



## DISCUSSION

Recently, the City has received requests for the use of LPS systems on an interim basis from a number of new developments that can ultimately be serviced by gravity sewers, but which cannot be installed immediately because the proponent has not been able to secure necessary off-site sanitary sewer rights-of-ways. Comprehensive and efficient development of infrastructure including road dedications and rights-of-way typically occurs in a sequential manner with new development being adjacent to existing development. However, in reality, sequential development is not always possible and road dedications and rights-of-way through private property must occasionally be negotiated by a developer through intervening properties to gain access to existing roads and utilities for new development. Staff is not recommending the use of LPS systems as a servicing strategy in these cases for the following reasons:

1. Conventional gravity sewer has few maintenance issues and provides a better, more reliable service to residents than LPS systems.
2. Cost and disruption to households when conversion to a gravity sewer connection becomes possible once the gravity sewer is available.
3. Sewerage from the LPS can be septic because of the low flows that are typical of these types of systems. Sewage that is septic results in odour problems, especially at the discharge points. Septicity in sewerage also creates hydrogen sulphide gas that, when mixed with the moisture in the sewer, induces corrosion in the sewer system, which reduces the life span of the sewer.

The policy attached as Appendix I has been drafted to allow the use of LPS systems in areas that practically cannot be serviced by gravity sewer on an indefinite basis or in specific areas where due to topography or soil conditions, such as South Westminster and Bridgeview, this is the only practical alternative. The policy is drafted such that LPS systems will not be allowed in new land development projects, except as provided above, even where proponents cannot secure rights-of-way immediately to allow the installation of a gravity sewer system. In such situations, the option remains for the provision of a localized interim pump station, which would be used until a downstream sewer is available.

## CONCLUSION

Based on the above discussion, it is recommended that Council adopt the policy titled "Use of Private Low Pressure Sanitary Sewer Systems (LPS)", which is attached as Appendix I to this report.

Paul Ham, P.Eng.  
General Manager, Engineering

VL/RAW/PH/RL/brb:kd

Appendix I – Sanitary Low Pressure Sewer System Policy.



# CITY POLICY

No.

---

<b>REFERENCE:</b>	<b>APPROVED BY:</b>	<b>CITY COUNCIL</b>
REGULAR COUNCIL MINUTES	<b>DATE:</b>	
	<b>HISTORY:</b>	<b>NEW</b>

---

**TITLE: Use of Private Low Pressure Sanitary Sewer Systems (LPS)**

A “low pressure sanitary sewer system” (LPS) for the purpose of this policy is defined as a private sanitary sewer pump station that pumps sewage from a private property to a community sewer system by means of a low pressure private sanitary sewer connection.

A Low Pressure Sanitary Sewer System (LPS) will only be permitted where:

- a. A property is below the elevation of the community trunk sewer and there is no physical means of providing a gravity sewer system and connection for the site;
- b. The full catchment area within which the specific property is located is too small to support a City-operated community pump station; and
- c. It is located in Industrial or Commercial areas of Bridgeview or South Westminster.

or

An LPS has been approved for use in a Council-adopted servicing plan.

An interim LPS system may be approved for use by the General Manager of Engineering, where an existing septic disposal system servicing an existing building on a property has failed and is beyond repair as confirmed by the Regional Health Board, or as determined by the General Manager, Engineering and where a gravity connection for the property to a community sanitary sewer is not physically possible.

This policy is subject to any specific provisions of the Local Government Act, or other relevant legislation or Union agreement.