# FREQUENTLY ASKED QUESTIONS Vehicle Wash Operations



#### What types of businesses are considered a vehicle wash operation?

Vehicle wash operations are defined under the Sewer Rates and Regulations Bylaw (No. 1862-2009) as "the washing of the exterior of vehicles by any commercial, industrial or institutional operation or by a public authority".

## Are there any exemptions for the code of practice for vehicle wash operations?

No. All vehicle wash operations must follow the requirements under the code.

#### What is an oil-water separator and how does it work?

The Sewer Rates and Regulations Bylaw (No. 1862-2009) defines an oil-water separator as "a three-state oil-water separator that meets the Standards for Oil-Water Separators (ULC-S656-00) prepared by Underwriters' Laboratories of Canada or equivalent oil-water separation technology able to achieve an effluent quality of 50mg/L of oil and grease (hydrocarbons) or less".

The oil-water separator helps remove oil, grease and solids from the wastewater before it enters the sanitary sewer. When wastewater enters the separator, the heavier solids and particulates settle out in the bottom of the separator while oil and lighter substances rise to the top. The solids and oil remain inside the separator while an outlet pipe below the water surface allows wastewater to exit to the sanitary sewer. Many oil-water separators also have baffles, coalescers and oil skimmers to improve separation of these substances. It is very important that the separator is cleaned out regularly to ensure proper operation of the separator and to prevent solids or oil from overflowing to the sewer. Effective treatment can be achieved if the correct oil-water separator is installed, routine maintenance is adhered to, and the separation of oil and water is not compromised by the excessive use of certain chemicals.

There are two common types of oil-water separators: 1) Standard baffle oil-water separators, and 2) Coalescing plate separators (CPS). The standard baffle oil-water separators are large-capacity cement vaults installed underground between a drain and the connecting sewer pipe. The vaults include baffles which allow sediments to become trapped and floating oils to be retained. The large capacity of the vaults allows the wastewater to slow down, promoting oil to float to the surface and solids to settle out. The coalescing plate separators (CPS) can be installed above or below ground. This design has a smaller capacity and uses a series of oil-attracting plates. The oil droplets in the wastewater collect and float to the surface, where they can be removed for proper disposal.

## Who can businesses contact for information about the installation of oil-water separators or other treatment works?

There are a number of reputable companies available to assist you with installing an oil-water separator or other treatment works for your business. A list of companies can be obtained by searching "Engineers-Consulting" or "Engineers-Environmental" at www.yellowpages.ca. You could also try searching the internet for "oil water separators" or "oil water separator installation" to contact a manufacturer/supplier directly. Alternatively, a number of businesses in Abbotsford already have oil-water separators in place, so you could try contacting colleagues in your field to obtain more information.

#### Is there a preferred supplier/manufacturer for an oil-water separator?

Given the array of models available and the demand, this is a personal decision and the marketplace and individual negotiations will determine best prices. Many different sizes are available depending on the application needed. We recommend you do your research and obtain multiple quotes before choosing the best treatment works for your business.

#### What should and should not go through an oil-water separator?

- Substances such as antifreeze, degreasers, detergents, fuels, alcohols and solvents will break up the oil into small droplets so that the oil will not float to the surface. In addition, vapors may accumulate and can pose a threat to sewer workers.
- Concentrated amounts of oily products can overload parts of the oil-water separator and may pass through to the sewer.
- More turbulent flows in the smaller capacity coalescing units may wash off any residual oils and could release large amounts of broken up oils to the sewer.
- Do not rely on an oil-water separator to handle wash water from fuel, coolant, solvent, oil or paint spills, etc. Instead, clean up spills using dry methods (where possible).
- Oil water separators are not designed to treat wastewater containing heavy metals. This type of discharge may require chemical treatment or special equipment to ensure acceptable wastewater quality.

#### What date do businesses have to have an oil-water separator installed by?

Vehicle wash operations must have an oil-water separator or other approved treatment works installed by July 29, 2017. Refer to the Code of Practice for Vehicle Wash Operations for additional information.

#### Will oil-water separators be inspected by the City?

Yes. City staff, upon request, may inspect treatment works at any time during regular business hours.

#### Will businesses be inspected prior to July 29, 2017?

Yes. City staff will inspect vehicle wash operations to confirm compliance with the other requirements specified under the code of practice (i.e. spill containment, waste management, record keeping, etc.). Refer to the Code of Practice for Vehicle Wash Operations for additional information.

#### How do businesses inspect the oil-water separator to know when it is dirty?

Many think that if it is still draining, the oil-water separator is working. However, build up of settled solids and oils can affect the efficiency of the separator. The Code of Practice requires that vehicle wash businesses inspect their oil-water separators at least once every month. The general steps to inspect an oil-water separator are:

- Open the inspection plate and look in each chamber. Make sure the outlet chamber has a sampling "T". It should have at least a 15 cm (6 inch) extension below the water surface.
- Take a long stick that will reach the bottom (about 2.5 m or 3 feet long). Any resistance in pushing through to the bottom will indicate a build up of solids. The oil-water separator must be cleaned out before the build of solids reaches 50% of the wetted height of the separator in any chamber.
- Measure the depth of the oil layer floating on top of the water. The oil should be removed before the depth of the layer reaches 5 cm (or 2 inches) of oil in any chamber. Older oil has a chance of becoming emulsified.
- For coalescing plate separators (CPSs), it is very important to remove and clean the plates before they get coated with silt and/or solids. If the plates become coated with material, this will allow oils to pass through to the sewer and may result in wastewater that exceeds the City's vehicle wash operation discharge limit of 50 mg/L for Oil and Grease (Hydrocarbons).

#### Who can businesses call to clean out an oil-water separator?

Businesses should choose a reliable vendor by making sure that its equipment is right for the situation, and that the vendor is a provincially licensed and approved waste collector. There are companies that specialize in pumping out and cleaning oil-water separators. These companies have special vacuum trucks that pump out the material inside a separator, before delivering it to a licensed treatment facility where the oils, solids and heavy metals are treated and removed from the water. A list of companies can be obtained through searching "Tank Cleaning" at www.yellowpages.ca.



### What maintenance and record keeping is required by vehicle wash businesses?

Vehicle wash businesses are expected to operate and maintain oil-water separators or other treatment works according to the manufacturer's or supplier's instructions. Design drawings of the oil-water separator or other treatment works must be kept on site. Maintenance, disposal and recycling records must be kept for a minimum of two years and must be available for inspection by City staff upon request, at any time during the ordinary business hours of the business. Refer to the Code of Practice for Vehicle Wash Operations for more information about maintenance and record keeping.

#### Who do I contact if I have any further questions?

Joe Vurzinger, CTech Utilities Environment Manager

Tel: 604-864-5663

Email: jvurzinger@abbotsford.ca