

Pipeline Regulations (Nova Scotia)

made under Section 44 of the

Pipeline Act

R.S.N.S. 1989, c. 345

O.I.C. 1998-452 (September 16, 1998), N.S. Reg. 66/98

as amended up to O.I.C. 2004-346 (August 26, 2004), N.S. Reg. 199/2004

Part I - General

Short title

1 These regulations may be cited as the Pipeline Regulations (Nova Scotia).

Interpretation

2 (1) Pursuant to clause 44(1)(x) of the Pipeline Act, the following words or expressions are defined for the purpose of that Act:

(a) "fees" include amounts payable to the Board

(i) upon application for a permit or licence;

(ii) for renewal, amendment, suspension, cancellation, transfer, assignment or abandonment of a permit or licence;

(iii) for a determination to alter or relocate the pipeline or to install additional or other equipment and the amounts payable as a result, pursuant to subsection 21(3) of the Act; and

(iv) for the purpose of recovering all or part of such direct and indirect expenses as the Board determines to be attributable to its responsibilities under the Act or these regulations;

(b) "marketing plant" includes oil transshipment, terminating or storage facilities;

(c) "pipes" includes gathering lines, transmission lines, distribution lines or service lines.

(2) In these regulations,

(a) "abandon" means to remove permanently from service or to declare abandoned by the owner, operator, person responsible, inspection officer or the Board;

(b) "Act" means the Pipeline Act;

(c) "Administrator" means a person designated by the Minister pursuant to Section 3 [3A] and includes an acting Administrator;

Clause 2(2)(c) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(ca) "Board" means the Nova Scotia Utility and Review Board;

Clause 2(2)(ca) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(cb) "bulk plant" means one or more above ground tanks or underground tanks, including any appurtenances, where petroleum products are received by pipeline, tank vessel, tank car or tank vehicle, and are stored in bulk for subsequent transmission by pipeline or transportation or distribution

by tank vessel, tank car or tank vehicle, but does not include a service station or a facility storing petroleum products for use only at that facility;

Clause 2(2)(c) relettered (cb): O.I.C. 2002-254, N.S. Reg. 67/2002.

(d) "certifying authority" means an independent person retained by the Board to perform the duties prescribed by Section 63;

(e) "change of service" means a change in the fluid transported in the pipeline which necessitates changes to the design requirements in accordance with CSA Z662;

(f) "class location" means a class location as defined in CSA Z662;

(g) "company" includes a person or a group of persons, partnership, or municipality and includes the heirs, successors, administrators or assigns of a company, person or group of persons, partnership, or municipality;

(h) "component" means component as defined in CSA Z662;

(i) "controlled area" means the strips of land 30 m wide immediately adjacent to each side of a pipeline right of way or, where the pipeline is not located within a pipeline right of way, immediately adjacent to each edge of the pipeline, and, without limitation, includes land that comprises the right of way held for the construction of a pipeline or for or incidental to the operation of a pipeline;

Clause 2(2)(i) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(j) "CSA" means the Canadian Standards Association;

(k) "CSA W178.2" means the CSA standard W178.2 entitled Certification of Welding Inspectors, as amended

Clause 2(2)(k) amended: O.I.C. 2004-346, N.S. Reg. 199/2004.

(l) "CSA Z341" means the CSA standard Z341 entitled Storage of Hydrocarbons in Underground Formations, as amended;

Clause 2(2)(l) amended: O.I.C. 2004-346, N.S. Reg. 199/2004.

(m) "CSA Z662" means the CSA standard Z662 entitled Oil and Gas Pipeline Systems, as amended;

Clause 2(2)(m) amended: O.I.C. 2004-346, N.S. Reg. 199/2004.

(n) "CSA Z731" means the CSA standard Z731 entitled Emergency Planning for Industry, as amended;

Clause 2(2)(n) amended: O.I.C. 2004-346, N.S. Reg. 199/2004.

(o) "dangerous goods or waste dangerous goods" means a substance that on entering the environment is in a quantity or concentration that

(i) may have an immediate or long-term adverse effect on the environment,

(ii) may constitute a danger to the environment on which human life depends,

(iii) may constitute a danger to human life or health;

(p) "deactivate" means to remove temporarily from service;

(pa) "Directorate" means the Nova Scotia Petroleum Directorate;

Clause 2(2)(pa) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(q) "distribution line" means distribution line as defined in CSA Z662;

(r) "environment" means environment as defined by the Environment Act;
Clause 2(2)(s) repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.

(t) "gas" means

(i) natural gas, including coal gas as defined in the Petroleum Resources Act, both before and after it has been subjected to any processing,

(ii) any substance removed from natural gas, crude oil, oil sands or coal for transmission in gaseous state,

(iii) any gaseous substance for injection to an underground formation through a well,

(iv) any substance declared by the Board to be gas;

(ta) "gas delivery system" means a gas delivery system as defined in the Gas Distribution Act;
Clause 2(2)(ta) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(u) "gas pipeline" means a pipeline through which gas is conveyed;

(v) "gathering line" means gathering line as defined in CSA Z662;

(w) "ground disturbance" means any work, operation or activity that results in a disturbance of the earth including, without limitation, excavating, digging, trenching, plowing, drilling, tunnelling, augering, backfilling, blasting, topsoil stripping, land levelling, peat removing, quarrying, clearing and grading, but does not include,

(i) except as otherwise provided in subclause (ii), a disturbance of the earth to a depth of less than 30 cm that does not result in a reduction of the earth cover over the pipeline to a depth that is less than the cover provided when the pipeline was installed,

(ii) cultivation to a depth of less than 45 cm below the surface of the ground, or

(iii) any work, operation or activity that is determined by the Board not to be a ground disturbance;

(x) "HVP" means hydrocarbons or hydrocarbon mixtures in the liquid or the quasi-liquid state with a vapour pressure greater than 110 kPa absolute at 38°C;

(y) "highway" means a highway to which the Public Highways Act applies;

(z) "incident" means an occurrence that results in

(i) the death of or serious injury to a person,

(ii) a significant adverse effect on the environment,

(iii) an unintended explosion,

(iv) an unintended or uncontained release of LVP hydrocarbons in excess of 1.5 m³,

(v) an unintended release of gas or HVP, or

(vi) the operation of a pipeline beyond its design limits as determined pursuant to CSA Z662 or any operating limits imposed by the Board;

(aa) "injection" includes removal;

(ab) "inspection officer" means a person authorized as such by the Board;

(ac) "ISO 9000" means the International Organization for Standardization standard series for a quality management system and quality assurance models;

(ad) "ISO 14000" means the International Organization for Standardization standard series for an environmental management system;

(ae) "installation" means

(i) any equipment, apparatus, mechanism, machinery or instrument incidental to the operation of a pipeline,

(ii) any building or structure that houses or protects anything referred to in subclause (i),

but does not include a refinery, processing plant, marketing plant or manufacturing plant;

(af) "joining" means the joining of pipe and components performed after the pipe and component manufacturing process;

(ag) "licence" means a licence issued pursuant to the Act to operate a pipeline;

(ah) "local authority" means the council of a regional municipality or incorporated town and includes an agency or body having the general administration or direction, management and control of a road by or under any Act of the Legislature;

(ai) "location factor" means location factor as determined in accordance with CSA Z662;

(aj) "LVP" means

(i) hydrocarbons or hydrocarbon mixtures in the liquid or quasi-liquid state with a vapour pressure of 110 kPa or less at 38°C,

(ii) multiphase fluids,

(iii) oil field water;

(ak) "maximum operating pressure" means maximum operating pressure as defined in CSA Z662;

(al) "Minister" means the Minister to whom is assigned all of the powers and duties conferred upon the Minister by the Act;

(am) "multiphase fluids" means multiphase fluids as defined in CSA Z662;

(an) "oil" means

(i) crude oil before and after it has been subjected to any refining or processing,

(ii) any hydrocarbon recovered from crude oil, oil sands, natural gas or coal for transmission in a liquid state,

(iii) liquefied natural gas,

and any other substance in association therewith;

(ao) "operate" includes deactivate and reactivate;

(ap) "permit" means a permit issued pursuant to the Act to construct a pipeline;

(aq) "pipeline" means pipes and installations for the transmission of

(i) gas,

(ii) oil,

(iii) fluids from a well,

(iv) water or effluent used or produced in connection with a well or the production or manufacture of gas or oil;

(ar) "prescribed" means prescribed by the regulations;

(as) "reactivate" means to return to service;

(at) "release" includes discharge, spray, inject, inoculate, abandon, deposit, spill, leak, seep, pour, emit, throw, dump, place, or exhaust;

(au) "road" means any road or road allowance and includes a street, public bridge or public park that is not a Provincial bridge or park within a regional municipality or incorporated town, but does not include a highway;

(av) "serious injury" includes an injury which results in

(i) fracture of a major bone,

(ii) amputation of a body part,

(iii) loss of sight of an eye,

(iv) internal haemorrhage,

(v) third degree burns,

(vi) unconsciousness, or

(vii) loss of a body part or function;

(aw) "service line" means service line as defined in CSA Z662;

(ax) "station" means a facility that is used by a company in connection with the operation of its pipeline, and includes a facility for pumping, compression, pressure reduction, maintenance, storage, metering, receiving or delivery, and includes the land and other works connected with the facility;

(axa) "storage facility" means a facility that is integral to a transmission line or distribution line and is constructed for the storage of oil and gas, and includes land and other works connected with the facility;

Clause 2(2)(axa) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(ay) "transmission" includes storage;

(az) "transmission line" means transmission line as defined in CSA Z662;

(ba) "well" means an orifice in the ground, including ground under water and the seabed and subsoil, made by drilling, boring or in any other manner, from which oil or gas is obtained or obtainable, or which is being so made for the purpose of seeking or obtaining oil or gas or ascertaining the presence of the same;

(bb) "working day" means a day other than Saturday or Sunday or a holiday in the Province of Nova Scotia.

(3) Wherever in these regulations a word or an expression defined by the Act or these regulations is used, it has the same meaning given to it by the Act or these regulations except where a contrary intention is expressed or necessarily implied.

Application

3 (1) These regulations apply in respect of pipelines designed, constructed, operated, maintained or abandoned in Nova Scotia lands after September 16, 1998.

Section 3 renumbered subsection 3(1) and amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) Subject to subsection (3), the construction requirements outlined in these regulations do not apply in respect of a pipeline or any part of a pipeline

(a) that existed on September 16, 1998; or

(b) for which an authorization to construct was issued on or before September 16, 1998.

Subsection 3(2) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(3) These regulations apply to any new construction, ongoing maintenance or ongoing repairs undertaken in respect of a pipeline or any part of a pipeline described in subsection (2).

Subsection 3(3) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

3A (1) The Minister shall designate an Administrator to administer these regulations.

(2) The Administrator shall be responsible for preparing

(a) interpretations of these regulations;

(b) amendments to these regulations; and

(c) policies, standards and guidelines under these regulations.

Section 3A added: O.I.C. 2002-254, N.S. Reg. 67/2002.

Board approval

4 (1) No company shall construct or operate a pipeline unless there is a permit or licence issued by the Board in force with respect to that pipeline.

(2) No company shall construct or operate a pipeline otherwise than in accordance with the terms and conditions of a permit or licence issued for the pipeline.

(3) Where a pipeline has been designed, constructed, operated, maintained or abandoned in Nova Scotia lands before September 16, 1998, the Board may issue such permits or licences as it shall determine with respect to the pipeline and may attach such terms and conditions to the permits or licences as it deems fit and proper.

Subsection 4(3) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(4) It is a term and condition of every permit and licence to construct or operate a pipeline that each holder of the permit or licence shall

(a) carry adequate personal injury, property damage and third party liability insurance for losses suffered in the construction and operation of the pipeline on such terms and in such amounts as is determined by the Board;

(b) at all times, indemnify and save harmless the Board and the Province from and against all claims, including costs related thereto, for all damages or injuries including death to any person or persons and for damage to any property, arising out of the holder of a permit or licence constructing, operating, and maintaining its pipeline in the Province.

Procedures and forms

5 (1) Except where otherwise required by the Act, the Utility and Review Board Act and their respective regulations, all procedures shall be as the Board may determine.

(2) Information to accompany all applications and forms shall be such as is determined by the Board to be necessary or required to carry out its powers and duties under the Act and these regulations.

Directed testing, inspection or assessment

6 In addition to its other powers, where the protection of property or public safety warrants, the Board may direct any company, at that company's own cost and expense, to test, inspect, or assess a pipeline in accordance with CSA standards or such other standards as the Board directs.

Section 6 amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

Fees and costs

7 (1) The Board may set fees and may order that the fees be paid as the Board considers appropriate.

(2) The Minister may recover costs for services rendered under the Act or these regulations by the Minister, the Directorate, or the Administrator.

(3) If circumstances require, a person who is billed under subsections (1) or (2) may ask the Board or the Minister, as the case may be, for documentation to support the bill.

Section 7 replaced: O.I.C. 2002-254, N.S. Reg. 67/2002.

Fee to accompany application or request

8 Unless the Board otherwise directs, fees shall accompany the application or request to which they apply.

Standards

9 (1) Where a company designs, constructs, operates, maintains or abandons a pipeline, or contracts for the provision of such services, the company shall ensure that the pipeline is designed, constructed, operated, maintained or abandoned in accordance with,

(a) the applicable provisions of these regulations; and

(b) the applicable provisions, as determined by the Board, of

(i) CSA-Z341, "Storage of Hydrocarbons in Underground Formations", and

(ii) where the pipeline transports liquid or gaseous hydrocarbons,

(A) CSA-Z662, "Oil and Gas Pipeline Systems", and

(B) CSA-B149.1, "Natural Gas and Propane Installation Code".

Clause 9(1)(b) replaced: O.I.C. 2000-534, N.S. Reg. 184/2000.

(1A) Any code or standard referred to in these regulations means the latest issue of the code or standard and as supplemented, amended or added to from time to time.

Subsection 9(1A) added: O.I.C. 2000-534, N.S. Reg. 184/2000.

(2) Without limiting the generality of the foregoing, the company shall ensure that the pipeline is designed, constructed, operated, maintained or abandoned in accordance with the design, specifications, programs, manuals, procedures, measures, and plans prepared and implemented by the company in accordance with these regulations.

(3) Where there is an inconsistency between these regulations and a standard referred to in clause (1)(b), these regulations prevail to the extent of the inconsistency.

(4) Where the standards incorporated into these regulations by clause (1)(b) are amended, a company shall not be obligated to comply with such amendments until 6 months after they have been made and published.

Amendments ordered

10 Where, pursuant to these regulations, a company is required to develop any design, specification, program, manual, procedure, measure, or plan, the Board may order amendments thereto having regard to public safety and public interest considerations.

Section 10 amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

Changes monitored

11 A company shall develop a system to monitor changes in respect of a design, specification, standard or procedure.

Part II - Design

Detailed designs

12 (1) A company shall prepare, and on request submit to the Board detailed designs of the pipeline.

(2) Detailed designs of pipe and components for which no design standard is set out in these regulations shall be submitted to the Board.

Section 12 amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

HVP pipelines

13 (1) For HVP piping to be situated in Class 1 locations and within 500 m of the right of way of a railway or paved roadway, a company shall prepare a documented risk assessment to determine the need for heavier wall design, taking into account such factors as pipeline diameter and operating pressure, HVP fluid characteristics, topography, and traffic type and density.

(2) The documented risk assessment referred to in subsection (1) shall be made available to the Board upon request.

Stations

14 A station shall be

- (a) designed to provide year round suitable access for personnel;
 - (b) designed to minimize unauthorized entry to and unauthorized operation of the station.
- Clauses 14(c) and (d) repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.
Section 15 repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.

Petroleum products storage

16 A bulk plant or storage facility shall

- (a) be located in an area that is known to be free from flooding, landslides, rockfalls and geological faults;
 - (b) be provided with an all-weather road that gives access to all permanently installed fire-fighting equipment located at or near the bulk plant or storage facility.
- Clause 16(c) repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.
Section 16 amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

Part III - Materials

Specifications

17 (1) A company shall prepare, and on request submit to the Board, the detailed specifications for the pipe and components to be used on the pipeline.
Subsection 17(1) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) For greater certainty, but not so as to restrict the generality of subsection (1), the detailed material of specifications should set out

- (a) the scope of the specifications;
- (b) the restrictions and requirements pertaining to the manufacture of the pipe and components;
- (c) references to the applicable codes and materials standards; and
- (d) the maximum operating pressure, design operating temperature and the other design operating conditions.

Part IV - Quality Assurance and Environmental Management

Quality assurance program

18 A company shall establish a quality assurance program to the ISO 9000 series standard or one that is considered by the Board equivalent to the ISO 9000 series standard for the purpose of ensuring that the pipe and components meet the detailed specifications referred to in Section 17.
Section 19 repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.

Part V - Field Joining

Field joining program

20 (1) Subject to subsection (2), a company shall prepare, and on request submit to the Board, a joining program in respect of the joining of pipe and components to be used in its pipeline.
Subsection 20(1) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) Where a company proposing to conduct joining by gas or arc welding

(a) adopts, where applicable, the requirements set out in CSA W178.2 as the requirement for the qualification of joining inspectors; and
Clause 20(2)(a) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(b) adopts the specifications, procedures, requirements, or standards set out in CSA Z662 as the specifications, procedures, requirements, or standards for the joining program, other than the requirements for the qualification of joining inspectors set out in CSA Z662,

those specifications, procedures, requirements, or standards of the joining program are and are deemed to be approved by the Board.

(3) For greater certainty, but not so as to restrict the generality of subsection (1), the joining program should set out

(a) the joining specifications;

(b) the joining procedures;

(c) the requirements for the qualifications of joining procedures;

(d) the nondestructive examination procedures;

(e) the requirements for the qualifications of joiners;

(f) the requirements for the qualifications of joining inspectors;

(g) the requirement for the qualification of the personnel engaged in nondestructive examination;

(h) the standards of acceptability of imperfections; and

(i) the procedures for the repair or removal of joint defects.

(4) When a company conducts joining on a transmission line, the company shall, where applicable, examine the entire circumference of each joint by radiographic or ultrasonic methods.

Subsection 20(4) added: O.I.C. 2002-254, N.S. Reg. 67/2002; amended: O.I.C. 2004-346, N.S. Reg. 199/2004.

(5) When a company conducts joining on a distribution line, the company shall, where applicable, examine the joints as required by CSA Z662.

Subsection 20(5) added: O.I.C. 2004-346, N.S. Reg. 199/2004.

Part VI - Construction

Construction safety

21 (1) Where a company contracts for the provision of services in respect of the construction of a pipeline, the company shall

(a) inform the contractor of all special conditions associated with the pipeline construction;

(b) inform the contractor of all special safety practices and procedures necessitated by the conditions or features specific to the construction;

Clause 21(1)(c) repealed: O.I.C. 2004-346, N.S. Reg. 199/2004.

(d) authorize a person to halt a construction activity in circumstances where, in the judgment of that person, the construction activity is creating a hazard to any person at the construction site.

Clause 21(1)(d) amended: O.I.C. 2004-346, N.S. Reg. 199/2004.

(2) The person referred to in clause (1)(d) shall, in the opinion of the company, have sufficient expertise, knowledge, and training to competently carry out the obligations set out in that clause.

22 A company shall, during the construction of a pipeline, take all reasonable steps to ensure that

(a) the construction activities do not create a hazard to the public; and

(b) all persons at the construction site who are not involved in the construction of the pipeline are informed of the practices and procedures that are to be followed for their safety.

Section 23 repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.

Right of way and temporary work areas

24 Where a pipeline is constructed, the right of way and temporary work areas of the pipeline shall be restored to a condition similar to the surrounding environment and consistent with the current land use, unless the Board specifies otherwise.

Crossing a utility or private roadway

25 Where a pipeline is carried within a utility or private roadway, the company constructing the pipeline shall ensure that there is no undue interference with the use of the utility or roadway during construction.

Section 25 amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

Part VII - Field Testing

Pressure testing program

26 (1) A company shall prepare, and on request submit to the Board, a pressure testing program in respect of any pressure test to be conducted for pipe and components to be used in its pipeline.

Subsection 26(1) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) For greater certainty, but not so as to restrict the generality of subsection (1), the pressure testing program should include

(a) a diagram of the test section together with an elevation profile, if applicable, and the location of the testing points;

(b) the specifications of the pipe and components to be tested;

(c) a description of the instruments to be used and the degree of accuracy and the calibration of those instruments;

(d) an identification of the test medium and any additives;

- (e) test duration;
 - (f) the minimum and maximum permitted test pressures;
 - (g) a description of the safety precautions to be implemented during the pressure test; and
 - (h) the procedures to be used during line filling, pressurizing, depressurizing, and dewatering, and the associated environmental protection measures to be implemented.
- (3) Where the company is testing transmission lines, it shall give 48 hours notice to the Board in advance of any pressure testing.

Permits for use and disposal of water

27 Prior to conducting a pressure test, a company shall ensure that any permits required in respect of the use and disposal of water for test purposes have been obtained.

General testing requirements

28 (1) The pressure testing shall be performed under the direct supervision of the company or an agent appointed by the company .

(2) The agent referred to in subsection (1) shall be independent of any contractor who carries out the pressure testing program and of any contractor who constructed the pipeline.

(3) The company or agent referred to in subsection (1) shall date and sign any logs, test charts, and other test records that are referred to in the pressure testing program required by Section 26.
Subsection 28(3) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

29 Where pre-tested pipe assemblies or segments are installed in a pipeline, the number of welds in the installations that are not subjected to a pressure test shall be minimized to the extent practicable.

Part VIII - Operation and Maintenance

Operation and maintenance manuals

30 (1) A company shall develop and update, and on request submit to the Board, operation and maintenance manuals which provide information and procedures to promote public safety and efficiency in the operation and maintenance of the pipeline.

Subsection 30(1) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) For greater certainty, but not so as to restrict the generality of subsection (1), operation and maintenance manuals should set out, in addition to the information and procedures referred to in CSA Z662, the following, in respect of the operation and maintenance of the pipeline:

- (a) information on materials and equipment;
- (b) procedures for the operation of stations, instrumentation, and alarms, and the safety precautions in respect of those operations;
- (c) the maximum and minimum operating pressures of the pipeline over a range of normal operating conditions;
- (d) the elevation profile of pipelines containing liquid hydrocarbons;
- (e) the maximum operating pressures for the pipeline;

- (f) a description of the pressure control devices installed on the pipeline;
- (g) information and procedures in respect of the pipeline control system, including
 - (i) the supervisory control and data acquisition system, if applicable,
 - (ii) the communication facilities,
 - (iii) the procedures used to detect leaks, respond to alarms, and interpret anomalies,
 - (iv) for oil pipelines, the material balance system and the rules of interpretation of any imbalances in the material balance calculation, and
 - (v) the procedures used to detect any malfunctions of the control system, including details of the corrective action to be taken;
- (h) the procedures and equipment for accident prevention and fire protection;
- (i) the company's corrosion control program, including a description of the corrosion prevention and corrosion monitoring systems;
- (j) the maintenance procedures for the pipeline, including a description of the program to be employed to confirm the integrity of the pipeline;
- (k) the environmental protection procedures for pipeline operation and maintenance activities;
- (l) the monitoring and surveillance programs for the protection of the pipeline;
- (m) the environmental monitoring and surveillance programs for the protection of the public;
Clause 30(2)(m) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.
Clause 30(2)(n) repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.
- (o) the location of the pipeline and a description of the means of access to the pipeline;
- (p) a description of the significant physical characteristics of the fluids to be transported in the pipeline;
- (q) the maintenance program for safety-related equipment;
- (r) a description of the training program referred to in Section 49, including
 - (i) the general objectives of the training program,
 - (ii) the types and format of training used,
 - (iii) the specific training methods or courses provided to individual employees or categories of employees,
 - (iv) a description of the testing methods and exercises used under simulated conditions to evaluate employees' knowledge of the regulations, procedures, and information referred to in subsection 49(2),
 - (v) the types of emergency exercises and simulations conducted as part of the training programs and the frequency with which they are conducted;

(s) details of the system and program audits referred to in Section 56, including frequency and methodology.

31 A company shall ensure that all persons associated with operation and maintenance activities on the pipeline are made aware of the practices and procedures to be followed, and have ready access to the operation and maintenance manuals, or relevant parts thereof, referred to in Section 30.

Maintenance safety

32 (1) Where a company contracts for the provision of services in respect of the maintenance of a pipeline, the company shall

- (a) inform the contractor of all special conditions associated with the pipeline maintenance;
- (b) inform the contractor of all special safety practices and procedures necessitated by the conditions or features specific to the maintenance;
- (c) take all reasonable steps to ensure that maintenance activities are conducted in accordance with the maintenance safety manual referred to in Section 34; and
- (d) authorize a person to halt a maintenance activity in circumstances where, in the judgment of that person, the maintenance activity is not being conducted in accordance with the maintenance safety manual referred to in Section 34 or is creating a hazard to any person at the maintenance site.

(2) The person referred to in clause (1)(d) shall, in the opinion of the company, have sufficient expertise, knowledge, and training to competently carry out the obligations set out in that clause.

33 A company shall, during the maintenance of a pipeline, take all reasonable steps to ensure that

(a) the maintenance activities do not create a hazard to the public; and
Clause 33(a) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(b) all persons at the maintenance site who are not involved in the maintenance of the pipeline are informed of the practices and procedures that are to be followed for their safety.

34 (1) A company shall prepare, and on request submit to the Board, a maintenance safety manual.
Subsection 34(1) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) A copy of the maintenance safety manual referred to in subsection (1) or the relevant parts thereof shall be kept at each maintenance site of the pipeline in a location where the copy is accessible to every person engaged in maintenance at the site.

Emergency plan and emergency procedures manual

35 (1) A company shall develop and regularly update an emergency plan and an emergency procedures manual.

(2) For greater certainty, but not so as to restrict the generality of subsection (1), an emergency procedures manual should set out

- (a) the information and procedures referred to in CSA Z662 and in CSA Z731 Emergency Planning for Industry;
- (b) a statement of the scope of application of the emergency procedures;
- (c) a detailed description of the facilities to which the emergency procedures apply, including

- (i) the location of and means of access to the facilities, and
 - (ii) the number and size of the pipelines involved;
 - (d) the range of pressures and, for pipelines containing LVP hydrocarbons, the range of flow rates that might be expected under normal operating conditions;
 - (e) a description of the significant physical characteristics of the fluids to be transported in the pipeline;
 - (f) the procedures for the documentation of emergencies;
 - (g) the instructions and warnings to be given to persons reporting an emergency;
 - (h) the initial action to be taken on discovery of an emergency;
 - (i) the names and telephone numbers of company personnel and their alternates or departments to be contacted in the case of an emergency and the respective responsibilities of the personnel or departments;
 - (j) a local emergency roster which includes, in addition to the contact list in CSA Z731, the names, addresses, telephone numbers and contact persons or agencies that may have to be contacted in case of an emergency, including, but not limited to, environmental agencies, police and fire and emergency measures officials, public utilities, municipal governments, qualified contractors, and equipment suppliers;
 - (k) the plans for cooperation with appropriate public agencies during an emergency;
 - (l) a description of the types and locations of available emergency clothing and equipment including, in the case of HVP pipelines, a description of the types and locations of portable emergency shut-off devices;
 - (m) the procedures to be followed at the site of the emergency, including the procedures for assembling repair personnel in a safe location;
 - (n) the safety precautions to be taken during an emergency, including
 - (i) the handling of the fluid transported by the pipeline,
 - (ii) the isolation and shut-off procedures for stations of the pipeline, and
 - (iii) the methods for monitoring the hazard level at the site;
 - (o) a list or map of areas susceptible to potentially adverse environmental effects that may require special attention during an emergency;
 - (p) contingency plans for the immediate protection of the public and the environment; and
 - (q) evacuation procedures.
- (3) A company shall file with the Board the emergency procedures manual referred to in subsection (1) as well as updates of the manual as they are made.

36 A company shall establish and maintain liaison with the agencies that may be involved in an emergency response on the pipeline and shall consult with those agencies in developing and updating the emergency plan and the emergency procedures manual referred to in Section 35.

37 A company shall take all reasonable steps to ensure that all persons who may be associated with an emergency response activity on the pipeline are made aware of the practices and procedures to be followed, and have ready access to the relevant portions of the emergency procedures manual referred to in Section 35.

Emergency awareness program

38 A company shall establish a continuing education program to inform the police, fire departments, medical facilities, other appropriate organizations and agencies, and the public residing adjacent to the pipeline, of the location of the pipeline, identifying emergency situations involving the pipeline, and specifying the safety procedures for the pipeline in case of an emergency.

General operation and maintenance requirements

39 A company shall

- (a) have communication facilities for the safe and efficient operation of the pipeline and for emergency situations;
- (b) periodically test instruments and equipment at the stations of the pipeline to demonstrate their proper and safe operation;
- (c) continually record the suction and discharge pressures of the pump or compressor stations of the pipeline;
- (d) clearly mark sectionalizing valves on any main line to identify their open and closed positions;
- (e) clearly mark isolating valves, blowdown valves, and other major valves within a station of the pipeline, identify the open and closed positions and their function; and
- (f) post, along the boundaries of the stations of the pipeline, signage indicating the name of the company and the telephone number to be called in the event of an emergency involving the pipeline.

Pipeline control system

40 (1) A company shall have a pipeline control system that comprises the facilities and procedures used to control and monitor the operations of the pipeline.

(2) The pipeline control system referred to in subsection (1) shall

- (a) record historical pipeline operations data, messages, and alarms for recall; and
- (b) include a leak detection system that for oil pipelines meets the requirements of CSA Z662, reflecting the level of complexity of the pipeline, the pipeline operations, and the products transported.

Maintenance welding

41 (1) A company shall not perform welding on a liquid-filled pipeline with a carbon equivalent of 0.50 percent or greater except where it has been demonstrated that no other practical alternative is available.

(2) Where a company performs welding referred to in subsection (1), the company shall treat the welds as a temporary installation and replace that installation with a permanent one as soon as practical.

(3) Despite subsections (1) and (2) and subsection 20(2), where a company intends to perform welding on a liquid-filled pipeline with a carbon equivalent of 0.50 percent or greater and to treat it as a permanent installation, the company shall submit to the Board for approval the welding specifications and procedures together with the results of the procedure qualification tests.

Monitoring and surveillance

42 A company shall develop and implement a monitoring and surveillance program for the protection of the pipeline and the public.

Section 42 amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

Pipeline integrity

43 A company shall establish and implement a pipeline integrity management program.

44 (1) Where a company finds a defect in excess of that allowed by CSA Z662 on its pipeline, the company shall document the particulars of the defect, the cause of the defect and the corrective action taken or planned.

(2) A company shall, on request, submit to the Board the documentation referred to in subsection (1).
Subsection 44(2) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

Change in class location

45 Where the class location of a section of a pipeline changes to a higher designation having a more stringent location factor, the company, within three months of the change, shall submit to the Board the company's proposed plan to deal with the change.

Section 45 amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

Change of service or increase in maximum operating pressure

46 Where a company proposes a change of service or increase in maximum operating pressure for the pipeline, the company shall submit an application for the change of service or increase in maximum operating pressure to the Board for approval.

Deactivation and reactivation

47 (1) Where a company proposes to deactivate a pipeline or section thereof for 12 months or more, the company shall submit to the Board, 3 months in advance, a notification of the deactivation.

Subsection 47(1) replaced: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) The notification referred to in subsection (1) shall include the rationale and the measures to be employed for the deactivation.

Subsection 47(2) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(3) Where a company has maintained a pipeline in a deactivated mode for 12 months without filing a notification under subsection (1), it shall immediately at the end of the 12-month period submit a notification of the deactivation to the Board.

Subsection 47(3) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(4) The notification referred to in subsection (3) shall include the rationale for the deactivation and the measures to be employed to continue the deactivation.

Subsection 47(4) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(5) In addition to the notification referred to in subsection (1) or (3), the Board may require that the company make an application to and be issued an approval by the Board before commencing or continuing with the deactivation.

Subsection 47(5) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

48 (1) Where a company proposes to reactivate a pipeline or section thereof that has been deactivated for 12 months or more the company shall submit to the Board, 3 months in advance, a notification of the reactivation.

Subsection 48(1) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) The notification referred to in subsection (1) shall include the rationale and the measures to be employed for the reactivation.

Subsection 48(2) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(3) In addition to the notification referred to in subsection (1), the Board may require that the company make an application to and be issued an approval by the Board before commencing the reactivation.

Subsection 48(3) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

Training

49 (1) A company shall take reasonable measures to develop and implement a training program for the employees of the company who are directly involved in the operation and maintenance of the pipeline.

(2) The training program referred to in subsection (1) shall instruct the employees on

(a) the regulations and procedures applicable to the day-to-day operation of the pipeline;

(b) the safety regulations and safety procedures applicable to the day to day operation of the pipeline;

(c) the procedures for the proper operation of the equipment that the employees could reasonably be expected to use; and

(d) the emergency procedures as set out in the manual referred to in Section 35 and the procedures for the operation of all emergency equipment that the employees could reasonably be expected to use.

(3) A company shall take reasonable measures to ensure that employees attending the training programs referred to in subsection (1) have a working knowledge of the subject-matter of those programs.

Section 50 repealed: O.I.C. 2002-254, N.S. Reg. 67/2002.

Part IX - Suspension, Removal, Discontinuance or Abandonment

51 (1) Where a company proposes to suspend, remove, discontinue or abandon a pipeline or a section thereof, the company shall submit to the Board, 3 months in advance, a notification of the suspension, removal, discontinuance or abandonment.

(2) The notification referred to in subsection (1) shall include the rationale for and the measures to be employed for the suspension, removal, discontinuance or abandonment.

(3) In addition to the notification referred to in subsection (1), the Board may require that the company make an application to and be issued an approval by the Board before commencing the suspension, removal, discontinuance or abandonment.

Section 51 replaced: O.I.C. 2002-254, N.S. Reg. 67/2002.

Part X - Reporting

Crossing reports

52 Where a company constructs a pipeline that crosses a private roadway or a utility, the company shall

(a) notify forthwith the owner of, or the authority having control over, the private roadway or utility and the Board of the details of any unplanned closure of the roadway or any unplanned interruption in the operation of the utility, if the closure or interruption results from the construction of the crossing; and

(b) on request, file with the Board a crossing report setting out

(i) the description and location of the private roadway or utility, and

(ii) the name of the owner of, or the authority having control over, the private roadway or utility.

Incident reports

53 (1) A company shall notify the Board forthwith following the discovery of an incident relating to the construction, operation, maintenance, deactivation, reactivation or abandonment of its pipeline and shall file with the Board as soon as practical thereafter preliminary and detailed incident reports.

(2) Following notification of an incident, an inspection officer may partially or completely relieve a company from the requirement to file preliminary and detailed incident reports.

Part XI - Audits and Inspections

General compliance

54 (1) A company shall conduct regularly documented audits and inspections to ensure its pipeline is designed, constructed, operated, maintained, or abandoned in compliance with

(a) the Act;

(b) these regulations; and

(c) the terms and conditions of permits, licences and orders issued by the Board.

(2) The audit referred to in subsection (1) shall document

(a) all non-compliance noted; and

(b) the corrective actions taken or planned.

(3) A copy of all audits and inspections shall be filed with the Board upon completion.

Construction inspection

55 (1) Where a company constructs a pipeline, the company or an agent independent of any construction contractor retained by the company shall inspect the construction to ensure that it meets the requirements of these regulations and complies with the terms and conditions of any permit, licence or order issued by the Board.

Subsection 55(1) amended: O.I.C. 2004-346, N.S. Reg. 199/2004.

(2) An inspection under subsection (1) shall be performed by a person who has sufficient expertise, knowledge and training to competently carry out the inspection.

Subsection 55(2) replaced: O.I.C. 2004-346, N.S. Reg. 199/2004.

System and program audits

56 (1) A company shall, on a regular basis, audit its pipeline control system required by Section 40. Subsection 56(1) replaced: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) For greater certainty, but not so as to restrict the generality of clause (1)(b), the audit program should cover all aspects of the control system including, where applicable,

(a) communication failures that have an adverse effect on operations or that have a duration of more than one hour;

(b) the supervisory control and data acquisition system;

(c) the leak detection system; and

(d) for oil pipelines, the material balance system.

(3) The documentation from the audits referred to in subsection (1) shall include

(a) the deficiencies noted; and

(b) the corrective actions taken or planned.

(4) A copy of the audits referred to in this Section shall be filed with the Board upon completion.

Part XII - Record Retention

Record retention requirements

57 A company shall, in addition to complying with the record retention requirements set out in the CSA standards referred to in Section 9,

(a) retain until at least 1 month after the date on which they were recorded, the records made pursuant to clauses 39(c) and 40(2)(a) except for leak detection data, which shall be retained for 6 months;

(b) retain an annual report on the training program referred to in Section 49 that compares the actual training received by employees to the planned training;

(c) retain until at least 1 year after the pipeline or section thereof is placed into service, the detailed information with respect to the quality assurance program referred to in Section 18;

(d) retain for the most recent 5 years of operation or for at least the 2 most recent complete audits, whichever period is the longest, the records for the audits referred to in Sections 54 to 56;

(e) retain for as long as installations referred to in Section 41 remain on the pipeline, detailed records of those installations, including

(i) the location of the installation,

(ii) the type of installation,

(iii) the date of installation,

(iv) the welding procedure used,

- (v) the carbon equivalent of the pipeline,
- (vi) the results of the nondestructive testing performed on the installation, and
- (vii) the planned date of removal of the installation;
- (f) retain accurate records of the location of all buried facilities until they are removed; and
- (g) retain for at least 2 years after the operation of a pipeline has been duly abandoned in accordance with all applicable requirements,
- (i) all records available to the pipeline company in respect to the procedures used in each stage of the manufacture of the materials referred to in Section 17,
- (ii) the production reports and mill certificates for the materials referred to in Section 17,
- (iii) the specifications and name-plate data, if any, of the pumps, compressors, drivers, storage tanks and other major equipment of the pipeline,
- (iv) the performance curves of all main line pumps and compressors of the pipeline,
- (v) the reports of all monitoring and surveillance programs referred to in Section 42,
- (vi) the documentation referred to in subsection 44(1) on pipeline defects, and
- (vii) the documentation on all incidents reported pursuant to Section 53.

Part XIII - Protection of Pipelines

Interference or disturbance prohibited

58 (1) Subject to this Part, no person shall interfere with or disturb a pipeline.

Section 58 renumbered subsection 58(1): O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) A company that owns or operates a pipeline that is interfered with or disturbed in violation of subsection (1) is authorized to stop any activity that is causing the interference or disturbance, and shall immediately notify the Board of the circumstances resulting in the stoppage.

Subsection 58(2) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

Due diligence re ground disturbance

59 (1) A person proposing to undertake or undertaking a ground disturbance shall, before commencing any work, operation or activity,

- (a) take all precautions reasonably necessary
 - (i) to ascertain whether or not a pipeline exists within
 - (A) the area in which that person proposes to undertake or undertakes the ground disturbance, and
 - (B) within 60 m of the area referred to in paragraph (A),
 - (ii) to determine the identity of the holder of the permit or licence of a pipeline in existence within the area or distance referred to in subclause (i); and

(b) notify the holder of a permit or licence referred to in subclause (a)(ii) of the nature of the proposed ground disturbance and the proposed schedule for the undertaking of that ground disturbance.

(1A) Despite subsection (1), a person proposing to undertake a ground disturbance within the controlled area of a gas delivery system shall, before commencing any work, operation or activity

(a) take all precautions reasonably necessary to ascertain the location of any pipelines that may be interfered with;

(b) determine the identity of the holder of the permit or licence for the pipeline; and

(c) notify the holder of the permit or licence referred to in clause (b) of the nature of the proposed ground disturbance and the proposed schedule for the undertaking of that ground disturbance.

Subsection 59(1A) added: O.I.C. 2002-254, N.S. Reg. 67/2002.

(2) A holder of a permit or licence shall, on the request of a person proposing to undertake or undertaking a ground disturbance, provide to that person any information respecting a pipeline in existence within the area or distance referred to in subclause (1)(a)(i) or within the controlled area of a gas delivery system as referred to in subsection (1A), as the case may be, that is contained in the records of the holder of the permit or licence and is required by that person for the purpose of complying with the Act and these regulations.

Subsection 59(2) amended: O.I.C. 2002-254, N.S. Reg. 67/2002.

(3) A holder of a permit or licence of a pipeline that may be or is affected by a ground disturbance shall provide to the person proposing to undertake or undertaking the ground disturbance any assistance that the person may reasonably require to enable that person to comply with the Act and these regulations.

Board intervention

60 (1) Where it appears to the Board or its authorized representative that a ground disturbance has been or is a contravention of the Act or these regulations, a permit or licence or an order or direction of the Board, or that a method or practice employed or any equipment used in a controlled area is improper, hazardous, inadequate or defective,

(a) the Board or its representative may order that the ground disturbance be suspended and shall not be resumed until

(i) the contravention ceases, or the Act or these regulations, a permit, licence or order or direction of the Board is complied with,

(ii) approved methods or practices are employed or adopted,

(iii) remedial measures are taken, or

(iv) proper, safe and adequate equipment is used;

(b) the Board or its representative may order that the ground disturbance be suspended until further order; or

(c) the Board may call an inquiry.

(2) Where a representative of the Board makes an order under clause (1)(a) or (b), that representative shall, as soon as possible, report to the Board and so advise in writing the holder of the permit or licence, if any, or person responsible for the ground disturbance, setting out the reasons for the actions of the representative.

Board inquiry

61 (1) Where an order is made under clause 60(1)(a) for the suspension of a ground disturbance within a controlled area, the person to whom the order is directed may request an inquiry and, if that person does so, the Board shall hold an inquiry within 5 working days after the date of receipt of the request.

(2) Where a ground disturbance within a controlled area, is suspended under clause 60 (1)(b), the Board shall hold an inquiry to investigate the circumstances leading to the suspension within 5 working days after the suspension.

Board determination

62 Within 15 days after the conclusion of an inquiry pursuant to Section 60 or 61, the Board may

(a) allow the ground disturbance within a controlled area to continue or resume subject to any conditions that the Board may prescribe;

(b) order the continued suspension of the ground disturbance within a controlled area until the Board makes an order to the contrary.

Part XIV - Certifying Authority

63 (1) The Board may engage the services of a certifying authority whose duty is to determine if the pipeline will be, has been or is being constructed, operated and maintained in accordance with the Act and these regulations.

(2) Every company that is the holder of a permit or licence, and every person in charge of a pipeline or installation, and every contractor or employee of such company or person shall permit or assist any member of the Board or any employee or agent of the certifying authority acting in the exercise of the powers and duties conferred by subsection (1) and any further authorization provided to the certifying authority by the Board pursuant to the Act or these regulations.

(3) On the completion of its duties, the certifying authority shall provide the Board with a report which shall

(a) advise whether or not the pipeline or installation will be, has been or is being constructed, operated and maintained in accordance with the terms and conditions of the permit or licence issued or an amendment thereto;

(b) certify that the pipeline or installation will continue to meet the requirements of the Act and these regulations under the terms and conditions of the permit or licence issued or an amendment thereto for such period of time as the certifying authority determines.

(4) The certifying authority shall be engaged by the Board through a competitive bidding process and selected from a list of independent third parties that have engaged individuals, or who are individuals, knowledgeable about pipelines and it is a condition of the contract award that those individuals shall perform the duties of the certifying authority.

(5) The remuneration of the certifying authority shall be determined by the Board and shall be paid from funds realized by the imposition of fees upon the company constructing, operating or maintaining the pipeline or installation which is the subject of the certifying authority's report and for which a permit or licence has been issued in accordance with the Act and these regulations.

(6) The report issued by the certifying authority may be used by the Board to assist it in

- (a) evaluating an application for a permit or a licence or in amending, suspending, cancelling or re-instating such permit or licence;
- (b) directing the alteration or relocation of the pipeline;
- (c) requiring the installation of additional or other equipment on the pipeline; or
- (d) the exercise of its powers and duties conferred by the Act and these regulations.

Part XV - Non-Derogation

Preservation of enactments

64 Nothing in these regulations derogates from any enactment that imposes duties, obligations and responsibilities upon a company.

Note: "Energy Board" replaced with "Board": O.I.C. 2002-254, N.S. Reg. 67/2002.

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