



*MODEL PROCESS REFERENCE DOCUMENT  
TO GUIDE MUNICIPAL CONSIDERATION OF SUBDIVISION AND  
DEVELOPMENT USING PRIVATE SEWAGE TREATMENT SYSTEMS*

*Prepared by the Alberta Association of Municipal Districts and Counties  
in partnership with its member municipalities  
and Alberta Municipal Affairs*

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## Introduction

Private sewage disposal systems, commonly called “septic systems”, treat sewage from homes and businesses that are not connected to a centralized wastewater treatment system.. It is estimated that 25.9 million gallons of waste is processed using private sewage treatment installations in Alberta per day. Some 250,000 to 300,000 on-site systems are thought to be operational in Alberta, and that number is growing. This translates into approximately 1 in every 5 Albertans using on-site sewage disposal technology. In most rural municipalities it is the predominant method of managing and treating sewage.

The performance, siting and management of private sewage treatment systems (now commonly referred to as on-site wastewater treatment systems) and the need to effectively manage their entire lifecycle is therefore a growing need. As the use of on-site systems grows, the need to adequately manage the site selection, design, installation, operation and maintenance of these systems also grows. As this improves, so will the reliability, effectiveness and sustainability of on-site wastewater treatment systems.

Recognizing the need to provide municipalities with better tools to manage these issues, the Alberta Association of Municipal Districts and Counties (AAMD&C), in partnership with Alberta Municipal Affairs, undertook a project to develop this resource/reference toolkit for municipalities entitled “A Model Process to Guide Municipal Consideration of Subdivision and Developments using Private Sewage Treatment Systems”.

When considering proposals for subdivisions or developments not served by a municipal sewer system, the *Subdivision and Development Regulation* requires that a municipality consider the suitability of the land for a private sewage disposal system.

However, a recognized and standardized process to guide a municipality’s consideration of whether the land and parcel size is suitable for onsite wastewater treatment systems does not exist. In order to properly evaluate any subdivision or development proposal, key information must be provided to the municipality through an effective and planned process that includes a site assessment. Moreover, any conditions that are established, as part of a subdivision decision, need to be carried over to the installation, permitting, and compliance monitoring process.

In March 2002 the Alberta Association of Municipal Districts and Counties (AAMD&C) agreed to undertake the Model Process Development Project and they were provided grant funding from Alberta Municipal Affairs.

The Model Process provides a planned strategy to evaluate and report on the suitability of land for the use of Private Sewage Treatment Systems (PSTS) in a proposed subdivision. The Model Process is intended to compliment the overall municipal subdivision process when the proposed subdivision relies on PSTS.

Rocky View needs high quality, trustworthy information in order to make good, well-informed decisions. The most vital information the Municipality needs to make a good decision regarding subdivision applications that rely on PSTS should ideally come from a Site Evaluation performed by a qualified professional.

Site evaluations in Alberta have historically relied on percolation tests to determine the suitability of land for private sewage disposal. While a percolation test certainly provides some valuable information, the AAMDC has demonstrated that in most cases a simple percolation test is not sufficient to determine site suitability. The AAMDC has developed this "Model Process" because they believe it will help municipalities in their consideration of whether PSTS are suitable for treating wastewater in a proposed subdivision.

The Municipal Government Act (MGA) outlines the process for subdivision of land in Alberta. Under the MGA, municipalities are responsible for land use planning, subdivision and development approval. The MGA gives Rocky View the responsibility to ensure that subdivisions relying on PSTS are properly investigated and the proposed parcel(s) is determined to be suitable for on-site sewage treatment. It also puts the onus on the subdivision proponent to prove out the viability of the subdivision proposal to the satisfaction of the subdivision authority.

These legislative requirements give the Municipal Subdivision Authority a great deal of latitude in determining what information needs to be provided to them. In effect, Municipal Subdivision Authorities have the ability to ask for whatever information they deem necessary to carry out their subdivision approval responsibilities. The Model Process recommends what site evaluation information and land characteristic information should be requested by the Municipality in order to evaluate the suitability of the land for PSTS.

The Model Process outlines what steps Municipalities need to take to determine what information to ask for, obtain the necessary information, and evaluate the information once it is received. It also clarifies the requirements and details expected of an evaluation at a given level of assessment and provides Guidance to consultants who will be carrying out the evaluations.

## Level of Assessment Qualification Requirements

<u>LEVEL OF ASSESSMENT</u>	<u>MINIMUM QUALIFICATION OF EVALUATOR</u>
Level 1 Variation	Certified PSTS Installer or Land Owner
Level 1 Assessment	*Engineer/Geologist or Agrologist
Level 2 Assessment	*Engineer/Geologist or Agrologist
Level 3 Assessment	*Engineer/Geologist or Agrologist
Level 4 Assessment	*Engineer/Geologist or Agrologist

\*Agrologist must be licensed by AIA/Engineer & Geologist must be licensed by APEGA

The following table includes a list of qualified consultants who are familiar with the Model Pilot Process and are able to carry out the various levels of assessment. The list has been provided in no particular order of preference. The subdivision applicant may choose to contact one of the consultants listed below or any consultant of their choice provided the consultant meets the minimum qualifications listed above.

<b>Firm Name</b>	<b>Phone</b>	<b>Contact Name</b>
Osprey Engineering Inc	(403) 933-2226	Michael Kitchen
Western Water Resources	(403) 217-2946	Van Ridout
Almor Testing Services Ltd	(403) 236-8880	Jim Montgomery
Sedulous Engineering	(403) 454-8487	Rob Deverell