



November 2015

## Testing and Compliance Services for Councils

Under current legislation, local government is typically responsible for compliance to environmental and health standards. With such a diverse range of commercial operations or private activities possible within council boundaries, Environment Health Officers (EHO's) or other Council staff may need to undertake a variety of types of monitoring to ensure compliance. This monitoring may include:

Monitoring Type	ALS	Monitoring Type	ALS
Drinking Water Testing (as per ADWG)	✓	Cooling Tower Water Testing	✓
Stormwater, Recycled, Waste Water Testing	✓	Hospital/Aged Care Facility Water Testing	✓
Landfill/Groundwater Monitoring	✓	Bio-solid or Compost Testing	✓
Swimming Pool Water Testing	✓	Environmental Discharge or Spill Testing	✓
Trade Waste Testing	✓	Flood Warning Systems & Hydrographics	✓
Algae Testing	✓	Water Sampling	✓

### WATER – DRINKING, STORMWATER, RECYCLED, WASTE

The provision of untreated drinking water from non-mains water sources (e.g. tanks or bores) to the general public (and its use in food preparation) by businesses poses a significant health risk and must be monitored for water quality to ensure it meets the Australian Drinking Water Guidelines and is safe for human consumption.

Polluted stormwater run-off into waterways can have a serious impact on the natural aquatic ecosystem and human health. During or immediately after a large storm event sampling can occur in targeted keys areas to determine if localised polluted stormwater is entering the waterway and potentially creating a health risk to both humans and animals.

Recycling water for irrigation or agricultural purposes has become more prevalent over recent years. The reuse purpose of the water needs to be considered as the water quality can pose significant health risks to both humans and animals.



Depending upon initial contamination, storage turnover and environmental conditions, the water quality may be uncertain and use in public areas may create health risks. Locations such as golf courses and public parks are examples where recycled water is used.

Faulty or failing septic systems can be a health risk to residents, the community and the environment. Faecal contamination from sewage or septic system leakage can enter stormwater, rivers and groundwater and pose a significant community health risk. Regular monitoring of the system is usually critical in eliminating any potential health risks.

## LANDFILL

Currently active or closed landfills often require monitoring to ensure compliance to EPA license conditions. ALS can provide routine sampling (low or high flow and grab samples) of groundwater or leachate bores, surface waters, leachate ponds and analysis of all routine analytical parameters however we do not provide consulting advice.

## AQUATIC CENTRES, SWIMMING POOLS, SPAS, ETC.

Swimming pool and aquatic centre waters are a potential source for pathogenic micro-organism (e.g. *E.coli* and *Cryptosporidium*) exposure and operators often need to manage this risk to public health and safety (e.g. refer <http://www.health.nsw.gov.au/environment/Pages/Swimming-Pool-and-Spa-Advisory-doc.aspx>). Assessing the microbiological quality of swimming pool water as an indicator of faecal contamination through analysis of heterotrophic plate count, coliform/*E.coli*, *Pseudomonas aeruginosa* and the possible presence of *Cryptosporidium* ([ALS EnviroMail #98](#)) can assist in managing public health and safety.

## TRADE WASTE

Businesses which discharge trade waste directly into the sewer system typically need a trade waste agreement in place with the local water authority. EHO's may need to perform spot checks on discharge or on surrounding environment should potential illegal discharging or spills be of concern.

## ALGAE

There are many different types of naturally occurring algae. Given the right mix of environmental and water quality conditions local lakes, ponds and other water bodies may become impacted with algae some of which may be potentially toxic. Should these water bodies be used for recreational, irrigation (e.g. golf courses) or agricultural uses toxic algae presents a human and animal health risk and is therefore often monitored especially in summer/autumn months.



## LEGIONELLA – COOLING TOWERS/WARM WATER SYSTEMS

Any public building or facility such as shopping centers, hospitals, and aged care facilities which use cooling towers for the provision of ventilation or have internal warm water distribution systems such as showers and basins require regular ongoing maintenance and monitoring to ensure the risk of Legionnaire's disease is minimised ([ALS EnviroMail #100](#), [EnviroMail #101](#)). Monitoring for the presence of *Legionella* and other microorganisms in these water systems is critical in this risk mitigation.

<https://www.health.qld.gov.au/public-health/industry-environment/disease-prevention-control/legionella/>

## FLOOD WARNING SYSTEMS

Floods can be catastrophic for business and communities. Whilst minor floods may only be inconvenient and disruptive, major floods pose a serious threat to life, property and infrastructure. Flood warning systems help authorities to make informed decisions when disaster is imminent. They can play an important role in preparing and reassuring communities, especially those in flood prone areas.



Flood Warning systems range in size and complexity, from fully integrated state wide systems to those providing local flood warning for such things as road crossings, pedestrian walkways, cycle paths, sports grounds and buildings. Irrespective of size, all systems require the establishment of rainfall and/or water level monitoring stations. These can control local warning lights, message boards and barrier gates, and transmit data to the relevant authorities so they may take appropriate action.

Once established it is imperative that these systems are properly serviced and maintained. Regular calibration and testing must be conducted to ensure they are operational and that the warnings provided are adequate and effective.

## **SAMPLING**

ALS has a large team of highly experienced and NATA accredited field samplers located across Australia that can be utilised for scheduled, emergency (rain event) or ad hoc (spot check) sampling. Should a council not have sufficient trained personnel or have any need and would like to maintain full independence ALS can undertake a wide range of sampling services covering the areas above.

ALS provides all the appropriate sampling containers, bottles and eskies free of charge.

## **ANALYSIS**

ALS has a large network of NATA accredited laboratories located throughout Australia in support of many of the compliance monitoring aspects detailed above. Our goal is to provide full access to the services that local government may require.

For further information, quotations or to order sample containers please contact your local ALS client services team.

## Australia Locations

### Victoria

#### Melbourne (SCORESBY)

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