

Aquatic facilities inspection checklist

For aquatic facility operators and Environmental Health Officers

Version 1.0

10 December 2020

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Available at [the department’s website](https://www2.health.vic.gov.au/public-health/water/aquatic-facilities/quality-guidelines) <https://www2.health.vic.gov.au/public-health/water/aquatic-facilities/quality-guidelines>

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# Purpose

This checklist is designed to:

* assist aquatic facility operators to undertake inspections of their facilities to ensure compliance with the *Public Health and Wellbeing Act 2008* (the Act) Public Health and Wellbeing Regulations 2019 (the regulations) and the Water quality guidelines for public aquatic facilities: managing public health risks (the guidelines), and
* guide local government environmental health officers (EHOs) in their assessment of how well aquatic facility treatment processes are maintained, compliance with the requirements outlined in the regulations and measures taken to prevent potential hazards from affecting visitors.

Use of this checklist is not mandatory – aquatic facility operators and EHOs can use their own inspection checklist if they wish. The content of this document is intended for general information only. This document does not contain any legal advice. Should it be required, aquatic facility operators and EHOs should obtain their own independent legal advice in relation to the matters contained in this document.

# Summary

### The following sections are included in this checklist:

* [Part 1:](#_Part_1:_General) General information section, including aquatic facility location and facility manager contact details, which are particularly required if an inspection requires follow-up.
* [Part 2:](#_Part_2:_Pool) Pool details section to identify pool setup and treatment processes in place for each pool. This information helps inspectors to highlight potential risks with the treatment system.
* [Part 3:](#_Part_3:_Requirements) Legislated requirements of aquatic facilities under the Act and the regulations.
* [Part 4:](#_Part_4:_Aquatic) Aquatic facility suspected or implicated as source of infection (if applicable).
* [Part 5:](#_Part_5:_Procedure) Procedure for non-compliance with microbiological parameters – regulatory requirements (if applicable).
* [Part 6:](#_Part_6:_Preventive) Preventive risk management strategies including controls that assist with minimising public health risks.

# Part 1: General information

### Name and role of person undertaking the inspection

|  |  |
| --- | --- |
| Date of inspection |  |
| Name |  |
| Role |  |

### Aquatic facility details

|  |  |
| --- | --- |
| Business name of proprietor |  |
| Address of aquatic facility premises |  |
| Phone |  |
| Email |  |
| Name of aquatic facility operator |  |
| Address of aquatic facility operator |  |
| Owner |  |
| Type of facility |  |
| Total number of pools |  |
| Total number of spas |  |
| Total number of interactive water features |  |
| Total number of other aquatic facilities (if applicable), e.g. interactive water features. |  |
| Category of aquatic facility (category 1 / category 2 / other (please specify) |  |

# Part 2: Pool details

Parameters to assist the inspector’s understanding of how the pool system works. Please fill in, circling the responses that apply. Note: Additional copies of this page can be created to enable assessments of more than three pools.

### Pool characteristics

|  | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- |
| Pool type / name |  |  |  |
| Location | Indoor / Outdoor | Indoor / Outdoor | Indoor / Outdoor |
| Disinfection treatment processes | Chlorine  Bromine  Ozone  UV  Other: | Chlorine  Bromine  Ozone  UV  Other: | Chlorine  Bromine  Ozone  UV  Other: |
| Filtration system | Separate / Combined  Age of system in years:  Backwashed and cleaned? Y / N  Backwash frequency:  Are cartridge filters maintained according to the manufacturer’s instructions? Y / N  Is coagulation and flocculation used in this system? Y / N | Separate / Combined  Age of system in years:  Backwashed and cleaned? Y / N  Backwash frequency:  Are cartridge filters maintained according to the manufacturer’s instructions? Y / N  Is coagulation and flocculation used in this system? Y / N | Separate / Combined  Age of system in years:  Backwashed and cleaned? Y / N  Backwash frequency:  Are cartridge filters maintained according to the manufacturer’s instructions? Y / N  Is coagulation and flocculation used in this system? Y / N |
| Water circulation system (turnover rate) | 30 min  1 hour  2–4 hours  < 2 hours  > 4 hours  Volume of water: | 30 min  1 hour  2–4 hours  < 2 hours  > 4 hours  Volume of water: | 30 min  1 hour  2–4 hours  < 2 hours  > 4 hours  Volume of water: |
| Chemical monitoring system | Manual  Automatic chemical monitoring and dosing system  Continuous  Timer  Frequency of calibration:  Frequency of inspection by EHO / other inspector: | Manual  Automatic chemical monitoring and dosing system  Continuous  Timer  Frequency of calibration:  Frequency of inspection by EHO / other inspector: | Manual  Automatic chemical monitoring and dosing system  Continuous  Timer  Frequency of calibration:  Frequency of inspection by EHO / other inspector: |

# Part 3: Requirements outlined in the Public *Health and Wellbeing Act 2008*, and the Public Health and Wellbeing Regulations 2019

These parameters are requirements outlined in the legislation.

Please record on-site testing results below.

### Registration with Council (category 1 facilities only)

Registration is issued under Divisions 3 and 4 of Part 6 of the Act and regulation 23 and Division 3 of Part 5 of the regulations.

|  |
| --- |
| **Requirement** |
| Current Certificate of Registration: Y/N |
| Registration number: |
| The certificate is for: initial registration / renewal of registration / transfer of registration |
| Date of registration: |
| Registration expiration date listed on the certificate: |
| Details listed in the certificate are current and correct (i.e. certificate details match ‘Aquatic facility details’ under Part 1 of this checklist): Y/N |

### Water Quality Risk Management Plan

|  |  |  |
| --- | --- | --- |
| **Reference** | **Requirement** | **Y/N** |
| Listed in Chapter 1 of the guidelines. | * A current Water Quality Risk Management Plan exists, and |  |
| * contains the following key elements:   + staff roles and responsibilities, competencies and training requirements; |  |
| * + a description of the facility, its source water, and its treatment systems; |  |
| * + water quality targets and treatment objectives; |  |
| * + hazard identification, risk assessment and control measures; |  |
| * + operational and verification monitoring; |  |
| * + incident management and response procedures; |  |
| * + data recording and reporting. |  |

### Condition of the aquatic facility

|  |  |
| --- | --- |
| **Regulation** | **Requirement** |
| r. 50 | Aquatic facility is kept in a clean, sanitary and hygienic condition: Y/N |

### Clarity of aquatic facility water

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 51 | Water clarity clear, with floor markings and lanes clearly visible | Y / N | Y / N | Y / N |

### **Temperature**

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 52 | Water in the aquatic facility does not exceed 40°C | Y / N | Y / N | Y / N |

### **Filtering**

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 53 | Water in the aquatic facility is effectively filtered so that all visible extraneous matter is removed from the water | Y / N | Y / N | Y / N |

### Treatment of aquatic facility water - disinfectant

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 54(1) | Aquatic facility water is treated with a **chlorine** or **bromine**-based disinfectant | Y / N | Y / N | Y / N |

### Treatment of aquatic facility water - chlorine

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| **Free chlorine level (mg/L):** | | | | |
| r. 54(2)(a) | Swimming pool (min. 1 mg/L) (where **cyanuric acid** **not** **used**) | mg/L | mg/L | mg/L |
| r. 54(3)(a) | Swimming pool (min. 2 mg/L) (where **cyanuric acid** **used**) | mg/L | mg/L | mg/L |
| r. 54(4)(a) | Spa (min. 3 mg/L) | mg/L | mg/L | mg/L |
| **Total chlorine level (mg/L):** | | | | |
| r. 54 (2)(b) | Swimming pool (max. 10 mg/L) (where **cyanuric acid** **not** **used**) | mg/L | mg/L | mg/L |
| r. 54(3)(b) | Swimming pool (max. 10 mg/L) (where **cyanuric acid** **used**) | mg/L | mg/L | mg/L |
| r. 54(4)(b) | Spa (max. 10 mg/L) | mg/L | mg/L | mg/L |
| **pH:** | | | | |
| r. 54(2)(c) | Chlorine treated swimming pool (where **cyanuric acid not used**) (between 7.2 and 7.8) | pH: | pH: | pH: |
| r. 54(3)(c) | Chlorine treated swimming pool (where **cyanuric acid used**) (between 7.2 and 7.8) | pH: | pH: | pH: |
| r. 54(4)(c) | Chlorine treated spa pool (between 7.2 and 7.8) | pH: | pH: | pH: |

### Treatment of aquatic facility water – bromine

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| **Free bromine level (mg/L):** | | | | |
| 54(5)(a) | Swimming pool (min. 2 mg/L) | mg/L | mg/L | mg/L |
| 54(6)(a) | Spa pool (min. 6 mg/L) | mg/L | mg/L | mg/L |
| **Total bromine level (mg/L):** | | | | |
| 54(5)(b) | Swimming pool (max. 8 mg/L) | mg/L | mg/L | mg/L |
| 54(6)(b) | Spa pool (max. 8 mg/L) | mg/L | mg/L | mg/L |
| **pH:** | | | | |
| 54(5)(c) | Bromine treated swimming pool (between 7.2 and 8.0) | pH: | pH: | pH: |
| 54(6)(c) | Bromine treated spa pool (between 7.2 and 8.0) | pH: | pH: | pH: |

### **Cyanuric acid level (if applicable)**

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 55 | Level of cyanuric acid in the water does not exceed 100 mg/L | Y / N | Y / N | Y / N |

### **Total alkalinity level**

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 56 | Total alkalinity level in the water in the aquatic facility is maintained above 60 mg/L | Y / N | Y / N | Y / N |

### **Combined chlorine (where chlorine is used as the disinfectant)**

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 57(a) | At all times less than the free chlorine residual | Y / N | Y / N | Y / N |
| r. 57(b) | Measured to be less than 1 mg/L at least once in every 24 hours of operation | Y / N | Y / N | Y / N |

### Microbiological quality of aquatic facility water

The aquatic facility operator must ensure that when the aquatic facility is open for use, the microbiological standard of the water is maintained within the following parameters:

| Regulation | Microbiological quality | Sample | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- | --- |
| r. 49(a) | Heterotrophic colony count (result must be less than 100 colony forming units/mL) | Number: |  |  |  |
| Time: |  |  |  |
| Result: Pass or fail |  |  |  |
| r. 49(b) | *Escherichia coli* (must not be detected in 100 mL of water) | Number: |  |  |  |
| Time: |  |  |  |
| Result: Pass or fail |  |  |  |
| r. 49(c) | *Pseudomonas aeruginosa* (must not be detected in 100 mL of water) | Number: |  |  |  |
| Time: |  |  |  |
| Result: Pass or fail |  |  |  |
| NA | Name of water testing laboratory | Name: | | | |

Note: Before collecting water samples for microbiological testing, check the sampling instructions provided by the testing laboratory for sample collection, storage and preservation. Samples should be sent to a NATA-accredited laboratory to be tested.

Water samples should be stored on ice and delivered to the relevant laboratory within the required temperature range and timeframe, ideally as soon as possible (where possible within six hours).

### Chemical testing

| Regulation | Parameter | Testing frequency (in hours/days/weeks) | | |
| --- | --- | --- | --- | --- |
| Pool 1 | Pool 2 | Pool 3 |
| r. 48(a)(i) | Free chlorine and total chlorine (if chlorine used) – tested immediately before the facility is in operation and at least 4-hourly intervals while the facility is in operation. |  |  |  |
| r. 48(a)(ii) | Free bromine and total bromine (if bromine used) – tested immediately before the facility is in operation and at least 4-hourly intervals while the facility is in operation. |  |  |  |
| r. 48(a)(iii) | pH – tested immediately before the facility is in operation and at least 4-hourly intervals while the facility is in operation. |  |  |  |
| r. 48(b) | Total alkalinity – at least weekly intervals |  |  |  |
| r. 48(c) | Cyanuric acid – at least monthly intervals |  |  |  |

### **Aquatic facility records detailing:**

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 61(1)(a) | All results of tests and monitoring required under Division 3 of Part 5 of the Public Health and Wellbeing Regulations 2019 | Y / N | Y / N | Y / N |
| r. 61(1)(b) | All corrective activities undertaken in relation to the water in the aquatic facility | Y / N | Y / N | Y / N |
| r. 61(2) | Records are kept at the premises where the aquatic facility is located for 12 months from the date on which the record was made | Y / N | Y / N | Y / N |

### **Duty to minimise risks**

| Regulation | Requirement | Has this requirement been met? |
| --- | --- | --- |
| r. 46 | An aquatic facility operator must manage the risks to human health arising from pathogenic microorganisms in the water in the aquatic facility in accordance with the regulations and the [Water quality guidelines for public aquatic facilities: managing public health risks](https://www2.health.vic.gov.au/public-health/water/aquatic-facilities/quality-guidelines) <https://www2.health.vic.gov.au/public-health/water/aquatic-facilities/quality-guidelines> | Y / N |
| Notes |  | |

### **Duty to maintain and test**

| Regulation | Requirement | Has this requirement been met? |
| --- | --- | --- |
| r. 47 | An aquatic facility operator must ensure that the water in the aquatic facility is maintained and tested in the manner set out in Subdivision 2 of Division 3 of Part 5 of the regulations (r. 45 – 61) | Y / N |
| Notes |  | |

# Part 4: Aquatic facility that is suspected or implicated as the source of infection (if applicable)

Regulation 58(1): The Secretary or an authorised officer must provide written notice to an aquatic facility operator if the water in the aquatic facility is suspected or implicated as the source of infection in a case or outbreak of a pathogenic microorganism.

| Regulation | Parameter | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| r. 58(2) | Water sample from the aquatic facility is taken and tested in accordance with any directions specified in a notice provided under r. 58(1) | Y / N | Y / N | Y / N |
| r. 58(3) | Aquatic facility is disinfected in accordance with any reasonable directions given to that person by the Secretary or an authorised officer. | Y / N | Y / N | Y / N |

# Part 5: Procedure for responding to non-compliance with microbiological parameters (if applicable)

This applies if an aquatic facility operator is notified by an initial laboratory report that any sample of water taken from the aquatic facility does not comply with the microbiological parameters set out in regulation 49.

| Regulation | Action | Pool 1 | Pool 2 | Pool 3 |
| --- | --- | --- | --- | --- |
| **Within 24 hours of receiving a notification by an initial laboratory report of microbiological non-compliance, the aquatic facility operator ensured that:** | | | | |
| r. 59(2)(a) | Corrective action was taken to bring the water quality within the microbiological parameters set out in r. 49. | Y / N | Y / N | Y / N |
| r. 59(2)(b) | The water quality risk management plan that was in place for the aquatic facility was reviewed | Y / N | | |
| r. 59(2)(c) | Any faults were corrected | Y / N | Y / N | Y / N |
| r. 59(2)(d) | Any changes necessary to prevent a re-occurrence of those faults were implemented | Y / N | Y / N | Y / N |
| **Within 48 hours of receiving a notification by an initial laboratory report of microbiological non-compliance, the aquatic facility operator ensured that:** | | | | |
| r. 59(3) | A further sample of water was taken from the aquatic facility and provided to a laboratory to assess compliance with the microbiological parameters set out in r. 49 | Y/N | | |
| **Within 24 hours of receiving a report from a laboratory with the results of the testing undertaken in accordance with r. 59(3):** | | | | |
| r. 59(4) | The Council was notified of the test results | Y/N | | |
| **If a laboratory tested a second sample of water in accordance with r. 59(3) and reported microbiological non-compliance again, the aquatic facility operator ensured that:** | | | | |
| r. 59(5) | Within 24 hours, the steps set out in r. 59(2)-(4) were undertaken again | Y/N | | |
| **If a laboratory tested a third sample of water in accordance with r. 59(5) and reported microbiological non-compliance again, the aquatic facility operator ensured that:** | | | | |
| r. 59(6) | The aquatic facility was closed and not opened until the water in the aquatic facility complied with the microbiological parameters set out in r. 49 | Y/N | | |
| **Within 24 hours of closing the aquatic facility,** **the aquatic facility operator ensured that:** | | | | |
| r. 59(7) | Council was notified in writing of the closure | Y/N | | |
| N/A | Name of water testing laboratory that was used: | | | |
| **Notes:** | | | | |

# Part 6: Preventive risk management strategies

This section contains preventive risk management strategies that are beneficial for pool management. The following parameters help to minimise public health risks.

| Parameter | Yes/No | Comments |
| --- | --- | --- |
| Is/Are the pool(s) clean? |  |  |
| Is the area around the pool and the wet deck clean? |  |  |
| Is the pool water suction cleaned? If so, how often? |  |  |
| Is soap available at all handwash basins within the facility? |  |  |
| Is soap available in all showers? |  |  |
| Are the amenities clean? |  |  |
| Are the surfaces regularly cleaned? If yes, what is the cleaning procedure and frequency? |  |  |
| Are adequate nappy change facilities available? (Are handwashing facilities and bins also available to enable good hygiene practices?) |  |  |
| Are nappy change facilities away from the pool concourse to minimise contamination risks? |  |  |

### **Policies and management**

| Parameter | Yes/No | Comments |
| --- | --- | --- |
| Is there a written faecal incident policy? |  |  |
| Are staff trained in responding to faecal accidents? |  |  |
| Is there a maximum bather number determined for each pool? |  |  |
| Is the maximum bather number policy enforced? |  |  |
| Is there a swim nappy policy? |  |  |
| Is there a handwashing policy? |  |  |
| Is there a pre-swim shower policy? |  |  |
| Is the pre-swim shower policy actively encouraged by staff? |  |  |
| Is there a microbiological sampling program in place? |  |  |
| How often is the pool water tested for microbiological quality? |  |  |
| Name of water testing laboratory: |  |  |
| Is healthy swimming signage on display? |  |  |

### **Record management**

| Parameter | Yes/No | Comments |
| --- | --- | --- |
| Does the facility have a water quality risk management plan in place? |  |  |
| Pool operator manual available? |  |  |
| Pool operator has received relevant training and competency assessment? |  |  |
| Up to date pool operator training and competency |  |  |
| Pool testing kit on premises? |  |  |
| Type of testing kit? |  |  |
| Are records kept of faecal accidents and responses? |  |  |
| Are regular pool chemical testing results kept? |  |  |
| Are records kept of all corrective activities undertaken in relation to water at the aquatic facility? |  |  |
| Are records kept at the aquatic facility premises for 12 months from the date on which the record was made? |  |  |
| Aquatic facility chemical test records sighted and up to date? |  |  |
| Aquatic facility microbiological test records sighted and up to date? |  |  |

### **Occupational health and safety**

| Parameter | Yes/No | Comments |
| --- | --- | --- |
| Are safety data sheets (SDS) available for each chemical? |  |  |
| Are chemicals stored appropriately and in an area inaccessible by the public? |  |  |
| Are chemical containers labelled? |  |  |
| Is the chemical storage area well ventilated and well lit? |  |  |
| Is the poisons information number available (13 11 26)? |  |  |

### **Notes and further actions:**

|  |
| --- |
| [Notes to be added here] |

Any feedback on ways to improve this checklist can be emailed to the Water Unit   
<water@dhhs.vic.gov.au>.