

SEWAGE MAIN

Adopted pursuant to *The Environmental Management and Protection Act, 2010*

PART 1 – General

Application

- 1-1** This chapter applies to every owner of a sewage main that is used or intended to be used by a **municipality** with a population of at least 5,000 **persons** as determined by the most recent census conducted pursuant to the *Statistics Act (Canada)*, but does not apply:
- (a) to the operation of a sewage main;
 - (b) to sewage treatment systems, including treatment systems designed to function in sewage mains, sewage plants, sewage reservoirs, large pipe structures used as reservoirs, lift stations and sewage pump houses; or
 - (c) to the following activities conducted on a sewage main:
 - (i) maintenance;
 - (ii) line break repairs;
 - (iii) construction of service connections;
 - (iv) replacement of a sewage main with another sewage main at the same location or within the same right of way.

Information Note

This chapter comes into force on June 1, 2015.

In accordance with section 84 of the Act, it is an offence to fail to comply with the code.

Compliance

- 1-2** Every owner of a sewage main shall comply with all the requirements established pursuant to:
- (a) Part 1; and
 - (b) either:
 - (i) Part 2; or
 - (ii) Part 3.

Notification required

- 1-3(1)** No person shall commence work on the construction of a sewage main unless that person has:
- (a) notified the [minister](#) in the form provided by the minister and provided the minister with any other information or material that the minister may reasonably require; and
 - (b) received a notification number from the minister.
- (2) Every owner of a sewage main who has received a notification number pursuant to clause (1)(b) shall ensure that the notification number is included on all documents required by this chapter to be kept and retained.

Information Note

A person may notify the minister:

- (1) electronically by using the following link: www.environment.gov.sk.ca; or
- (2) by requesting a form from the Saskatchewan Ministry of Environment at:
Saskatchewan Ministry of Environment
1-800-567-4224 (toll free in Canada)
Centre.Inquiry@gov.sk.ca

The owner shall not operate the sewage main without first obtaining an operating permit.

Every owner of a sewage main should consider and respond to the potential need to evaluate heritage properties.

Qualified person and certificates

- 1-4(1)** For the purposes of clause 2(1)(bb) of the Act, in this chapter “**qualified person**” means:
- (a) for the purposes of certifying an [environmental protection plan](#):
 - (i) a person licensed to practise professional engineering pursuant to *The Engineering and Geoscience Professions Act*; or
 - (ii) an individual who is designated by the minister or who is a member of a class of persons designated by the minister pursuant to the Act to undertake the activity;
 - (b) for the purposes of certifying a sewage main design plan:
 - (i) a person licensed to practise professional engineering pursuant to *The Engineering and Geoscience Professions Act*;
 - (ii) a person who is an applied science technologist pursuant to *The Saskatchewan Applied Science Technologists and Technicians Act* and who has 8 years of experience in the area of work to be performed that is recognized by the Saskatchewan Applied Science Technologists and Technicians; or
 - (iii) an individual who is designated by the minister or who is a member of a class of persons designated by the minister pursuant to the Act to undertake the activity;

- (c) for the purposes of certifying the monitoring and commissioning requirements:
 - (i) a person licensed to practise professional engineering pursuant to *The Engineering and Geoscience Professions Act*;
 - (ii) a person who is an applied science technologist or certified technician pursuant to *The Saskatchewan Applied Science Technologists and Technicians Act*;
 - (iii) an operator who holds at least the corresponding certificate for the classification of the **sewage works** that is set out in the Saskatchewan Water and Wastewater Works Operator Certification Standards; or
 - (iv) an individual who is designated by the minister or who is a member of a class of persons designated by the minister pursuant to the Act to undertake the activity;
 - (d) for the purposes of certifying the quality assurance and quality control sampling and analytical procedures, any person mentioned in clause (c).
- (2) Every owner of a sewage main shall ensure that any certificate provided by a qualified person in accordance with this chapter satisfies the requirements set out in the Qualified Person Certification Standard.

Information Note

The identification of a person as a qualified person does not entitle that person to engage in an activity if that activity is within the exclusive scope of practice of a profession and that person is not a member of that profession.

Designation of sewage main as a sewage works

- 1-5** For the purposes of this chapter, every sewage main is designated as a sewage works for the purposes of subclause 2(1)(ee)(ii) of the Act.

Environmental samples and laboratory analysis

- 1-6(1)** Subject to subsection (2), every owner of a sewage main shall ensure that environmental samples are:
- (a) collected, preserved, stored, handled or analysed in accordance with a method approved by a standards-setting organization; and
 - (b) if analysed by a laboratory, analysed by a laboratory accredited pursuant to the requirements of the Canadian Association for Laboratory Accreditation in accordance with the parameters for which the laboratory has been accredited.
- (2) If no parameter-specific environmental sampling method or analytical method accreditation process exists, every owner of a sewage main shall ensure that a qualified person provides a certificate stating that, in his or her opinion, the quality assurance and quality control for sampling and analytical procedures produce accurate, precise and reliable results.

Information Note

Standards-setting organizations include bodies such as the Standards Council of Canada, the Canadian Standards Association, the Underwriters Laboratories of Canada, the International Organization for Standardization, the American Society for Testing and Materials (ASTM) International and the United States Environmental Protection Agency.

General records

- 1-7(1)** Every owner of a sewage main shall ensure that the following records are kept and retained for at least 7 years from the date the record was created:
- (a) the results of all pressure integrity testing performed during commissioning of the sewage main;
 - (b) a record of any action taken to correct failed test results respecting pressure integrity;
 - (c) a record of any departure from planned or accepted construction practices;
 - (d) records of any environmental sampling, analysis or monitoring that has been conducted, including:
 - (i) the results of any environmental analysis;
 - (ii) the date, location and time of environmental sampling or monitoring;
 - (iii) the name of the person collecting the environmental sample;
 - (iv) an identification of the environmental sample type;
 - (v) the date of analysis of the environmental sample;
 - (vi) the sampling method used;
 - (vii) the name of the laboratory that performed the analysis of the environmental sample;
 - (viii) the name of the person responsible for performing the analysis of the environmental sample; and
 - (ix) the quality assurance and quality control records of any environmental samples.
- (2) Every owner of a sewage main shall ensure that the following records are kept and retained for the entire operational life of the sewage main and for a period of 15 years after the operational life:
- (a) any sewage main operation or maintenance manual developed during the operational life;
 - (b) copies of all sewage-main-related notification information and correspondence;
 - (c) copies of all sewage-main-related design specifications, reports and as-constructed drawings;
 - (d) copies of all records related to the construction and any inspection of the sewer main;
 - (e) copies of all analytical and testing procedures;
 - (f) any certificate received from a qualified person;
 - (g) any other records mentioned in Part 2 or Part 3.

- (3) Every owner of a sewage main shall ensure that the records required to be kept pursuant to this section are made available to the minister on request.
- (4) An owner of a sewage main shall ensure that, on transfer of ownership of the sewage main, the records required to be kept pursuant to this section are transferred to the new owner.

General reporting

1-8 Every owner of a sewage main shall:

- (a) provide the following documents, before beginning construction, to the designer, contractor and the person supervising the construction work:
 - (i) a copy of the notification provided to the minister pursuant to section 1-3;
 - (ii) a copy of this chapter; and
- (b) provide the minister with the following:
 - (i) before beginning construction, verbal or written notice of the date when construction will begin;
 - (ii) after construction is 75% complete and before it is 95% complete, verbal or written notice that construction is significantly completed;
 - (iii) within one year after completing construction, as-constructed drawings of the sewage main or any changes to the sewage main.

Information Note

A person may provide verbal or written notice to the minister by:

- (1) contacting the Environmental Protection Officer responsible for the waterworks; or
- (2) electronically by using the following link: www.environment.gov.sk.ca

PART 2 – Alternative Solution

Information Note

Part 2 applies to every owner of a sewage main who has elected to comply with Part 2.

Results-based objective

- 2-1(1)** The results-based objective of this chapter is to limit the probability of unacceptable **adverse effects** resulting from the activity addressed by this chapter.
- (2) The results-based objective mentioned in subsection (1) must be satisfied by:
 - (a) providing a sewage main to convey wastewater by taking reasonable and prudent measures:
 - (i) to employ inert materials in the sewage main;

- (ii) to design and construct the sewage main:
 - (A) to resist exfiltration or infiltration of foreign [substances](#);
 - (B) to limit the release of wastewater during conveyance; and
 - (C) to facilitate the cleaning and maintenance of the sewage main; and
- (iii) to pressure test the sewage main in advance of commissioning;
- (b) providing longevity of the sewage main by taking reasonable and prudent measures to design and construct the sewage main:
 - (i) to facilitate seamless workings with the existing sewage works and [waterworks](#) for a period of at least 10 years;
 - (ii) to withstand normally encountered stresses; and
 - (iii) to facilitate cleaning and maintenance of the sewage main; and
- (c) taking reasonable and prudent measures to include components on monitoring, recording and reporting.

Environmental protection plan

2-2 Every person who intends to construct a sewage main shall:

- (a) have an environmental protection plan prepared that sets out the methods that will be employed to satisfy the results-based objective described in section 2-1;
- (b) ensure that a qualified person provides a certificate stating that, in his or her opinion, the methods and components in the environmental protection plan, if carried out in accordance with that plan, will satisfy the results-based objective described in section 2-1; and
- (c) submit the following documents to the minister:
 - (i) the environmental protection plan for acceptance pursuant to section 27 of the Act;
 - (ii) the certificate from a qualified person:
 - (A) obtained pursuant to subsection 1-6(2), if any; and
 - (B) obtained pursuant to clause (b).

Information Note

The environmental protection plan, and the certificate(s) from the qualified person, may be submitted to the minister:

- (1) electronically by using the following link: www.environment.gov.sk.ca; or
- (2) by requesting a form from the Saskatchewan Ministry of Environment at:
 - Saskatchewan Ministry of Environment
 - 1-800-567-4224 (toll free in Canada)
 - Centre.Inquiry@gov.sk.ca

In accordance with section 27 of the Act, the minister may accept the environmental protection plan, accept the environmental protection plan and impose terms and conditions or refuse to accept the environmental protection plan.

PART 3 – Acceptable Solution

Information Note

Part 3 applies to every owner of a sewage main who has elected to comply with Part 3.

Sewage main design plan

- 3-1(1)** Before constructing, altering or expanding a sewage main, the owner of the sewage main shall:
- (a) ensure that a sewage main design plan is prepared that satisfies the requirements set out in subsection (2); and
 - (b) ensure that a qualified person provides a certificate stating that, in his or her opinion, the sewage main design plan, if carried out in accordance with that plan, will satisfy the requirements set out in subsection (2).
- (2) The sewage main design plan mentioned in subsection (1) must satisfy the requirements set out in the following provisions of the Sewage Works Design Standard:
- (a) section 1.2.1 (General);
 - (b) section 1.2.2 (Sanitary Sewage Collection/Pumping and Forcemains);
 - (c) section 2 (Sanitary Sewers).

Commissioning of sewage main

- 3-2(1)** Every owner of a sewage main shall:
- (a) ensure the sewage main is constructed in accordance with the sewage main design plan prepared in accordance with section 3-1; and
 - (b) before commissioning a sewage main, ensure that a qualified person provides a certificate stating that, in his or her opinion:
 - (i) there is no physical cross-connection between a **sewage** main and a water main that could permit the passage of any sewage or contaminated water into a supply of **water** that is intended for human consumption or a human consumptive use;
 - (ii) there is no physical cross-connection between a sewage main and **surface water** or **groundwater**, unless otherwise approved by the minister;
 - (iii) there is no physical interconnection between a sewage main and a storm sewer in a manner that would allow sewage in the sewage main to be **discharged** through the storm sewer;

- (iv) the sewage main is constructed to a sufficient depth to protect against freezing and to receive sewage from basements without flooding;
 - (v) the infiltration and exfiltration rate for pressure testing of polyvinyl chloride sewage mains and fittings does not exceed 4.6 litres per millimetre diameter of pipe per kilometre length per day; and
 - (vi) the sewage main is designed and constructed to create a local environment free of odour complaints.
- (2) Notwithstanding subclause (1)(b)(v), low-pressure air testing may be permitted to verify joint tightness when tested to a maximum rate of air loss of 0.0004572 metres cubed per square metre (0.0015 cubic feet per minute per square foot) of internal surface.

Environmental samples

- 3-3** Notwithstanding section 1-6, every owner of a sewage main shall ensure that environmental samples collected, preserved, stored, handled or analysed pursuant to this Part are collected, preserved, stored, handled or analysed in accordance with the Standard Methods for the Examination of Water and Wastewater.

Reporting

- 3-4** Every owner of a sewage main shall submit the following documents to the minister:
- (a) before constructing, altering or expanding a sewage main:
 - (i) the sewage main design plan mentioned in clause 3-1(1)(a); and
 - (ii) the certificate from a qualified person obtained pursuant to clause 3-1(1)(b); and
 - (b) before commissioning a sewage main, the certificate from a qualified person obtained pursuant to clause 3-2(1)(b).

Information Note

A person may submit documents to the minister by:

- (1) contacting the Environmental Protection Officer responsible for the waterworks; or
- (2) electronically by using the following link: www.environment.gov.sk.ca.

Glossary of Terms

Act

The Environmental Management and Protection Act, 2010.

Human consumptive use

A use of water for human consumption, including the following uses and applications:

- (a) drinking;
- (b) cooking and food preparation;
- (c) oral hygiene.

Municipality

A municipality as defined in *The Interpretation Act, 1995*, including the Saskatchewan portion of the City of Lloydminster.

Owner of a sewage main

A person who owns a sewage main or intends to construct a sewage main.

Pipes

Closed conduits and all appurtenances attached to those conduits.

Qualified Person Certification Standard

The Qualified Person Certification Standard, as established by the minister on November 15, 2012, and adopted pursuant to the Adoption of Standards Chapter.

Saskatchewan Water and Wastewater Works Operator Certification Standards

The Saskatchewan Water and Wastewater Works Operator Certification Standards, EPB 539, as established by the minister on November 15, 2012, and adopted pursuant to the Adoption of Standards Chapter.

Service connection

A sewage pipe that connects a sewage main with a premises.

Sewage main

That part of a sewage collection works that includes sewage mains, force mains and related piping, control and monitoring systems and appurtenances.

Sewage Works Design Standard

The Sewage Works Design Standard, EPB 503, as established by the minister on November 15, 2012, and adopted pursuant to the Adoption of Standards Chapter.

Standard Methods for the Examination of Water and Wastewater

The Standard Methods for the Examination of Water and Wastewater, 21st Edition, 2005, published by the American Public Health Association, the American Water Works Association and the Water Environment Federation, and adopted pursuant to the Adoption of Standards Chapter.

Storm sewer

A system of conduits, drains, mains, manholes, basins and pipes intended, exclusively or principally, to convey [storm water](#).

Standards Referenced in this Chapter

The following standards, adopted pursuant to the Adoption of Standards Chapter, are referenced in this chapter:

- Qualified Person Certification Standard
- Saskatchewan Water and Wastewater Works Operator Certification Standards
- Sewage Works Design Standard
- Standard Methods for the Examination of Water and Wastewater