

**PRIVATE SEWAGE SYSTEMS STANDARD OF PRACTICE 2009 (SOP)  
PART 7 – SITE EVALUATION  
SOIL PROFILES AND MINIMUM OF TWO TEST PITS**

This bulletin has been jointly developed by Safety Services and the Plumbing Technical Council to inform the Private Sewage Industry of the minimum requirements associated with site investigation and the development of soil profiles as identified in Part 7 of SOP.

The soil test pit provides a large profile view of the trench side wall to expose each *soil horizon* to assess the texture and the shape and grade (*soil structure*) of the soil, which will impact the loading rates used to design the soil based treatment system. A minimum of two test pits per site are required by the SOP, as test pits are the only method that can assess variability in soil horizons that needs to be documented on a soil profile and used in designing an effective soil based treatment system.

A soil profile sheet must be completed for each soil test pit to determine the most limiting soil layer for the system design. A soil sample from each test pit (minimum of one sample per test pit and two samples per site) of this *limiting condition* soil must be sent to a certified laboratory for the analysis required in the SOP and a lab report must be generated and included with the permit application for the permit file. Please visit our Design Tools and Forms website for soil profile forms and other supporting documentation.

[http://municipalaffairs.alberta.ca/CP\\_PSDS\\_DesignToolsAndForms.cfm](http://municipalaffairs.alberta.ca/CP_PSDS_DesignToolsAndForms.cfm)

The use of intact cores of soil collected by a Shelby tube can only be used as supporting information for the final design of large or complex systems that require extensive soil investigation. The Plumbing Technical Task Group that researched, drafted and developed the Alberta Private Sewage Systems Standard of Practice 2009 (SOP) supported the use of test pits as the only method that will achieve the minimum site evaluation requirements of Part 7 of the SOP.