

#### **INFRASTRUCTURE & OPERATIONS**

# TRADE WASTE

#### MANAGEMENT OF OILY WASTE

Managing liquid waste is important to our future. We can all play a part to ensure that our region remains a great healthy place for everyone. We care about our local community and the environment.

Oily waste generally refers to liquid trade waste resulting from the washing down of vehicles, machinery and parts. Pollutants from these activities include petroleum based oils and greases, solids, metals and solvents.

Pre-treatment allows for the reduction of pollutant concentrations to acceptable levels. The main components used in oily waste are roofing, bunding, dry basket arrestors, retention pits and oil separators.

The cleaning frequency of a pre-treatment device is governed by the quantity of accumulated waste; it is therefore in management's interest to ensure minimal waste is disposed.

The following housekeeping tips may be helpful in training staff and achieving better results.

- Ensure that the wash area is covered and bunded to secure all wastewater. Connect all drains to the pre-treatment facilities.
- Dry sweeping/cleaning before hosing.
- Use water sparingly. Install fine spray nozzles on a spray system to reduce water consumption.
- Use high pressure hoses or hoses with trigger nozzles for washing.

- Keep the 'wet area' to a minimum.
- Reuse wash water whenever possible.
- Reduce the amounts of detergents used.
- Use "Quick Break" detergents that are certified for performance by the supplier. This will help remove grease in the pre-treatment stage and can also reduce the level of petroleum hydrocarbons.
- Use cleaning products that have the pH of 7-10. Metals can dissolve if the pH of waste is higher or lower. In this form they are very difficult to remove without expensive pre-treatment and can cause damage to the environment.
- Use drip trays to catch oil. Plug any parts that tend to leak.
- If parts are washed in a solvent cleaning bath, it should be done in a bunded area, so solvent can be collected and disposed of separately.
- Ensure that kerosene, petrol and solvents are not discharged into the sewer even in small quantities. Drain parts over the solvent bath before hosing down.
- Drain oil and fluids from engines, gear boxes and other parts, before dismantling into storage containers. Do not discharge oil into the sewer.
- Do not discharge caustic bath and rinse into the sewerage system.



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- Do not use caustic as a cleaner. This raises the pH of the waste.
- Ensure degreasers are not discharged to sewer. Wipe parts with rags after degreaser is applied prior to washing.
- If parts are immersed in a degreasing solution, drain the parts and wipe before washing.
- Store oil, solvents, cleaning chemicals in a bunded area not connected to the sewerage system. Arrange for collection of oils, grease and solvents for recycling by a licenced contractor.
- Oil spills and grease blobs should be dry cleaned prior to washdown.

## OILY WASTE - QUICK BREAK DETERGENTS

What do the terms 'quick break', 'bio-degradable' and 'phosphatefree' mean?

Biodegradable detergents are broken down more readily by organisms in the environment than nonbiodegradable compounds but can still cause problems so their use should be minimised.

Phosphate-free detergents limit the nutrient load in water that can lead to problems, such as blue-green algae, but may still have a negative impact on the ability of organisms in the water to breed.

Quick break degreasers allow oil and water to separate within a few minutes of their use. This helps your oil separation system to function effectively in removing oil before discharge to sewer.

Non-quick break compounds may keep oil and water in suspension for several hours, allowing oil

to pass through an oil/water separator and into the sewer or septic system.

### How can you tell the difference?

Check the label or Safety Data Sheet to check if the cleaning agents you are using are biodegradable, phosphate-free and quick breaking.

To test for quick breaking properties, perform this simple test:

1. Half fill a jar with clean water and mark the top of the waterline using a permanent marking pen.

Draw another line 1-2 cm above the waterline mark, and fill to this line with used oil.

- Add approx. 1 teaspoon of diluted degreaser/ detergent (or ½ teaspoon of concentrate) to the jar, put on the lid and shake vigorously to emulsify the liquids.
- 3. Set jar aside, and allow 10 minutes for the oily water to settle.

If, after 10 minutes, the oily water emulsion has separated back into its respective lines of clear water and 'free' oil, your cleaning agent is quick-breaking.

If the liquids remain emulsified and has a white, cloudy appearance then the chemical does not possess guick-break properties.

