



# Collection and submission of water samples for bacteriological analysis

## General client information

### Sample Bottles for Microbiological Analysis of Water

The Agrifood laboratory supplies sampling bottles for the collection of water samples. Sterile sample bottles and sampling bottles containing sodium thiosulphate are provided as a mandatory part of the testing portable water, swimming pools & spa water for microbiology samples. These bottles are always available and can be collected from the laboratory when required.

NOTE: Please only take enough bottles for your immediate sampling requirements. Expiry timeframes apply to sample bottles. Store sample bottles in a clean, dark and dry place.

Transport your samples in a clean esky that is only used for the purpose of transporting water samples. Cool the samples with ice bricks and pack the samples securely so they will not be damaged during transport.

NOTE: Never use loose ice to cool water samples. If the samples are submerged in thawed ice they may become contaminated and the results may be unreliable.

NOTE: Do not freeze water samples.

### Identification of the water sample collection points

The minimum requirements to identify a sample are: Client, Sampling Point, Date and Time of collection and analysis required. Refer to the "Microbiology Water Sample Submission Form" to be submitted along with the water sample in the lab. It is essential that the water sample collection point is clearly and unambiguously identified. If samples are to be collected from a set sampling point on an ongoing basis please provide a consistent description of the sampling point.

### Collection of water samples

Water samples must be collected in accordance with the sample collection instructions from this laboratory. Refer to the "Water Sample Collection Instructions for microbiological testing". Always wash your hands before collecting water samples and handle the sample bottle taking care not to introduce contamination. An air gap of 2-3cm must be left when the bottle is closed.

NOTE: Water samples submitted in dirty or poorly stored bottles will not be accepted.

### Sample submission

Samples are required to be submitted within specific holding timeframes for microbiology testing. Please complete the sample submission form: Analysis Request form (F/117) or Microbiology Water Samples Submission Form (F/832).

It is best if samples are sent so that they arrive at Agrifood laboratory ideally no later than 15:30h from Monday to Thursday and no later than 13:30h on Friday.

**Samples must be received to the laboratory within 24hrs from time of collection.**

## Water Sample Collection Instructions for microbiological testing



- Collect an appropriate water sampling bottle for each site to be sampled and the required submission form from the laboratory
- Prior to collecting the sample, label the sample bottles and complete the sample submission form. For each site record the sample bottle number on the sample submission form and record sample site details.
- Wash and dry hands and ensure that the immediate area is clear of possible contaminants.
- Clean and disinfect the tap with 70% Ethanol that is to be the sampling point. Remove any aerators, strainers or attachments from the tap if present.
- Disinfect by flaming the tap opening with a butane torch is preferred. If this is not possible or the tap is unsuitable for flaming then swab the tap opening with isopropyl alcohol swab.
- Flush the system for 2 minutes with a HIGH rate of water flow.
- Reduce water flow to a steady stream approximately the width of a pencil.
- Carefully remove the lid of the sampling bottle taking care not to contaminate the lid with fingers or non-sterile surfaces.
- Collect the water sample into the bottle and fill to level with the top of the label. The air gap allows for adequate mixing at the laboratory. A minimum of 200ml of samples is required.
- Do not rinse the bottle or over fill.
- Carefully screw the lid on the bottle and tighten firmly.
- Do not use the water sample to test for onsite observations such as Temperature, pH or Chlorine level.
- Transport the samples to the laboratory without delay with completed paperwork. Ensure your samples are suitably packaged in a cooler and the courier is aware of the delivery requirements. Samples must be received refrigerated (2°C to 8°C) and within 24hrs from collection to be analyzed.
- Do not use loose ice to cool samples. Do not freeze samples. An esky with an ice brick is the most suitable vessel for transportation.
- **Samples must be received by the laboratory within 24hrs from time of collection.**
- If you have any questions, please contact the laboratory for current requirements. Phone: 03 9742 0555

## Classification of Water Types

Water Category	Types of Water
Potable	Mineral Water
	Carbonated Water
	Soda Water
	Ice Water
	Bottle Water
	Tap Water 1
Industrial Water	Treated Washing Water
	Treated Food Processing
	Treated Effluent (Meat Processing)
	Treated Effluent (Poultry Processing)
Trade Waste	Aerobic Treatment Units
	Trade Wastewater from Restaurant
	Trade Wastewater from Motor Trades
	Waste
Purified/Processed	Distilled Water
	Reverse Osmosis (RO)
	Electro deionization (EDI) system
	Ultrafiltration
	Feed Water
	USP24 Water
Swimming Pools and Spa	Spring Water
	Swimming Pool – Indoor Public
	Swimming Pool – Indoor Private
	Swimming Pool – Outdoor Private
	Swimming Pool – Outdoor Public
	Spa – Indoor Public
Environmental	Spa – Outdoor Public
	Hot Spring Water
	Rain Water
	Werribee River
	Lake – Natural
	Marine Water
	Tank Water
Recycled	Ground Water
	Irrigation Park – 1 – Natural
	Irrigation Park – 2 - Natural
	Recycled water through dual reticulation systems
	House Recycle – 1 –Natural
	Irrigation (field/farm) – 1 – Natural
Sewage	Recycled Greywater
	Effluent Water
	Domestic Waste Water
	Sludge Water
	Grey Water