

The Sewerage System Regulation and Municipal Wastewater Regulation: Jurisdictional Flow Divide for Onsite Sewerage Systems

The Ministry of Health and the Ministry of Environment have jointly developed this guideline to clarify the meaning of section 2 of the Sewerage System Regulation and section 4 of the Municipal Wastewater Regulation. These sections specify the maximum design daily flows for onsite sewage systems¹ permitted under each regulation and represent the dividing line between large and small onsite systems.

This document should be used as supplemental guidance when determining which regulation to apply when onsite sewage systems are designed, installed, operated and maintained. The final decision in any individual case is determined by the regulator. This guidance applies for new applications only, although existing authorizations may be reviewed against this guideline's criteria (below) when changes are requested.

In general terms, the Sewerage System Regulation regulates sewage systems with design daily domestic sewage flows of less than 22,700 litres per day (22.7 m³ per day) and the Municipal Wastewater Regulation regulates maximum daily wastewater² flows of greater than or equal to 22,700 litres per day as follows:

Section 2 of the Sewerage System Regulation applies to the construction and maintenance of:

- a) *A holding tank*
- b) *A sewerage system that serves a single family residence or a duplex,*
- c) *A sewerage system or combination of sewerage systems with a combined design daily domestic sewage flow of less than 22,700 litres that serves structures on a single parcel, and*
- d) *A combination of sewerage system with a combined design daily domestic sewage flow of less than 22,700 litres that serves structures on one or more parcels or strata lots or on a shared interest.*

Section 4 of the Municipal Wastewater Regulation includes the following subsections which align with the Sewerage System Regulation:

- 1) *In this section, 'parcel', 'sewerage system' and 'strata lot' have the same meanings as in the Sewerage System Regulation, B.C. Reg. 326/2004.*
- 2) *Subject to subsection 3, this regulation applies to all discharges*

¹ Also referred to as a ground discharge in the Municipal Wastewater Regulation

² Domestic wastewater in the Municipal Wastewater Regulation has the same meaning as domestic sewage as defined in the Sewerage System Regulation

- a. *To the ground, if the discharge*
 - i. *Is equal to or exceeds maximum daily flows of 22.7 m³/d, and*
 - ii. *Is from a sewerage system or combination of sewerage systems that serve structures on one or more parcels or strata lots, or on a shared interest, and*
 - b. *To water.*
- 3) *This regulation does not apply to a discharge to ground or water if the discharge is from a sewerage system that serves only a single family residence or duplex.*
 - 4) *This regulation applies to all uses of reclaimed water unless the reclaimed water is from a sewerage system that serves only a single family residence or duplex.*

For further clarity, the following descriptions are intended to provide more detail on these regulatory provisions:

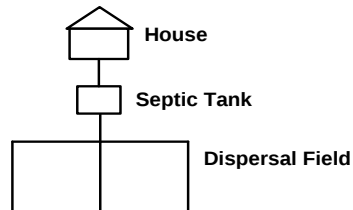
- Design daily flow is considered to be synonymous with the terms “estimated daily domestic sewage flow” and “maximum daily flow” as referenced in the Sewerage System Regulation and the Municipal Wastewater Regulation, respectively. It represents the maximum flow that the system will be designed to discharge.
- Sewerage System Regulation section 2(b) stands on its own, independent of the other subsections. Accordingly, a sewerage system serving one single family residence or duplex falls under the Sewerage System Regulation regardless of design daily flow rate.
- Any structures with domestic sewage served by combined systems either fall under the Sewerage System Regulation sections 2(c), 2(d), or under the Municipal Wastewater Regulation depending on the design daily flow described by the following sections. Further description is also provided in the diagrams below.
 - o Within the Sewerage System Regulation sections 2(c) and 2(d):
 - A ‘combination’ of sewerage systems refers to the physical connectivity of sewage infrastructure within a single system (e.g., several septic tanks serving several structures, but all tanks connected to a single dispersal field). This interpretation is intended to align with the methods used to design sewerage systems by considering cumulative design daily flow for sizing systems or for determining dispersal areas.

- 'Combination' does not refer to separate sewerage systems that are not physically connected. Accordingly, flows through separate systems should not be added together as a means of determining Sewerage System Regulation / Municipal Wastewater Regulation jurisdiction because that is not a consideration in their design.
 - The design daily flow of individual systems, either single or in combination, must be assessed. If an individual system has less than 22.7 m³/day design daily flow, the Sewerage System Regulation applies regardless of whether multiple systems are located on the same land parcel or on several land parcels.
- o Under the Municipal Wastewater Regulation:
- by default, those systems not captured by the Sewerage System Regulation fall under the either the Municipal Wastewater Regulation or the *Environmental Management Act*, including:
 - any system where the treatment works are not physically connected to the source of the sewage, and
 - all physically combined systems with design daily flows greater than or equal to 22.7 m³/day are captured under the Municipal Wastewater Regulation
 - Sewerage System Regulation sections 2(c) and 2(d) apply not only to single family residences or duplexes, but all other structures discharging domestic sewage as well (e.g., apartments and commercial buildings with domestic sewage).

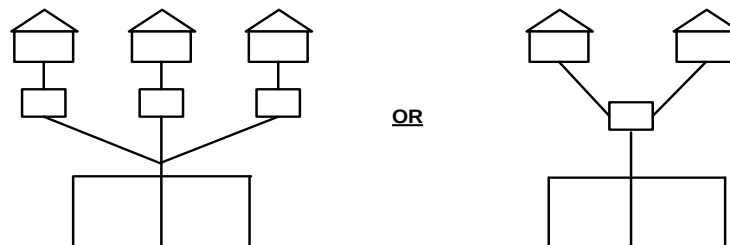
The following diagram provides illustrations of the aforementioned sewerage systems:

TYPES OF SEWERAGE SYSTEMS

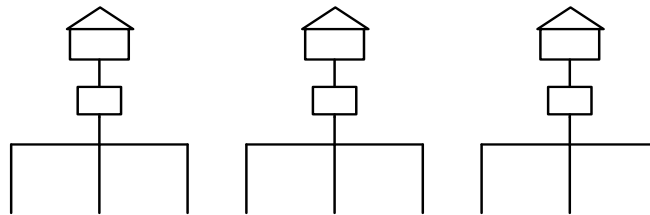
A Sewerage System



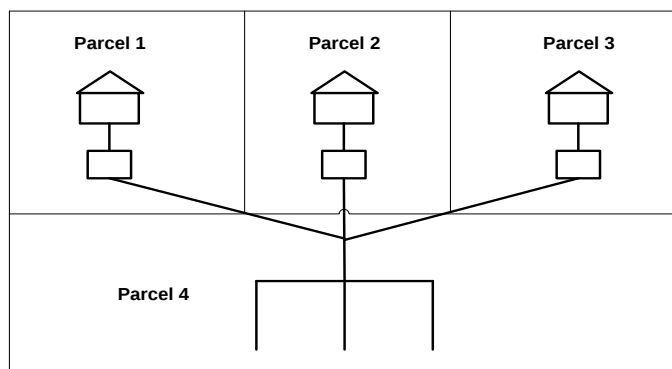
Examples of a Combination of Sewerage Systems



Separate Sewerage Systems (Not a Combination of Systems)



A Combination of Sewerage Systems that Overlap More than One Parcel



**Note that a sewerage lagoon can be substituted in for the dispersal field in all of the example schematics above.*

The following are examples of how the Sewerage System Regulation and Municipal Wastewater Regulation would apply to various development scenarios:

▪ **SCENARIO 1:**

A strata lot comprised of 50 three bedroom single family residences, each with their own septic tank and dispersal field (i.e. systems are not physically connected in any way) and each with a total design daily flow less than $22.7 \text{ m}^3/\text{day}$.

Answer: The Municipal Wastewater Regulation does not apply because it involves discharges from systems serving single family residences within the meaning of Municipal Wastewater Regulation section 4(3). In this case, adding the individual design daily flows together would not be a relevant design consideration for sizing each system. Therefore, each system falls under the Sewerage System Regulation. There would need to be, however, enough land area to deal with the individual systems as an important design consideration. If all the flows were combined through physical connections into a single sewage system the Municipal Wastewater Regulation would apply.

▪ **SCENARIO 2:**

A land parcel consists of 25 separate sewage systems [for 25 single family residences] and another single system designed for 25 units [all single family residences] that will be physically combined. The total design daily flow for the combined system is greater than $22.7 \text{ m}^3/\text{day}$.

Answer: The 25 separate sewage systems would fall under the Sewerage System Regulation and the 25 unit combined system would fall under the Municipal Wastewater Regulation.

▪ **SCENARIO 3:**

A land parcel consists of one combined single family residence system of 25 homes with a design daily flow greater than $22.7 \text{ m}^3/\text{day}$; one community building that is not a single family residence that has its own treatment system with a design daily flow greater than $22.7 \text{ m}^3/\text{day}$, and 12 single family homes each with their own system.

Answer: The combined 25 home system would fall under the Municipal Wastewater Regulation, the community building would fall under the Municipal Wastewater Regulation, and the 12 individual system single family homes would fall under the Sewerage System Regulation.

▪ **SCENARIO 4:**

A land parcel consists of three individual homes which are sharing a single sewerage system (one tank and dispersal field). The tank and dispersal field are located on a second land parcel. The design daily flow of the combined system is less than 22.7 m³/day.

Answer: The combined system (serving structures on a separate parcel) would fall under the Sewerage System Regulation.

▪ **SCENARIO 5:**

Three individual homes located on three separate land parcels share a single sewerage system dispersal field located on a fourth separate parcel. Each home has its own septic tank which ties into the single dispersal field (i.e. a combined system). The design daily flow of the combined system is greater than 22.7 m³/day.

Answer: The combined system would fall under the Municipal Wastewater Regulation. (*note that if the design daily flow was less than 22.7 m³/day, Sewerage System Regulation section 2(d) for a combination of systems on one or more parcels would apply, as in scenario 4 above).

Protocol for Health Officers

- If a development with a sewage system is filed with the regional health authority (under the Sewerage System Regulation), but is suspected by the health officer of exceeding the 22.7 m³/day design daily flow limit, the filing application should be reviewed by the health officer. If the development is confirmed to exceed the 22.7 m³/day design daily flow threshold, the health officer should pass the filing on to Ministry of Environment staff, and advise the applicant to apply to the Ministry of Environment for registration under the Municipal Wastewater Regulation. The health officer should confer with the development owner and/or Ministry of Environment staff during the review process – particularly for applications which need updating due to new development considerations (increased flows).

Protocol for Ministry of Environment Staff

- If a development is registered with a Ministry of Environment regional office (under the Municipal Wastewater Regulation), but is suspected of having a design daily flow less than the 22.7 m³/day flow limit, the application should be reviewed by Ministry of Environment staff. If the development is confirmed to be less than the 22.7 m³/day flow threshold, the Ministry of Environment should pass the application on to regional health authority staff, and advise the applicant to file with the health authority under the Sewerage System Regulation. The Ministry of Environment staff should confer with the development owner and/or health authority staff during the review process – particularly for applications which need updating due to new development considerations (decreased flows).
- Ministry of Environment staff may conduct an onsite inspection of a development registered under the Municipal Wastewater Regulation at any time and require data specific to the operation be produced during the inspection.
- Ministry of Environment staff may contact the development owner after reviewing the data report submissions, and provide notification regarding whether the development meets the requirements of the Municipal Wastewater Regulation. If the development does not comply the owner will be provided with direction by the Ministry of Environment to bring the development back into compliance.
- If the development owner has a history of non-compliance with the Municipal Wastewater Regulation, the owner may be subject to escalating enforcement action.

Questions regarding this jurisdictional flow interpretation guideline should be directed to the following contacts:

Sewerage System Regulation (Ministry of Health):

Health Protection Branch
4th Floor – 1515 Blanshard Street
Victoria, BC
Tel: 250 952-2128
HP-PHW@gov.bc.ca

Municipal Wastewater Regulation (Ministry of Environment):

Clean Communities Section
Environmental Standards Branch
3rd Floor – 525 Superior Street
Victoria, BC
Tel: 250 387-9886
envprotdiv@Victoria1.gov.bc.ca