

Interceptors Operation & Maintenance Requirements

Ease of access for maintenance and inspection is essential. In particular, lids should be kept as lightweight as practicable.

A routine inspection programme should be established for each unit. This should be based on the volume or load of the contaminants of concern, the frequency of releases of contaminants, and the nature of the area being drained. During the first 30 days after installation, sub-surface pre-treatment units should be visually inspected after every rainfall event and the amount of deposition measured to give the operator an idea of the expected rate of sediment deposition. After this initial period, systems should be inspected at least every six months to verify the appropriate level of maintenance. During these inspections, the floating debris and solids should be removed and the sump cleaned out using a conventional sump vacuum cleaner. In most situations, the units should be cleaned out at least annually.

Litter picking at site should be frequent, as rubbish is detrimental to the operation of the facility and the appearance of the site. Frequent street sweeping in the catchment area of a filtration system increases the time interval in which the sedimentation facility has to be cleaned out and reduces the amount of fine suspended solids that can potentially clog the filter media.

Proper disposal of oil, solids and floating debris removed from pre-treatment components must be ensured, and the environmental regulator can offer advice where there are any doubts concerning disposal options. A small portion of water will be removed along with the pollutants during the clean-out process, which should be considered when costing sediment disposal processes.

Harmful vapours may develop in sub-surface filtration or hydrodynamic separation units, as hydrocarbons may remain there for extended periods of time. Appropriate testing for harmful vapours and venting should be undertaken whenever access for maintenance is required.

Pre-treatment systems: operation and maintenance requirements

Maintenance schedule	Required action	Frequency
Regular maintenance	Removal of litter and debris	Six monthly
Occasional maintenance	Change of filter media	As required
	Removal of sediment, oil, grease and floatables	As required
Remedial actions	Replacement of malfunctioning parts	As required
Monitoring	Inspect for evidence of poor operation	Six monthly
	Inspect filter media and establish appropriate replacement frequencies	Six monthly
	Inspect sediment accumulation rates and establish appropriate removal frequencies	Monthly during first half year of operation, then every six months

For oil/water separators, the following items should be undertaken every six months as a minimum:

- check volume of sludge
- check thickness of light liquid
- check function of automatic closure device
- empty the separator if required
- check the coalescing material and clean or change if necessary (Class 1 only)
- check the function of the warning device (if fitted).

General inspection of oil/water separators should occur at a maximum frequency of five years, and should cover the following:

- watertightness of system
- structural condition
- internal coatings
- in-built parts
- electrical devices and installations
- checking of adjustment of automatic closure devices

It is of key importance that the separator is filled with clean water before it is put into operation and each time after it is emptied for maintenance. Failure to do so will cause the separator to malfunction until stormwater builds up the required permanent water level in the facility. It is possible to fit an alarm to separators that will indicate when the collected oil volume is at a maximum, and this may be a regulatory requirement.

Maintenance activities should be detailed in the Health and Safety Plan and a risk assessment should be undertaken.