

The Sewerage System Standard Practice Manual (SPM)

Introduction to the SPM and SPM review process

The BC Sewerage System Standard Practice Manual (SPM) is provided by the BC Ministry of Health as a source of “standard practice”, as required under the *Health Act’s* Sewerage System Regulation (SSR). The first SPM, V1 (2005) was released June 2005.

The SPM is a living document, with regular review cycles. Currently review is annual.

The BC OnSite Sewage Association (BCOSSA) Technical Review Committee (TRC), reviews and edits the SPM for the Ministry of Health. As part of this review process the TRC gathers stakeholder input as well as scientifically supported technical information. The TRC may also provide interpretation of, and technical support to, the manual.

The first revision of the SPM to create the SPM V2 was completed September 2007.

Key changes in the SPM V2

Standards are similar to those of the SPM V1, however, the layout is changed to make the manual more usable. Coverage of technologies and methods has been greatly expanded. Consistency of standards, and of presentation has also been improved. Future revisions are expected to be more minor.

Layout changes

The manual has been divided to three parts plus appendices.

- **Part 1**
 - Administrative, roles and responsibilities and standard practice.
- **Part 2**
 - Critical standards for onsite systems, this part includes the key design tables.
- **Part 3**
 - Standards and guidelines for Record of Sewerage System filings and practice.
 - Details of technologies and methods for onsite, “Toolbox” of techniques and standards for application of those techniques.

Key conceptual changes

- Cost effectiveness for onsite systems was a priority
- Clear division of critical standards, and identification of linked standards
- Clear guidance on departures from the manual standards, with procedures for Part 2 and Part 3 standards

Introduction to Version 2 of the SPM

- Solution oriented approach, less restrictive
- Expanded design and solution options, with basic and extended options
- More emphasis on maintenance and monitoring
- Standards for practice provided, including minimum standards for design documentation and plans

Future review will build on this approach, and the TRC will use feedback from its technical support service as well as more formally from stakeholders to support this. As a living document the SPM will continue to improve, and will be flexible to changes in technologies and in needs.

Onsite Sewage System cost effectiveness and the new SPM

In the review of the manual the TRC had a view to three key objectives:

- Protection of public health.
- Cost effective and efficient systems
- Onsite system kept as simple as possible to improve long term reliability and reduce maintenance costs.

The Technical Brief highlights the way in which revisions in the SPM V2 address cost effectiveness. These include:

- Increased flexibility for system selection
 - Site capability tables allow for several options for common site constraints
 - Allows for more economical solutions, available to ROWPs as well as professionals
- Improvements to critical standards, allowing more economical solutions to common problems, for example:
 - Vertical Separation tables provide extended options for shallow soils
 - With deep soils, conventional gravity systems can now be used instead of advanced systems for very permeable soils
- Improvements to technologies coverage and standards:
 - New types of technique, for example:
 - Evapotranspiration Absorption (ETA) beds allow low cost solution for drier areas with poor soils
 - Sand lined trenches allow Type 1 solution to areas with very permeable soils
 - Improved standards for techniques, for example:
 - No size restriction on dosed gravity systems
 - Standards for sand mounds allow use on marginal sites with Type 1 treatment

The SPM V2 is expected to result in systems that are more cost effective, as well as more reliable. Future review will continue to focus on these objectives.