



# Guide to Managing Wastewater

## Commercial Vehicle Washing Industry

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This guide was developed with the cooperation of and input from the vehicle wash industry.

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Developed for Metro Vancouver by Ideaspace and KWL



# Introduction

The commercial vehicle washing industry provides an important service to Metro Vancouver residents and businesses. Commercial car and truck washing helps keep vehicles clean and prolongs the value of a significant financial investment.

Some of the materials found in the wastewater from commercial vehicle washing can damage the wastewater system and pose a risk to fish and the natural environment.

Metro Vancouver has created this guide to help commercial vehicle wash operators manage wastewater safely and responsibly. To make sure the guide is practical and easy-to-use, Metro Vancouver consulted with representatives from the vehicle wash industry.

We hope this guide reflects your business needs and provides you with convenient steps you can follow to manage wastewater in a way that safeguards the wastewater system and the natural environment.

Metro Vancouver is the regional government that represents 21 municipalities, one treaty first nation, and one electoral area in the Greater Vancouver area.

Metro Vancouver collects and treats wastewater to protect public health and the environment.

This guide will be of interest to the commercial vehicle wash industry, including, but not limited to, businesses that operate automatic tunnel and rack wash systems, high-pressure wand (self-serve) systems, and handwashing and detailing services.



# Managing Wastewater Safely and Responsibly

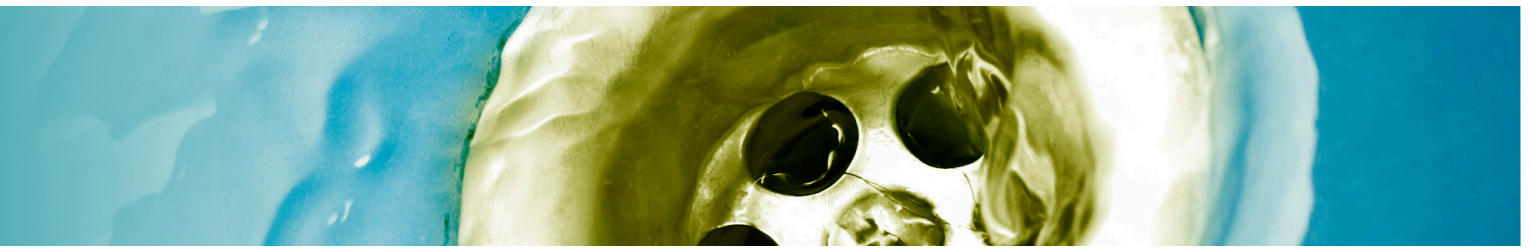
Our research has shown most commercial vehicle washing companies are aware that building and maintaining a good reputation with customers includes the responsible management of the waste products from their work.

Vehicle wash operators recognize that it is more efficient and cost-effective for the industry to voluntarily adopt recommended practices and avoid permits and regulations. They have also told us they care about the environment and want to manage wastewater safely and responsibly.

Many operators are unaware that wastewater from commercial vehicle washing may contain sediments and pollutants that can damage pipes, clog pumps and block screens in the wastewater system. This stresses the wastewater system and costs money to maintain and repair.

Some of these pollutants also pose a risk to fish and the natural environment.





Wastewater from vehicle washing can contain:

- Toxic chemicals found in cleaning and polishing products
- Oil and grease
- Grit
- Heavy metals found in the grime washed off vehicles



## DID YOU KNOW

Commercial car and truck washes in Metro Vancouver dispose of an estimated 0.5 million litres of wastewater every day. That's enough water to completely fill the passenger and cargo space in 160 mid-size cars. This wastewater puts significant pressure on the wastewater system and the natural environment.



# Safeguarding the Wastewater System and the Environment

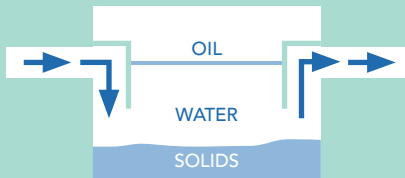
## Recommended Practices

Vehicle wash operators play an important role. Here are some recommended practices to help manage wastewater safely and responsibly:



### 1. Capture Wash Water

**Ensure that all wash water is captured in drains that lead to sanitary sewers.** Never discharge wastewater to lawns, storm drains, ditches or manholes, or allow runoff to the street.



### 2. Interceptor System

**Install a vehicle wash interceptor system that captures oil and solids from all wash water before it goes to the sanitary sewer.\***



### 3. Interceptor Maintenance

**Inspect the vehicle wash interceptor weekly, and have it cleaned out by a qualified service provider.** This should be done according to the manufacturer's maintenance recommendations, or, as a general guideline, before the oil level reaches 2.5cm deep, and before the solids level reaches 30cm below the outlet (see diagram on page 8).



### 4. Soaps

**Use biodegradable and phosphate-free soaps.**

\* A vehicle wash interceptor is a building and plumbing code requirement. Hire an engineer or a plumbing professional to help select the right vehicle wash interceptor for your operation.



## 5. Sign Posting

Post signs that prohibit engine washing, use of customer-supplied detergents, and disposal of anything except wash water to the wash area drain (this applies to self-serve facilities).



## 6. Cleaning Chemicals

Minimize the quantities of cleaning chemicals kept on site. Appropriately dispose of old or used fluids and containers through a Provincial Take Back Program (if applicable) or by returning to the supplier. For more information, check the Recycling Council of British Columbia website at [www.rcbc.bc.ca](http://www.rcbc.bc.ca) or call 604-RECYCLE.



## 7. Labelling

Label cleaning and polishing products according to WHMIS requirements and store in a secure area where spills can be contained.



## 8. Spill Clean-up

Promptly clean up spills with a dry absorbent and appropriately dispose of used absorbents as outlined on the spill kits.



## 9. Staff Training

Train staff on the practices described in this guide, and maintain good records of inspection and cleaning to optimize the interceptor cleaning frequency.




# Vehicle Wash Interceptor

In Metro Vancouver, wastewater from commercial vehicle washing can be discharged directly into a drain that is connected to the sanitary sewer system.

To safeguard the wastewater system and the natural environment, large particles and pollutants must be removed prior to discharge.

Many vehicle wash operators are leading the industry by keeping a written record of vehicle wash interceptor inspections and pump outs. This helps ensure the vehicle wash interceptor is well maintained and able to keep oil, grease and grit out of the wastewater.

[Click here to download the Vehicle Wash Interceptor Maintenance Log \(printable PDF file\).](#)



**Vehicle Wash Interceptor Maintenance Log**  
Keep one sheet for each interceptor on site.

Interceptor location (if applicable): \_\_\_\_\_

Dimensions (length, width, and wetted height): \_\_\_\_\_

Volume (cubic metres): \_\_\_\_\_

Note:  
 Length (cm) X width (cm) X wetted height (cm) ÷ 10,000,000 = cubic metres  
 Length (ft) X width (in) X wetted height (ft) ÷ 0,000,014 = cubic metres

**Interceptor Inspections**

Inspect and record results of all three chambers at least once per month.

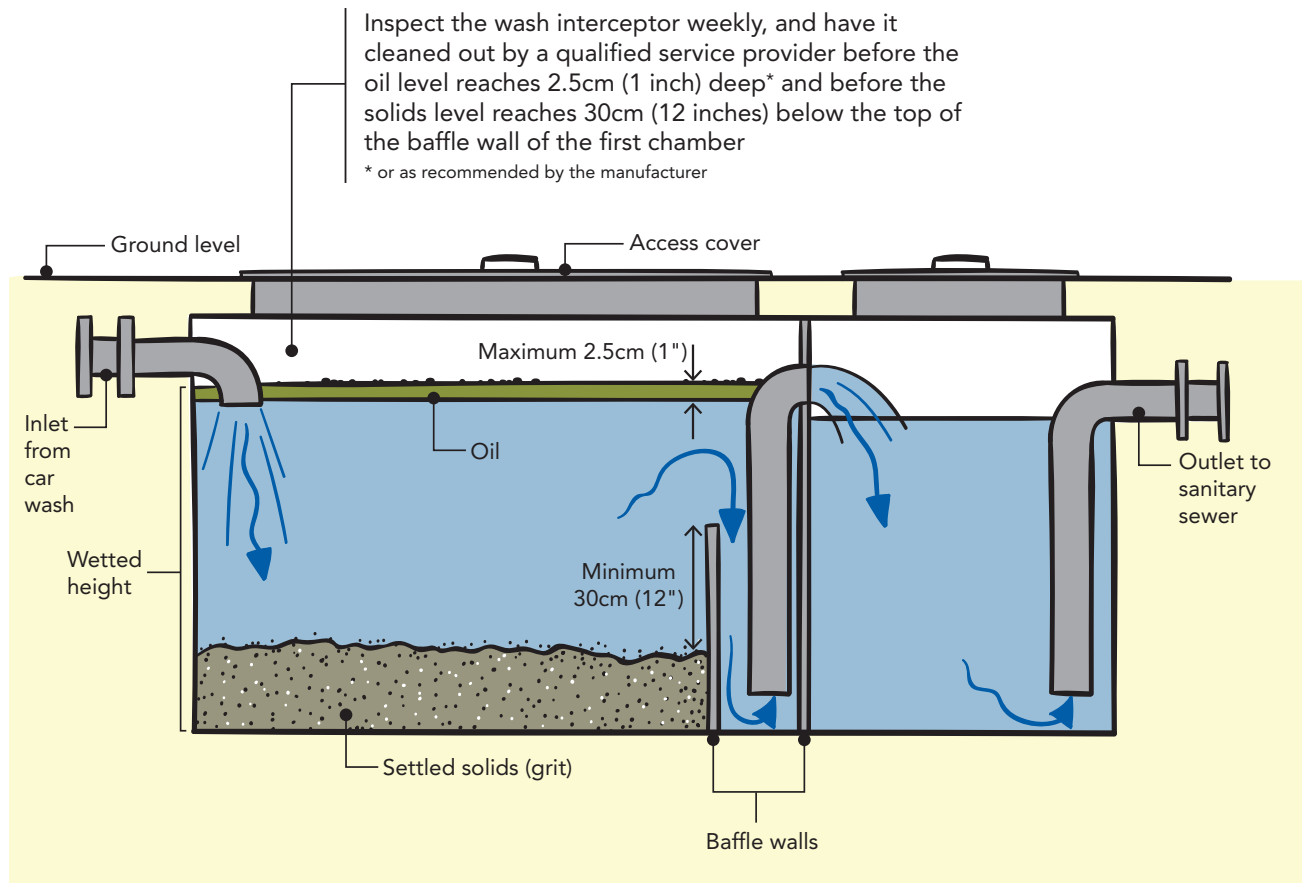
**Clean out within 7 days if:**

- floating materials (oil and grease) exceed 2.5cm (1 inch) or 5% of wetted height, or
- the amount of solids (sludge) exceed 30% of wetted height

**Immediately take corrective action if:**

- there is evidence of petroleum bypass, or
- interceptor malfunction

Month	JANUARY	FEBRUARY	MARCH	APRIL
Sludge (cm)				
Floating material (cm)				
Date of inspection				
Initials				
Month	MAY	JUNE	JULY	AUGUST
Sludge (cm)				
Floating material (cm)				
Date of inspection				
Initials				
Month	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Sludge (cm)				
Floating material (cm)				
Date of inspection				
Initials				
Date of clean-out	Company name	Address	Phone number	Initials



This example of a vehicle car wash interceptor illustrates when it should be cleaned out by a qualified service provider in order to prevent oil, grease and grit out of the wastewater system.

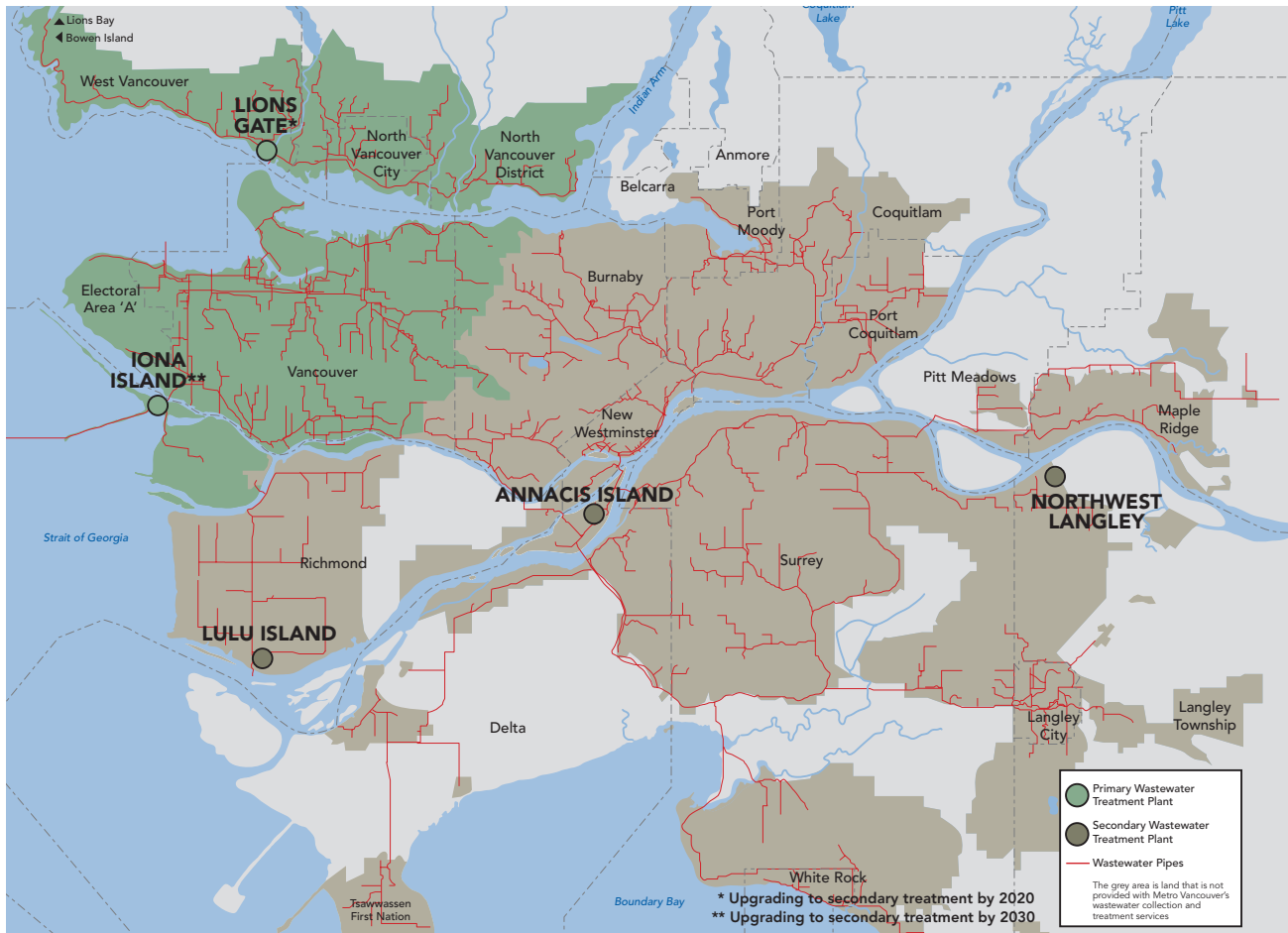
# Understanding the Wastewater System

Metro Vancouver provides an important service to the region, collecting and treating wastewater to protect the environment and public health.

The wastewater system consists of private, municipal and regional trunk sewers that convey wastewater for treatment at one of five regional wastewater treatment plants. The treatment plants are regulated by the Provincial and Federal governments.

While Metro Vancouver and municipalities are responsible for managing approximately 50% of the wastewater treatment system, private businesses and residents are responsible for the other 50% of the system. That means, we have a shared responsibility to manage the wastewater system.

Metro Vancouver relies on a range of tools including codes and bylaws, education programs and guides to reduce or eliminate wastewater pollutants at their source.

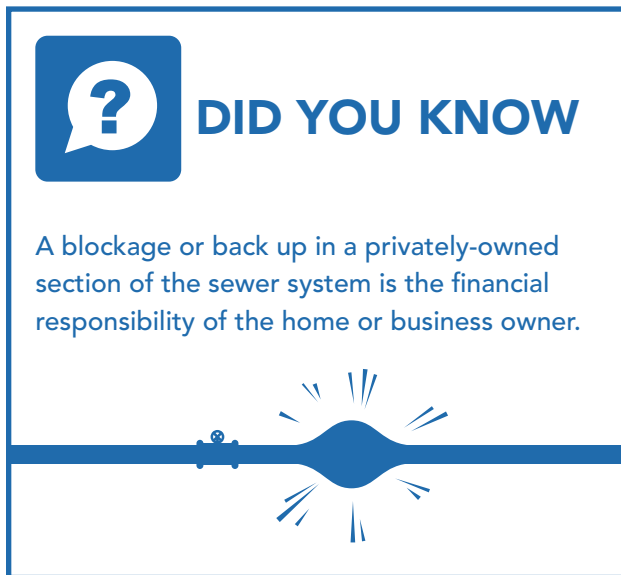


In Metro Vancouver, there are estimated 6,400 km of private sewers, 7,100 km of municipal sewers and 530 km of Metro Vancouver sewers. The entire wastewater treatment system is approximately 14,030 km in length – that's the total distance from Vancouver to Halifax and back.

# Complying with Regulations

Regulations are in place to safeguard the wastewater system and protect the environment.

Metro Vancouver's Sewer Use Bylaw has been in effect since 1990. It applies to the direct or indirect discharge of waste into any sewer or drain connected to a sewage (also called wastewater) facility operated by Metro Vancouver.



**DID YOU KNOW**

A blockage or back up in a privately-owned section of the sewer system is the financial responsibility of the home or business owner.

The graphic features a blue speech bubble with a white question mark icon, followed by the text 'DID YOU KNOW' in bold blue letters. Below this is a blue line representing a sewer pipe with a small blue figure of a person standing on it. A large blue splash or burst of lines emanates from the pipe, indicating a blockage or backup.

The Sewer Use Bylaw is in place to:

- Protect human health, safety and the environment
- Protect the sewers and sewage facilities from damage and promote their efficient and cost-effective operation

Commercial vehicle wash operators are required to comply with the Sewer Use Bylaw. The Sewer Use Bylaw restricts the discharge of specific pollutants (including grit, metals, and oil and grease) into the sanitary sewer system.

Commercial vehicle washing is also regulated by building and plumbing codes, which require a vehicle wash interceptor to separate oil, grease and grit from wastewater.

All owners and operators should be familiar with Metro Vancouver's Sewer Use Bylaw. Non compliance can result in penalties and fines. Links to relevant codes and bylaws have been provided below.

## Relevant Regulations

To find the regulations and requirements referred to in this guide, please go to:

### **Metro Vancouver Sewer Use Bylaw**

[www.metrovancouver.org](http://www.metrovancouver.org) (search for Metro Vancouver Sewer Use Bylaw)

### **BC Building Code**

[www.bccodes.ca](http://www.bccodes.ca)

### **City of Vancouver Building Bylaw**

[www.vancouver.ca](http://www.vancouver.ca)

### **Workplace Hazardous Materials Information System (WHMIS)**

[www.whmis.org](http://www.whmis.org)



