

NATIONAL ASSEMBLY

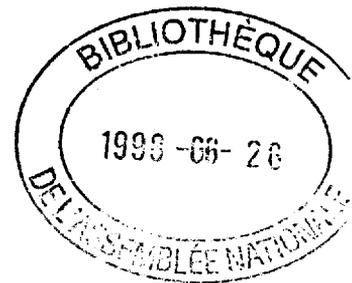
SECOND SESSION

THIRTY-FIFTH LEGISLATURE

Draft Bill

An Act to amend the Engineers Act and other legislative provisions

**Tabled by
Mr Serge Ménard
Minister responsible for the administration
of legislation respecting the professions**



Québec Official Publisher
1998

EXPLANATORY NOTES

This draft bill redefines the field of practice of engineers by revising the activities that may be performed exclusively by engineers and by determining the works in respect of which such activities are reserved to engineers.

The draft bill proposes the granting to the Bureau of the Ordre des ingénieurs of all the necessary powers to govern the legal persons authorized to practice the engineering profession.

Lastly, the draft bill proposes other legislative amendments, in particular in relation to penal matters.

LEGISLATION AMENDED BY THIS DRAFT BILL :

- Engineers Act (R.S.Q., chapter I-9);
- Public Buildings Safety Act (R.S.Q., chapter S-3).

Draft Bill

AN ACT TO AMEND THE ENGINEERS ACT AND OTHER LEGISLATIVE PROVISIONS

THE PARLIAMENT OF QUÉBEC ENACTS AS FOLLOWS :

1. Division I, the heading of Division II and sections 2 to 4 of the Engineers Act (R.S.Q., chapter I-9) are replaced by the following :

“DIVISION I

“DEFINITIONS

1. In this Act, unless the context indicates a different meaning,

“area” means the greatest horizontal area of a building within the outside surfaces of exterior walls or within the outside surface of exterior walls and the centre line of common fire-walls;

“building” means any construction used or intended for sheltering or housing persons, animals or things;

“Bureau” means the Bureau of the Order;

“engineer” means a member of the Order;

“industrial engineering facility” means a building or part of a building designed for a specific industrial process or for processing, repairing or storing goods or materials related to a specific industrial process;

“industrial process” means an ordered sequence of operations for the achievement of a specific practical result by the repeated application of a scientific or technological process for the purpose of natural resource transformation, industrial production or the protection, depollution or restoration of the environment;

“member” means a person entered on the roll of the Order;

“Order” means the Ordre des ingénieurs du Québec constituted by this Act;

“residential occupancy” means occupancy of a building or part of a building as a living space by persons for whom sleeping accommodation is provided, except a building or part of a building where persons are lodged or confined to receive medical treatment or where persons are detained;

“roll” means the list of the members in good standing of the Order drawn up in accordance with the Professional Code and this Act;

“storey” means that portion of a building which is situated between the top of any floor and the top of the floor next above it and, if there is no floor above it, that portion between the top of such floor and the ceiling above it;

“system” means a combination of physical components organized in dynamic interaction to carry out a specific practical function;

“technological valuation” means the evaluation of the state of an enterprise’s technological system and technological assets, and of the enterprise’s technological relations with the community;

“works” means a physical structure, an industrial process or a system in respect of which the engineering profession is practised pursuant to section 3 or a combination of such structures, processes or systems, the manuals required for the operation of such a structure, process or system according to design and any alteration, conversion or disposal work in connection with such a structure, process or system.

1.1. This Act does not apply to work relating to a building intended for residential occupancy whose area does not exceed 300 m², which does not exceed two storeys and whose total floorspace within the inside surface of exterior walls does not exceed 600 m².

Nor does this Act apply to a wood-frame building not intended for residential occupancy whose area and total floorspace do not exceed, respectively, the measurements specified in the first paragraph, which does not exceed one storey and whose structural components do not bear an overload exceeding 4.8 k.pa.

“DIVISION II

“PRACTICE OF THE ENGINEERING PROFESSION

2. The following activities, which proceed from the interpretation or application of exact sciences or technology through analysis or calculation, shall be the exclusive prerogative of engineers:

(a) designing a works;

(b) carrying out the review of a works, verifying the technical quality of a works, giving technical opinions concerning a works or certifying the conformity of a works with recognized construction, manufacturing, functioning and operating standards;

(c) supervising any work in connection with a works and establishing supervision and inspection directives.

“2.1. The design of a works by an engineer shall consist, according to the nature of the works, of all or some of the following activities: selecting, on the basis of relevant technical information, the applicable options, calculation criteria, processes and systems; analysing the risks associated with and impact of the works; optimizing and preparing the descriptions and sketches of the technical concept; making calculations; preparing design plans or reports and plans and specifications; preparing commissioning, operating and maintenance manuals, flowcharts, specifications and functional testing procedures for a works; verifying and certifying the technical concept, plans, specifications and manuals; and certifying their conformity with recognized construction, manufacturing, functioning and operating standards.

“2.2. The practice of the engineering profession includes the technological valuation of an enterprise.

“3. The engineering profession is practised in respect of the following elements of a building: foundations, structural components, mechanical installations such as heating, ventilation and air conditioning equipment, plumbing, electricity, elevators, hoists, escalators, moving walkways, fire protection systems and pressurized systems. In the case of an industrial engineering facility, the engineering profession is practised in respect of the entire facility.

The engineering profession is also practised in respect of the following works, where the safeguarding of human life, health, welfare and safety, of property or of the quality of the environment is dependent upon their reliability,

- (a) a construction other than a building erected on a foundation;
- (b) a removable or temporary installation;
- (c) a motorized apparatus and the electrical, electronic, mechanical, optical, hydraulic, pneumatic, aeronautical, thermal or nuclear components and manufactured materials of any other apparatus;
- (d) any other works used
 - (1) for the production, transformation, transportation, storage, distribution, consumption, efficient use or recovery of any form of energy;
 - (2) for the operation of an industrial facility or complex, in particular as equipment or tools;
 - (3) for the processing, conservation, use, transmission, emission or reception of information by electronic, electromagnetic or optical means or by any other means of the same nature;
 - (4) for the transportation or movement of persons or property;

(5) for municipal utilities or recreational facilities, in particular the road system, waterworks, sewer system or other sanitation services, energy supply, parks, pools, road signs, traffic management and fire protection, or for services of the same nature accessory to a commercial enterprise;

(6) for the analysis, treatment or purification of solids, liquids or gas or for the collection, transportation, sorting, transformation, storage, recycling or disposal of waste, refuse or residues;

(7) for the prospecting, development or processing of natural resources other than forest resources, particularly in mines, quarries and oil or gas fields;

(8) for the protection, depollution, restoration or enhancement of the environment;

(9) for the use, improvement, stabilization or protection of soil, rocks or ice or for water management;

(10) for agricultural or agri-food purposes;

(11) for the protection, supervision, control or safety of other works governed by this section that operate automatically;

(12) for the carrying out of work in connection with temporary soil and rock retention structures, cofferdams, formwork, shoring, scaffolding, platforms and cranes;

(e) any accessory construction other than an industrial engineering facility used or intended for housing a works described in subparagraphs *b* to *d*.

“4. Any engineer performing a design activity in respect of a future building or in respect of an alteration of the form, use, functioning or architectural character of a building must collaborate with the architect practising architecture in respect of the building.

Any architect practising architecture in respect of an industrial engineering facility or in respect of an accessory construction, other than such a facility, used or intended for housing a works described in subparagraphs *b* to *d* of the second paragraph of section 3 must collaborate with the engineer responsible for designing the facility or construction.

“4.1. The contractor in charge of work in connection with a works, the owner of such works and any person acting on behalf of either may supervise such work if

(1) the work is carried out on the basis of design plans or reports and plans and specifications certified by an engineer;

(2) supervision is effected in strict conformity with the written supervision directives prepared and certified by an engineer; and

(3) any modification of the plans or specifications or any substitution of materials is approved in writing by an engineer.

“4.2. Any person may perform an activity described in section 2 if it is performed under the supervision and responsibility of an engineer.

“4.3. Any person in the employ of the operator of an industrial enterprise may, in the exercise of that person’s functions, perform an activity described in section 2

(1) in respect of an industrial process already in operation in the enterprise, provided that there is no serious risk to human health or safety and that the finality of the process is not altered;

(2) in respect of a building belonging to the operator and whose area does not exceed 600 m² and which is intended for the operation of the enterprise.

“4.4. Any person who is an agent of the operator of a public utility enterprise or of a municipality may, in the exercise of that person’s functions, perform an activity described in section 2 in respect of a works belonging to the operator if

(1) the activity proceeds from plans prepared and standardized by an engineer and is performed in circumstances in which the plans are applicable;

(2) the works is made up exclusively of standardized and repetitive components and is assembled according to a procedure and a detailed description contained in the plans and specifications prepared and certified by an engineer and standardized by the operator for the purposes of the enterprise; or

(3) the activity is verified by an engineer and approved in a signed document containing the engineer’s permit number.

The person may also perform such an activity in respect of an industrial process already in operation in the enterprise, provided that there is no serious risk to human health or safety and that the finality of the process is not altered.

“4.5. Any person may, as a subcontractor of the operator of an industrial enterprise, produce the components of an apparatus described in subparagraph *c* of the second paragraph of section 3 in accordance with the specifications prepared by an engineer for the operator, provided the latter assumes full responsibility for the apparatus.

“4.6. Any member of the personnel of the operator of an enterprise or an industrial complex who is in charge of assembling an apparatus described in subparagraph *c* of the second paragraph of section 3 or industrial equipment or

tools using components manufactured outside Québec may use for that purpose plans or specifications prepared by the manufacturer outside Québec.

“4.7. Any person who is the holder of an accreditation issued according to law in respect of aeronautical products or of equipment intended for the supply of services related to the aeronautical industry may, if the person is a member of the personnel of an operator in the aeronautical industry, perform activities for which the person is qualified according to the accreditation in respect of an apparatus described in subparagraph *c* of the second paragraph of section 3 or in respect of components of the apparatus.”

2. Section 5 of the said Act is amended by striking out paragraphs *a*, *c*, *i*, *j* and *k*.

3. Section 11 of the said Act is replaced by the following :

“11. The Bureau may, by regulation,

(a) determine the requirements that a legal person must satisfy to be authorized to practise the engineering profession, in particular as to

i. its name;

ii. its objects;

iii. the status of member of the Order with full right to practise that may be required to act as an officer or director, which requirement is to be met at the very least by the chief executive officer or the chief of operations of the enterprise and by two or more members of the board of directors;

(b) prescribe the conditions and procedure for the issue and renewal of authorizations granted to legal persons, and the duration of such authorizations;

(c) determine the conditions upon which a legal person may be authorized to carry out projects comprising engineering, supply services as well as construction or construction management, and prescribe the conditions and procedure for the issue of such an authorization;

(d) determine the provisions of a regulation the contravention of which constitutes an offence;

(e) prescribe transitional measures concerning the application of a regulation to legal persons whose objects or activities are of the same nature as the professional activities reserved for engineers.

“11.1. The regulations made by the Bureau under sections 87 to 91 of the Professional Code apply to a legal person, with the necessary modifications.

The Bureau may amend such a regulation to ensure its applicability to a legal person.

“11.2. Sections 56, 57, 59, 59.2, the first and second paragraphs of section 60, sections 60.1 to 60.6, Divisions VI and VII of Chapter IV except sections 130, 133 and 156, and section 192 of the Professional Code apply to a legal person, with the necessary modifications.

“11.3. The Bureau must revoke the authorization of a legal person where

(1) the legal person’s authorization was obtained by fraud or on the basis of false declarations;

(2) the legal person no longer fulfils the conditions for the issue of the authorization, in particular those concerning liability insurance; or

(3) the legal person is bankrupt.

“11.4. The Bureau shall determine, by regulation, the liability insurance required of any legal person as protection against the pecuniary consequences of the obligation to which it may be held, by reason of an injurious act or omission, to repair an injury caused to another in the practice of the profession. The regulation may provide that the requirement may be met by means of an individual insurance contract, a group insurance contract or a contract of suretyship.

The regulation shall specify minimum stipulations as regards the amount of insurance and the indemnities payable. It shall also fix standards, in particular as to the number of losses and the nature of the risks or services that must be covered and as to the time from which they are covered. It shall, where applicable, contain provisions concerning the duration of the coverage, the due dates of premiums, maximum deductible amounts, exclusions and clauses of reduction of coverage.

The regulation may provide standards and rules that vary on the basis, in particular, of the number of shareholders or officers of the legal person who are engineers, of the main activities of the legal person, of whether or not it is a closed company within the meaning of the Securities Act (chapter V-1.1) and of the number of members of the Order that are in its employ.

“11.5. Failure by an engineer who is a director or officer of a legal person to inform the board of directors and the secretary of the Order of grounds on which the engineer believes that the legal person is acting in contravention of sections 11 to 11.4 is an act derogatory to the dignity of the engineering profession.

“11.6. Where a legal person is convicted of an offence under section 116 of the Professional Code, the committee on discipline shall impose either of the following penalties in respect of each count contained in the complaint:

(a) a fine of not less than \$1,000 for each offence; or

(b) revocation of the authorization.

For the purposes of subparagraph *a* of the first paragraph, where an offence continues, its continuity shall constitute a separate offence, day by day.

The decision of the committee on discipline may include terms and conditions. Where there is more than one penalty, it may also prescribe that the penalties apply consecutively.

“11.7. Where a legal person is convicted of an offence under section 116 of the Professional Code or under this Act, no engineer who ordered or authorized the commission of the offence or who consented thereto or participated therein as a director or officer of the legal person may be a shareholder, member, director or officer of any legal person referred to in section 11 or apply for an authorization required under that section.

The disqualification shall last for five years from the date of conviction.

“11.8. As regards the application of Division VII of the Professional Code and of any regulations made by the Bureau under section 87 of that Code to engineers or to legal persons, in addition to an activity performed in respect of a works described in section 3, any activity performed by an engineer or a legal person as a professional, including an activity performed in respect of a works exempted from the application of this Act, shall constitute the practice of the engineering profession.”

4. Section 15 of the said Act is amended

(1) by replacing “agricultural” in the third line of paragraph *b* of subsection 2 by “agri-food”;

(2) by replacing “or chemical” in the fourth line of paragraph *b* of subsection 2 by “, chemical, physical or computer”.

5. Section 18 of the said Act is repealed.

6. Section 19 of the said Act is repealed.

7. Section 22 of the said Act is amended

(1) by replacing “3 of this Act” in paragraph 1 by “2”;

(2) by replacing “fulfil the office of” in the first and second lines of paragraph 4 by “practise the engineering profession”.

8. The said Act is amended by inserting, after section 22, the following:

“22.1. Any person is guilty of an offence and is liable, in the case of a natural person, to a fine of not less than \$600 and not more than \$6,000 or, in

the case of a legal person, to a fine of not less than \$5,000 and not more than \$50,000, or of not more than 5% of the total budget for the work in connection with the works as established by the client, whichever is greater, who

(1) uses, for the purposes of the construction, alteration, disposal or conversion of a works whose design is within the exclusive practice of the engineering profession, plans or specifications not certified by an engineer;

(2) carries out, without using plans and specifications, work to construct, alter, dispose of or convert a works whose design is within the exclusive practice of the engineering profession;

(3) carries out work in connection with a works whose design is within the exclusive practice of the engineering profession without the supervision of an engineer or a person authorized under this Act;

(4) uses a document not certified by an engineer that records an activity that only an engineer may perform;

(5) contravenes a regulatory provision the contravention of which constitutes an offence.

“22.2. Any investigator designated by the Bureau may at any reasonable hour enter premises where work is carried out in connection with works for the purpose of ascertaining whether the plans, specifications or other engineering documents used have been certified by the engineer who prepared them or supervised their preparation and obtaining any relevant plan, specification or other engineering document. Such investigator must, if so requested, show a certificate of capacity signed by the secretary of the Order.

Any person who hinders the work of an investigator referred to in the first paragraph or refuses to deliver plans, specifications or other documents required by the investigator is guilty of an offence and is liable to either of the fines under section 22.1, according to whether the person is a natural person or a legal person.

“22.3. Penal proceedings for an offence other than an offence under the second paragraph of section 22.2 are prescribed one year after the date of opening of the investigation record relating to the offence. However, no proceeding may be brought if more than five years have elapsed since the date of commission of such an offence.

The certificate of the secretary of the Order or of another member of its personnel designated for that purpose by the Bureau is, in the absence of any evidence to the contrary, conclusive proof of the date of the opening of the investigation record.”

9. Sections 24 and 25 of the said Act are replaced by the following:

“24. An engineer must certify the plans, specifications and other engineering documents that are prepared by the engineer or under supervision of the engineer to record an activity constituting the practice of the engineering profession and attest that the documents comply with all applicable mandatory standards. The engineer may, in writing, restrict the validity of the attestation of compliance to a given territory and a specific period.

“25. An engineer shall certify any plan, specifications or other document recording an activity constituting the practice of the engineering profession by signing it, affixing the engineer’s seal and indicating any restrictions on the attestation of compliance with applicable standards.

However, where an engineer performs an activity in a facility as an agent of the operator of an enterprise, the engineer may certify any of the documents referred to in the first paragraph by signing the document and indicating the engineer’s permit number.”

10. Section 26 of the said Act is amended by replacing “No” in the first line of the first paragraph by “Except to the extent provided for by a regulation made under section 11, no”.

11. The said Act is amended by inserting, after section 26, the following :

“26.1. This Act applies subject to the competence granted to forest engineers concurrently with engineers by the Forest Engineers Act (chapter I-10) in respect of activities relating to forest engineering work and subject to the right to use the title of forest engineer under that Act.

“26.2. This Act shall not operate to prevent the holder of a bachelor’s degree issued by the Université du Québec upon completion of studies in technology at the École de technologie supérieure from carrying out work for which the holder is trained.”

12. Section 27 of the said Act is amended by replacing “practising as an engineer” in the first line by “performing an activity within the exclusive competence of engineers”.

13. Section 2.1 of the Public Buildings Safety Act (R.S.Q., chapter S-3), enacted by section 283 of chapter 34 of the statutes of 1985, is amended by striking out paragraph 3.

14. This Act comes into force on *(insert here the date of assent to this Act)*.