In the workplace environment, harassment creates a hostile or poisoned work atmosphere that interferes with the quality of work and can affect an individual's personal life. Many individuals live with the threat of being forced out of a job, fired, or denied promotions or other work-related benefits. Even jokes that cause awkwardness or embarrassment can undermine a person's self-esteem and can lead to a wide range of stress-related illnesses. Individuals often feel intimidated, humiliated, and degraded. Harassment is not harmless, funny, or trivial. It is the responsibility of all professional members and representatives of permit holders to be aware of how their behaviour affects others. Behaviour that is unwelcome and unwanted or makes others feel uncomfortable may result in harassment allegations.

In addition, employers may be held responsible for the behaviour of their employees, particularly if employers have not taken adequate steps to provide a discrimination-free workplace environment. Under the principle of vicarious liability, the Supreme Court of Canada has found that the employer may be responsible for the actions of its employees[2]. Lack of awareness may not eliminate this potential liability. Employers are responsible for providing a harassment-free work environment for all employees, clients, and other associates. An effective policy regarding harassment can significantly reduce an employer's or association's liability should a complaint ever be made or filed. Prompt and appropriate response to such a complaint can further reduce liability.

Diversity

Diversity Considerations

People entering the workforce today come from many different demographic groups. This variety brings opportunities for businesses and professions. The diverse points of view thus available bring added creativity and innovation, improve decision-making, and create a competitive advantage. Society's increasing diversity will influence the professions, workplaces, and relationships with associates. Members should seek to understand the viewpoints of others and develop joint ways of dealing with issues. New behavioural norms that welcome diverse groups are required in the workplace environment to allow all individuals to contribute to the best of their abilities within their organizations.

[2] *Bazley v. Curry [1999]2 SCR 534*

Professional members are encouraged to work to improve the workplace environment and eliminate barriers to acceptance and advancement while maintaining fair and just treatment for all. Eliminating these barriers and improving the workplace environment is an area where continuous improvement is in order and where the professions have an opportunity to demonstrate leadership.

The following sections illustrate the issues facing several of the diverse groups in our society.

Diversity Considerations Related to Women

Women are under-represented in the engineering and geoscience professions, especially at the senior levels. Societal expectations and stereotypes have kept many women from even attempting to enter the professions. Within some of our professional workplaces, barriers to the acceptance and advancement of women still exist. Among these are:

Direct discrimination:

Some women have been denied the opportunity to practice, even though fully qualified. The rationalizations given for such treatment have ranged from a presumed inability to be effective in field work to concern over women's ability to effectively balance home and work responsibilities and the potential leave requirements for childbearing.

Systemic discrimination:

Our professions have been dominated by men, and so the role models and understood norms for successful professionals have been largely masculine. Many women entering the profession have had to adapt to these masculine standards to be successful or risk isolation from their male colleagues.

Harassment:

Women can be subjected to harassment, both deliberate and inadvertent, which impacts the likelihood of them staying in our professions. Harassment based on gender reduces women's ability to progress through their careers and harms the reputation and credibility of the professions.

Diversity Considerations Related to Sexual Orientation and Gender Identity

Sexual orientation and gender identity are grounds of discrimination prohibited under legislation. The early recognition of this basis of discrimination was of greatest significance to gays and lesbians and gradually widened to include bisexual and transgender persons. Related issues include the denial of accommodations and housing, the denial of services by both public bodies and private sector organizations (such as food services and retail services), harassment in the workplace, loss of employment, denial of permits and licenses, denial of training, and denial of promotion.

Diversity Considerations Related to Indigenous People

The culture and history of Indigenous peoples in Canada are distinct. Existing Indigenous and treaty rights of the Indigenous peoples in Canada are recognized and affirmed in the *Constitution Act*, 1982. In working with Indigenous peoples, it is important to appreciate that different processes and ways of conducting business may

apply and that customs may vary from community to community. Respect is an integral part of Indigenous culture and developing mutual respect and understanding takes time. Listening with patience and honouring community elders are also important cultural norms.

Diversity Considerations Related to Persons with Disabilities

Persons with disabilities have faced significant barriers to employment and fair treatment. These barriers can be attitudinal or physical. Attitudinal barriers exist because of the assumptions made about what persons with disabilities can and cannot do. Some people are uncomfortable with individuals who have some form of disability and are unsure of how to behave around them. The physical and attitudinal barriers often can be removed or eased by accommodation or education. There are agencies and associations that can provide more information on overcoming the range of barriers that may exist in the workplace. The Supreme Court of Canada has ruled that an employer must take "reasonable steps" in making accommodations so that people do not suffer discrimination. Such a ruling empowers human rights commissions to impose the legal duty of *reasonable accommodation* in the workplace.[3]

Diversity Considerations Related to Newcomers

Newcomers to our country arrive with a wide variety of expectations, abilities, and needs. Many of them come from cultures that have significantly different behavioural norms from those in Canada. In addition, English may be their second (or third) language. While these factors may make it more difficult to communicate or to develop understanding, it is important that all people are treated fairly and with dignity. Where appropriate, professional members should take steps to facilitate their participation in their workplaces and to ensure that their human rights are not violated.

Dealing with Harassment and Discrimination

If you are harassed or discriminated against, do not ignore it. The following steps are recommended for dealing with discrimination and harassment:

1. Make it clear to the person that their actions are not welcome.
2. Document your concerns and include details of the incident(s)s, date(s), time(s), place(s), and witness(es).
3. If you feel you have been discriminated against or harassed at work, notify the appropriate person as identified in your firm's discrimination and harassment policy. In the absence of a policy, talk to that person's supervisor, your supervisor or another senior person in the company.
4. If your complaints to the individual or the employer do not yield satisfactory results, you may wish to file a complaint with the appropriate human rights commission.

[3] Hydro-Québec v. Syndicat des employé-e-s de techniques professionnelles et de bureau d'Hydro-Québec, section locale 2000 (SCFP-FTQ), [2008] 2 SCR 561.

If you feel you have been discriminated against or harassed by a professional member, you may file an allegation with PEGNL.