

INFORMATION REQUIRED PRIOR TO SWIMMING POOL CONSTRUCTION

The information found in these pages, summarizes the requirements found within the Health (Swimming Pools) Regulations 1964 and that specified by the Department of Health (DOH), to assist the builder, developer, or owner when applying to the DOH to construct, alter, extend or upgrade any swimming pool used by or in connection with any Club, School, Business, Association or Body Corporate, including but not limited to; Swim Schools, Hotels, Motels, Resorts, Health Clubs, Caravan Parks, Mine - Sites, Recreational Campsites, Strata - Titled Residential Premises, Flats, Home Units and Bed & Breakfast/Farm Stay Facilities.

Please note, this information is primarily directed at Group 2, 3 & 4 facilities classified in accordance with the Draft Aquatic Facilities Legislation, Code of Practice.

The information provided may not adequately address the scope of Group 1 and some Group 2 facilities; hence the DOH recommends that when Group 1 & 2 defined facilities are involved, you refer to the DOH previous document titled: Guidelines for the Construction Opening, Alteration or Extension to Swimming Pools, in conjunction with these pages.

Although intended to be a fairly comprehensive list of information, for Group 2, 3 & 4 defined facilities, please note that differing facilities may incorporate designs and features not necessarily covered within the scope of these pages. Therefore the DOH assessment of submitted plans and specifications may require you to provide additional information.

Please note, the *Health (Swimming Pools) Regulations 1964* are the existing legislation, with respect to all public defined swimming pools. However we recommend you take a look at the proposed Draft Aquatic Facilities Legislation and its associated Code of Practice, at the planning stage of intended works, and consider what implications the proposed Legislation and Code of Practice may have with respect to existing swimming pools in the future.

You can access a copy of the proposed Draft Aquatic Facilities Legislation/Code of Practice, on the following DOH website;

<http://www.population.health.wa.gov.au/environmental/resources/information-sheet%5Faquatic%5Ffacilities.pdf>

Additionally the existing Health (Swimming Pools) Regulations 1964 can be obtained, from the State Law Publisher, located at 10 William Street, Perth.

For further enquiries please call the Applied Environmental Health Branch on 9388 4819.



Application Form

NOTICE TO CONSTRUCT, ALTER OR EXTEND A SWIMMING POOL HEALTH ACT (SWIMMING POOLS) REGULATIONS, 1964

1. LOCATION OF PROPOSED POOL:

Contact Persons Name: _____
Business Name (if applicable): _____
Pool Address: _____

Suburb: _____ Post Code: _____

Name of Local Government: _____

2. PROPERTY OWNER:

Owners Name: _____

Business Name: _____

Address: _____

Suburb: _____ Post Code: _____

Phone No's: (Wk) _____ (Mobile) _____ (Fax No.) _____

3. OWNERS AGENT:

Contact Person: _____

Business Name: _____

Address: _____

Suburb: _____ Post Code: _____

Phone No's: (Wk) _____ (Mobile) _____ (Fax No.) _____

4. POOL BUILDER:

Contact Person: _____

Business Name: _____

Address: _____

Suburb: _____ Post Code: _____

Phone No's: (Wk) _____ (Mobile) _____ (Fax No.) _____

IMPORTANT INFORMATION

- Plans and specifications of the swimming pool must be approved by the Executive Director, Public Health (EDPH) prior to the commencement of work as required by the Regulation 4(1) of the Health (Swimming Pools) Regulations 1964.
- Work must be carried out in accordance with the conditions of approval. The swimming pool must not be opened until it has been inspected by an Environmental Health Officer and approved by the EDPH.
- Non compliance may result in legal action being brought against the owner.
- Any of the following may complete this application form:** The owner/occupier/manager/pool builder/or trusted persons by whose authority such swimming pool is intended to be so built/extended.

5. This application form, accompanied by **Two (2)** copies of the plans and specifications or description of the work and block plans in accordance with Regulation 3 of the Health (Swimming Pools) Regulations 1964, should be returned to:

Executive Director, Public Health
Attention: Applied Environmental Health
PO Box 8172
Perth Business Centre
PERTH WA 6849

Please Print Name: _____

Signature: _____ Date: _____

NOTICE TO BE SENT TO EXECUTIVE DIRECTOR, PUBLIC HEALTH AND LOCAL GOVERNMENT

Regulation 3

3. (1) Whenever it is intended to construct, open, alter or extend any swimming pool, the occupier shall give notice to the Executive Director, Public Health and to the local authority of such intention.
- (2) The notice to the Executive Director, Public Health shall be accompanied by:
- (a) 2 copies of plans, specifications and a description showing the mode or proposed mode of construction, draining, ventilating and lighting the swimming pool, the quantity of water which the swimming pool is intended to hold and the capacity of the filtration and other water treatment units; and
 - (b) a block plan showing the position of the swimming pool in relation to the position and distribution of sanitary conveniences and the lands on which the swimming pool abuts and the purposes for which those lands are used.

Approval of Executive Director, Public Health to be obtained

Regulation 4

4. (1) A person shall not commence the construction, opening, alteration, or extension of a swimming pool until the written approval of the Executive Director, Public Health to the plans, specifications and action to be taken has been obtained.
- (2) The local authority of any district wherein the construction, opening, alteration or extension of a swimming pool is commenced shall forthwith notify the Executive Director, Public Health in writing.

Exemption from a Qualified Person

Regulation 14

- 14 (2) The occupier shall ensure that a person qualified in methods of rescue and resuscitation of apparently drowned persons is always present on the premises when the swimming pool is in use.
- 14 (4) The Executive Director, Public Health may by instrument in writing exempt an occupier from complying with subregulation (2) in respect of a swimming pool if the Executive Director, Public Health is satisfied:
- (a) that because of the size or location of the pool, or the number of persons entitled or likely to use the pool, it would be unreasonable to require the occupier to ensure that a person who has the qualifications referred to in subregulation (3) is present whenever the pool is in use; or
 - (b) that in view of the class or classes of persons entitled or likely to use the pool, or of the safety measures enforced and supervision provided at the pool, it is not necessary to require that a person who has those qualifications be present whenever the pool is in use.

INFORMATION TO PROVIDE THE DEPARTMENT OF HEALTH FOR SWIMMING POOL CONSTRUCTION / ALTERATION OR UPGRADE

BLOCK PLAN

One block plan is required.

It must show the location of the swimming pool, first aid room, sanitary facilities, other buildings, security fences, shade structures, position of overhead lighting and site boundaries.

(Scale 1:200)

SWIMMING POOL

Provide drawings to show the plan, section and elevation views.

Details required include; length, width, depth, method of construction, pool and concourse gradients and drainage, associated water features, water falls and ponds, ventilation (if enclosed), underwater lighting and the location and size of depth markings.

PLUMBING SCHEMATIC

Provide a plumbing schematic that illustrates the plumbing layout for the pool and plant - room area with the following items indicated;

- Water flow direction (including return inlets & outlets for the pool)
- Pipe diameters
- Pumps
- Filters
- Valves
- ORP/ pH sensor point
- Sterilisation injection points
- pH correction point
- Skimmer boxes / Balance tank
- Make up water point
- Heating equipment (including associated water circulation)
- Associated water feature / water fall water circulation
- Backwash disposal
- Sight glasses
- Sample taps

PLANT ROOM

Provide a drawing / sketch to illustrate the size and layout of the plant - room equipment, including chemical bunding (to 110% of the proposed storage volume), drainage and ventilation (*Scale not less than 1:100*).

Chlorine and acid chemicals shall be separated and stored in secure containment bunds, designed to withstand the effect of the chemical to be stored therein.

ELECTRICAL

- Confirm that a certificate from the electrical contractor at the completion of all electrical works, with specific reference to the following will be provided;
 1. Compliance with the AS/NZS 3000:2000 Wiring Rules for all electrical works.
 2. Equi - potential bonding of pool and concourse steel reinforcing, together with all metallic objects that have a dimension greater than 100 mm that are within 3 metres of the pool.
 3. All power supplies leading to pool pumps and appliances are RCD protected.

LIGHTING

- Confirm in writing whether the pool will be used during the hours of darkness.
- If the swimming pool is to be used during the hours of darkness, the pool must be illuminated by overhead lighting, to a minimum of 43 lux, and an average of 86 lux at 900mm in from the edge of the pool. Lighting must be installed to prevent excessive glare. Pool decks shall be illuminated to a minimum distance of 3.6m from the perimeter of the pool.
- An isolux plot of the proposed installation must be provided before a construction approval for the pool will be issued, thus to prevent non-complying installations being installed.

Or alternatively;

- If the swimming pool is not to be used at night, a sign must be displayed near the entrance of the pool identifying the hours the pool will be used and stating the pool is not available for night use.
- Confirm in writing that a sign will be displayed near the entrance of the pool gate stating with words to the effect “pool open for daylight use only”, “pool is not available for night use”, or “Pool only available for use - sunrise to sunset”.

POOL FLOOR COLOUR

The pool is to be finished in a light colour with a light reflecting value of not less than 60 per centum.

Your attention is drawn to the following selection of colours from the AS 2700 Colour Standards for General Purposes that have been approved as swimming pool floor colours. Please note that only these colours are proposed for approval in the Draft Aquatic Facilities Legislation, Code of Practice - Appendix 1.

N (Grey or Neutral) Group

N 11 Pearl Grey
N 12 Pastel Grey
N 14 White

G (Green) Group

G 32 Opaline G 45 Chartreuse
G 42 Glacier G47 Crystal Green
G 43 Surf Green

B (Blue) Group

B 32 Powder Blue
B 33 Mist Blue
B 35 Pale Blue
B 45 Sky Blue

P (Purple) Group

P 21 Sunset Pink
P 31 Dusty Pink
P 33 Ribbon Pink

X (Yellow - Red) Group

X 31 Raffia
X 32 Magnolia
X 33 Warm White
X 34 Driftwood

Y (Yellow) Group

Y 31 Lily Green Y 35 Off White
Y 32 Flummery Y 45 Manilla
Y 33 Pale Primrose
Y 34 Cream

R (Red) Group

R 32 Apple Blossom
R 33 Ghost Gum
R 34 Mushroom Pink
R 41 Shell Pink

T (Blue - Green) Group

No approved colours in this group

- Indicate in writing the proposed colour of the pool floor.

If the proposed pool floor colour is other than those AS 2700 colours designated in Appendix 1, or white, you are required to submit a sample, or a colour chart of the proposed colour to the Department of Health (DoH).

- If the swimming pool floor incorporates a number of different colours, designs or patterns, then a drawing of the pool floor area with the proposed colours, designs or patterns indicated is required to be submitted for approval.

SANITARY FACILITIES

- What is the proposed distance (m) between sanitary facilities and the swimming pool?
- Confirm/ provide a plan to indicate the number of toilets, showers, handbasins, and what changeroom facilities will be provided for both male and females.

DEPTH MARKINGS

- Depth markings must be clearly indicated on a plan of the pool.
- Confirm that depth markings will be displayed at regular intervals (approximately every 6 - 8m), on all sides, and directional changes located on the concourse and pool walls, and to be of a colour that contrasts the pool walls and concourse colours.
- We recommend that depth markings are 150 mm in size (confirm sizing).

SECURITY

- Confirm in writing that swimming pool gates, fencing, and enclosure will comply with Australian Standard 1926.1.
- Confirm the type of pool fencing & gates you propose to install.

POOL FLOOR GRADIENT

The pool floor gradient must be constructed in accordance with Health (Swimming Pools) Regulations 1964, sub regulation 7A (1) (c) - if the length of the pool is < 12.5m, or 7A (1) (d) if the length of the pool is 12.5m or greater and the water depth is less than 1.75 metres.

- Provide a cross sectional diagram of the pool. This diagram must include measurements that include the pool length and pool depths (at the shallow and deep points of the pool).

DIVING BOARDS

- Provide details of any proposed diving board/s, or platform/s for the pool. Indicate all dimensions including but not limited to the board/ platform height above water, distance overhanging water, separation distances between boards/ platforms.

CONCOURSE/ POOL SURROUNDS

- Confirm in writing that the concourse will be constructed using a flat non - slip material that is graded to drain away from the pool.
- Confirm what material will be used for concourse construction.

- Indicate the method of concourse drainage, eg: floor wastes, grass areas.
- Provide a schematic diagram of all waste disposal points on the pool concourse that allows drainage from the pool.
- Confirm that landscaping will be sufficiently enclosed as to prevent soil run-off into the pool.

DISINFECTION/ FILTRATION SYSTEM

Company names that have been used in approved disinfection systems include, but may not necessarily be limited to the following;

- Chemigem
- Autochem
- Aquarius
- US Filter - Stranco
- Strantrol
- Dolphin
- Prominent

Isolated salt chlorinating systems are not approved by the Executive Director Public Health (EDPH). Back-up liquid chlorine injection systems in addition to salt chlorinators have previously been approved by the EDPH but in many situations do not work properly together. Research on the performance and reliability of salt chlorination systems are currently being investigated and maybe approved in the future, however for the time been are viewed as non - compliant.

- Confirm in writing that you will provide a disinfection system that incorporates an automatic disinfection & pH correction, oxidation reduction potential (ORP), or Amperometric monitored system.
- Confirm and indicate on a plan (scale not greater than 1:100) that the chlorine injection point will be located prior to filtration. Sensor points must be located prior to chemical injection points.

TURNOVER/ FILTRATION RATE

- Have a qualified hydrological engineer or other competent individual (with demonstrated industry experience) certify the design performance of the proposed filtration system by completing, signing and returning the attached pool filtration datasheet. The certification should be accompanied by performance curves for the pumps, with the duty points indicated under clean and dirty conditions.
- Ensure the pump can complete one pool change in less than eight hours with a clean or dirty system. Also bear in mind the proposed turnover rates as documented in the proposed Draft Aquatic Facilities Code of Practice (See DOH website for details).

**BASIC POOL FILTRATION AND SYSTEM DESIGN
PERFORMANCE INFORMATION
(To be completed for each independent plumbing system)**

LOCATION		
DESCRIPTION (Swim, diving, spa,)		
CAPACITY (CUBIC METRES)		
PUMP MAKE/MODEL		
NUMBER OF PUMPS TO OPERATE SIMULTANEOUSLY		
FILTER MAKE/MODEL		
NUMBER OF FILTERS IN USE SIMULTANEOUSLY		

TOTAL SYSTEM PERFORMANCE DATA		FILTER CLEAN	FILTER DIRTY
Filter Resistance (KPa or Metres) (See note 2)			
Total Plumbing Resistance (Kpa or Metres)	+		
Head (Kpa or Metres) (See Note 5)	±		
Total System Resistance (At total system flow rate) (KPa or Metres) (See note 3)	=		
Pump Rate (Kpa or Meters)			
Total System Resistance (KPa or Metres)	-		
Total System Flow Rate (L/Min or L/Hour) (See notes 1 and 2)	=		
Total Pool Volume (L)			
Total System Flow Rate (L/Min or L/Hour)	÷		
POOL TURNOVER RATE	=		

NOTES:

1.	Pump manufacturers performance curves with the duty points under clean and dirty filter conditions clearly marked thereon must accompany this statement.
2.	Data from the filter manufacturer stating maximum allowable flow rate must accompany this statement.
3.	The "total system flow rate" is the flow to be circulated to and from the pool with all pumps operating simultaneously. It must not count stand-by pumps.
4.	System schematic diagram showing the point of chlorination and distances between pool inlets and outlets must accompany this statement
5.	Pressure loss or gain due to vertical separation of pump and water level

HEATING CIRCUIT

Water connected to the disinfection/ filtration system that undergoes heating, must not return to the pool without first being chlorinated and filtered.

- Confirm whether the pool will be heated.
- If the pool is to be heated, provide a plumbing schematic of water flow through the heating system.

INLETS/ OUTLET POSITION

- Ensure that the inlets and outlets are located no more than a maximum distance of 13 metres from each other.
- Show on a plan (scale not less than 1:100) the positions of pool inlets/ outlets.
- Confirm that the plumbing for the vacuum point in the pool wall shall be installed so that the possibility of having full suction is excluded to prevent possible entrapment.

Ensure the vacuum line is installed prior to chemical sensors and chemical injection.

- Provide pipe function and flow direction identification for pipe-work in the plant room.

TOP UP/ MAKE UP WATER

- Indicate on a plan the position of make - up water for the pool.
- Confirm that make up water will be introduced prior to chemical sensor injection points, via a permanent plumbing fixture.

The make - up water can be installed, either into the skimmer box / balance tank, or plumbed directly into the pipe - work, which takes water from the skimmer box / balance tank to the filtration pump.

If make -up water is connected into the skimmer box, ensure that the make - up water entry point is above the pool water line or that the make - up line is fitted with a back flow prevention valve.

POOL TEST KIT

- Confirm which one of the following approved manual water test kits, will be provided and stored permanently onsite, for the daily testing of pool water;
 - Lovibond Comparator
 - Palintest 2000 Comparator
 - Lovibond Photometer
 - Palintest Photometer

FIRST AID EQUIPMENT

The first aid room must be accessible at all times whilst the pool is in use.

- Provide details to indicate the location of the first aid room/place and confirm that this will be equipped with the following;
 - Handwash basin with running water
 - First aid kit.
 - Stretcher.
 - 2 woollen or thermal blankets.
 - Resuscitation (CPR) notice, or /& displayed by the pool side.
 - First aid sign indicating the location of the first aid room/place.

BACK WASH DISPOSAL

- Indicate the proposed backwash water disposal method.
- Confirm that written proof will be provided indicating that approval has been granted by the Local Government in the case of on-site disposal, or from the Water Corporation if disposal is via sewer.

CHLORINE GAS STORAGE

- Indicate on a site plan the location of chlorine gas storage.
- Confirm that chlorine gas storage will either comply with AS/ NZS 2927: 2001 or alternatively the following items;

Chlorine gas will be stored in a separate, well ventilated, lockable room, kept free of combustible or inflammable materials, fitted with a floor at or above ground level, protected from direct sunlight and isolated from the rest of the building.

The storage room will not be connected to a ventilating, or air conditioning unit, or be adjacent to a furnace, heating element or radiator.

- Confirm that either a self – contained breathing apparatus, with a 10 minute minimum protection against chlorine, or an AS 1716 self - contained breathing apparatus, will be provided and stored in a readily accessible place away from, but near to the area likely to be contaminated.
- Confirm that all personnel shall be trained in the use of such apparatus, and that apparatus will be regularly tested and maintained.

CHEMICAL STORAGE

Liquid chemicals should be stored within permanent bunding, at least 110% capacity of the maximum quantity of chemicals to be stored therein. Bunding should also be impervious to acids and chlorine and protected from rain and sprinklers to prevent bunding from filling up with water.

- Provide details of bunding to be provided for liquid pool chemicals.

WATER FEATURES/ WATER FALLS

- Confirm in writing whether any water features / water falls will be provided in conjunction with the swimming pool.
- If water features / water falls are to be provided, then elevation plans of water features/ water falls, and water circulation schematic/s are required.
- Water entering the pool from a water feature, must be filtered and can not be taken directly from the balance tank.

SWIMMING POOL MANAGERS EXEMPTION

The occupiers of all defined pools (including those located in strata titled apartments/mining sites/clubs developments), are required to ensure the pools are provided with a full time, fully qualified swimming pool manager. However the Regulations allow the Executive Director, Public Health to exempt a facility from this.

The **owner/ occupier**, or the **person/ group** who will be responsible for the **management** of the pool upon completion, is required to write to the Executive Director of Public Health to apply for this exemption before the pool will be approved for use. The following details must be included when applying in writing to the Executive Director, Public Health for this exemption.

Note - The letter must be addressed to the Executive Director, Public Health.

- Name / title, contact number & address of person / group to whom the exemption shall be granted
- Address and location of swimming pool
- Name and contact details of nominated persons to manage and maintain the pool
- Type of establishment
- Approximate number of pool users per day
- Hours pool is open
- Qualifications of Supervisor (if applicable)
- Conditions of pool use
- Provide a statement explaining how the pool will be supervised/ managed

And post the application to:

Executive Director of Public Health
PO Box 8172
Perth Business Centre WA 6849