

Guidelines for sampling water for microbiological examination

The Animal Health Laboratory is NATA accredited to test for bacteria in water using Australian Standard methods.

Note: The Animal Health Laboratory **does not** undertake chemical testing of water.

Refer to <http://analyticalservices.tas.gov.au/>
Phone: 03 6165 3300

Sample submission

The Animal Health Laboratory (AHL) accepts water samples for testing as follows:

Potable/Recreational Waters

Monday to Thursday
9.00 am to 5.00 pm

Pools

Monday to Wednesday
9.00 am to 3.00 pm

Legionella & Heterotrophic Colony Count

Contact the Animal Health Laboratory to discuss your testing schedule.

Water samples are to be collected into sterile sample bottles, containing chlorine neutraliser, as supplied by AHL. It is most important to collect water samples carefully to avoid contamination.

Please arrange your sampling time to minimise delays in samples reaching AHL.

Water samples should be placed on ice and reach AHL as soon as possible after collection as testing, ideally, **should be completed** within **24 hours**.

For more information refer to AS/NZS 5667.1:1998 Water Quality – Sampling Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples or other suitable guidelines or documents based on the standard.

Sample Checklist

All samples should be submitted in a sterile bottle provided by AHL. The bottle **must** be labelled and accompanied by a completed Water Microbiology collection form.

Provide **all** following details:

- Full name (title, first name and surname)
- Full street address
- Phone number/email for result reports
- ABN (if company)
- Water source
- Date & time of collection

Note: If no email address is provided/available the report will be sent by mail.

Tap Sampling

1. Remove external tap fittings such as rubber tubes or hose attachments.
2. Turn tap on full and allow to flow for 2-3 minutes to clear service lines.
3. Adjust flow-rate to gentle stream of water.
4. Open sample bottle just before it is required for filling.
5. When removing cap, hold it at the top making sure that fingers do not come into contact with the neck or the inner surface of the cap. Do not lay the cap down or allow it to touch anything.
6. Do not rinse the bottle. The small amount of liquid present in the bottle neutralises chlorine and preserves your sample.
7. Do not adjust flow rate during sampling.
8. Immediately fill with water, leaving 2.5cm head space.
9. Replace the cap tightly and label bottle clearly.



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River, spring, lake reservoir or well sampling

1. Sample water away from the bank and near the draw off point.
2. Open sample bottle just before it is required for filling.
3. When removing cap, hold it at the top making sure that fingers do not come into contact with the neck or the inner surface of the cap. Do not lay the cap down or allow it to touch anything.
4. Hold bottle near base and plunge it, neck downwards, below water surface to about 30 cm depth.
5. Turn bottle until neck points slightly upwards with the mouth directed towards the current. If there is no current, move the bottle forward away from your hand. A rigid pole, 1.2 - 2.5m long, with the bottle clamped firmly at one end is useful for collecting samples particularly when there is likely to be damage to the bank.
6. When full, remove from water and immediately replace cap. Label the bottle clearly.
7. If unable to collect samples this way attach a weight to the bottle and lower into the water.

Hand pump sampling

1. Pump for a few minutes before collecting sample to flush all standing water from the pump.
2. Open sample bottle just before it is required for filling.
3. When removing cap, hold it at the top making sure that fingers do not come into contact with the neck or the inner surface of the cap. Do not lay the cap down or allow it to touch anything.
4. Replace the cap tightly and label bottle clearly.

Pools (includes Recreational, Hydrotherapy and Spas)

Public Health Guidelines recommend that the pool sample be collected at the point furthest from the water inlets.

1. Do not rinse the bottle. The small amount of liquid present in the bottle neutralises chlorine and preserves your sample.
2. Do not touch the inside of the cap or neck of the bottle.
3. Hold bottle near base and plunge it, neck downwards, below water surface to about 30-40 cm depth
4. Turn bottle until neck points slightly upwards with the mouth directed upwards.
5. When full, remove from water and immediately replace cap. Label the bottle clearly.

Preservation and storage of samples

1. Place samples in container surrounded by ice for transport.
2. Arrange for the samples to be delivered to the laboratory as soon as possible. **Note:** samples need to be tested with 24 hours of collection.

Submitting samples

Submit samples to:

Specimen Reception - Animal Health Laboratory
NRE Tas
165 Westbury Road
Prospect TAS 7250

Telephone: 03 6777 2097 or 03 6777 2111

Email: specimenreception@nre.tas.gov.au

<https://nre.tas.gov.au/watermicro>