NEW AQUATIC FACILITIES LEGISLATION

Health (Aquatic Facilities) Regulations 2007

&

Code of Practice for the Design, Construction, Operation, Maintenance and Management of Aquatic Facilities (Sep 2008)

Llew Withers & Jared Koutsoukos

APPLIED ENVIRONMENTAL HEALTH BRANCH
Overview

- Background
- Health (Aquatic Facilities) Regulations 2007 (the regulations)
- Code of Practice for the Design, Construction, Operation, Management & Maintenance of Aquatic Facilities (the Code)
- Frequently Asked Questions
- Training & Qualifications
- Aquatic Facility Working Group
- Aquatic Facility Guidance Notes
- Questions
Background
Code Consultation

- **Development:** Commenced approximately 1995
- **Public Consultation:** February - July 2004 (76 submissions received)
- **Comments Reviewed by:** “Swimming pool & Waterslide Working Parties”
- **Further Consultation 2004...**
  - Australian Institute of Environmental Health,
  - Royal Life Saving Society -WA Branch,
  - Leisure Institute of WA Aquatics
  - Department of Education & Training
  - Western Australia Local Government Association
  - Industry Engineering Representatives
  - Aquatic Leisure Technologies
  - REIWA & STIWA (body corporate pools)
  - Caravan Park Association of WA
  - Tourism Western Australia
  - Physiotherapy Association Australia (WA Branch)
  - Department of Local Government & Regional Development
Background

Commencement of the Regulations

- Consultation Context (to establish policy positions):
  - Comment period for the Code & Swimming Pool Working Party meetings

- Commencement of the regulations - 1 October 2007

- The regulations & Code are available online:
  (State Law Publisher): www.slp.wa.gov.au
  www.public.health.wa.gov.au then click on water, then swimming pools

- DOH published & circulated: ‘Aquatic Facilities Guidance Note 2’
  to explain the key aspects & commencement provisions.
The Regulations

Parts

Part 1 - Introduction

Part 2 - Construction, Alteration & Extension of AF’s

Part 3 - Operation of Aquatic Facilities

Part 4 - General Provisions

Part 5 - Transitional Provisions
The Regulations
Part 1 - Introduction

- **Regulations** apply to all districts as local laws made under the Act.

- The **Code** is **adopted** to the extent it is applied by these **regulations**.

- **Regulations** **prevail over** the **Code** to the extent of any inconsistencies.
Legislation Framework

- Health Act 1911
- The Regulations
- The Code
  - Other Guidelines
  - Australian Standards
The Regulations
Part 1 - Introduction

Terms used in the regulations

“water body”, includes any spa pool, swimming pool, swimming bath, water slide, wave pool & any other aquatic amenity or facility controlled or used by in connection with any club, school, business, association or body corporate.
The Regulations
Types of Water Bodies
The Regulations FAQ

**Water Body Definition**
Are man-made lakes captured as water bodies under the regulations?

- A: No, man-made lakes are not specifically defined by the regulations, or the Code.

**Other Examples**
- Spray-grounds, are not specifically defined by the regulations, or the Code, however the regulation wording “any other aquatic amenity or facility” provides scope to capture spray-grounds at a future point in time.

- Water Playgrounds are captured: they are not specifically defined by the regulations, but are specifically defined by the Code.
Terms used in the regulations

“Aquatic facilities” consists of:
- the water bodies; & plant, concourse, toilets, change rooms, lighting, fencing, & any other structure, building or plant necessary for water body operation.

AF’s do not include AF’s:
- if operated under a strata scheme < 30 lots,
- only uses water directly from the ocean,
- or is a naturally occurring water body.
The Regulations
Aquatic Facility Includes
Key Issues
Aquatic Facility Definition

What was the intent when drafting definition?

- To exclude residential units/apartments (< 30 lots) with permanent/semi-permanent tenants.

What does the regulation definition exclude?

- AF’s operated by a strata company with < 30 lots
Key Issues
Aquatic Facility Definition

Problems with Definition

- Excludes strata titled AF’s with < 30 lots operating commercially e.g. short-term stay, tourism etc.

- Captures some residential non-strata titled AF’s with < 30 lots e.g. blocks of flats/apartments

Solution

- MINISTER TO AMEND THE REGULATIONS.
The Regulations

Part 1 - Introduction

Terms used in the regulations

“class”, in relation to the class of AF/water body construction and operation: e.g. class 1-4

- Equivalent to “Group 1-4” reference in the Code.
  - certificate of compliance (construction)
  - permit to operate (operation)

“operator”, of an aquatic facility includes:

- Occupier of land/ premises of AF.
- Any other person concerned with AF operation other than an employee.
The Regulations
Part 1 - Introduction

Terms used in the regulations

“alter”, an aquatic facility, means to do work on the facility...

do not include: maintenance, repair, or replacement where equivalent or similar performance parts, plant or equipment is used.

Significance

- Applications to EDPH for approval only necessary when proposing to undertake construction, alteration or extension works.
UNDERTAKING WORK ON AN AQUATIC FACILITY

- Maintenance & Repair – **like for like**
  - No Approval Required
- Construction, Alteration & Extension
  - EDPH Approval Required
The Regulations

P2 - Construction, Alteration & Extension of Aquatic Facilities

D1 - Approval of Construction...

- Construction, alteration or extension must comply with EDPH approval

- The occupier must complete application form (see DOH website)
  - Attach 2 copies of plans/specifications & all other necessary information

- EDPH may approve application if:
  - complies with the Code, or;
  - health & safety of patrons not compromised & either
    - performance is the same or better, or;
    - public interest in approval.

- EDPH may approve a variation or staged construction.
D2 - Certificate of Compliance

- An **AF must only be operated** if there is a certificate of compliance in force specifying the **AF/water body class of operation**.

- A person may apply to **EDPH** for a certificate of compliance.

- EDPH may issue certificate of compliance if the **AF** has been constructed, altered, or extended in accordance with:
  - EDPH approval, or if;
  - Complies with **Code** at time of application.
Basic Certificate & Permit Model

AF's in use or under Construction

No EDPH Approval
Inspect for Compliance with Repealed Regulations

EDPH Approved
EDPH Issue Certificate of Compliance
EDPH Issue Permit to Operate
Certificates of Compliance & Permits to Operate

- Certificates of compliance & permits to operate have been issued to all approved/compliant pools under the repealed regulations.

- Existing pools unapproved under the repealed regulations are being inspected by EHO’s & inspection reports sent to DOH.

- DOH are issuing G2-4 Operators with works lists (copies sent to LG) & advising to complete before 1 Oct 2009 deadline.

- If LG EHO’s are unaware of request to undertake inspections, or require further info, email swimmingpools@health.wa.gov.au
The Regulations
P5 - Transitional Provisions

AF’s in Operation 1 Year Before Regulations

- EDPH can only issue a certificate of compliance & permit to operate if:
  - Class 2-4 AF’s comply with the repealed regulations, prior to 1 October 2009, or;
  - Class 1-4 AF’s comply with the Code
The Regulations

Question?

• What will happen if an Operator of a Class 2-4 existing swimming pool has not completing a works list under the repealed regulations prior to 1 October 2009?

Answer

• Operator’s will need to comply with the Code, in order to receive a certificate of compliance & permit to operate
The Regulations
P3 - Operation of Aquatic Facilities

D1 - Permit to Operate an Aquatic Facility

- An Operator may only operate an AF/water body if he/she has a permit to operate an AF/water body, which prescribes the relevant class or higher class of operation.

- An Operator may apply to the EDPH for a permit to operate an AF/water body at a specified class.

- The EDPH may grant an Operator a permit to operate providing:
  - A certificate of compliance is in force, &
  - Satisfactory water quality &
  - Staff qualifications comply with Code requirements.
The Regulations
Operation of Class 1 Aquatic Facilities

• Water bodies are available to the general public to participate in unstructured recreational activities.

• Require supervision

• Operators can choose to lower their operational classification i.e. Class 1-3
The Regulations
Operation of Aquatic Facilities

Permit to Operate

- AF Operators may operate an AF/water body at a lower classification level than specified in a permit to operate, providing activities follow the classification prescribed by Table 1, Section 1.2 - Classification of AF’s in the Code.

Example

- An operator of a Class 1 AF may reduce AF’s operation to Class 2 for designated periods which comprise only of Class 2 activities, if personnel with Class 2 qualifications in (supervision & emergency care), are onsite and supervising patrons in the water body for the Class 2 activity duration.
Qualifications of Coaching & Instructional Staff

Table 9 - of Code

• Only applicable to Group 2 Activities

• Hold appropriate industry qualification

• Removes need for dedicated lifeguard
### The Code

## Qualifications of Coaching & Instructional Staff - Table 9

<table>
<thead>
<tr>
<th>Aquatic Activity</th>
<th>Approved Industry Standard or Equivalent</th>
</tr>
</thead>
</table>
| **Swimming & Water Safety Instruction** | • Royal Life Saving Instructor of Swimming & Water Safety Certificate or    
                                           • AUSTSWIM Teacher of Swimming & Water Safety |
| **Competitive Swimming Coaching**    | Australian Swimming Coaching Qualification |
| **Platform & Springboard Diving**    | Australian Diving Association Coaching Qualification |
| **SCUBA Diving**                     | Dive Instructor Qualification from a recreational SCUBA training organisation. |
| **Aqua-Exercise**                    | Australian Fitness Association Council Aqua-Exercise Leaders Certification |
| **Hydrotherapy**                     | Registered Physiotherapist                |
Lowering Aquatic Facility Classification
FAQ - Risk Management

- **Operators** can independently lower AF operational class to if undertaking activities of reduced class (see Table 1 of the Code).

- **Operators** must ensure AF activity classification (Table 1) is equivalent to operational requirements (Sect’s 5, 6 & 7).
  - E.g. Ensure personnel with qualifications appropriate to activity.

- **Operators** should fulfill duty of care when independently lowering classification by ensuring:
  - Specific arrangements for chlorine gas
  - Controlling unrestricted AF access
  - Ensuring water quality & appropriate supervision.

**NOTE: DOH GUIDANCE NOTE (6) TO FOLLOW**
Lap Swimming Activity Classification

**Group 1 & 3 Activity** (see Table 1 of Code)

**Group 1** = general admission, pay fee at entrance

**Group 3** = discrete user i.e. members/guests

*Lap swimming = only use of pool*

Considered a **Group 3** activity if:

- **AF** policies & procedures ensure discrete user group & patron safety i.e.
  - Restrict entry to persons 10 years, or older.
  - Ensure minimum 2 lap-swimmers at any one time.

**NOTE:** SUBJECT TO CURRENT CONSIDERATION OF AFWG
The Regulations
Operation of Aquatic Facilities

• **Group 1** AF’s must **now** comply with **Code**:
  - Section 5 - Water Quality & Testing
  - Section 6 - Qualification Requirements
  - Section 7 - General Sanitation & Operational Req’s

• **Group 2-4** AF’s need not comply until **1 October 2009**
The Regulations
Operation of Aquatic Facilities

• The following repealed regulation requirements apply for Group 2-4 AF’s until 1 October 2009
  - Exemptions (Managers) r. 13A, 14 (2-6)
  - Operational Requirements r. 8, 9(1), 10-13 & 15-20
    E.g. water circulation/filtration/chemical sampling
  - EDPH (Closure power) r. 4 A(1)
  - Offences & Penalties r. 21
The Regulations
Operation of Aquatic Facilities

• EDPH may approve variations to operational requirement's (Sections 5, 6 & 7), if:
  - same or better health & safety protection, or
  - does not compromise health & safety of patrons, or
  - there is a public interest.

• A copy of the approved variation must be kept at AF for inspection upon request by EHO.
The Regulations
Operation of Aquatic Facilities

- Operators are required to ensure compliance by 1 October 2009 with the following Code clauses:
  - 2.12 - Depth Markings,
  - 2.22 - First Aid Amenities,
  - 2.23 - First Aid Equipment,
  - 2.24 - Rescue Equipment &
  - 2.25 - Safety Signage
The Regulations
Mandatory Safety Requirements
The Regulations
Water Sampling

- Local Government (LG) EHO of each district must collect 2 water samples (WS) (bacteria & amoeba), from each AF water body 1/month.

- EDPH may exempt LG if it is impractical for EHO to collect samples & if AF Operator can ensure WS for their AF is collected 1/month.
The Regulations
Water Sampling

Problems

- Available EHO’s
- Many LG’s use Trainee EHO’s to collect WS
- EDPH can’t exempt LG, except if impractical

Solution

- Minister has agreed to enable persons working under EHO direction to collect WS.
  - DOH will issue circular to advise of this directive
  - The regulations will be amended
The Regulations
P3 - Operation of Aquatic Facilities

- EDPH/EHO may issue **Operator with Improvement Order** if:
  - **AF**/operation is a **risk** to patrons health
  - **non-compliance** with:
    - operational requirements (Sections 5, 6 & 7)
    - approved **variations** to operational requirements
    - clauses 2.12 & 2.22-2.25
The Regulations
P3 - Operation of Aquatic Facilities

- Improvement Order **must** be issued using an approved form & specify:
  - Area/s of non-compliance with Code’s Operational Req’s
  - Measures required to comply/reduce risk patrons health.
  - **Timeframe** for Operator compliance.
  - Any ancillary, or incidental directions.
Improvement Order Form
• Operator **must** comply with Improvement Order (IO)

• EDPH/EHO may extend timeframe **before** IO expires

• EDPH/EHO must note date of compliance on IO & give Operator copy upon request.
The Regulations
P3 - Operation of Aquatic Facilities

- EDPH/EHO may issue Operator a Closure Order (CO) for:
  - Not complying with an Improvement Order, or;
  - non-compliance with:
    - operational requirements (Sections 5, 6 & 7)
    - approved variations to operational requirements
    - clauses 2.12 & 2.22-2.25
  
- AF/operation is a serious risk to patrons health.

- No certificate of compliance (only EDPH)
The Regulations
P3 - Operation of Aquatic Facilities

**D3- Quality Control “Closure Order”**

- A **CO expires** after **48hrs** if the EDPH does **not** **confirm**.

- EDPH may **confirm**, or **cancel** **CO**.

- **Operator/s must** ensure **AF/water body remains closed** whilst **CO** is in force.
The Regulations
P3 - Operation of Aquatic Facilities

D3- Quality Control “Closure Order”

- A **CO must** be issued using an **approved** form & specify:
  - Grounds for closure
  - Measures required to comply with **Code**
  - Measures required to reduce the risk
  - Operator commits offence, if fails to keep **AF/water body closed**.

- A **CO** confirmed by **EDPH** remains **valid until**:
  - Grounds for closure ceased, or remedied &
  - Measures required to be taken completed &
  - EDPH directs the closure order to cease (in writing)
Closure Order Form

Health Act 1931
Health (Aquatic Facilities) Regulations 2007 (Regulation 22)
Closure Order

Local Government (SFO)
(heavy, advance copy)

1. [Form details]
2. [Operator details]
3. [Date]
4. [Time (am/pm)]
5. [Place of operation]
6. [Type of facility]
7. [Number of operators]
8. [Name of operator]
9. [Address]
10. [Contact number]
11. [Email]
12. [Website]
13. [Licence number]
14. [Licence expiry date]
15. [Inspection date]
16. [Inspection report number]
17. [Inspection report details]
18. [Inspector name]
19. [Inspector signature]
20. [Approving authority name]
21. [Approving authority signature]
22. [Approval date]
23. [Approval number]

Regulation 22 of the Health (Aquatic Facilities) Regulations 2007

NOTES & COMPLETION DETAILS

Review of closure order

A period of 30 days will be given to the operator to rectify any deficiencies, prior to the issue of the closure order.

Failure to comply with closure order

Regulation 22 (3) of the Health (Aquatic Facilities) Regulations 2007 provides for the immediate closure of the facility if it is not in compliance with the regulations.

Penalty for non-compliance

Regulation 22 (4) of the Health (Aquatic Facilities) Regulations 2007 provides for the imposition of a penalty of up to $5,000 for each day that the facility remains non-compliant.

Department of Health

Western Australia
What current breaches may warrant an EHO issuing an Order to a Group 1 AF Operator?

**Improvement Order**
- Non-compliance with Sect’s 5, 6 or 7 of the Code, or;
- AF/operation is a risk to health.

**Closure Order**
- Non-compliance with Sect’s 5, 6 &/or 7 of the Code & if AF/operation is a serious risk to health, or;
- failure to comply with an Improvement Order
What current breaches may warrant an EHO issuing an Order to a Group 2-4 AF Operator?

**Note:** Limited application until 1 October 2009

**Improvement Order**
- AF/operation is a risk to health

**Closure Order**
- Failure to comply with an Improvement Order
Division 1 - Hygiene & Use of Facilities

- A person **must not** enter, or use AF water body if:
  - Suffering from gastroenteritis, or disease/skin infection that is **communicable**.
    - **Exemption** - person with written statement from a medical practitioner (stating not a health hazard to other water body users).
  - in unclean condition/wearing unclean clothes
  - under influence of alcohol/drugs (i.e. intoxicated)
  - a baby or young child who ordinarily wears a nappy, not wearing an **aqua-nappy**.
Division 1 - Hygiene & Use of Facilities

Patron/Operator Responsibilities

• A person **must not:**
  - pollute
  - deposit rubbish or offensive matter
  - **intentionally** release bodily material/waste

  into an **AF water body**, other than what is released through ordinary use.

• A person **must not** permit animals to enter an **AF**
  - **Exemption** guide dogs/animals trained to assist disabled people
    (Note: Animals **must not** enter water body).
D2 - Miscellaneous Provisions

- EDPH must give reasons for decision if refuses:
  - grant approval to construct, alter, or extend
  - Issue certificate of compliance
  - grant permit to operate

- Person affected by EDPH decision may apply to the State Administrative Tribunal.
The Regulations
P4 - General Provisions

• Offences & penalties:
  - 1\textsuperscript{st} offence $100 - $1000
  - 2\textsuperscript{nd} offence $200 - $1000
  - 3\textsuperscript{rd} offence $500 - $1000
  - Continuing offence $50 - $100 each day

• The Code is available on DOH website

• Copies available for inspection at:
  - Grace Vaughan House - 227 Stubbs Terrace, Shenton Park
Transitional Timeline

1 October 2007 - Commencement

1 April 2008 – G1 Operators to comply Sect’s 5, 6 & 7 of the Code

1 September 2009 – EDPH Issue G2-4 Certificate/ Permit

1 October 2009 - G2-4 Operators to comply Sect’s 5, 6 & 7 of the Code

1 October 2009 – All Operators to comply Code clauses 2.12, 2.22 - 2.25
Section 1 - Administrative Provisions
Section 2 - Design & Construction Requirements
Section 3 - Circulation & Water Treatment Systems
Section 4 - Chemical Safety
Section 5 - Water Quality & Testing
Section 6 - Qualifications for Operators & Supervisors
Section 7 - General Sanitation & Operation
Section 8 - Requirements for Special Facilities
Section 9 - Public Spa Pools
Section 10 - Special Requirements for Waterslides
Section 11 - Hydrotherapy Pools
The Code

Appendices

Appendix 1 - Approved Colors
Appendix 2 - Safety Signage
Appendix 3 - Requirements for Solar Water Heating
Appendix 4 - Requirements for Ozone Systems
Appendix 5 - Stairways, Ladders & Platforms
Appendix 6 - Slip Resistance Testing & Performance
Appendix 7 - Water Balancing
Appendix 8 - References
Appendix 9 - Acknowledgements
The Code

Use of External Standards


- External standards are dated referenced
  E.g. AS 1926.1-1993

- DOH/Aquatic Facility Working Group (AFWG) will review superseded standards & recommend EDPH amend Code (as appropriate).
The Code
Classification Table Factors

• 4 Aquatic Facility Groups

• Classification Criteria:
  - Facility Design Characteristics
  - Types of Personnel Accessing Facility
  - Types of Activities / Nature of use

• Starting Point - General Classification Examples
## Table 1 - Classification of Aquatic Facilities

<table>
<thead>
<tr>
<th>Patron Access Limitations</th>
<th>Activity</th>
<th>Technical Operator Requirements</th>
<th>Patron Supervision/ Emergency Care Personnel</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public access with limited restrictions e.g. child &lt; 10yrs accompanied by person ≥ 16yrs</td>
<td>Non structured <em>Typical examples; leisure, free-play &amp; lap-swimming</em></td>
<td>On-site at all times.</td>
<td>All patrons directly supervised. Emergency care personnel on-site at all times.</td>
<td><strong>Group One</strong> Facilities typically available to the general public for payment of an entry fee and examples include; aquatic centres, waterslides &amp; water-parks.</td>
</tr>
<tr>
<td>Restricted to discrete users and user groups</td>
<td>Structured Qualified activity leader present <em>Typical examples; infant aquatics, learn-to-swim, swimming and lifesaving classes and aqua-exercise</em></td>
<td>Not on-site at all times.</td>
<td>All patrons directly supervised. Emergency care personnel on-site at all times.</td>
<td><strong>Group Two</strong> Facilities generally include; schools, learn-to-swim centres, learn-to-dive pools, nursing homes, hospitals &amp; hydrotherapy/physiotherapy use pools.</td>
</tr>
<tr>
<td>Restricted to discrete users and user groups <em>Typical examples; Club members, commercial guests &amp; residents and guests</em></td>
<td>Non structured No qualified activity leader present <em>Typical examples; leisure, free-play &amp; lap-swimming</em></td>
<td>Not on-site at all times.</td>
<td>No direct supervision. Emergency care personnel able to respond within a reasonable period of time (See Sect 6.2.5).</td>
<td><strong>Group Three</strong> Facilities generally include; Discrete user access of group 1, 2 or 4 aquatic facilities (AF) by community/swimming groups, or; commercial developments for guests such as hotels, motels, resorts, serviced apartments, caravan parks, health clubs, mine sites, recreational camp-sites, lodging houses, staff/student accommodation complexes &amp; places restricted to adult only access.</td>
</tr>
<tr>
<td>Restricted to owner/occupier residents and guests</td>
<td>Non structured No qualified activity leader present <em>Typical examples; leisure, free-play &amp; lap-swimming</em></td>
<td>Not on-site at all times.</td>
<td>No direct supervision. No emergency care personnel on-site.</td>
<td><strong>Group Four</strong> Facilities generally include; Small temporary accommodation developments such as bed and breakfast and farm-stay facilities and permanent/semi-permanent residential development with 30 or more dwelling units/apartments and retirement/lifestyle villages that do not allow non-residential based club/member access to AF.</td>
</tr>
</tbody>
</table>
The Code
General Classification Examples

Group 1
Anyone can enter/pay fee
- LG aquatic centres
- Waterslides

Group 2
Education/Tuition based
- Schools
- Learn-to-swim
- Physiotherapy
- Dive Instruction

Group 3
Discrete user groups/set rules
- Hotel/ motels
  - Community operated facilities

Group 4
Residents/Guests/rules apply
- Residential Apartments ≥ 30 units
- B&B
- Chalets/Farm stays
The Code

Group 1
The Code
Group 2
The Code
Group 3
The Code
S2 - Design & Construction

General Requirements
- Surface Finishes
- Obstruction & Entrapment
- Floor Gradients
- Access & Egress
- Ventilation
- Concourses & Walkways
- Separation Distances
- Sanitary Amenities
- Backwash Water
- Electrical Safety
- Lighting/ Protection
- Shade Protection
- Fencing & Security

- More prescriptive
- Generally ONLY apply to New AF
- AF’s have until 1 October 2009 to comply with:

<table>
<thead>
<tr>
<th>MANDATORY REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.12</td>
</tr>
<tr>
<td>2.22</td>
</tr>
<tr>
<td>2.23</td>
</tr>
<tr>
<td>2.24</td>
</tr>
<tr>
<td>2.25</td>
</tr>
</tbody>
</table>
The Code
S2 - Design & Construction

Depth Markers

- Permanent
- Contrast colour to background
- Intervals not exceeding 7.5m
- Visible to person entering pool
- Indicate max & min depth
- Indicate water depths at all major deviations in shape
The Code
S2 - Design & Construction

- Close as practicable to corners of rectangular shaped water bodies

- Near to all designated entries not located directly over stair/step entries

- Display: horizontal & vertical surfaces (min height = 90mm)

- Required on vertical surfaces IF distance between concourse/coping deck/header & water level is ≥ 125mm

- Pictorial signage displayed to indicate sudden changes in gradient
Beach Entrance

CAUTION - DEEP WATER

0.6m
CAUTION - SHALLOW WATER

1.8m
NO DIVING

1.2m
DROP OFF

Sudden Drop Off

300mm

Government of Western Australia
Department of Health
CAUTION...
First Aid Facilities - Group 1

- Separate room or area
- Hand wash basin with reticulated potable water
- GPO outlet
- Communication system - phone & emergency No.
- Washable flooring
- Resuscitation Notice
- First Aid Sign
- Work bench - preparation cleaning/sterilisation of items
- Storage for 1st aid supplies & equipment
- Examination couch
First Aid Facilities - G2 & 3

- Resuscitation Notice
- First Aid Sign
- Hand wash basin with water
- GPO outlet
- Storage for 1st aid supplies
- Washable flooring
The Code
S2 - Design & Construction

First Aid Equipment - G1

- First Aid Kit
- Stretcher
- Blankets & Pillows
- Resuscitation Equipment:
  O2 therapy & supplementation for expired air resuscitation - child/adults
- Spinal Board & Extrication Collars
- Pocket Mask & Disposable Gloves
First Aid Equipment G2 & 3

- First aid kit
- Stretcher
- 2 blankets/pillows
- Pocket mask
- Disposable gloves
The Code
S2 - Design & Construction

Rescue Equipment Groups 1-3

- Provide appropriate rescue equipment e.g.
  - Reaching poles
  - Rescue tubes
  - Lifejackets
  - Throwing ropes
  - Throwing bags

- Excludes waterslide landing pools, or landing sheds
The Code
S2 - Design & Construction

Safety Signage

• Lists patron rules & behaviour

• Prominent location

Groups 3-4

• Display warning sign at entrance stating:
  "NO LIFEGUARD ON DUTY"
  100mm lettering
## Table 4 - Water Body Loading Category Chart

<table>
<thead>
<tr>
<th>Category</th>
<th>Loading Classification</th>
<th>Parameters</th>
<th>Examples</th>
<th>Maximum Permissible Turnover Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spas</td>
<td>Spa Pools</td>
<td>Spa Pools, Leisure Bubble Pools</td>
<td>15 mins</td>
</tr>
<tr>
<td>2</td>
<td>Extreme</td>
<td>Very High Bather Load, Very Shallow Water</td>
<td>Toddlers Pool, Water Slide Splashdown Pool</td>
<td>30 mins</td>
</tr>
<tr>
<td>3</td>
<td>Very High</td>
<td>Very High Bather Load, Heated Water, Shallow Water</td>
<td>Shallow Leisure Pool, Hydrotherapy Pool</td>
<td>1 hour</td>
</tr>
<tr>
<td>4</td>
<td>High</td>
<td>High Bather Load, Heated Water, Moderately Shallow Water</td>
<td>Medium Depth Leisure Pool, Learn to Swim, Wave Pool</td>
<td>1 ½ hours</td>
</tr>
<tr>
<td>5</td>
<td>Moderate</td>
<td>High Bather Load, Heated Water, Medium Depth Water</td>
<td>Full Depth Heated Leisure Pool, Lazy River, Medium Depth Unheated Outdoor Leisure Pool</td>
<td>2 hours</td>
</tr>
<tr>
<td>6</td>
<td>Light</td>
<td>Medium Bather Load, Heated Water, Medium Depth Water</td>
<td>Heated School Pool, Health Club Pool, Body Corporate, Caravan Park, Motel Pools Full Depth Unheated Outdoor Leisure Pool</td>
<td>2 ½ hours</td>
</tr>
<tr>
<td>7</td>
<td>Low</td>
<td>Low Bather Load, Deep Water</td>
<td>50m Competition Pool, Unheated Municipal/School/Motel etc Pool</td>
<td>3 ½ hours</td>
</tr>
<tr>
<td>8</td>
<td>Very Low</td>
<td>Very Low Bather Load, Very Deep Water</td>
<td>Diving Pool, Water Polo Pool</td>
<td>5 hours</td>
</tr>
</tbody>
</table>

- Generally only applies to **new AF** except, when altering existing filtration/water circulation system.
The Code
S4 - Chemical Safety

• Chemical storage requirements - Administered by Department of Consumer & Employment Protection Resource Safety Division

• Requires Compliance with:
  - Explosives & Dangerous Goods Act 2004
  - Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007
    • Adopts AS 2927 for Chlorine Gas handling/storage
New Tests

- Alkalinity = 60-200mg/L
- Calcium hardness = 50-400mg/L
- TDS ≤ 1000 mg/L above supply water, max = 3000mg/L

pH range

- Chlorine = 7.2-7.8
- Bromine = 7.2-8.0

- Maximum chlorine level = 10 mg/L
- Maximum water temperature = 38 °C
# The Code

## S5 - Water Quality & Testing

<table>
<thead>
<tr>
<th></th>
<th><strong>Minimum Free CHLORINE Levels - milligrams per litre</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Temperature</strong></td>
<td></td>
</tr>
<tr>
<td><em>&lt; 26C</em></td>
<td></td>
</tr>
<tr>
<td><strong>Unstabilised</strong> pools</td>
<td>1.0</td>
</tr>
<tr>
<td>cyanuric acid not used</td>
<td></td>
</tr>
<tr>
<td><strong>Stabilised</strong> pools</td>
<td>2.0</td>
</tr>
<tr>
<td>cyanuric acid is used</td>
<td></td>
</tr>
<tr>
<td><strong>&gt; 26C</strong></td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Spa & hydrotherapy pools**: 3.0

**Wading Pools**: 3.0
## The Code

**S5 - Water Quality & Testing**

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Water Temperature &lt; 26°C</th>
<th>Water Temperature &gt; 26°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swimming Pools, Wave Pools, Water Slide Receiving Pools</td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Hydrotherapy Pools, Spa Pools and Wading Pools</td>
<td>4.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>
• Minimum manual chemical water testing frequencies - free Chlorine/Bromine & pH (see table)

• Frequency of new tests not specified - Recommend 1/week/fortnight/month

<table>
<thead>
<tr>
<th>Group</th>
<th>Min Testing Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>every 4hrs</td>
</tr>
<tr>
<td>2</td>
<td>3 times/day</td>
</tr>
<tr>
<td>3</td>
<td>twice/day</td>
</tr>
<tr>
<td>4</td>
<td>once/day</td>
</tr>
</tbody>
</table>
Approved Test Kits

- Palintest Comparators
- Palintest Photometers
- Lovibond Comparators
- Lovibond Photometers

Please note that some test kits may need to be upgraded to facilitate additional tests.
The Code
S5 - Water Quality & Testing

Operator Responsibilities (Off-season)
i.e. AF closed/not in use for extended period

1. Display signs at all AF entry points:
   e.g. “FACILITY CLOSED FOR OFF-SEASON” or similar.

2. Maintain water clarity

3. Prevent algal growth, insect breeding, objectionable odours & other nuisances/safety hazards in/from water body.

4. Obtain approval from Local Govt EH Service to re-open.
<table>
<thead>
<tr>
<th>Type of Organism</th>
<th>Max Allowable Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterotrophic Plate Count</td>
<td>100 Colony Forming Units (CFU) per mL.</td>
</tr>
<tr>
<td>Presumptive Total Coliforms</td>
<td>&lt;1 per 100mL</td>
</tr>
<tr>
<td>Presumptive <em>Pseudomonas spp</em></td>
<td>&lt;1 per 100mL</td>
</tr>
<tr>
<td>(Only applies water temp &gt; 32°C)</td>
<td></td>
</tr>
<tr>
<td>Thermophilic Amoebae</td>
<td>Not Detected</td>
</tr>
<tr>
<td>Thermophilic <em>Naegleria</em></td>
<td>Not Detected</td>
</tr>
</tbody>
</table>
The Code
S7 - General Sanitation & Operational Requirements

7.1 Cleaning & Maintenance Requirements
7.2 Automatic Electric Cleaner Safety
7.3 Heat Blanket Safety
7.4 Electrical Safety
7.5 Hand Dosing of Chemicals
7.6 Prohibition of Entry Into Water Body
7.7 Prohibition of Animals
7.8 Operations Manual & Emergency Action Plans
7.9 Minimum Entry Age
7.10 Supervision Requirements
7.11 Operation of Diving Facilities & Starting Platforms
7.12 Qualifications of Coaching and Instructional Staff
7.13 Towel & Bathing Costume Hire
7.14 Maximum Bather Numbers
The Code
S7 - General Sanitation & Operational Requirements

Operation Manuals & Emergency Action Plans

- Operators of **G1-3 AF’s** to prepare in accordance with RLSSWA **Pool Safety Guidelines**:
  - GO1.01 - Operation Manuals
  - GO1.02 - Emergency Action Plans
# The Code

**S7 - General Sanitation & Operational Requirements**

## Operations Manual
- Facility Layout
- Training
- Occupational Health & Safety
- Personnel Policies & Procedures
- Supervisory Procedures
- Maintenance
- Water Quality
- Programs
- Emergency Action Plan

## Emergency Action Plan
- Routine Aquatic Emergency Procedures
- Major Incidents
- Staff Response
- Rescue & First Aid Equipment
- Emergency Services
- Evacuation
- Critical Incident Stress
- Practising Emergency Procedures
The Code
S7 - General Sanitation & Operational Requirements

Cleaning & Maintenance Requirements

- Maintain AF in:
  - good repair/sound working & sanitary condition
  - clean & free of litter & vermin

Automatic Electric Cleaners

- Do not leave in water when AF open for use

Heat Blankets

- RLSSA Pool Safety Guideline GO 1.05 - Pool Covers
The Code
S7 - General Sanitation & Operational Requirements

**Electrical Safety**

- **Do not** connect **GPO’s** located around concourse to power equipment when people are in water body.

- **Only** use mains power supply electrical equipment on dry surfaces.

- **Licensed Electrical Worker** shall test (every 6 months):
  - RCD’s
  - Cord extension sets
  - Portable electrical equipment
Hand Dosing Of Chemicals

- **Prohibited** when *water body* is occupied by:
  - Patrons/ Bathers

Towel & bathing costume hire

- Approved **CLEANING PROCESS** between each use:
  - *Health (Cloth Materials) Regulations 1985*
Minimum Entry Age - Group 1-3 AF’s

- 10 yrs, unless accompanied by a person 16+yrs
  - Guideline SU 1.11- Parental Supervision
  - Waterslides exempt from clause 4.2
    (i.e. do not need to supervise charges at all times)
## The Code
### Maximum Bather Numbers - Table 10

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Maximum Bather Numbers at any time (persons/m² of water)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spa Pool</td>
<td>1 person / 1.0m²</td>
</tr>
<tr>
<td>Toddler, Waterslide Splash Down, Leisure &amp; Hydrotherapy Pools</td>
<td>1 person / 2.0m²</td>
</tr>
<tr>
<td>Learn to Swim, Wave, Lazy River, School, Health Club, Strata Titled, Caravan Park, Motel &amp; Hotel Pools</td>
<td>1 person / 2.5m²</td>
</tr>
<tr>
<td>50m Competition, 25m Lap, Diving, Water Polo Pools</td>
<td>1 person / 3.5m²</td>
</tr>
</tbody>
</table>
Diving & Starting Platforms

• Operation = RLSSA Pool Safety Guidelines
  - SU 1.13 - Supervision of Diving Towers and Springboards
  - Starting Platforms: SU 1.23 Safe Diving for Competitions

• Supervision required whilst in use
The Code
S6 - Qualifications for Operators, Supervisors & Emergency Care Personnel

Encompass

• National Units of Competency
• RLSSWA Guidelines
• EDPH Approved Criteria
• Vary for different AF Groups
Approved Training Courses

FAQ

- **Code** requires AF personnel to hold a qualification obtained from EDPH approved training course comprising of specified national units of competency.

**Approved Courses (to date)**

- **Central Tafe (Royal Life Saving Society)**
  - Pool Operators Training Course (covers Group 1 qualification)

- **H2O Pro**
  - Pool Lifeguard Training Course (satisfies Group 1 Patron Supervision qualification requirements)
Training Provider
EDPH Approved Criteria

- Training course delivered through Registered Training Organisation (RTO).

- RTO registered by Training Accreditation Council (if delivering in WA), or listed on National Training Information Service website: www.ntis.gov.au

- Training course covers national units of competencies prescribed by the Code for relevant qualification.

- Course Trainers/Assesses hold Cert IV in Assessment & Training and/or are industry competent in relevant training/assessment delivery area.

- Written approval obtained from EDPH.
The Code
S6 - Qualifications for Operators, Supervisors & Emergency Care Personnel

Group 1 - General

• Personnel required to be on the premise whenever AF is open for use, with qualifications in:
  - Technical Operations
  - Patron Supervision
  - Emergency Care

• Recognition of existing qualifications

• Qualifications can be held collectively by staff
Technical Operator (TO)

- A person who holds a current technical operations qualification obtained from an approved training program, who engages in:
  - Operation & Maintenance of AF.
The Code
S6 - Qualifications for Operators, Supervisors & Emergency Care Personnel

Group 1

- **Technical Operations**
  - 8 Units of Competency (UC)
  - Currency = *LIWA Aquatics/ Equivalent Accreditation* every 3yrs

- **Patron Supervision**
  - 3 UC
  - Currency = *RLSSWA Pool Lifeguard Award/ Equivalent*
  - Reassessment = Annually

- **Emergency Care**
  - 1 UC
  - Currency = *Senior First Aid Certificate/ Equivalent*
  - Re-assessment = every 3 years
Group 1 - Technical Operators Accreditation

- Pool Operators Training Course Certificate
- Current Senior First Aid Certificate/ Equivalent
- Current RLSS Pool Lifeguard Award/ Equivalent
- Details past/present aquatic industry employment
- Attend 2 professional development seminars in 3yrs
Supervision

- Adequate & constant surveillance of persons in water by a person appropriately qualified to:
  - anticipate problems
  - quickly identify emergencies
  - provide appropriate & timely response

- Group 1-2 AF’s require direct supervision
- Group 3 AF’s are not required to provide supervision
Supervision Group 1-2 AF’s

- Group 1 = 1 Lifeguard for every 100 patrons
- Locate supervisors to maintain water supervision

Supervisors - Assigned Duties (Should not)

- Distract patron supervision (at all times)
- Inhibit ability to provide immediate assistance to:
  - patrons in distress
**Supervision**

**Other Duties**

- **Typically** the following duties would not impact on patron safety;
  - Minor maintenance carried out during low patronage times
  - Daily routine activities (admittance, kiosk, water testing)
  - Setup and re-position lane-ropes
  - Prepare and re-position lane signage
  - Litter pickup
  - Re-position minor furniture and equipment on pool deck
  - One on one interaction with patrons, for general customer service or enforcement of rules.
  - Lifeguard rotations
Qualifications of Coaching & Instructional Staff

- Only applicable to **Group 2 Activities**
- Hold appropriate industry qualification
- Removes need for dedicated lifeguard
# The Code

## Qualifications of Coaching & Instructional Staff - Table 9

<table>
<thead>
<tr>
<th>Aquatic Activity</th>
<th>Approved Industry Standard or Equivalent</th>
</tr>
</thead>
</table>
| **Swimming & Water Safety Instruction** | • Royal Life Saving Instructor of Swimming & Water Safety Certificate or  
|                                       | • AUSTSWIM Teacher of Swimming & Water Safety                                  |
| Competitive Swimming Coaching         | Australian Swimming Coaching Qualification                                      |
| Platform & Springboard Diving        | Australian Diving Association Coaching Qualification                           |
| SCUBA Diving                          | Dive Instructor Qualification from a recreational SCUBA training organisation. |
| Aqua-Exercise                         | Australian Fitness Association Council Aqua-Exercise Leaders Certification       |
| Hydrotherapy                          | Registered Physiotherapist                                                      |
Waterslides - Supervision Qualifications

• A **competent** person shall supervise:
  – flume entrances

• A person holding a current **Senior First Aid Certificate/equivalent** shall supervise:
  – flume exits & landing pools
Groups 2 & 3

- Operate & maintain AF by personnel holding qualifications in:
  - Technical Operations
  - Participant Supervision/ Patron Rescue
  - Emergency Care (First Aid Certificate)
# The Code

**S6 - Qualifications for Operators, Supervisors & Emergency Care Personnel**

## Group 2-4 - Technical Operations

- SRC AQU 001B  Monitor Pool Water Quality
- SRC AQU 002B  Operate Aquatic Facility Plant & Equipment
- SRC AQU 004B  Maintain Pool Water Quality
- SRX OHS 001B  Follow Defined Occupational Health & Safety Policies and Procedures
Technical Operations Requirements
Group 2-4

- A person other than a technical operator may do the daily manual water body chemistry testing if instructed by a technical operator.

- Checks water quality not plant & equipment

- Report results outside required range to Technical Operator for further advice/action.

- Technical Operator e.g. may visit AF once/week, except when responding to report of water quality problem.
Accessing Training
Potential Training Providers

**Technical Operations**

- Central Tafe *(via Royal Life Saving Society)*
- State Training Services *(via StateSwim)*
- Smart Connection Company
- Aquatic Operations Development Australasia
- Poolwerx
  - Monitor pool water quality (only)
The Code
S6 - Qualifications for Operators, Supervisors & Emergency Care Personnel

Groups 2

- Personnel with the following qualifications must be on the premise whenever AF open/available for use:
  - Participant Supervision/Patron Rescue
    - E.g. Aquatic Rescue Award/Certificate
  - Emergency Care
    - E.g. Senior First Aid Certificate
Groups 3

- Personnel with the following qualifications must be able to “respond to a call for help quickly enough to minimise the chance of a person suffering long-term damage as a result of an incident”:
  
  - Participant Supervision/Patron Rescue
    - i.e. Aquatic Rescue Award/Certificate
  
  - Emergency Care
    - i.e. St Johns (Workplace First Aid Certificate)
Emergency Care Qualifications

Groups 1 & 2
HLTFA 1A Apply Basic First Aid

Group 3
HLTFA 201A Provide basic emergency life support

- Currency FIRST AID CERTIFICATE = Reassessment every 3 years
The Code
S6 - Qualifications for Operators, Supervisors & Emergency Care Personnel

Group 2 - Participant/Patron Supervision

- SRC AQU 003B Respond to an aquatic emergency using basic water rescue techniques

Annual Reassessment

Or Table 9 in the Code
The Code
S6 - Qualifications for Operators, Supervisors & Emergency Care Personnel

Group 3 - Participant/Patron Supervision

• SRC AQU 003B Respond to an aquatic emergency using basic water rescue techniques

Or

• Aquatic Rescue Course Approved by EDPH:
  - RTO, industry expertise (bronze medallion & resuscitation) & examiner
  - RLSS, Surf Life Saving, Paddy’s Dive Instructors, G1 Pool Manager’s & Industry?
  - Dry Rescue, Wet Rescue, Recover & Resuscitate (video)
  - Knowledge Component - water safety/spinal injury (multiple choice Q’s)

• Update every 3 years
Accessing Training
Other Potential Providers

Aquatic Rescue Award for G2 AF’s
- Royal Life Saving Society (RLSS)
- H2O Pro

First Aid Certificates
- Red Cross
- St Johns Ambulance
- RLSS

- Further info regarding RTO’s, Training Courses & national units of competency are available on the NTIS website or by contacting Training Accreditation Council
The Code
S8 - Structural Requirements for Special Features

- Diving (Platform & Springboard) Facilities
- Moveable Booms
- Water Features
- Wave Pools
- River Rides
The Code
S9 - Public Spa Pools

Design Requirements

AS 2610.1-1993 Spa Pools
Part 1: Public Spas

Min Water Body Turnover:
Table 4 of Code = 15 mins
The Code
S10 - Special Requirements for Waterslides

Design Requirements

- Engineers Certification
  - Structural adequacy
  - Flume design

- Access Ladders/Stairs
  - Appendix 5 of Code

- Landing Pool

Operation Requirements

- Safe Rider Speeds
The Code
S11 - Hydrotherapy Pools

Design Requirements

AS 3979 - 1993 Section 2, excluding:

- 2.1.7 Lighting
- 2.2.4.2 Indicators
- 2.2.6 Concourse drainage & finish
- 2.2.9 Water circulation
- 2.3 Electrical equipment
- 2.5 Pool covers
- 2.6 Storage areas

Wherein Section 2 of the Code shall apply
Aquatic Facilities Working Group (AFWG)

- DOH sent out expressions of interest for AFWG (FEB 08) - seeking wider representation than Swimming Pool Working Party

- AFWG includes approx 20 representative organisations:
  - WALGA, EHA, SPASA, LIWA, RLSS, APA, CIAWA, RVA, STIWA, DoSR, DoHW, DoET, Architects, Engineers, Water Treatment Specialists & Pool Maintenance

- Meetings held: 13 May & 29 July 2008

- Key Agenda Items:
  - General Construction Issues
  - Group 1 Single Person Operator Proposal
  - Review Aquatic Rescue/ First Aid Qualification Requirements G3
  - Technical Operator Clarification
  - Qualification Equivalency
  - Amendments to Regulations - AF Definition, Water Sampling, Extend timeframe G2-4
Guidance Notes

- AFGN#3 - Clarification of Pool Managers Qualification Req’s
- AFGN#4 - Aquatic Facility Water Body Remedial Action Pathway
- AFGN#5 - Summary of Code & Regulation Amendments & Aquatic Facility Working Group Resolutions
- AFGN#6 - Lowering Aquatic Facility Classification
- AFGN#7 - Water Sampling Requirements
- AFGN#8 - Frequently Asked Question’s
AFWG
Spray-parks

[Images of various spray-parks]

Department of Health
AFWG

Spray-parks - Large Systems

• Require large quantities of water at demand

• Costing/sizing difficulties i.e. cost of providing very large filters/holding tanks to filter & hold filtered water

Industry Consideration
• High turnover rate (≈30mins)
• % re-circulating water not filtered

Primary Water Quality Concerns
• Amoebic Meningitis
  - Adequate free Cl residual & contact time will resolve e.g. 2mg/L for 3 mins (maintain holding tank at 2mg/L free chlorine)

• Cryptosporidiosis
  - Possible solution: UV disinfection & ultra-fine filtration
Repealed Regulations

Construction (cont... application, unless alteration)
- lighting, fencing, pool floor gradient

The Regulations

Construction & Operation (Sect’s 5, 6 & 7)
- Criteria = health & safety, performance & public interest
Application & Continuation of Exemptions
FAQ - Group 2-4

Repealed Regulations

Operational (applicable until 1 October 2009)
• water chemistry/samples, Cl gas storage, manager’s qualifications

Construction (cont... application, unless alteration)
• lighting, fencing, pool floor gradient

The Regulations

Construction & Operation (Sect’s 5, 6 & 7)
• Criteria = health & safety, performance & public interest
LG/EHO Role to Inspect AF’s

FAQ

Repealed Regulations
- LG to notify EDPH when pool construction commenced
- EDPH requested LG to inspect constructed non-approved pools

The Regulations
- EHO to collect water samples (monthly)
- LG/EHO may issue improvement/closure orders or prosecute
- Implies AF inspection for operational (primary) & construction.

Recommendation
- Start-up/annual audit - focus on construction
- Check different operational aspects upon subsequent AF visits
Thanks for listening

Any Questions?
Additional Information

General: 9388 4911
Fax: 9388 4905
Email: swimmingpools@health.wa.gov.au
Web: www.public.health.wa.gov.au