

EPB 254 - Water Pipelines

Many pipelines are regulated by the Water Security Agency (WSA) under *The Waterworks and Sewage Works Regulations, 2010*. WSA regulated pipeline systems include those directly connected to a municipal waterworks and other pipelines not directly connected to a municipal waterworks with 15 or more service connections. The Water Security Agency and Saskatchewan Health/Health Regions jointly regulate some smaller potable water pipelines known as Limited Scope Pipelines. In general, all WSA regulated pipelines should follow the criteria outlined below.

For Construction

All pipelines should be constructed following standard engineering practice. Qualified professionals should be involved in the design and installation of the pipelines. Guidance can be obtained from the WSA's documents titled "EPB 276 - Water Pipeline Design Guidelines," and "EPB 501 – Waterworks Design Standard" as well as the Saskatchewan Association of Rural Water Pipelines document entitled "Rural Water Pipeline Handbook for Saskatchewan." The Saskatchewan Association of Rural Water Pipelines (SARWP) may also provide advice; they can be contacted by telephone at 1-866-327-2797, on their website (<http://www.sarwp.ca/>) or by email (sarwp@sasktel.net).

For Operation

The operating requirements of each pipeline will vary based on site-specific considerations. All WSA regulated systems should be operated in a fashion appropriate as described in the system's Permit to Operate a Waterworks. Some standard operating practices will be altered by new WSA guidelines on pipeline construction and operation.

WSA has specific requirements for all water pipeline systems governed by *The Waterworks and Sewage Works Regulations*. These requirements will entail regular monitoring of parameters (such as chlorine residuals), proper record keeping, proper reporting of upset conditions and meeting other specific requirements of the regulations. In general, all WSA regulated pipeline systems, other than Limited Scope Pipelines, intended or used to provide water for human consumptive use are required to:

- have a certified operation in charge by July 15, 2015;
- meet water quality standards and timeframes as laid out in "EPB 507 – Saskatchewan's Drinking Water Quality Standards and Objectives";
- regularly monitor parameters such as bacteria and chlorine. Further information is available in the document "EPB 202 - Municipal Drinking Water Quality Monitoring Guidelines";
- maintain an appropriate disinfection level;
- have the pipeline systems assessed by a qualified professional in order to determine areas that require attention. Additional guidance is available in the "EPB 233A - Waterworks System Assessment – Round 3 Standards";
- review operational records periodically;
- notify the consumers of water quality; and
- have a Quality Assurance/Quality Control (QA/QC) plan/policy in place. A template is available in "EPB 243 - Quality Assurance and Quality Control Policy for Waterworks: An Overview for Smaller Waterworks". The QA/QC should include information regarding the pipeline system's standard operating procedures (such as the method of flushing lines) as well as an emergency plan. The emergency plan should address non-routine incidents that may occur, like water breaks or water contamination through backflow and the actions that the pipeline association will take in the event that the incident occurs. Further help and templates are available in the WSA's Emergency Planning documents (EPB 540, EPB 540B, EPB 541A and EPB 241B).

For further information on WSA regulated pipeline systems, please contact your Environmental Project Officer.