



Trade Waste Fact Sheet

Automotive Industry

Wastewater from automotive industries can be high in oils and oily sludges which cause problems when discharged to the sewerage system, including:

- the formation of deposits of oily solids, reducing sewer capacity, causing blockages and overflows
- generation of volatile compounds in the sewerage network, which is a safety risk for workers
- damage to sensitive treatment membranes, resulting in poor effluent quality and costly repairs
- damage to pumps from sludgy wastes

Trade Waste Approval

Any discharge to sewer from a trade waste generating activity requires a Trade Waste Approval from Townsville City Council.

Trade waste generating activities in the motor trades includes:

- degreasing and washing of engines, gearboxes and automotive parts
- washing of workshop floors contaminated with hydrocarbons
- washing of motor vehicles, trucks and heavy machinery
- rub down and paint scrapings from panel and smash repair shops
- waste from flushing of radiators and engine blocks.

To make an application, contact Council on (07) 3632 0093 or at tcctradewaste@townsville.qld.gov.au. For information about fees and charges associated with trade waste discharge, see the relevant trade waste fact sheet.

Sewer Admission Limits

To protect the sewerage system and worker safety, Council requires that oily wastewater is pre-treated so that:

- Oils and grease are less than 200 mg/L
- Petroleum hydrocarbons are less than 30 mg/L
- Total suspended solids are less than 1000 mg/L
- Chemical oxygen demand (COD) is less than 3000mg/L

Not Permitted to Sewer

Flammable or volatile liquids can cause fires or explosions in sewerage systems and are a danger to our workers. They cannot be accepted into the sewer system.

Raw or depleted degreasing substances or baths of detergent cleaners, hydrocarbon cleansers, caustic soda, phenol/cresol solutions, cresylic acid and chlorinated hydrocarbons must not be discharged into sewer as trade waste. These wastes are regulated wastes that must be disposed off-site at a licensed treatment and disposal facility.

Coolant and radiator fluid (glycol) has a particularly high organic strength and is normally not permitted to sewer. Instead, these fluids should be handled and disposed of in the same manner as your waste oils.

Stormwater is not permitted to sewer. All wash bays must be roofed or banded with stormwater diversion control. Storm water diversion valves must be serviced annually by a certified plumber/drainier.

If detergents are being used in the generation of oily water wastes, then such detergents must be 'Quick Breaking' to rapidly break the emulsion and improve oil separation in the pre-treatment system. Detergents are considered quick breaking if the emulsion breaks (the oil separates from the water) within 30 minutes.

Other housekeeping methods that can be employed to reduce load to sewer include:

- use dry cleaning methods, such as wiping up spills and sweeping, rather than hosing.
- use absorbent packs available to soak up oil spills.
- ensure all equipment is properly cleaned and maintained.
- don't pour oil down the drain. Ensure that adequate storage is provided for used oil and that a collection program is arranged with an oil recycler.
- use cleaning products that are low phosphorus and have a pH of 6.5–10.

Pre-treatment

Trade waste generated by the motor trades industry and any other business where oily waste is generated must be pre-treated using an adequately sized system that is designed for the removal of petroleum oil and silt.

The Council preferred oil and silt removal system includes:

- 100L silt trap.
- hold tank (volume equal to or greater than oil separator capacity).
- non emulsifying pump, sized so as not to exceed oil separator capacity.
- oil water separator (coalescing plate or vertical gravity), to be sized according to rate of inflow (see manufacturer's specification).
- waste oil collection.

Maintenance of Pre-treatment

Regular cleaning of oil separators is required to ensure effective operation. Council will set the service frequency (period between services) of each oil separator and hold tank as part of the trade waste approval. This is usually every 3 months but may be more frequent for poor housekeeping. Maintenance should be in accordance with manufacturer's instructions.

Council is to be advised within a month that the service has been completed and of any maintenance issues noted. It is preferred that this advice be provided by service contractors in a monthly spreadsheet. Servicing records (from service agent, waste contractor and/or in-house records) should be kept and made available to Trade Waste Officers when required.

Council recommends that an approved service contractor be used for maintenance of oil water separators. Other service providers may be used however Council may require a Trade Waste Officer to inspect the device immediately after servicing, at the approval holder's expense.

See the attached Oil/Water Separator Maintenance Checklist for guidance.

Oil/Water Separator Maintenance Checklist

Weekly Maintenance

- remove obstructions from the grates and pit such as leaves, rags, plastic bags etc.
- inspect the pit to ensure that float switch is working.
- inspect the holding tank and remove any floating solids which may block the foot valve and pump.
- inspect the oil water separator checking the plate pack is secured to the base of oil separator.
- check the filter sock if one is installed and clean with a quick break detergent or replace it if needed.
- check the oil skimmer level to see if it is set correctly by manually operating the pump.
- check the waste oil collection vessel connected to the oil water separator and empty into a waste oil storage container for collection by a licensed liquid waste transport contractor.
- inspect for any damage and correct operation.
- inspect pump for leaks.

12-Week Maintenance

Please note: A copy of the completed 12-week maintenance record must be emailed to tcctradewaste@townsville.qld.gov.au and a copy retained on-site.

- perform all tasks in weekly maintenance.
- inspect hold tank and assess whether pump out is required (depending on service frequency stated in trade waste approval) e.g. high levels of accumulated sludge and oil. Note that failure to pump out hold tank regularly may damage pump and overload oil separator.
- manually operate the pump to reduce the volume of wastewater in the holding tank to the lowest level. (raise the high level float to start the pump (check voltage first))
- drain sludge from the oil separator back into the holding tank to be pumped out by licensed liquid waste transport contractor.
- remove and clean plate or coil pack with quick break detergents and pressure cleaner.
- hose out oil water separator thoroughly back into the hold tank.
- arrange for a licensed liquid waste transport contractor to pump out all wastewater in the holding tank at the completion of the above steps.
- reinstall plate/coil pack (anti surge) and secure to oil separator to stop pack from floating.
- close sludge valve.
- reinstall filter sock if one is fitted.
- fill oil separator with clean water.
- run on manual to reset oil skimmer level.

General Maintenance of an Oil/Water Separator

The below information can also be submitted as a Microsoft Excel spreadsheet, as long as the layout and content are the same.

Weekly Maintenance

Week	Date	Name	Initials	Clean Grates & Pits	Inspect Pit Float Switch	Inspect Hold Tank	Check Plate Pack	Check and Clean Filter Stock	Check Oil Skimmer Level	Check Waste Oil Vessel	Inspect for Damage	Inspect Pump
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												

12 Week Maintenance **Date:** _____ **Contractor:** _____

Level	Separator Sludge to Hold Tank	Remove & Clean Plate or Coil Plate	Hose out Oil/Water Separator	Hold tank Pumped out	Reinstall Plate/Coil Pack	Close Sludge Valve	Fill Separator with Water	Reset Oil Skimmer

Additional Comments:

