

By Melodie Sullivan, attorney

# The professional, ethical conduct and the public's security

What must an engineer do when faced with decisions, made by his or her client, which could compromise the public's security? In order to answer this question, we must examine the laws and regulations guiding the engineer, the values underlying the practice of engineering and the engineer's personal sense of ethics. The Guidelines for professional practice, published by the Ordre des ingénieurs du Québec, describe the four fundamental values of the engineer's professional practice: competency, ethical conduct, accountability and social commitment.

Regarding ethical conduct, the Guidelines propose the following: "Committed to ethical conduct, an engineer's top priorities are the interests of society and of his or her clients; personal interest and profitability come second. Ethical conduct means dedication to integrity, availability, independence, professional discretion and solidarity with colleagues. In the search for technical and scientific success within the limits of legislation and regulations, the engineer's actions are guided by his or her professional conscience."

These values provide direction for engineers practicing across Canada. With respect to the fact that the ethical obligations of engineers must be given a broad interpretation, the Canadian Council of Professional Engineers (CCPE) had this to say in its Guideline on the Professional Engineering Practice in Canada: "The ethics of professional engineering is an integrated whole and cannot be reduced to "fixed" rules. Therefore, the more common issues and questions arising from the Code are discussed in a general framework, drawing on portions of the Code to demonstrate their interrelationship and to expand on the basic intent of the Code."

The Guideline sets out the engineer's essential role as regards the protection of the public in the following way: "Professional engineers should hold paramount the safety, health and welfare of the public and the protection of the environment. This obligation to the safety, health and welfare of the general public, which includes one's own work environment, is often dependent upon engineering judgements, risk assessments, decisions and practices incorporated into structures, machines, products, processes, and devices. Therefore, engineers must ensure that works they are involved with conform with (sic) accepted engineering practice, standards, and applicable codes, and would be considered "safe" based on peer adjudication. This responsibility extends to include all situations which an engineer encounters, and includes

an obligation to advise the appropriate authority if there is reason to believe that any engineering activity or its products, processes, etc. are not in compliance in a significant manner."

## THE PUBLIC'S INTEREST, FIRST AND FOREMOST

Given the foregoing considerations and faced with having to choose between maintaining a business relationship with the client or complying with his or her values and sense of ethics, the engineer must uphold the public's interest above all.

Hypothetically, let us examine the case of an engineer performing his or her duties consisting of preparing plans and specifications for the construction of a factory. After having delivered these documents, the engineer learns that the client has replaced certain elements referred to in the documents in hopes of limiting costs. As a result of these changes, the building's structure would not be in compliance with the codes or with good practice. Recognizing these facts, the engineer concludes that the structure represents a danger for the public. What to do?

The Code of ethics of engineers (enabling statutes, Engineers Act, R.S.Q. c. I-9 and Professional Code, R.S.Q., c. C-26, a. 87) sets out the engineer's obligations. Section 3.02.07 provides that: "Where an engineer is responsible for the technical quality of engineering work, and his opinion is ignored, the engineer must clearly indicate to his client, in writing, the consequences which may result therefrom."

First of all, and inasmuch as the engineer's mandate includes carrying out engineering works or monitoring them, the engineer will have to advise the client of those non-compliant elements in connection with the plans and specifications. The engineer will also have to explain the possible implications arising from these faulty elements. At that moment, it is quite possible that the personal and business relations between the parties involved begin to deteriorate and that the engineer be faced with a decision to make: act in favour of his or her professional values or choose contractual harmony.

It will always be up to the engineer to determine whether his or her professional values are at stake and to ensure that his or her autonomy and professional independence remain intact. Following this initial reflection, the engineer may wish to go further and decide that the situation calls for advising the proper authorities, namely those responsible for the issuance and control of permits or those which enforce applicable rules and regulations.

Similarly, section 2.03 of the Code of ethics of engineers creates a duty for the engineer towards the public: "Whenever an engineer considers that certain works are a danger to public safety,

1. *Guidelines for professional practice, published by the Ordre des ingénieurs du Québec, 1990, p. 23.*
2. [http://www.engineerscanada.ca/e/files/guideline\\_practice\\_with.pdf](http://www.engineerscanada.ca/e/files/guideline_practice_with.pdf) (p. 12)

*It is up to the engineer to determine whether his or her professional values are at stake and to ensure that his or her autonomy and professional independence remain intact. The engineer may decide that the situation calls for advising the proper authorities.*

he must notify the Ordre des ingénieurs du Québec (Order) or the persons responsible for such work.”

This obligation rests with every engineer, whether or not he or she is directly involved in the work in question. In practical terms, once an engineer determines that there is a justified cause for action given that a danger to the public does indeed exist, based on his or her professional conscience and in light of the values underlying the profession, he or she must advise the Ordre des ingénieurs du Québec or those responsible for the work in question. The persons responsible for such work may include the client, the contractor or public authorities such as the Régie du bâtiment du Québec (RBQ) or the Commission de la santé et de la sécurité du travail (CSST). It goes without saying that the engineer will have to weigh his or her own knowledge and convictions before sounding the alarm.

In conclusion, adherence to the fundamental values of the practice of engineering, namely an ethical conduct and compliance with the duties set out in the Code of ethics, represents an obligation which implies ensuring the public’s protection, a principle overriding all other considerations. During the course of his or her work, the engineer must remain vigilant and diligent in order to avoid all pressures which might compromise his or her integrity and professional independence. It is, in essence, a question of judgement. The engineer must weigh these questions in light of the facts as well as his or her competencies and sense of accountability toward the public.