



## Environmental Health Guide

# Response to Unsatisfactory, Aquatic Facility Microbiological Results

This guide is to provide Local Government Environmental Health Officers (EHO's) with recommended actions to respond to unsatisfactory, aquatic facility microbiological results.

Recommended actions are based on the Microbiological Water Standards as outline in Table 8 of the Code of Practice for the Design, Construction, Operation, Management and Maintenance of Aquatic Facilities (The Code) (Excerpt below).

The EHO reviews the results and identifies if action is required based on the parameters detailed in Table 8 of the Code and then implements recommended control strategies.

For Group 1 pools, please liaise with the trained Aquatic Facilities Operator.

For Group 2-4 pools, contact should be made with the trained Technical Operator in the first instance.

## Improvement and Closure Orders

Improvement orders can be issued in circumstances of unsatisfactory counts of *Escherichia coli* or *Pseudomonas aeruginosa*. In the case of thermophilic *Naegleria*, a voluntary or formal closure can be implemented.

## General Information

Improvement Order and Closure Order must be issued on the approved forms. The approved forms can be accessed from the Department of Health [Website](#).

## Further Information

For further information on the topics covered in this guide;

Environmental Health Directorate  
Department of Health  
PO BOX 8172  
PERTH BUSINESS CENTRE WA 6849  
[swimmingpools@health.wa.gov.au](mailto:swimmingpools@health.wa.gov.au)

Telephone: (08) 9222 2000

Table 1: Excerpt from the Code of Practice - Table 8: Microbiological Water Standards

Type of Organism	Maximum Count Allowable	Required Control Strategy
<p><b>Escherichia coli (E. coli)</b></p> <p>(All aquatic water bodies)</p> <p>(Presence of E. coli indicates faecal contamination of human or animal origin)</p> <p>Ongoing E. coli contamination requires investigation by trained Technical Operator.</p>	< 1 cfu/100ml	Maintain Code chemical requirements and continue monthly monitoring.
	≥ 1 cfu/100ml	<p>Close water body to patrons, super-chlorinate to 10mg/l for 8 hours and then open water body for use.</p> <p>Repeat microbiological testing.</p>
<p><b>Presumptive Pseudomonas aeruginosa</b></p> <p>(All aquatic water bodies with an operational temperature of 32°C or greater).</p>	< 1 cfu/100ml	Maintain Code chemical requirements and continue monthly monitoring.
	≥ 1 cfu/100mg	<p>Close water body to patrons, gently clean internal water body walls and super-chlorinate to 10mg/l for 8 hours.</p> <p>Repeat microbiological testing.</p>
	<p>Spa pools should be replenished by 100% water volume every 4 weeks or 25% of water by volume each week.</p> <p>A refilled spa pool may be used providing it is within the Code's chemical requirements.</p>	
<p><b>Thermophilic Naegleria</b></p> <p>(All aquatic water bodies)</p> <p>(Where thermophilic Naegleria is detected, the aquatic water body should immediately be closed and begin remediation actions).</p>	Not Detected	Maintain Code chemical requirements and continue monthly monitoring.
	Pending	Caution – await Lab results as a Naegleria organism may or may not be Detected. Maintain Code chemical requirements and continue monthly monitoring.
	Detected	<p>Close water body to patrons and super-chlorinate to 10mg/l for 8 hours.</p> <p>Collect and submit follow-up water body samples to the laboratory. When results are available and have been endorsed as satisfactory by the Local Government EHO, the water body may be re-opened.</p> <p>EHO and trained Technical Operator shall investigate the problem and review water treatment program.</p>

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