

## Contaminated sites

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Wastewater discharges from contaminated sites could harm the sewerage system. These may contain suspended solids, heavy metals, petroleum hydrocarbons, solvents or a combination of chemicals. For the purposes of this guideline, 'contaminated sites' refers to the sewer disposal of:

- treated landfill leachate
- treated ground/surface water from land decontamination
- de-watering of construction site excavations.

Decontaminated surface water should be discharged to the stormwater system, providing it is of better quality than the receiving water body. Contact the [Environment Protection Authority](#) (EPA) for advice on decontaminated water disposal options as this may vary from site to site.

Where the contaminated ground or surface water would be detrimental to the environment, but is amenable to the sewage treatment process, we may approve disposal to our sewerage system subject to conditions in this guideline.

### Key trade waste quality requirements

Parameter *	Generally accepted level
Total Dissolved Solids	Dependant on the impact at receiving Sewerage Treatment Plant.
Suspended Solids	≤500 mg/L
Benzene	≤1.0 mg/L
Ethyl Benzene	≤2.0 mg/L
Toluene	≤2.0 mg/L
Xylene	≤2.0 mg/L
Total Petroleum Hydrocarbons	≤ 30 mg/L
Lead	≤1.0 mg/L**
Polycyclic Aromatic Hydrocarbons	≤5.0 mg/L
Phenol	≤5.0 mg/L

\*Further site specific test parameters and maximum limits may be included after initial application assessment.

\*\*Allowable concentrations of lead and other heavy metals will be dictated by the degree of bioaccumulation or inhibition of biological processes at the receiving Sewerage Treatment Plant.

## Application and site treatment plan

Applicants for discharge approval use a *Contaminated Groundwater to Sewer* application form and pay the [one-off application fee](#). The application includes a site treatment plan with the following details:

- the nature of the wastewater to be treated
- pollutant type and concentration
- any interfering agents which may inhibit treatment or analysis
- site plan showing the affected area, bore hole locations etc
- a pre-treatment strategy, which addresses all contaminants of concern
- appropriate safeguards to prevent clean ground or surface water from entering the contaminated zone during clean-up.

A full NATA endorsed groundwater test report in accordance with the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) should be included with the application.

A sampling schedule and cost calculation method is negotiated between the parties before commencement of operations.

## Typical pre-treatment

- All treatment tanks, chemicals and stored waste products are stored in a bunded compound (see the [Bunding and Blind Tanks Guideline](#)).
- A tank with lockable outlet, for holding a representative volume of final effluent, is supplied. Samples from this tank are analysed to confirm discharge quality.
- Pumps used for petroleum/oil contaminated water are of the positive displacement, intrinsically safe type.
- A flow meter is installed in accordance with the Trade Waste [Discharge Flow Meters Guideline](#) to measure the volume of groundwater disposed to sewer. The meter is accessible at all times to Restricted Wastes Officers for taking readings. The meter is placed as close as possible to the final discharge point.

## Typical operation

- Operators may use batch treatment as per [Trade Waste Batch Treatment Guideline](#). A [Batch Treatment Waste Notification Form](#) is submitted to the Trade Waste team at least one business day before any disposal of wastewater to sewer. This option provides maximum control.
- Continuous discharge may be considered if electronic sensors would effectively manage discharge quality on an ongoing basis (e.g. pH, conductivity, headspace gasses – as appropriate). In such arrangements, the sensor is linked to a controller capable of ceasing discharge if maximum thresholds are exceeded. However, all initial discharges are made on a batch basis. Provided analyses meet requirements on a consistent basis, continuous discharge will be approved. Once approved, the operator carries out regular sampling and analyses, with all results supplied to the Trade Waste and Networks team.
- The Trade Waste and Networks team also undertakes random monitoring to verify performance.

- Samples are collected, handled and analysed in accordance with the [Sampling and Analysis Guideline](#).
- Flow rates to sewer are regulated to prevent sewer surcharging.
- Discharge to sewer complies at all times with [Restricted Wastewater Acceptance Standards](#) or discharge limits determined by the Trade Waste and Networks team. Contaminant concentrations exceeding Acceptance limits undergo further treatment or disposal by a licensed liquid waste contractor.

## Fees and charges

- The costs of sampling by Trade Waste and Networks team and subsequent analytical and administrative costs incurred by us are borne by the operator.
- The cost of disposal to sewer of successfully treated groundwater is charged to the operator in accordance with the current rates for [non-domestic hauled waste](#).
- Billing frequency is negotiated between the parties before commencement of the operation.
- Should the accounts rendered by us to the operator fall into arrears at any time, we may immediately suspend further discharges upon giving written notice to all parties involved.

## More information

Mains water protection (AS/NZS 3500.1:2015)