



Application for a Pipeline Licence

1. An applicant for a licence to construct and operate a pipeline under *The Pipelines Act, 1998*, and *The Pipelines Regulations, 2000*, must apply to the department using the prescribed form, **Pipeline Licence Application IR-724**, and include with the application the following information and material:
 - (a) two white print copies of the plan of the pipeline showing the location of the pipeline in its entirety and the location of all pumping stations, compressor stations, valves used for isolating and sectionalizing the pipeline, and the location of all tanks used in the pipeline operation. All plans must include the land descriptions necessary to properly locate the pipeline;
 - (b) a typical profile and cross-section of the pipeline indicating the depth of burial;
 - (c) a typical crossing profile, if applicable, for roads, railroads and underground utilities;
 - (d) a stream crossing profile for each stream to be crossed;
 - (e) a representative gas analysis if any quantity of H₂S is present in the gas phase of the substance being transported;
 - (f) any other information that the minister may require.
 2. **Part I-General Application Data** must be completed when applying for a new pipeline or any of the following amendments to an existing pipeline:
 - (a) an alteration.
 - (b) an abandonment;
 - (c) a discontinuation of operation;
 - (d) a resumption of operation;
 - (e) an increase in the maximum operating pressure;
 - (f) an increase in the H₂S content;
 - (g) a change of the substance being transported.
 3. When applying for a new pipeline an application fee of \$ 350.00 is required. When applying for an alteration of a pipeline a \$ 200.00 application fee is required if the alteration includes new right of way or if more than 100 metres of pipe will be replaced. There is no application fee for other pipeline licence amendments.
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4. The substance to be transported should be identified using Table 1 as a reference.

Substance to be Transported	Typical Substances
Crude Oil	crude oil, crude oil blends
Natural Gas	methane, natural gas with ≤ 10 mol/kmol H ₂ S
Sour Natural Gas	natural gas with > 10 mol/kmol H ₂ S
Multiphase	oil well effluent
Produced Water	formation salt water
Fresh Water	potable water, surface water
LVP Products	condensate, diesel fuel, gasoline, heating oil, kerosene, solvents, hydrocarbon diluents
HVP Products	butane, ethylene, propane, pentanes, liquid ethane

Table 1: Substance to be Transported

5. The partial pressure of H₂S in the gas phase is used to determine if sour service materials are required. The partial pressure is determined by multiplying the mole fraction of H₂S by the maximum operating pressure (MOP):

Mole fraction H₂S (gas phase) * MOP (kPa)

- (a) for natural gas pipelines sour service materials are required if the partial pressure of H₂S in the gas phase exceeds 0.35 kPa;
- (b) for multiphase pipelines (oil effluent) sour service materials are required if the combination of H₂S in the gas phase is greater than 70 kPa partial pressure or greater than 50 mol/kmol H₂S for system pressure less than 1400 kPa.

6. Unless high density polyethylene pipe meeting the requirements of section 7 has been approved, all materials intended for sour service shall comply with the sour service clause of the applicable CSA Z245 standard. If no applicable CSA standard exists, the current material requirements of the National Association of Corrosion Engineers NACE MRO175 shall apply. The minimum material requirements for sour service pipelines are:

- (a) Steel Pipe – CSA Z245.1;
- (b) Steel Fittings – CSA Z245.11;
- (c) Steel Flanges – CSA Z245.12;
- (d) Steel Valves – CSA Z245.15.

7. High density polyethylene pipe, including free standing liners inside steel, may be approved for sour service pipelines in wet gas gathering applications subject to the following requirements:

- (a) all materials shall be in accordance with CSA Z662-03 clause 13.3.3;
- (b) the standard dimensional ratio (SDR) shall not be greater than 13.5;
- (c) the minimum gauge of all marker wires shall be 14 and all marker wires shall be tested annually for electrical conductivity;
- (d) the pipeline must be located a minimum of 0.1 kilometres from a permanent dwelling and 0.5 kilometres from the boundaries of an urban municipality or public facility;

- (e) all occupants of permanent dwellings within 0.5 kilometres of the pipeline must be notified of the pipeline location and the substance being transported prior to commencing operation of the pipeline.

8. Pipeline licences expire one year from the date of issuance unless construction has started. Licences may be extended for subsequent periods of six months upon written request and the submission of a \$ 250.00 licence extension fee for each extension.

9. **Notifications and Easements.** When applying for a new pipeline or an alteration to an existing pipeline that requires new construction or new right of way, this section must be completed in its entirety providing statements that all notifications have been completed and all easements have been obtained. If the answer to any of the questions within this section is no, then supporting documentation must be included with the application. All documentation should be retained and made available upon request.

10. **Certification.** The application is to include certification from a professional engineer, as defined in *The Engineering and Geoscience Professions Act* (must be registered in Saskatchewan), that the pipeline has been designed in accordance with the standards set out in this guideline and *The Pipelines Regulations, 2000*.

11. **Part II-Detailed Pipeline Specification** must be completed detailing each pipeline segment of a new pipeline project or any new pipe being installed as the result of an alteration. Information on each pipeline segment should include:

- (a) the legal description of the start point and end point;
- (b) the substance to be transported;
- (c) the length of the pipeline segment in kilometres;
- (d) the pipe size, the wall thickness of the pipe and the pipe material and grade;

Material Standard	Grade	Category
Steel Pipe		
API 5L	A	
API 5L	B	
API 5L	X42	
API 5L	X60	
CSA Z245.1	290	1
CSA Z245.1	359	1
CSA Z245.1	359	2
Polyethylene Pipe		
API 15LE	3408	SDR 9
Fibreglass Pipe		
ANSI 300	700	

Table 2: Pipeline Materials (examples only)

- (e) the class location identified as 1, 2, 3 or 4 as determined by CSA Z662-03 clause 4.3.2;
- (f) the design pressure, test pressure and maximum operating pressure in kilopascals;
- (g) the depth of cover;
- (h) the protective coatings;

Protective Coatings
Grouted
Cement
Polyvinyl Chloride
Yellow Jacket

Table 3: Protective Coatings (examples only)

12. **Proposed Pressure Test Procedures.** Operation of the pipeline shall not commence until a successful pressure test has been completed and a Leave to Open granted. The applicant must provide information on the proposed test medium, test duration and the maximum and minimum test pressures. The applicant may provide additional details such as, strength and leak test duration, whether the pipe is fully exposed, visual inspection procedures, etc. The department must receive a minimum of 24 hours notice prior to conducting the pressure test. Following a successful test, the applicant must provide copies of all test charts to the department so a maximum operating pressure can be determined and a Leave to Open granted. All original charts should be retained and made available upon request.

13. Submit the completed application with the applicable application fee to:

Engineering Services Branch
 Saskatchewan Industry and Resources
 200 - 2101 Scarth Street
 Regina, Saskatchewan S4P 2H9

14. For further information contact:

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