

Commissioning & Maintenance Guide

REWATEC

CWS Washdown Separators









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To Safeguard Warranty Please Ensure You Are Using The Latest Installation Manual.

PT Water and Environment Ireland

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Introduction

The primary function of oil/water separators is to separate oil, petrol, diesel etc., from wastewater and retain the separated liquids. These separated liquids must be removed regularly, using a licensed effluent disposal contractor (your contracted service provider), to ensure that the separator operates as efficiently as possible.

The natural oil/water separating process from gravity fed wastewater depends on the storage, or 'dwell', time within the separator chamber. Guidelines have been established for minimum 'dwell' times, and hence, minimum working volumes for separators. These have been applied in tests carried out by Premier Tech Water & Environment which are based on the maximum flowrate into the separator (I/sec). As the working volume reduces by the accumulation of the separated oil, petrol, diesel etc., so the separating efficiency reduces.

Another major influencing factor on the efficiency of separator systems is sediment. Oil/water separators are usually designed as liquid/liquid separators unless the specification has determined a requirement to store a volume of sediment. This can be accommodated within a combined liquid/sediment separator where the storage volume is increased accordingly. However, if the design of the drainage system can allow the sediment to be separated and stored upstream of the oil/water separator, in catch-pits or sediment separators, the system would function more efficiently. Settled sediment must be removed regularly to ensure optimum efficiency.

REGULAR MAINTENANCE OF SEPARATOR EQUIPMENT WILL ENSURE IT OPERATES AS INTENDED WITH MINIMUM RISK OF POLLUTION TO THE ENVIRONMENT.

Maintenance Inspections

Separators are used in widely varying circumstances where some will require very frequent maintenance and others will have substantially longer intervals before any maintenance (emptying) is required. However, for every separator regular maintenance inspections should be carried out to determine whether or not there is a need to remove the accumulated oil, petrol, Diesel, etc., or sediment. The owner of the Rewatec separator is responsible for its operation and ensuring that the effluent quality does not breach any Discharge Consent Standards. It is advisable to set up a 'Service Agreement' with an effluent disposal contractor who can provide 'automatic' and regular maintenance and advise you if any problems with the system occur. The owner is reminded that the existence of a 'Service Agreement' does not necessarily transfer responsibility for general maintenance which must be conducted in accordance with this guide.

Separators should be inspected at least every six months to establish whether or not emptying is necessary, and a log shall be maintained. Additional equipment for separators provided by Premier Tech such as an Alarm System which will give warning of the accumulation of oil, petrol, diesel, etc., but should not be used to replace regular inspections.

To keep your Rewatec Separator in top condition, we recommend regular servicing by Premier Tech or its service partners.

Maintenance Procedures

1.0 Health and Safety

The maintenance procedures described here should be read and fully understood by the operator (competent person) before commencing work.

Appropriate personal protective equipment should be used (gloves, goggles, waterproof clothing etc.,) particularly when handling filters which have been in contact with oil and oily sediment.

Before any work commences always identify the separator and its associated manhole covers and cone off or erect barriers around the entire area.

DO NOT ENTER THE TANK

2.0 Commissioning the separator following installation

- **2.1** Sediment and other construction debris can accumulate in the separator during its installation and whilst associated works are in progress. If this has occurred, isolate the separator from the drainage system remove the sediment as follows.
- **2.2** Using a licensed effluent disposal contractor (your contracted service provider) empty the entire contents of the separator ensuring complete removal of the sediment. Using a high-pressure hose, wash any remaining residue towards the suction hose.
- 2.3 Fill the separator with clean water up to the outlet invert level.

3.0 Maintenance

3.1 If, following maintenance inspections, the separator is found to be storing the maximum volume of oil, petrol, diesel etc. or the maximum volume of sediment, inform your licensed effluent disposal contractor who will arrange emptying. Before making arrangements, check that you are registered with the local environmental authorities.

- **3.3** Isolate the separator from the drainage system either by closing preinstalled valves in the upstream and downstream manholes or by securely fitting proprietary pipeline stoppers.
- **3.4** Using a licensed effluent disposal contractor (your contracted service provider) carry out the following:

Remove the oil, petrol, diesel etc., from the surface of the liquid, leaving as much of the cleaner water as possible in the separator. Remove the sediment from the bottom of the separator taking great care in and around the filter outlet housing on the base to ensure that it does not become damaged, again leaving as much of the cleaner water as possible in the separator.

- 3.5 Fill the separator with clean water up to the outlet invert level.
- **3.6** Check that the Alarm probe has not been damaged and that the alarm system is working.
- **3.7** Replace the manhole covers and remove the cones and/or barriers from the worksite.

REMEMBER - if the alarm system activates due to the accumulation of oil, petrol, diesel etc., do not delay in contacting your licensed effluent disposal contractor.

