Province of Alberta

PIPELINE ACT

PIPELINE RULES

Alberta Regulation 91/2005

With amendments up to and including Alberta Regulation 4/2015

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Note

All persons making use of this consolidation are reminded that it has no legislative sanction, that amendments have been embodied for convenience of reference only. The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law.

(Consolidated up to 4/2015)

ALBERTA REGULATION 91/2005

Pipeline Act

PIPELINE RULES

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Administration

Interpretation

1(1) In these Rules,

(a) "Act" means the *Pipeline Act*;

(b) "Alberta One-Call" means the non-profit corporation called Alberta One-Call that transmits a notification from a person who intends to disturb the ground to its members whose buried facilities might be affected by the ground disturbance;

(c) repealed AR 89/2013 s30;

(d) "break" means the escape of substance from a pipeline in a manner that immediately impairs the operation of the pipeline;

(e) "contact damage" means damage to a pipeline that occurs during a ground disturbance and results in

(i) a puncture or crack in the pipeline,

(ii) a scratch, gouge, flattening or dent on the pipeline surface, or

(iii) damage to the pipeline's protective coating that compromises the functionality of the coating, with the exception of minor damages that may occur during final hand excavation and external cleaning;

(f) "corporate emergency response plan" means a general emergency response plan that applies to all wells, pipelines and facilities of a licensee;

(f.1) "Directive 038" means Directive 038: Noise Control;

(f.2) "Directive 050" means Directive 050: Drilling Waste Management;

(g) "Directive 056" means Directive 056: Energy Development Applications and Schedules;

(g.1) "Directive 058" means Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry;

(h) "Directive 060" means Directive 060: Upstream Petroleum Industry Flaring Directive;

(i) "Directive 071" means Directive 071: Emergency Preparedness and Response Requirements for the Upstream Petroleum Industry;

(i.1) "Directive 077" means Directive 077: Pipelines - Requirements and Reference Tools;

(j) "distribution specification gas" means natural gas that does not contain more than an average of 7 milligrams of hydrogen sulphide gas per cubic metre of natural gas at an absolute pressure of 101.325 kilopascals at a temperature of 15 degrees Celsius, equivalent to 5 parts per million;

(j.1) "drilling waste" means the mud and cuttings generated while directional drilling for the purpose of pipeline construction;

(k) "emergency" means a present or imminent event, outside the scope of normal operations, that requires prompt co-ordination of resources to protect the health, safety or welfare of people or to limit damage to property and the environment;

(l) "emergency response plan" means a comprehensive plan to protect the public that includes criteria for assessing an emergency and procedures for mobilizing response

personnel and agencies, establishing communications and ensuring coordination of the emergency response;

(m) "facility surface lease" means the area leased by a licensee for a well, installation or facility connected to a pipeline, but does not include an access road to the well, installation or facility;

(m.1) "flowing water" means water within a creek, stream, river, lake or other body of water except where the water is completely frozen to the bed of the body of water;

(n) "hand excavation" means excavation of a pipeline or part of a pipeline by hand and includes excavation by water or air jets and, if the pipeline is more than 1.5 metres below the surface of the ground, excavation by a combination of hand and mechanical means in accordance with the procedure set out in Schedule 3;

(o) "HVP product" means hydrocarbons or a hydrocarbon mixture as defined in CSA Z662;

(p) repealed AR 48/2012 s2;

(q) "leak" means the escape of substance from a pipeline in a manner that does not immediately impair the operation of the pipeline;

(r) "LVP product" means hydrocarbons or a hydrocarbon mixture as defined in CSA Z662;

(s) "occupant" means

(i) a person, other than the owner, who is in actual possession of land,

(ii) a person who is shown on a certificate of title or by contract as having an interest in land,

(iii) an operator granted a right of entry as defined in the *Surface Rights Act* in respect of land pursuant to a right of entry order as defined in that Act,

(iv) in the case of Crown land, a person shown on the records of the department or other body administering the land as having an interest in the land, or

(v) the holder of a permit for a coal mine;

(t) "owner" means

(i) the person in whose name a certificate of title has been issued pursuant to the *Land Titles Act*, or

(ii) if no certificate of title has been issued, the Crown or other body administering the land;

(u) "% SMYS" means the hoop stress level expressed as a percentage of the specified minimum yield strength of the pipe based on nominal wall thickness;

(v) "polymeric" means consisting of either thermoplastic or thermoset polymer engineering materials;

(v.01) "Regulator" means the Alberta Energy Regulator;

(v.02) "Regulator Pipeline Base Map" means the plan produced by the Regulator on a township or smaller area basis showing pipelines currently licenced under the Act;

(v.1) "regulatory authority" means an entity having lawful authority respecting the regulation of pipelines in a jurisdiction other than Alberta;

(w) "surface construction activity" means construction activity that is concentrated at the surface of the ground or at a depth of less than 30 centimetres and that does not result in a reduction of the earth cover over a pipeline to a depth that is less than the cover provided when the pipeline was installed;

(x) "surface development" means occupied permanent or part-time dwellings, publicly used facilities, including campgrounds, places of business and any other structures used by the public on a regular basis;

(y) "Uniform Color Code" means the Uniform Color Code set out in the American Public Works Association publication *Recommended Marking Guidelines for Underground Utilities*.

(2) Words and expressions used but not defined in these Rules have the meanings assigned to them in the Act and in the codes and standards referred to in section 9(2).

(3) For the purposes of section 1(1)(e) of the Act, the controlled area is

(a) a strip of land 30 metres wide on each side of the pipeline, measured from the pipe centreline, or

(b) the distance from the pipe centreline to the edge of the right of way,

whichever is wider.

(4) For the purposes of the Act and these Rules, if piping or a pipeline that conveys gas, steam or HVP product is contained wholly within the boundary of a facility surface lease or wholly within the boundaries of adjacent and abutting facility surface leases, it is not considered a pipeline.

(5) A natural gas pipeline that conveys distribution specification gas at pressures of 700 kilopascals or less, but that is used for the purposes of providing fuel or gas in connection with a facility, scheme or other matter authorized under the *Oil and Gas Conservation Act* or the *Oil Sands Conservation Act* is a pipeline within the meaning of the Act.

(6) For the purposes of section 19 of the Act and these Rules,

(a) a licensee who is an individual is resident in a jurisdiction if the individual makes his or her home in and is ordinarily present in that jurisdiction, and

(b) a licensee that is a corporation is resident in a jurisdiction if a director or officer of the corporation or a person employed or retained to provide services to the corporation makes his or her home in that jurisdiction, is ordinarily present in that jurisdiction and is authorized to

(i) make decisions respecting a licence for a pipeline issued by

(A) the regulatory authority in that jurisdiction, or

(B) in the case of Alberta, the Regulator,

(ii) operate the pipeline, and

(iii) implement directions from the regulatory authority, or in the case of Alberta, the Regulator, relating to the pipeline.

(6.1) Where these Rules refers to a directive by its number or title or both, the reference is to be considered as a reference to that directive as published by the Regulator and amended from time to time.

(7) Repealed AR 160/2008 s2.

AR 91/2005 s1;186/2005;160/2008;228/2011;
48/2012;78/2012;221/2012;89/2013;159/2013

Exemption — agents

1.1(1) In this section, "mutual recognition agreement" means a valid and subsisting agreement made between the Minister and a regulatory authority of another jurisdiction for the purpose of recognizing substantial regulatory equivalency and enabling reciprocity between Alberta and that jurisdiction.

(2) The Regulator may, on application, grant an exemption from the requirement under section 19 of the Act to appoint an agent if the licensee applying for the exemption

(a) is resident in a jurisdiction outside Alberta that is a party to a mutual recognition agreement and is subject to the authority of the regulatory authority in that jurisdiction,

(b) is in compliance with all applicable legislation in Alberta and in the jurisdiction in which the licensee is resident and all applicable directives, orders, decisions, directions and other instruments of the regulatory authority referred to in clause (a) and of the Regulator,

(c) provides evidence satisfactory to the Regulator that the licensee meets, and during the time the licence is in effect will continue to meet, the requirements set out in subsection (3), and

(d) agrees to attorn to the jurisdiction of Alberta with respect to all matters, obligations and liabilities pertaining to licences issued by the Regulator.

(3) An exemption under subsection (2) is subject to the condition that, in substitution for the requirements of section 19(2)(a), (b) and (c) of the Act, the licensee must have

(a) sufficient numbers of individuals who are trained and competent to

(i) carry out work relating to the pipelines for which the licensee has been granted a licence in compliance with the requirements of all applicable legislation and all applicable directives, orders, decisions, directions and other instruments of the Regulator, and

(ii) respond sufficiently to incidents and emergencies, including, without limitation, leaks and breaks,

and

(b) representatives at a pipeline site during any construction, testing, maintenance, repair, ground disturbance and

abandonment activities at the pipeline site who are authorized to make decisions respecting all aspects of those activities.

(4) An exemption under subsection (2) ceases to have effect immediately on

(a) the licensee ceasing to meet a requirement referred to in subsection (2)(a), (b) or (d), or

(b) the Regulator determining that it is no longer satisfied that the licensee or approval holder meets or will continue to meet the requirements set out in subsection (3).

AR 160/2008 s3;84/2009;221/2012;89/2013

Compliance with Directives

1.2(1) A licensee shall comply with the requirements of Directive 077.

(2) Subject to section 79, a licensee shall comply with the requirements of Directive 060.

(3) Unless otherwise authorized by the Regulator, a licensee shall manage drilling waste in accordance with Directive 050 and Directive 058.

AR 91/2010 s2;48/2012;78/2012;77/2013;89/2013

Notification

2(1) Unless otherwise authorized by the Regulator, a licensee who is required to notify the Regulator under these Rules shall send the notice electronically through the Regulator's digital data submission system.

(2) Notwithstanding subsection (1), a licensee who is required to notify the Regulator of a pipeline leak, break, test failure or contact damage shall immediately do so by telephoning the appropriate regional field centre of the Regulator.

AR 91/2005 s2;89/2013

Application for licence to construct and operate pipeline

3(1) Unless otherwise authorized by the Regulator, an application under Part 4 of the Act for a licence to construct and operate a pipeline, including any applicable installation, must be in accordance with the requirements of Directive 056.

(2) Unless otherwise authorized by the Regulator, and in addition to the requirements of subsection (1), for a steam distribution

pipeline having an internal aggregate capacity greater than 0.5 cubic metres, the licensee shall

(a) confirm in its application to the Regulator that it has registered the design of the pipeline and any mechanical coupling with the Alberta Boilers Safety Association in accordance with the *Design, Construction and Installation of Boilers and Pressure Vessels Regulations* (AR 227/75), and

(b) obtain all required approvals from the Alberta Boilers Safety Association prior to putting the pipeline into operation.

(3) No application is required

(a) for the replacement of parts of a pipeline or parts of a pipeline liner if

(i) the length of each individual replacement section is less than 100 metres,

(ii) the replacement sections are equivalent to the original material or exceed the requirements and suitability for purpose of the original material,

(iii) the replaced sections of pipeline or pipeline liner are removed, and

(iv) the replacement work is carried out wholly within the existing right of way;

(b) if the pipeline, regardless of length, is contained wholly within the boundary of a facility surface lease or wholly within the boundaries of adjoining facility surface leases;

(c) for a short-term temporary pipeline in accordance with Directive 056;

(d) for a temporary surface pipeline used for the sole purpose of transporting water to or from a facility, scheme or other matter authorized under the *Oil and Gas Conservation Act* or the *Oil Sands Conservation Act*, if all of the following criteria are met:

(i) the source water has a chloride content of 640 milligrams per litre or less;

(ii) the source water has an electrical conductivity of 2.0 decisiemens per metre or less;

(iii) the source water has a pH value between 6.5 and 9.0;

(iv) the source water has no hydrocarbon sheen;

(v) the source water does not contain any of the following: municipal wastewater; water affected by an industrial process; produced or process water from an oil or gas activity;

(vi) no chemical will be added to the source water or to the water at any time during transport in the pipeline.

AR 91/2005 s3;48/2012;89/2013;195/2014

Survey of right of way boundaries

4(1) The applicant for a licence shall ensure that right of way boundaries for the pipeline are surveyed in accordance with the *Surveys Act* before the commencement of construction.

(2) An applicant or licensee is exempt from the requirements of subsection (1) with respect to repairs or modifications to a pipeline within the existing right of way unless the repairs or modifications require an additional right of way.

(3) The Regulator may exempt an applicant or licensee from the requirements of subsection (1) or (2) in exceptional circumstances.

AR 91/2005 s4;89/2013

Notice to Regulator of delay or failure to complete licensed work

5(1) If the work on a pipeline for which a licence has been issued will not be commenced prior to an expiry date set out in the licence, the licensee shall notify the Regulator at least 30 days prior to the expiry date in accordance with the requirements of Directive 056.

(2) If the work on a pipeline for which a licence has been issued will not be commenced or completed, the licensee shall notify the Regulator in accordance with the requirements of Directive 056.

AR 91/2005 s5;48/2012;89/2013

Commencement of construction

6 At least 24 hours prior to the commencement of construction of a pipeline, the licensee shall notify the Regulator in accordance with section 2(1) of the location of the construction and the proposed time of commencement.

AR 91/2005 s6;89/2013

Operations, maintenance and integrity management manuals

7(1) A licensee shall prepare and maintain a manual or manuals containing procedures for pipeline operation, corrosion control,

integrity management, maintenance and repair and shall on request file a copy of each manual with the Regulator for review.

(2) A licensee shall include in the appropriate manual referred to in subsection (1) provision for evaluation and mitigation of stress corrosion cracking when the licensed pipeline has disbonded or non-functional external coatings.

(3) A licensee shall

(a) update the manuals referred to in subsection (1) as necessary to ensure that their contents are correct, and

(b) be able to demonstrate that the procedures contained in the manuals are being implemented.

AR 91/2005 s7;89/2013

Emergency response plans

8(1) A licensee of a pipeline shall prepare and maintain a corporate emergency response plan in accordance with the requirements of Directive 071 and shall submit a copy to the Regulator for review on request.

(2) A licensee of a pipeline conveying HVP product shall prepare a site-specific emergency response plan in accordance with Directive 071 and shall,

(a) in the case of a pipeline that is not yet in operation, submit the plan to the Regulator and obtain the Regulator's approval of the plan before putting the pipeline into operation, and

(b) in the case of a pipeline already in operation, submit the current site-specific emergency response plan for the pipeline to the Regulator for review.

(3) For a pipeline conveying a product that contains hydrogen sulphide gas in the gas phase when the pipeline is operating at the licensed conditions, a licensee shall calculate the emergency planning zone in accordance with Directive 071 and determine whether any surface development exists or is taking place within the emergency planning zone.

(4) If any surface development exists or is taking place within the calculated emergency planning zone of a pipeline referred to in subsection (3), the licensee shall prepare a site-specific emergency response plan in accordance with Directive 071, and shall,

(a) in the case of a pipeline that is not yet in operation, submit the plan to the Regulator and obtain the Regulator's

approval of the plan before putting the pipeline into operation, and

(b) in the case of a pipeline already in operation, submit the current site-specific emergency response plan for the pipeline to the Regulator for review.

(5) If there is no surface development within the calculated emergency planning zone of a pipeline referred to in subsection (3), the licensee shall prepare and maintain a corporate emergency response plan in accordance with Directive 071 and shall submit a copy to the Regulator for review on request.

(6) A licensee of a pipeline shall, in accordance with Directive 071,

(a) update all emergency response plans for the pipeline, as necessary,

(b) conduct training exercises in carrying out emergency response plans, and

(c) ensure that it is capable of adequately responding to spills.

AR 91/2005 s8;48/2012;89/2013

Part 2
Materials and Design

Codes and standards

9(1) A reference in these Rules to a code or standard is to the latest published edition of the code or standard issued by the Canadian Standards Association (CSA).

(2) Except as otherwise specified by these Rules, the following standards are in force:

(a) CSA Z245.11, *Steel Fittings*;

(b) CSA Z245.12, *Steel Flanges*;

(c) CSA Z245.15, *Steel Valves*;

(d) CSA Z662, *Oil and Gas Pipeline Systems*.

(3) Except as otherwise specified by these Rules, the minimum requirements for the design, construction, testing, operation, maintenance, repair and leak detection of pipelines are set out in CSA Z662.

(4) The leak detection requirements contained in Annex E of CSA Z662 are mandatory for liquid hydrocarbon pipelines.

AR 91/2005 s9;186/2005;89/2013

Approval of non-standard materials or methods

10(1) Notwithstanding section 9, if an applicant or licensee proposes to use a polymeric or fibre-reinforced composite material for pipeline construction or repair, the applicant or licensee shall ensure that the Regulator has been provided with sufficient technical information concerning the material to allow the Regulator to determine whether the material is acceptable for the proposed use.

(2) If an applicant or licensee proposes to use pipeline materials, pipeline components, joining methods, construction methods, repair methods or maintenance methods other than those that are included in CSA Z662, the applicant or licensee shall ensure that the Regulator has been provided with sufficient technical information concerning the materials, components or methods to allow the Regulator to determine whether the materials, components or methods are acceptable for the proposed use.

(3) If the Regulator is satisfied that the materials, components or methods referred to in subsections (1) and (2) are acceptable for the proposed use, the Regulator may approve the use of the materials, components or methods, subject to any restrictions on or conditions regarding their use that the Regulator considers necessary.

(4) An applicant or licensee who proposes to use materials, components or methods referred to in subsections (1) or (2) must have received the Regulator's approval of the use of the materials, components or methods before proceeding.

(5) If an engineering assessment is required by CSA Z662 and is used by the applicant or licensee to support the acceptability of the material, components or methods referred to in subsection (1) or (2), it must be submitted to the Regulator on request.

AR 91/2005 s10;89/2013

Polymeric or fibre-reinforced pipe

11 Unless authorized by the Regulator, a licensee shall not install polymeric or fibre-reinforced composite pipe as either freestanding liner inside a steel pipeline or a freestanding pipe for the purpose of conveying natural gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas.

AR 91/2005 s11;89/2013

Exemption from standard

12 If CSA Z662 requires a pipeline to be altered because of a change in its surroundings, the Regulator may, on application, determine whether the pipeline is suitable and safe for continued service under the original standards to which it was built and if satisfied may exempt the licensee from any or all of the requirements of CSA Z662.

AR 91/2005 s12;89/2013

Emergency shutdown devices and check valves

13(1) A licensee shall ensure that a pipeline conveying gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas, or any lesser hydrogen sulphide content that the Regulator stipulates in a particular case, is equipped with automatically actuated emergency shutdown devices or check valves.

(2) A licensee shall conduct an engineering assessment to define the pipeline operating conditions and the closure parameters of the automatically actuated emergency shutdown devices referred to in subsection (1) that will ensure the release volume used in calculating the emergency planning zone in the event of a pipeline break is as low as reasonably practicable.

(3) A licensee shall ensure that the automatically actuated emergency shutdown devices or check valves referred to in subsection (1) and (2)

(a) isolate the pipeline into segments whose volumes are in accordance with those specified in the licence application, and

(b) automatically close as defined by the engineering assessment required in subsection (2) if a pipeline break occurs.

(4) A licensee shall ensure that the automatically actuated emergency shutdown device referred to in subsection (1)

(a) closes on the failure of any control or operating component,

(b) remains closed once the device has closed due to actuation or failure, and

(c) requires on-site human intervention to reopen once it has closed unless it was closed due to a planned pipeline shutdown.

(5) A licensee shall not allow the pipeline or the automatically actuated emergency shutdown devices to operate outside of the conditions defined within the engineering assessment conducted under subsection (2).

(6) If the licensee determines that the pipeline or the automatically actuated emergency shutdown devices could be operating outside of the conditions defined by the engineering assessment conducted under subsection (2), the licensee shall shut in the pipeline until

(a) the pipeline and the automatically actuated emergency shutdown devices can be operated within the defined conditions, or

(b) the licensee completes an engineering assessment as specified in subsection (2) and revises the emergency planning zone, as required by Directive 071.

(7) Unless otherwise authorized by the Regulator, a licensee shall maintain a record of the current engineering assessment conducted under subsection (2) and the actions taken under subsection (6) until the pipeline is abandoned.

(8) The licensee shall submit a copy of the records required under subsection (7) to the Regulator on request.

AR 91/2005 s13;48/2012;89/2013

Control systems in blended gas streams

14(1) If gas streams are blended for the purpose of maintaining a lower hydrogen sulphide content in the final blended stream, and any inlet stream conveys gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas, or any lesser hydrogen sulphide content that the Regulator stipulates in a particular case, the licensee shall ensure that there are 2 independent safety systems to prevent a greater hydrogen sulphide content in the blended stream than permitted in the licence.

(2) A licensee shall ensure that one of the 2 independent safety systems referred to in subsection (1) provides, as a minimum, the process control to achieve the blend ratio and that the other system provides, as a minimum, monitoring and automatic shutdown.

AR 91/2005 s14;89/2013

Equipment pressure ratings

15(1) A licensee shall ensure that any valve, flange, fitting or other component connected to a pipeline has a manufacturer's rating that is equal to or greater than the maximum operating pressure authorized by the Regulator.

(2) In addition to the requirements of subsection (1), a licensee shall ensure that the pressure ratings for all valves

(a) do not exceed those specified in CSA Z245.15, and

(b) are derated for service temperatures above 120 degrees Celsius as specified by CSA Z662.

(3) In addition to the requirements of subsection (1), a licensee shall ensure that the pressure ratings for all flanges

(a) do not exceed those specified in CSA Z245.12,

(b) are derated for service temperature in accordance with the applicable manufacturing standard or specification for that flange, and

(c) are derated for service temperature in accordance with CSA Z662 if the applicable manufacturing standard or specification does not address the proposed service temperature.

(4) A licensee shall ensure that the pressure ratings for all other components are derated for service temperatures above 120 degrees Celsius in accordance with CSA Z662 if the applicable manufacturing standard or specification does not address the proposed service temperature.

(5) Subsections (2) to (4) apply only in respect of licences granted after the coming into force of these Rules.

AR 91/2005 s15;89/2013

Stress level limitations

16 For pipelines designed to convey gas with a content of more than 10 moles of hydrogen sulphide gas per kilomole of natural gas, the design stress levels may not be greater than

(a) 60% SMYS for all underground piping, and

(b) 50% SMYS for all above ground piping.

Maximum noise levels

17 A licensee shall operate pipeline facilities and conduct pipeline construction and operations in accordance with the maximum noise level limitations specified by the Regulator in Directive 038.

AR 91/2005 s17;48/2012;89/2013

Casing under highway, road or railway

18 If casing or thicker-wall pipe required by CSA Z662 is installed under a highway, road or railway, the casing or thicker-wall pipe must extend for the full width of the right of way of the highway, road or railway.

Modifications due to highway, road or railway

19 If the construction of a new highway, road or railway or the modification of an existing highway, road or railway requires the upgrading of an existing pipeline, the required casing, thicker-wall pipe or other load-bearing structures allowed by CSA Z662 must extend for the full width of the right of way of the highway, road or railway.

Minimum earth cover

20(1) Unless otherwise authorized by the Regulator, and subject to subsection (3), the minimum earth cover for any pipeline must at all times be the greater of the minimum earth cover specified in CSA Z662 and, as the case may be,

(a) 1.4 metres within the right of way of a highway,

(b) 1.1 metres within the right of way of a road, and

(c) 0.8 metres in any other place.

(2) Unless otherwise authorized by the Regulator, the minimum earth cover set out in subsection (1) must be maintained for all operating and discontinued pipelines.

(3) Unless otherwise specified by the Regulator, for a pipeline existing at the time that these Rules comes into force, if lesser earth cover was permitted by the construction standards and regulatory requirements in place at the time of construction, that lesser cover is acceptable.

AR 89/2013 s20;89/2013

Surface pipelines

21(1) A licensee of an existing pipeline, well or facility who intends to install a surface pipeline for temporary service shall do so in accordance with the requirements set out in this section and in Directive 056.

(2) A licensee shall install

(a) a form of pressure-relieving device if any possibility of a pressure increase above the allowable maximum operating

pressure exists due to a rise in ambient air temperature or solar heating,

(b) a system to allow for adequate expansion or contraction due to temperature change,

(c) temperature monitoring equipment if the pipeline material has temperature limitations,

(d) suitable restraints to adequately control lateral or vertical movement, and

(e) any other safety or operational systems the Regulator considers appropriate.

(3) A licensee shall bury the pipeline at all road and trail crossings and shall install pipeline warning signs at the point of pipeline entry and exit of each crossing.

(4) A licensee shall take additional precautions, including adding extra pipeline warning signs or providing other warnings to indicate the presence of a surface line, when

(a) equipment may be working in the vicinity of the pipeline,

(b) off-road vehicular traffic may endanger the pipeline, or

(c) any conditions may obscure or endanger the pipeline.

AR 91/2005 s21;48/2012;89/2013

Operating pressure

22(1) Unless otherwise authorized by the Regulator, a licensee shall design, operate and maintain its pipeline in accordance with the maximum operating pressure permitted in the licence.

(2) If 2 or more pipelines are connected and their licensed maximum operating pressures differ by more than 5% of the lowest licensed maximum operating pressure, a pressure control system and overpressure protection must be installed in accordance with CSA Z662 to ensure that the pipeline with the lowest maximum operating pressure will not be subjected to a pressure greater than its licensed maximum operating pressure.

(3) In addition to subsection (2), a licensee shall install a pressure control system and overpressure protection at any point in a pipeline where supply from any source makes it possible to increase the pressure in the pipeline above its licensed maximum operating pressure.

(4) Unless otherwise authorized by the Regulator, the operating pressure of a pipeline at all points along the pipeline must not exceed the maximum operating pressure permitted in the licence.

(5) Unless otherwise authorized by the Regulator, the maximum operating pressure of a section of a pipeline must be determined using the test pressure recorded or calculated at the highest point in the section.

AR 91/2005 s22;89/2013

Part 3
Pressure Testing

Placing pipeline into operation

23 A licensee shall not place a pipeline into operation until

(a) a pressure test satisfactory to the licensee has been completed in accordance with CSA Z662 and these Rules,

(b) the pipeline test pressure has been reduced to a level no greater than the proposed maximum operating pressure and, if necessary, the pipeline has been purged, and

(c) all tie-ins have been completed and inspected.

AR 91/2005 s23;89/2013

Notice to Regulator of pressure test

24 A licensee shall notify the Regulator at least 48 hours prior to the commencement of any pressure test.

AR 91/2005 s24;89/2013

Conditions for pressure testing

25 A licensee shall pressure test a pipeline that will be buried during operation with the full depth of earth cover applied.

Protection of persons and property

26 A licensee shall conduct a pressure test in a manner that will ensure the protection of persons and property in the vicinity of the pipeline.

Report of leak or break

27 A licensee shall immediately notify the Regulator of any leak or break that occurs in a pipeline during pressure testing.

AR 91/2005 s27;89/2013

Maximum length of pipe to be pressure tested

28 The Regulator may specify the maximum length of pipe to be tested in any test.

AR 91/2005 s28;89/2013

Recording pressure test results

29(1) A licensee's record or chart of a pressure test must be continuous and legible over the full test period, with the commencement and termination points of the test identified.

(2) A licensee may use electronic pressure-recording instruments if

(a) a permanent paper copy of the test data is retained, and

(b) the sampling rate and instrument sensitivity are sufficient to properly identify the expected deviations from normal test pressure.

(3) The instrument used to record the pressure during a test must be selected so that the pressure reading occurs between 25% and 90% of the full range of the instrument.

(4) The range of the pressure-recording instrument referred to in subsection (3) must be recorded on the chart face or on the permanent paper copy of the test data.

(5) Each pressure-recording instrument must be periodically calibrated to maintain accuracy to within 2% of its range, and the Regulator may require verification of such calibration.

AR 91/2005 s29;89/2013

Unsatisfactory test

30 If evidence of satisfactory testing is not provided to the Regulator on request, the Regulator may order that the pipeline be

(a) depressured,

(b) purged, if necessary, and

(c) pressure tested as directed by the Regulator.

AR 91/2005 s30;89/2013

Alternative methods for establishing pipeline integrity

31 A licensee may apply to the Regulator for approval to establish the integrity of the pipeline by methods other than pressure testing.

AR 91/2005 s31;89/2013

Pressure testing above 100% SMYS

32 If a pipeline is to be tested at a pressure that would cause a hoop stress greater than 100% SMYS, the licensee shall

(a) use liquid test media,

(b) develop a detailed test procedure and submit a copy of it to the Regulator on request,

(c) plot a pressure-volume curve starting at 80% SMYS, and

(d) prior to pressure testing, develop a detailed plan for spill containment and cleanup that can be implemented immediately in the event of a leak or break and submit a copy of the plan to the Regulator on request.

AR 91/2005 s32;89/2013

Pressure near test head assembly

33 The test pressure for any part of a pipeline that is within 20 metres of the connection with the test head assembly must be limited to a hoop stress level not greater than 90% SMYS.

Minimum test pressure

34 Notwithstanding CSA Z662, a licensee shall use a minimum test pressure of

(a) not less than 700 kilopascals for any pipeline, unless the Regulator approves a lower test pressure, and

(b) not less than 1.4 times the maximum operating pressure in all class locations for pipelines conveying gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas.

AR 91/2005 s34;89/2013

Contingency plans for liquid test media

35(1) A licensee shall comply with the liquid test media requirements in Directive 077 if

(a) the licensee intends to test a pipeline using a liquid test medium other than fresh water, and

(b) one or more of the following matters will apply in respect of the test:

(i) the volume of the test section will exceed 500 cubic metres;

(ii) the hoop stress level during the test is expected to exceed 100% SMYS;

(iii) the pipeline will cross or be within 100 metres of flowing water at the time of pressure testing.

(2) If none of the matters described in subsection (1)(b) will apply in respect of the test, the licensee shall, prior to the start of pressure testing, develop and maintain contingency plans as required in the appropriate section of CSA Z662.

AR 91/2005 s35;228/2011

Approval of gaseous test media

36(1) If a licensee proposes to use air or another gaseous medium to pressure test a pipeline section that has an internal volume larger than 125 cubic metres, the licensee shall first submit to the Regulator for approval a detailed proposal for the test, including a fully documented engineering evaluation that demonstrates that the proposed testing procedure is safe and sufficiently sensitive to detect leaks.

(2) If the licensee proposes to use air or another gaseous medium to pressure test a pipeline section where there is known or suspected to be corrosion or any other condition that could potentially cause the pipeline to break during testing, the licensee shall first submit to the Regulator for approval a detailed proposal for the test, including a fully documented engineering evaluation that demonstrates that the proposed testing procedure complies with the requirements of CSA Z662 and these Rules and that appropriate measures will be implemented to ensure the protection of people and property in the vicinity of the pipeline.

AR 91/2005 s36;89/2013

Gases used in testing

37 A licensee may use non-toxic gases other than those specified in CSA Z662 to pressure test a pipeline within CSA Z662 Class 1 areas if the testing complies with all other requirements of CSA Z662 and these Rules regarding gaseous media pressure testing.

AR 91/2005 s37;89/2013

Release of gaseous test media

38 After the completion of a pressure test, any gaseous medium to be released must be vented or flared in accordance with Directive 038 and Directive 060.

AR 91/2005 s38;48/2012

Hydrogen sulphide gas prohibited in test medium

39 No gas containing hydrogen sulphide may be used as a test medium.

Duration of test

40(1) Notwithstanding the test durations specified in CSA Z662, a licensee may pressure test a pipeline or section of a pipeline less than 75 metres in length or a pipeline permanently located above ground for a minimum of one hour.

(2) In exceptional circumstances, a licensee may apply to the Regulator to pressure test a pipeline or section of a pipeline other than one referred to in subsection (1) for a shorter period than the minimum specified in CSA Z662.

AR 91/2005 s40;89/2013

Pressure testing of vessels or manifolds

41 An in-line pressure vessel or prefabricated manifold on a pipeline does not require a field pressure test if it has been shop pressure tested.

Retest

42 The Regulator may require a pipeline to be retested if, in the opinion of the Regulator, it may be unsafe for the pipeline to continue to be operated at the licensed operating pressure.

AR 91/2005 s42;89/2013

Part 4
Inspection and Records

Right of way inspection

43(1) The licensee of a pipeline that crosses water or unstable ground shall at least once annually inspect the pipeline right of way to assess

(a) the surface conditions on and adjacent to the right of way,

(b) indications of any leak in the pipeline,

(c) any construction activity performed by others,

(d) any encroachment or development near the pipeline right of way, or

(e) any other condition affecting the operation of the pipeline.

(2) The licensee of a pipeline other than one referred to in subsection (1) shall inspect the pipeline right of way in accordance with that subsection at least once annually or in accordance with the inspection intervals determined in the integrity management component of the licensee's manual or manuals referred to in section 7.

(3) The licensee shall conduct the inspections required under subsections (1) and (2)

(a) at times of the year judged by the licensee to be the most appropriate to achieve a satisfactory inspection, and

(b) so as to reasonably minimize disturbance or damage to affected surface property.

Additional inspections

44(1) Notwithstanding the frequency of inspections required by section 43, a licensee shall carry out additional inspections in accordance with section 43(1)(a) to (e) as follows:

(a) monthly for any CSA Z662 Class 1 LVP product gathering segments;

(b) once every 2 weeks for any Class 1 LVP product transmission segments, Class 1 HVP product segments or Class 2 segments conveying gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas;

(c) once every week for any Class 2, 3 or 4 LVP product gathering or transmission segments, Class 2, 3 or 4 HVP product segments, or Class 3 or 4 segments conveying gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas.

(2) For the purposes of this section and section 45, "LVP product" does not include multiphase fluids or oilfield water.

Surface construction activity

45 If a licensee detects or becomes aware of any current or proposed surface construction activity within the controlled area of a pipeline conveying LVP product, HVP product or gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas, the licensee shall

(a) if the surface construction activity has not commenced, meet with the party proposing to carry it out to determine

what safety measures, if any, are necessary to ensure the safety of the pipeline,

(b) if the surface construction activity has commenced, meet immediately with the party carrying it out on the site of the activity for the purpose set out in clause (a),

(c) if there is uncertainty concerning the depth of the pipeline, confirm the depth of the pipeline prior to any further or proposed surface construction activity,

(d) identify and mark on the ground the location of the pipeline and the limits of the controlled area, and

(e) supervise the surface construction activity at least once each day on which the surface construction activity is taking place to ensure that all necessary safety measures are being implemented.

No fees for inspection and supervision

46 A licensee shall perform inspections or supervision as required under this Part without charging any fee to the party carrying out the surface construction activity.

Records of inspection and supervision

47 Unless otherwise authorized by the Regulator**,** a licensee shall maintain a record of all inspection and supervision required under this Part for a period of 2 years from the date the record is made and shall submit a copy of the record to the Regulator on request.

AR 91/2005 s47;89/2013

Material balance inspection

48 A licensee shall interpret material balance records in accordance with Appendix E of CSA Z662 to determine whether a leak trend is established.

Material balance calculations

49 A licensee who performs material balance calculations shall use sound engineering practices to derive measurement uncertainties and alarm tolerances.

Shutdown device inspection

50(1) A licensee shall conduct preventative maintenance, servicing and function testing of the automatically actuated emergency shutdown devices and check valves referred to in

section 13 and the safety systems referred to in section 14, including any associated sensors or operating systems.

(2) A licensee shall conduct an annual inspection, assessment and test, with a maximum interval of 18 months between such activities, of the automatically actuated emergency shutdown devices and check valves referred to in section 13 and the safety systems referred to in section 14, including any associated sensors or operating systems, to ensure that the devices are operating properly.

(3) A licensee shall verify and document that the actual pipeline operating conditions and the automatically actuated emergency shutdown device closure parameters are as defined within the engineering assessment conducted under section 13.

(4) A licensee shall maintain records of all such work under this section for a period of 2 years from the date the record is made.

(5) A licensee shall submit a copy of the records required under this section to the Regulator on request.

AR 91/2005 s50;48/2012;89/2013

Materials to be provided to Regulator

51 A licensee shall submit to the Regulator on request

(a) samples of materials used in the construction of a pipeline,

(b) cut-outs from the pipeline, and

(c) samples of defective materials.

AR 91/2005 s51;89/2013

Records of data

52(1) A licensee shall maintain

(a) a record of data recorded by the operator and by the supervisory control and data acquisition system, including actions taken on field-investigated alarms, for a period of 3 months from the time of the observations, and

(b) a record of all leaks, breaks and contact damage until the pipeline is removed.

(2) The licensee shall submit a copy of the records referred to in subsection (1) to the Regulator on request.

AR 91/2005 s52;89/2013

Annual inspection for external corrosion mitigation

53(1) Unless otherwise authorized by the Regulator, a licensee shall conduct an inspection or test on all steel and aluminum lines in a pipeline system to determine the effectiveness of external corrosion mitigation procedures

(a) annually, and

(b) prior to the resumption of operation of a discontinued or abandoned pipeline.

(2) Notwithstanding subsection (1), an inspection or test for external corrosion mitigation is not required for a pipeline being used as a conduit for a pulled-through freestanding liner unless the outer pipeline is being used as a secondary containment vessel.

AR 91/2005 s53;89/2013

Annual evaluation for internal corrosion mitigation

54(1) Unless otherwise authorized by the Regulator, a licensee shall conduct and document an evaluation of any operating or discontinued metallic pipelines in a pipeline system to determine the necessity for, and the suitability of, internal corrosion mitigation procedures

(a) annually,

(b) prior to the commencement of operation of a new pipeline, and

(c) prior to the resumption of operation of a discontinued or abandoned pipeline.

(2) The evaluation for internal corrosion mitigation shall include, as necessary, an evaluation of production records, operating experience, monitoring data and inspection data.

AR 91/2005 s54;89/2013

Exemption for lined metallic pipelines

55(1) The evaluation for internal corrosion mitigation referred to in section 54 is not required for metallic pipelines containing a full contact polymeric liner unless there is reason to believe that corrosive fluids have entered the annular space between the liner and the pipe.

(2) If there is reason to believe that corrosive fluids have entered the annular space between the liner and the pipe of a metallic pipeline referred to in subsection (1), the evaluation set out in section 54 must be performed to confirm whether the existing

condition of the pipeline is acceptable and determine the necessity for internal corrosion mitigation procedures.

Records of evaluation

56 A licensee shall maintain a record of the inspections and evaluations required under sections 53, 54 and 55 and their results for a period of at least 6 years from the date the record is made and shall submit a copy of the record to the Regulator on request.

AR 91/2005 s56;89/2013

Notice of maintenance activity

57(1) The licensee of a pipeline conveying HVP product or natural gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas shall notify the Regulator at least 48 hours prior to commencing

(a) the replacement of short portions of pipeline allowed by section 3(3)(a),

(b) instrumented internal inspections of the pipeline, and

(c) any activity that may result in welding on an in-service pipeline.

(2) If the requirement for 48 hours' notice referred to in subsection (1) cannot be met due to the need for emergency pipeline repairs to restore service, the licensee shall notify the Regulator at the earliest opportunity.

AR 91/2005 s57;89/2013

Part 5
Ground Disturbance

Ground disturbance in absence of pipeline right of way

58 No person shall undertake a ground disturbance within 5 metres of the centreline of a pipeline where there is no pipeline right of way without the approval of

(a) the licensee of the pipeline, or

(b) the Regulator, if approval cannot reasonably be obtained from the licensee.

AR 91/2005 s58;89/2013

Alberta One-Call

59 Every licensee shall register with the Alberta One-Call service and shall

(a) register every licensed pipeline with Alberta One-Call regardless of the operational status of the pipeline, and

(b) for new construction, register the pipeline prior to putting it into operation.

Preparation for ground disturbance

60(1) For the purposes of section 32(1)(a)(i)(B) of the Act, the distance from the perimeter of the area in which a person proposes to undertake a ground disturbance within which the person shall take all precautions reasonably necessary to ascertain whether a pipeline exists before commencing any work, operation or activity is 30 metres.

(2) A person proposing to undertake a ground disturbance within the controlled area of a pipeline shall notify the licensee of the pipeline and Alberta One-Call at least 2 days and not more than 10 days, excluding Saturdays, Sundays and holidays, prior to commencing the ground disturbance so that Alberta One-Call may notify the licensee of any buried pipeline of the intent to disturb the ground and request that the licensee identify and mark the location of the pipeline.

(3) The identifying and marking referred to in subsection (2) must be provided no later than 2 days, excluding Saturdays, Sundays and holidays, after the licensee is notified of the proposed ground disturbance unless a longer time period is agreed to by the licensee and the person proposing to undertake the ground disturbance.

(4) If the licensee has notice of a proposed ground disturbance in the controlled area of a pipeline, the licensee shall, prior to the commencement of the ground disturbance, accurately mark on the surface of the ground the horizontal position and alignment of the pipeline with clearly distinguishable warning signs and markers at adequate intervals in accordance with the Uniform Color Code, and provide documentation of the markings to the person proposing to undertake the ground disturbance.

(5) A person shall not proceed with a ground disturbance within the controlled area of a pipeline until the locating and marking of the pipeline has been completed.

(6) If the person proposing to undertake the ground disturbance wishes to carry out the identifying and marking of the pipeline in accordance with the requirements of subsection (4) and obtains the prior agreement of the licensee to do so, the licensee may delegate its responsibility under subsection (4) to the person.

(7) Notwithstanding subsection (4), alternative methods of locating and marking a pipeline may be used if agreed to by the licensee and the person proposing to undertake the ground disturbance.

(8) Subsections (4) and (5) do not apply if

(a) the ground disturbance is proposed to be undertaken in the controlled area outside the right of way of an existing pipeline,

(b) the right of way or pipeline is clearly separated from the proposed ground disturbance by a fence, highway, road or other visible improvement, and

(c) the exemption from the requirements of subsections (4) and (5) is agreed to by the licensee of any affected pipeline.

(9) The requirement for 2 days' notice in subsection (2), and all the requirements of subsections (3), (4) and (5), do not apply if a ground disturbance is undertaken in connection with the restoration of essential public services in an emergency or containment of an environmental emergency and the alternative notification, location and excavation procedures are agreed to by the licensee of any affected pipeline.

Erection of temporary fencing

61(1) Before commencing a ground disturbance in the controlled area of a pipeline where uncontrolled access over the pipeline by equipment may cause damage to the pipeline, the person responsible for the proposed ground disturbance shall erect temporary fencing of the pipeline right of way to limit access.

(2) When necessary, the temporary fencing shall allow for crossings of the pipeline right of way.

(3) The location of crossings and the precautions to be taken to protect pipelines from damage at those locations shall be determined and agreed to by the licensee and the person responsible for the proposed ground disturbance, and failing agreement, either party may apply to the Regulator for a decision.

AR 91/2005 s61;89/2013

Approval of ground disturbance

62(1) When approval for a ground disturbance is requested from a licensee pursuant to section 42 of the Act or section 58 of these Rules, the licensee shall respond in writing within 21 days from the date the approval is requested.

(2) An approval granted by the Regulator pursuant to section 42 of the Act or section 58 of these Rules may contain terms and conditions the Regulator considers appropriate in the circumstances.

AR 91/2005 s62;89/2013

Duties of licensee and person undertaking ground disturbance

63(1) A licensee of an existing pipeline who has been notified under section 32(1)(b) of the Act of a proposed ground disturbance shall

(a) have a representative inspect the pipeline before the commencement of the ground disturbance to ensure that the identifying and marking referred to in section 60(4) have been properly carried out,

(b) ensure that its representative has in his or her possession when on the site of the ground disturbance a copy of the written approval for the ground disturbance,

(c) ensure that its representative has completed a supervisory level training course in ground disturbance practices and is currently certified to supervise a ground disturbance, and

(d) carry out any inspections of the ground disturbance that are necessary to ensure the continued safety of the pipeline.

(2) The person responsible for a ground disturbance shall keep all pipeline warning signs or markers referred to in section 60(4) visible and legible for the duration of the ground disturbance and shall replace or relocate them if necessary.

(3) A person undertaking a ground disturbance who exposes any part of a pipeline shall notify the licensee at least 24 hours prior to backfilling the pipeline, and on being so notified, a representative of the licensee shall inspect without delay the exposed part of the pipeline before backfilling to ensure that no damage has occurred.

(4) A licensee shall retain a record of any inspections conducted under subsection (3) for a period of 2 years from the date the record is made and shall submit a copy of the record to the Regulator on request.

AR 91/2005 s63;89/2013

Safety of adjacent pipeline

64 If in the opinion of the Regulator it is desirable to do so, the Regulator may require that an existing pipeline located adjacent to

a ground disturbance in the controlled area of a pipeline be depressured, operated at a reduced pressure or otherwise protected throughout the period of the ground disturbance.

AR 91/2005 s64;89/2013

Exposing pipeline

65(1) An excavation conducted for the purpose of locating a pipeline shall be done by hand excavation until the pipeline is sufficiently exposed to enable it to be identified.

(2) A representative of the licensee shall be present at the time the pipeline is being exposed, unless the licensee and the person undertaking the ground disturbance agree otherwise.

(3) A person proposing to undertake a ground disturbance that will cross or be carried out within 5 metres of an existing pipeline shall, before commencing any mechanical excavation, locate and expose the existing pipeline by hand excavation.

(4) Hand excavation procedures must be acceptable to the licensee of the pipeline.

(5) After a pipeline has been located in accordance with this section, no person shall use or cause to be used mechanical excavation equipment within 600 millimetres of the pipeline or within any distance beneath a pipeline, except under the direct supervision of a representative of the licensee of the existing pipeline.

(6) Notwithstanding subsection (3), an existing pipeline need not be exposed if

(a) it has been located, marked and inspected in accordance with sections 60 and 63, and hand excavated to a distance of 5 metres on each side of the located and marked position, with the hand excavation being made to a depth at least 150 millimetres greater than that required for the ground disturbance, or

(b) its position has been verified to the satisfaction of the licensee by comparison with recorded measurements of the pipeline taken during a previous exposure.

(7) If a proposed ground disturbance will be parallel to and within 5 metres of a pipeline, the pipeline may be exposed at intervals along the pipeline, with the length of the intervals being at the discretion of the licensee of the existing pipeline or at the Regulator's direction.

(8) If a pipeline is to be exposed by the licensee of the pipeline, the licensee may make written application to the Regulator for approval to use pipeline exposure procedures other than those referred to in subsection (6) or (7).

AR 91/2005 s65;89/2013

Vehicles crossing pipeline

66 No person shall operate a vehicle or equipment across a pipeline at a point that is not within the upgraded and traveled portion of a highway or public road without obtaining approval from the licensee of the pipeline unless

(a) the vehicle or equipment is used for farming operations,

(b) the vehicle is an off-highway vehicle as defined in section 117(a)(iii) to (viii) of the *Traffic Safety Act*, or

(c) the vehicle is a private passenger vehicle as defined in section 1(1)(jj) of the *Traffic Safety Act* and has a nominal chassis rating of not greater than 3/4 of a ton.

No fees for ground disturbance activities

67 A licensee shall locate and mark a pipeline, perform inspections and supervise a ground disturbance as required under this Part without charging any fee to the party undertaking the ground disturbance.

Part 6
Warning Signs

Pipeline warning signs

68(1) A licensee shall install pipeline warning signs

(a) at each side of the crossing where a pipeline crosses a highway, road, railway or watercourse,

(b) within the land acquired for the pipeline and facing the highway, road, railway or watercourse,

(c) if the pipeline right of way adjoins the right of way of a highway, road or railway, on the common boundary of the rights of way but not within the right of way of the highway, road or railway, and

(d) if the pipeline is

(i) located in a ditch or unpaved area in the right of way of a highway or road, or

(ii) conveying HVP product in an urban area,

at intervals that will clearly and continuously mark the location of the pipeline.

(2) A licensee shall install warning signs as required by subsection (1)

(a) prior to the commencement of operation of the pipeline,

(b) in accordance with either format set out in Schedule 1, provided that the format is consistent for the entire pipeline that is the subject of the licence,

(c) no more than 300 millimetres from a fence line, if one exists,

(d) as close to the centreline of the pipeline as possible without risking striking the pipeline,

(e) so that each sign is not obscured by brush or any other thing, and

(f) as independent, free-standing structures that must not be attached to any other structures except the fencing surrounding the licensee's facilities.

(3) Notwithstanding subsection (2)(b), a licensee may install temporary warning signs not in accordance with Schedule 1 while surface restoration activities are in progress but shall install permanent warning signs in accordance with Schedule 1 as soon as surface restoration activities are completed.

(4) A licensee shall, regardless of the operational status of the pipeline and for all pipelines, including abandoned pipelines, maintain pipeline warning signs and shall replace any pipeline warning sign that becomes defaced, worn out or illegible or that is missing or destroyed.

(5) A licensee shall, regardless of the operational status of a pipeline and for all pipelines, including abandoned pipelines, update all warning signs by replacing them with new signs or applying durable permanent adhesive decals bearing the updated information

(a) before a telephone number indicated on the warning sign becomes invalid, and

(b) within 180 days of a change in any of the other information required by Schedule 1 unless otherwise authorized by the Regulator.

(6) If a pipeline or part of a pipeline has been removed, any existing warning signs in the area from which the pipeline or part of the pipeline has been removed shall also be removed.

(7) A licensee may apply to the Regulator for permission to install warning signs otherwise than in accordance with Schedule 1 in exceptional circumstances.

(8) A licensee shall not indicate on a pipeline sign that a pipeline is abandoned.

AR 91/2005 s68;89/2013

HVP product

69 Warning signs for a pipeline conveying HVP product must clearly indicate the name of the highest vapour pressure HVP product that may be conveyed.

Group pipeline signs

70(1) A licensee may install group pipeline warning signs for a group of pipelines in the same right of way, rather than a separate sign for each pipeline, if

(a) the licensee is the same for each pipeline in the group,

(b) each pipeline in the group conveys the same product,

(c) the warning sign, in accordance with Schedule 1, identifies that there are other pipelines close by, and

(d) none of the pipelines in the group convey HVP product or gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas.

(2) The warning signs for a group of pipelines must be placed on both sides of the right of way containing the group of pipelines and must not be more than 60 metres apart.

Identification of pipeline installations

71(1) A licensee shall install pipeline warning signs in accordance with Schedule 2 adjacent to all pipeline installations, including meter regulator stations and regulator stations, valves, field manifolds and line heaters.

(2) A licensee shall install a large facility identification sign at the entrance to any gas compressor station and oil pumping station showing the name of the facility, legal location of the facility, the name of the licensee, an emergency telephone number and a warning symbol as set out in Schedule 2.

(3) Warning symbols identifying the hazard at a pipeline installation referred to in subsection (2) shall be limited to

(a) Category I: Flammable (gas or liquid), or

(b) Category II: Poisonous Gas.

(4) A Category I symbol must be used unless an installation conveys a poisonous substance, in which case a Category II symbol must be used.

(5) No warning symbols may be used that do not conform to the requirements set out in this section and Schedule 2.

Part 7
Changes to Pipeline

Liner installation

72 Unless otherwise authorized by the Regulator, an application to the Regulator for approval to install a liner in a pipeline or part of a pipeline shall be in accordance with the requirements of Directive 056.

AR 91/2005 s72;48/2012;89/2013

Liner installation in sour service

73 If a liner is to be installed in a pipeline to be used in sour service, as defined in CSA Z662, and the hoop strength capability of the lined system depends on the strength of the exterior pipeline pipe, the exterior pipeline pipe must be in accordance with the sour service requirements of CSA Z662 and these Rules.

AR 91/2005 s73;89/2013

Change in substance or pressure

74 Unless otherwise authorized by the Regulator, an application for approval to convert a pipeline to convey a substance other than the substance authorized by the licence or to provide for a change in the licensed maximum operating pressure of a pipeline must be in accordance with the requirements of Directive 056.

AR 91/2005 s74;48/2012;89/2013

Testing requirements for change in substance or pressure

75 The Regulator may establish testing requirements it considers necessary for the approval of a change in substance conveyed or licensed maximum operating pressure.

AR 91/2005 s75;89/2013

Part 8
Release of Product

Report of leak, break or contact damage

76 If a leak, break or contact damage has been reported to the Regulator in accordance with section 35 of the Act or section 27 of these Rules, the licensee shall on request submit to the Regulator a written report indicating

(a) the time the leak, break or contact damage occurred,

(b) the approximate quantity of substance lost, if any,

(c) the method of repair, if applicable,

(d) the conditions that caused or contributed to the leak, break or contact damage and any substantiating reports,

(e) the steps to be taken to prevent similar occurrences in the future,

(f) information regarding the spill containment and recovery techniques, and

(g) any other information that the Regulator may request.

AR 91/2005 s76;89/2013

Containment of leak or break

77 If oil, salt water or other deleterious liquids escape from a leak or break in a pipeline, the licensee shall, on detection of the leak or break, take immediate steps to stop the source of release and contain and clean up the spill.

Repair of leak, break or contact damage

78 If a leak, break or contact damage occurs in a pipeline, the Regulator may specify the method of repair.

AR 91/2005 s78;89/2013

Intentional release of gas

79(1) Unless otherwise authorized by the Regulator, a licensee shall not intentionally release from a pipeline into the atmosphere any non-distribution specification gas unless the gas is burned in an approved manner or otherwise treated to meet the required specifications.

(2) Subsection (1) does not apply when the gas referred to in subsection (1) is vented intermittently

(a) from the annulus of a lined pipeline during a liner inspection,

(b) during the removal of corrosion coupons, provided that the coupon loop or fitting has been purged with gas not containing hydrogen sulphide gas at a concentration higher than acceptable for distribution specification gas, and the coupon loop or fitting is then depressurized to flare, hydrogen sulphide removal treatment or other process before opening, or

(c) from a pig sender or receiver that has been purged with gas not containing hydrogen sulphide gas at a concentration higher than acceptable for distribution specification gas, and the pig sender or receiver is then depressurized to flare, hydrogen sulphide removal treatment or other process before opening.

(3) Gas vented intermittently in accordance with subsection (2)

(a) does not require an approval under Directive 060,

(b) must not be vented continuously, and

(c) must not cause off-lease odours.

(4) Any other gas vented from a pipeline must be vented in accordance with the requirements of Directive 060.

AR 91/2005 s79;48/2012;89/2013

Part 9
Relocation or Alteration of Pipeline or Other Regulator Direction

Application for direction under section 33 of the Act

80(1) An application for a direction under section 33 of the Act must include

(a) one copy of the most recent Regulator Pipeline Base Map showing

(i) the present location of the pipeline where the alteration, relocation or addition is proposed,

(ii) the name of the licensee and the licence number of the pipeline,

(iii) the proposed pipeline alteration, relocation or addition, and

(iv) details of any surface work or improvement at the pipeline location if the alteration, relocation or addition is to accommodate the surface work or improvement;

(b) the specifications of the pipeline and any associated casing;

(c) a statement concerning

(i) the purpose of the pipeline alteration, relocation or addition and the reason the applicant considers it to be in the public interest,

(ii) any documented evidence relating to prior knowledge by either party of the surface work or improvement affecting the pipeline, and

(iii) the opinion of the applicant about allocation of costs necessary to complete the pipeline alteration, relocation or addition and the reasons for it;

(d) an estimate of total costs for the alteration, relocation or addition;

(e) a list of owners and occupants of property affected by the pipeline alteration, relocation or addition and the status of acquisition of right of way, working space and consents of owners and occupants.

(2) On receipt of the application referred to in subsection (1), the Regulator may require written comments from the persons affected by the pipeline alteration, relocation or addition.

(3) The Regulator may require the licensee to perform any testing that it considers necessary prior to making an order under section 33 of the Act.

AR 91/2005 s80;89/2013

Notice to Regulator

81(1) A licensee shall notify the Regulator when the work pursuant to a direction under this Part has been completed.

(2) After receiving a notice referred to in subsection (1), the Regulator may amend the licence.

AR 91/2005 s81;89/2013

Part 10
Discontinuance, Abandonment, Removal or Resumption

Discontinuance or abandonment of pipeline

82(1) Unless otherwise authorized by the Regulator, a licensee shall discontinue, abandon or return to active flowing service a pipeline that has not seen active flowing service within the last 12 months.

(2) Unless otherwise authorized by the Regulator, a licensee required under subsection (1) to discontinue or abandon a pipeline or part of a pipeline shall do so in accordance with the requirements of Directive 056 and notify the Regulator in accordance with the requirements of Directive 056 within 90 days of the completion of the discontinuance or abandonment operations.

(3) When a pipeline or part of a pipeline is discontinued, the licensee shall ensure that the pipeline or the part of the pipeline that is discontinued is

(a) physically isolated or disconnected from any operating facility or other pipeline,

(b) cleaned, if necessary,

(c) purged with fresh water, air or inert gas, any of which may include the addition of internal corrosion inhibitors if the licensee is prepared to mitigate the environmental effects that could occur as a result of accidental release or spillage,

(d) protected by suitable internal and external corrosion control measures,

(e) not isolated or disconnected in a manner that results in an adjoining operating pipeline having fittings or connection points remaining that would create stagnant fluid traps or dead legs, unless

(i) those locations are permanently accessible and subject to a scheduled inspection program, or

(ii) the contained fluids are confirmed and documented as being non-corrosive,

and

(f) left in a safe condition.

(4) If a pipeline or part of a pipeline cannot be physically isolated or disconnected from an operating facility or pipeline, it must not be discontinued or abandoned but must be maintained as an operating pipeline and its integrity must be taken into account in the licensee's overall pipeline integrity management program.

(5) When a pipeline or part of a pipeline is abandoned, the licensee, in addition to meeting the requirements of subsection (3), shall

(a) remove any surface equipment, including pig traps, risers, block valves and line heaters, unless they are located within the boundaries of a facility that will continue to have other licensed equipment operating after the pipeline abandonment,

(b) cut off the pipeline or the part of the pipeline to be abandoned below surface at pipeline level, except when it is located within the boundaries of a facility that will continue to have other licensed equipment operating after the pipeline abandonment,

(c) purge the pipeline with fresh water, air or inert gas, none of which may contain added chemicals or corrosion inhibitors,

(d) remove cathodic protection from the pipeline,

(e) permanently plug or cap all open ends by mechanical means or welded means, and

(f) identify all ends with a permanent tag that indicates the licensee, licence and line number, other end points, date of abandonment and abandonment media left inside the pipeline.

(6) When an existing pipeline is exposed for any purpose and reveals a stagnant fluid trap or dead leg in an operating segment of the pipeline that resulted from a previous discontinuance or abandonment, the licensee shall remedy the stagnant fluid trap or dead leg by

(a) removing and replacing the affected parts of the pipeline,

(b) establishing permanent access to the affected parts of the pipeline and subjecting them to a scheduled inspection program,

(c) confirming and documenting that the contained fluids are non-corrosive, or

(d) some other method acceptable to the Regulator.

(7) If the pipeline or the part of the pipeline to be discontinued or abandoned is either polymeric in composition or contains a polymeric liner, the licensee shall monitor the internal atmosphere for a period of time sufficient to determine that the polymeric materials are not evolving any hazardous gaseous constituents that would prevent the pipeline from complying with subsection (3)(c) and (f).

(8) Subsection (6) applies to all pipelines including those that were discontinued or abandoned prior to the coming into force of these Rules.

(9) A licensee shall abandon a pipeline in accordance with this section

(a) if the Regulator has suspended or cancelled the licensee's licence because the licensee has contravened the Act, these Rules or an order or direction of the Regulator,

(b) if the Regulator has notified the licensee that in the opinion of the Regulator the pipeline may constitute an environmental or safety hazard,

(c) if the licensee

(i) is not or ceases to be resident in Alberta,

(ii) has not appointed an agent in accordance with section 19 of the Act, and

(iii) does not hold a subsisting exemption under section 1.1 from the requirement to appoint an agent,

(d) if the licensee is deceased,

(e) if the licensee is a corporation registered, incorporated or continued under the *Business Corporations Act* that is not active or has been dissolved or if the corporate registry status of the licensee is struck or rendered liable to be struck under any legislation governing corporations,

(f) if the licensee has not discontinued the pipeline in accordance with the Act, these Rules or an order or direction of the Regulator,

(g) if the pipeline is associated with a well or facility that has been abandoned or has been ordered to be abandoned by the Regulator and the pipeline is not used for any other well or facility,

(h) if the licensee has sold or disposed of the licensee's interest in the pipeline and has not transferred it to a person who is eligible to hold a licence for the pipeline, or

(i) where otherwise ordered to do so by the Regulator.

AR 91/2005 s82;186/2005;212/2005;48/2012;221/2012;89/2013

Responsibility for discontinued or abandoned pipeline

83 Notification to the Regulator of discontinuance or abandonment operations does not relieve the licensee from the responsibility for further discontinuance or abandonment or other operations with respect to the same pipeline or part of a pipeline that may become necessary.

AR 91/2005 s83;89/2013

Removal of pipeline

84 Unless otherwise authorized by the Regulator, a licensee intending to remove an entire pipeline or any part of a pipeline shall submit an application to the Regulator for approval in accordance with the requirements of Directive 056.

AR 91/2005 s84;48/2012;89/2013

Resumption of pipeline operation

85(1) Unless otherwise authorized by the Regulator, a licensee intending to resume the operation of a pipeline or part of a pipeline that has been discontinued, abandoned or that has not been in active flowing service within the last 12 months shall make an application to the Regulator for approval in accordance with the requirements of Directive 056.

(2) An application under subsection (1) shall include comprehensive information as set out in Directive 056 about the pipeline materials and their condition and the Regulator may require pressure testing, non-destructive examination, material testing or other examination of the pipeline before rendering a decision on the application.

AR 91/2005 s85;48/2012;89/2013

Part 11
Transitional Provisions, Repeal, Expiry and Coming into Force

Transitional

86 A licence or approval granted by the Regulator before the coming into force of these Rules remains in force according to its terms until it expires or is amended, suspended or cancelled or a

subsequent licence or approval is granted under the Act or these Rules.

AR 91/2005 s86;89/2013

Repeal

87 The *Pipeline Regulation* (AR 122/87) is repealed.

Expiry

88 For the purpose of ensuring that these Rules are reviewed for ongoing relevancy and necessity, with the option that they may be repassed in their present or an amended form following a review, these Rules expires on January 31, 2025.

AR 91/2005 s88;89/2013;4/2015

Coming into force

89(1) Subject to subsections (2), (3), (4) and (5), these Rules comes into force on May 31, 2005.

(2) Section 44(1)(b), in respect of Class 2 segments conveying gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas, and section 44(1)(c), in respect of Class 3 or 4 segments conveying gas containing more than 10 moles of hydrogen sulphide gas per kilomole of natural gas, come into force on November 30, 2005.

(3) Sections 45, 68(2)(b) and (f), 68(4), (5), (6) and (8) and 71(2) come into force on November 30, 2005.

(4) Sections 7, 43, 54, 59, 63(1)(b) and (c) and 82(1) come into force on May 31, 2006.

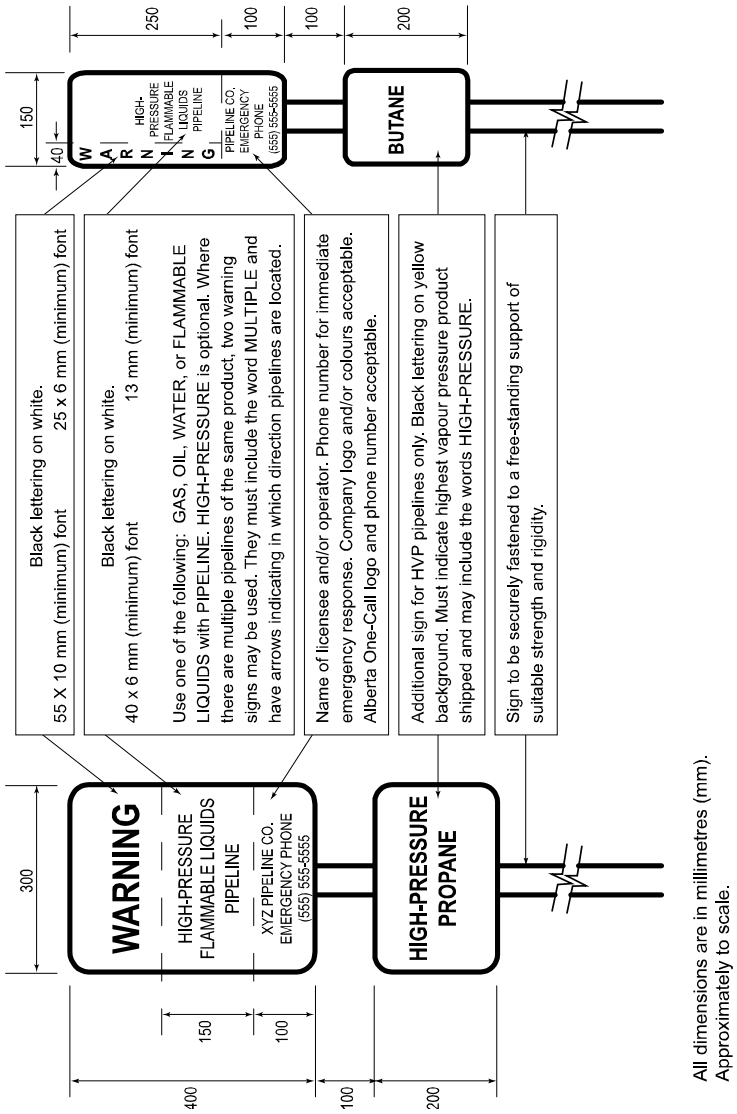
(5) With respect to licences granted before the coming into force of these Rules, including amendments to those licences whether granted before or after the coming into force of these Rules, section 82(4) comes into force on May 31, 2006.

(6) With respect to licences granted after the coming into force of these Rules, section 15(2) to (4) come into force on November 30, 2005.

AR 91/2005 s89;89/2013

Schedule 1

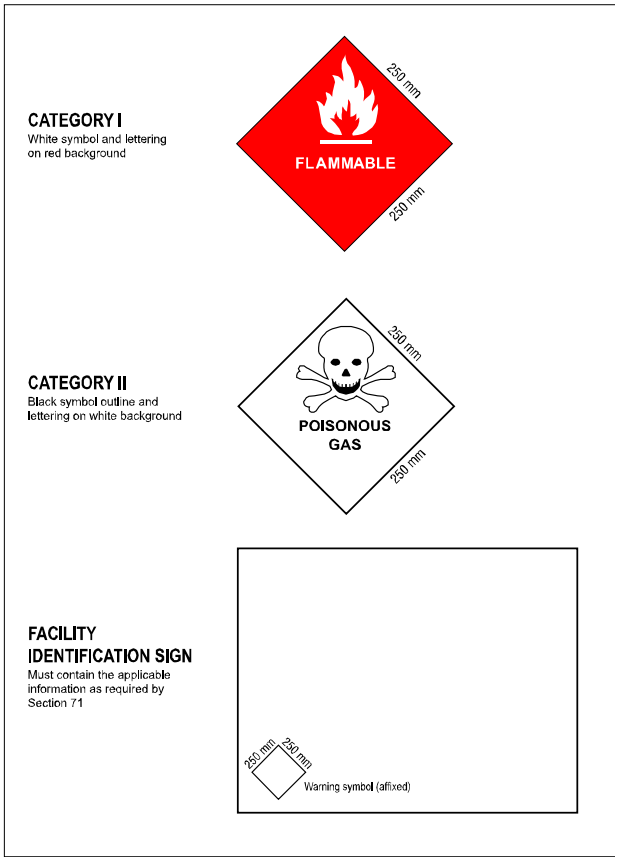
Approved Pipeline Warning Signs



All dimensions are in millimetres (mm).
Approximately to scale.

Schedule 2

Facility Identification Signs



Schedule 3

Excavation Procedures for Exposing a Pipeline that is More Than 1.5 Metres Below the Surface of the Ground (section 65)

Steps:

1 Using electronic or other depth location devices, determine the location, alignment and approximate depth of cover of the pipeline to be exposed. A minimum of 3 readings spaced a minimum of 3 m apart must be taken and the alignment marked.

2 Add 25 cm to the maximum depth recorded. This sum is labelled C on Figures 1 and 2.

3 Using hand excavation, dig a trench of length 2C to a depth not exceeding 1.5 m at right angles to the alignment marked in Step 1.

4 If no pipeline is found, dig a square of side 2C centred on the hand-excavated trench, as shown in Figure 1, using mechanical excavation to a depth of 0.5 m less than the trench depth.

5 Decrease the dimension of C by the depth of the mechanical excavation.

6 Repeat the procedure from Step 3, using a new value for C each time until the pipeline is found.

7 If the pipeline is very deep, check the alignment and depth after the 2nd mechanical excavation and adjust C, if necessary.

This procedure is based on the assumption that an electronic depth location device gives a reasonably accurate alignment and depth of pipeline to be exposed. The addition of 25 cm to the indicated depth is intended as a precautionary measure to accommodate inaccuracy in depth and alignment.

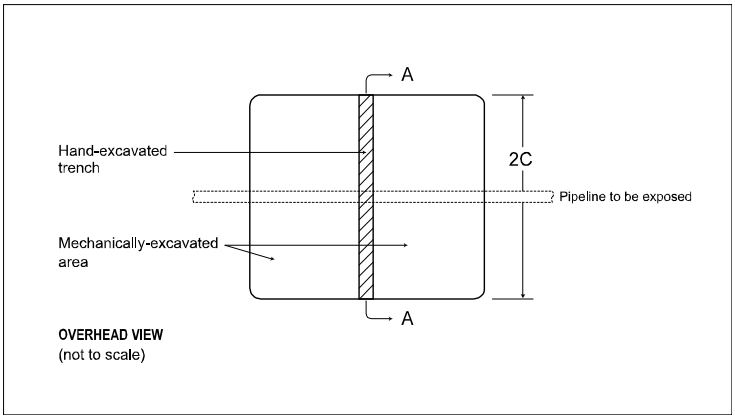


Figure 1 - Plan View

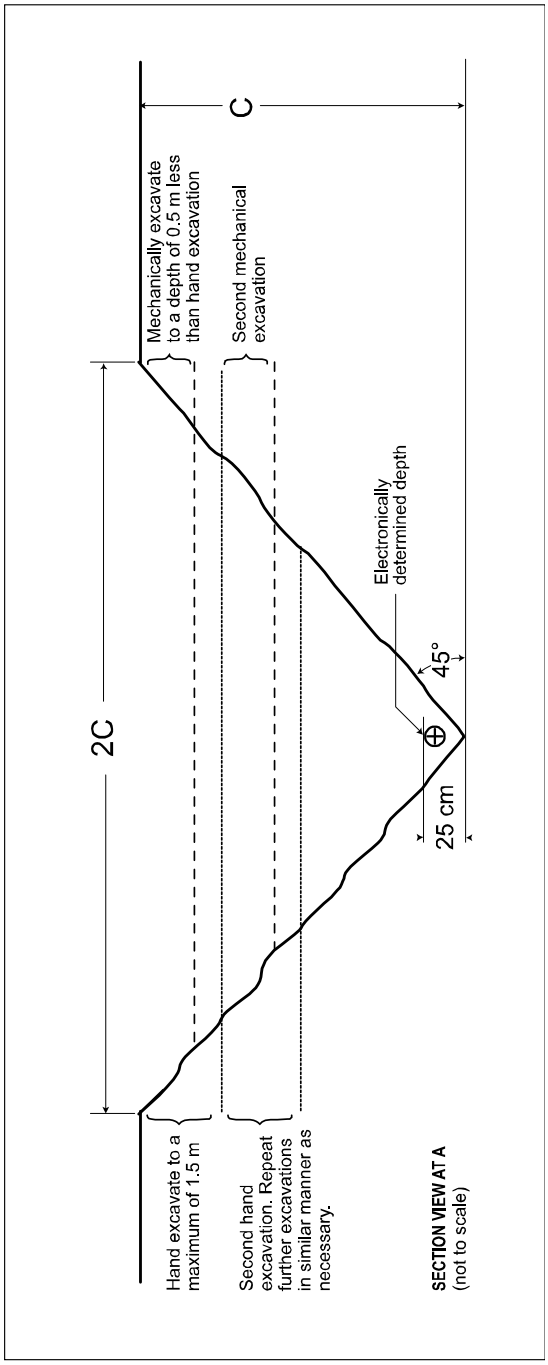


Figure 2 - Cross-section (along cutline AA in Figure 1)

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