



**METRO
VANCOUVER**

GREASE INTERCEPTOR SIZING METHODOLOGY

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Deputy Sewage Control Manager

PURPOSE The purpose of this document is to outline the methodology for sizing a grease interceptor as required in the Food Sector Grease Interceptor Bylaw No. 268, 2012 adopted by the Greater Vancouver Sewerage and Drainage District (GVS&DD).

APPLICATION A Food Services Establishment (FSE) is defined in the Food Sector Grease Interceptor Bylaw No. 268, 2012 (the Bylaw).

Exceptions:

- a. All wastewater generated by the FSE is collected for off-site waste management
- b. The FSE has on-site waste water treatment (septic system – not connected to the GVS&DD sewer system)
- c. Lunch rooms (but not cafeterias), kitchenettes in motels and bed and breakfast operations
- d. Community facilities with limited food services capabilities that host potlucks or where food is prepared off-site and dishes, pots and cutlery are washed off-site
- e. The FSE sells food, but does not prepare any foods and does not use/provide permaware (examples may include gas stations, convenience stores, corner stores, etc)
- f. The FSE prepares food containing fats, oils or grease but the dishes are washed in a different location that has a grease interceptor and is subject to the bylaw

METHODOLOGY All fixtures that may discharge fats, oils or grease must be connected to a properly sized grease interceptor in accordance with the requirements contained within the bylaw. A grease interceptor will be sized to be equal to or greater than the total flow of the fixtures that are plumbed to the grease interceptor. An FSE may have more than one grease interceptor.

The maximum discharge flow rate must be calculated by adding together the flow rates from each fixture that will discharge simultaneously using the following method:

1. For sinks, calculate the total volume (to the flood line) of each fixture and assign a drain time of one minute

2. For self cleaning exhaust hoods with an automatic cleaning cycle, measure the discharge flow rate or use the manufactures' estimate of peak discharge flow rate during the automatic wash cycle
3. For dishwashing equipment use the manufacturers' estimated peak discharge flow rate
4. For floor drains, trench drains and garbage compactors estimate the flow rate using the following table

Table 1: Drain Flow Rate

Drain Diameter		Drain Rate		
millimeters	inches	L/s	imperial gallons/minute	US gallons/minute
50	2	1.4	18.3	22
76	3	2.36	31.2	37.5
102	4	2.84	37.5	45

Modifications to reduce the volume of liquid contained in a sink to reduce the rated capacity of the required grease interceptor, including stand pipes, holes or cut down dividers, are not acceptable. Modifications that reduce the total volume of the sink are acceptable. However, these modifications may not comply with other enactments, such as health or plumbing code requirements.

The sizing of a grease interceptor must meet the approved methodology set out in this document. Alternative sizing methodologies will be assessed on an individual basis by the Sewage Control Manager.

ENFORCEMENT Metro Vancouver Regulation and Enforcement Officers will periodically inspect FSE to assess compliance with the Bylaw. In follow-up to these inspections a notice of violation will be utilized to document deficiencies at those facilities that are not complaint with the Bylaw. There is a \$300 fee authorized under the Bylaw for re-inspections.

DEFINITIONS **Board** – means the Board of the Greater Vancouver Sewerage and Drainage District.

Environmental Management Act – means the *Environmental Management Act*, of the Province of British Columbia.

Officer – means persons appointed by the Board as officers under the *Environmental Management Act*, and the *Sewer Use Bylaw, Consolidated*, to be an officer.

Sewage Control Manager – means a person appointed by the Board, under the *Environmental Management Act*, and the *Sewer Use Bylaw*, to be a sewage control manager.

Sewer Use Bylaw – means the Greater Vancouver Sewerage & Drainage District Sewer Use Bylaw No. 299, 2007, as amended.