



Pool Owner & Operator Information Package



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Included in this package:

- Letter to Owner/Operator
- Pool Opening Notification Form

Key information from Ontario Regulation 565/90 - Public Pools:

- Emergency Telephone
- Pool Water Clarity and the Black Disc
- Swimming Pool Outlet (Main Drain) Covers
- Safety Equipment
- Equalizer Fittings
- Adding Make-up Water to the Swimming Pool
- Calculation of Maximum Bather Load

Additional Information:

- Emergency Procedure Sign
- Chemical Safety Reference Guide
- First Aid Box Requirements
- Sample Daily Record of Swimming Pool Operation
- Pool & Spa Operator Training Course Contact List

Ontario Regulation 565/90, Public Pools may be found at:

<http://www.e-laws.gov.on>



The Halton Region Health Department has prepared this package to assist you in opening your swimming pool for the summer season.

Public pools are regulated under Ontario Regulation 565/90, Public Pools (O. Reg. 565/90). It is the responsibility of the swimming pool owner and operator to comply with this regulation and to operate and maintain the pool in a safe manner. This package includes detailed information on specific requirements of the regulation. A copy of Ontario Regulation 565/90, Public Pools may be found at www.e-laws.gov.on.ca.

The regulation requires that pool owners designate an operator to be responsible for pool operations. Operator training is highly recommended by the Halton Region Health Department. A list of companies and associations offering pool and spa operator training courses is included in this package.

The operator's name and address must be included on the enclosed Notification Form, which is to be completed and returned to the Health Department at least two weeks prior to the anticipated opening date of the pool. Once this notice is received, a Public Health Inspector will contact you to schedule an inspection. It is the responsibility of both the owner and operator to ensure that the swimming pool meets the requirements of O. Reg. 565/90 when the pool is opened for use. Please be advised that if the pool does not meet these requirements, the inspector may close the pool.

Please contact the Halton Region Health Department if you have questions by dialing 311.

Pool Opening Notification Form

As required by section 5(3) of O. Reg. 565/90, I wish to notify the Medical Officer of Health of my intention to re-open this swimming pool for the coming season.

Pool Information

Pool/Building Name:		
Pool/Building Address:	City:	Postal Code:
Class of Pool - A or B (O. Reg. 565/90 section 2):		
Proposed Opening Date:		
Pool Hours:		

Owner/Operator Information

Registered Owner of the Premise:		
Address:	City:	Postal Code:
Telephone:	Fax:	
Contact Name & Telephone/Ext (if corporation):		
E-mail (optional):		

Contact for pool inspection:

Owner or Operator Signature: _____ Date: _____

Please complete in full and return (fax, mail, or in person) to:

Halton Region Health Department

Health Protection Services
1151 Bronte Rd., Oakville ON
L6M 3L1
Fax: (905)825-8797

Must be received at least **two weeks** in advance of pool opening.





Emergency Telephone

Please refer to O. Reg. 565/90, section 2, to determine if your swimming pool is Class A or Class B.

Class A Pool - O. Reg. 565/90 section 16(1)(a)

The emergency telephone must be easily accessible from the deck and directly connected to an emergency service or the local telephone utility.

Class B Pool - O. Reg. 565/90 section 16(1)(b)

The emergency telephone must be accessible no farther than 30 metres from the pool.

Cordless and cellular phones are not acceptable emergency telephones.

Testing Requirement - O. Reg. 565/90, section 16(2)

The operator is required to test the emergency telephone and document that the phone is working each day before the pool is open for use.

If the emergency telephone is either not available or not working, the operator is required to close the pool immediately. Document the closure in the daily log records.

Signage

Section 19(3) requires that a notice identifying the emergency telephone be posted at the telephone.

A sample emergency procedures sign is provided with this package to post at the emergency telephone. This sign is required in addition to the emergency telephone sign. Ensure the sign is laminated or protected from weathering.



Pool Water Clarity and the Black Disc Test

O. Reg. 565/90 sections 6(4)(1) and 7(4)

Pool water clarity is one of the most important factors in the safe operation of a swimming pool. Poor water clarity has resulted in bather injuries and death and can result in increased pool maintenance costs.

The black disc is used as a visibility standard for measuring pool water clarity.

The **black disc** must be:

1. 150 millimetres in diameter
2. Surrounded by a white background (having the same or greater diameter as the black disc)
3. Secured to the deepest point on the pool bottom so that it is not easily moved to a shallower depth
4. Maintained in good condition

The black disc must be **clearly visible** from any point on the deck **nine metres away**.

When water clarity becomes poor and the black disc may not be clearly observed from a nine metre distance, the operator is legally required to close the pool until the black disc can be clearly observed from nine metres away.

An operator is also required to close the pool if the black disc is not present.

The pool closure is to be documented in the daily log records.



Swimming Pool Outlet (Main Drain) Covers

O. Reg. 565/90 section 16.1(2)

In 1991, a lifeguard drowned when her foot became stuck in the main drain cover of a public swimming pool. A Coroner's inquest into the incident found that this accident would not have happened if the cover of the main drain was in place. As a result, the jury recommended that all water outlet covers be routinely inspected to ensure they are secure.

Every owner and every operator shall ensure that:

1. All of the pool's outlet covers are **inspected at least once every 30 days**
2. A written record of the inspection is made by the person who performed the inspection
3. The record of the inspection is **kept on-site for one year**

If at any time an outlet cover is loose or missing, the pool is to be closed by the operator until the cover is repaired or replaced. Document the pool closure in the daily log records.



Safety Equipment

O. Reg. 565/90 section 20(1)

The following safety equipment is to be provided on the pool deck for emergency use:

1. An electrically insulated or non-conducting **reaching pole**, at least 3.65 metres long.
2. **Two buoyant throwing aids** – preferably located on either side of the pool. They must each be securely attached to a six millimetre diameter rope with a length not less than 1/2 the width of the pool plus three metres.
3. A **spine board** or device designed for transporting a person who has a possible neck or back injury.
4. A complete **first aid box** (a list of first aid box requirements is included in this package for your convenience).

An operator is required to close the pool if safety equipment is not present or is in poor condition. The pool closure must be documented in the daily log records.



Equalizer Fittings

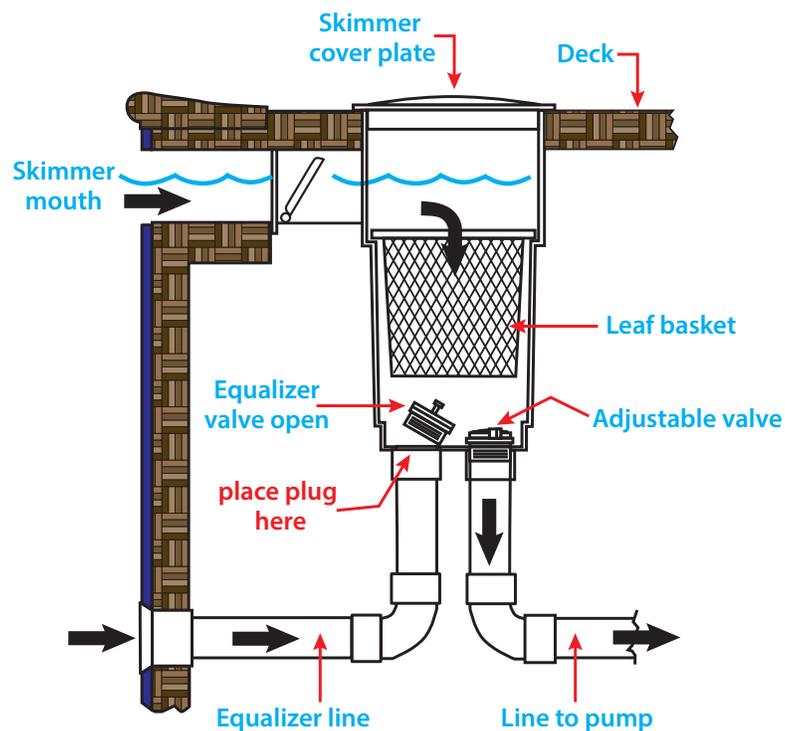
Many swimming pools were built with equalizer lines to prevent damage to the pump if the water level drops below the skimmer. The small suction caused by equalizer lines has resulted in the drowning of a bather because hair was pulled into the line and the bather was not able to reach the water surface to breathe.

As a result of this potential hazard, **suction from the equalizer fittings must be prevented.** This is accomplished by blocking the fitting(s) with a threaded plug(s). The plug can be screwed into the equalizer valve opening under the leaf basket in the skimmer. There is no standard size for the plug; therefore the owner/operator must contact a pool manufacturer/distributor.

Once the skimmer equalizer fittings are inoperable, it is important to maintain the pool water level above the level of the skimmer to prevent damage to the pump.

An operator must close a pool where the equalizer fittings have not been properly sealed to prevent suction. The pool closure must be documented in the daily log records.

Diagram of a skimmer





Adding Make-up (Fresh) Water to the Swimming Pool

O. Reg. 565/90 section 7(12)

The amount of make-up water added to the pool must equal 20 litres (L) per bather per day. Follow the three steps below to complete this daily calculation:

1. Document the number of bathers at the end of the day in the log records.
2. Calculate the volume of make-up water to be added to the pool by multiplying the number of bathers by 20 L.
3. After adding the make-up water, document the water meter reading in the daily records.

Example:

40 bathers used the pool today

40 bathers x 20 L per bather = 800 L

Therefore, 800 L of make-up water must be added to the pool

Converting water meter units:

Some water meters do not measure in litres. Therefore, a conversion must be made to determine how much make-up water is to be added:

1 m³ (cubic metre) = 1000 L 1 imperial gallon = 4.546 L 1 U.S. gallon = 3.785 L

Using the above example if your water meter reads in cubic metres (m³): **20 L = 0.02 m³**

If 40 bathers use the pool, 0.02 m³ x 40 = 0.8 m³. Therefore 0.8 m³ of make-up water must be added to the pool. (Tip: 50 bathers will require the addition of 1 m³ of make-up water)

If your water meter reads in imperial gallons: **20 L = 4.4 imperial gallons**

If 40 bathers use the pool, 4.4 imperial gallons x 40 = 176 imperial gallons. Therefore, 176 imperial gallons of make-up water must be added to the pool

If your water meter reads in U.S. gallons: **20 L = 5.3 U.S. gallons**

If 40 bathers use the pool, 5.3 U.S. gallons x 40 = 212 U.S. gallons. Therefore, 212 U.S. gallons of make-up water must be added to the pool



Calculation of Maximum Bather Load for a Swimming Pool

(The total number of bathers allowed at any time in the pool and on the deck)

Step 1 – Area of the shallow end

The shallow end is the part of the pool where the water is 1.35 metres (m) deep or less.

Length of shallow end x Width of shallow end = Area of shallow end (1)

Step 2 – Area of the deep end

The deep end is the part of the pool that is deeper than 1.35 m.

Length of deep end x Width of deep end = Area of deep end (2)

Step 3 – Maximum Bather Load

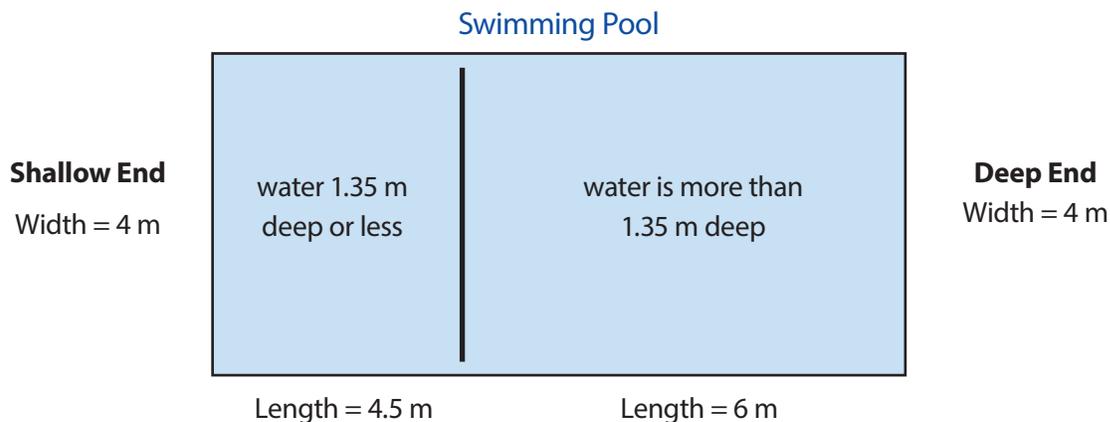
$\frac{\text{Area of shallow end (1)}}{1.4} + \frac{\text{Area of deep end (2)}}{2.5} = \boxed{}$ bathers

Note: If the swimming pool is an unsupervised Class B pool and the total pool water surface area is greater than 93 square metres, the maximum bather load posted may not be greater than 10.

To calculate the total pool water surface area:

Area of shallow end (1) + Area of deep end (2) = Surface area of pool

Example - Maximum Bather Load Calculation





Length of shallow end = 4.5 m
Width of shallow end = 4 m
Area of shallow end = Length x Width
= 4.5 m x 4 m
= 18 square metres (m²) (1)

Length of deep end = 6 m
Width of deep end = 4 m
Area of deep end = Length x Width
= 6 m x 4 m
= 24 m² (2)

**Maximum
bather load** = $\frac{\text{Area of shallow end (1)}}{1.4} + \frac{\text{Area of deep end (2)}}{2.5}$

$$= \frac{18}{1.4} + \frac{24}{2.5}$$
$$= 12.86 + 9.6 = 22.46$$

= 23 bathers (rounded up to the next highest number)

Pool water surface area calculation:

Area of shallow end (1) + Area of deep end (2) = Total pool water surface area
18 + 24 = 42m²

EMERGENCY PROCEDURE

Speak clearly and slowly

1. Dial _____

2. State the emergency

3. Provide location: _____

Pool/Building Name:		
Pool/Building Address:	City:	Postal Code:
Main intersection		
Pool location on property:		

4. Provide emergency telephone number for pool: _____

5. **State:** - Type of emergency
- Type of accident
- Number of victims

6. Have someone meet emergency services to direct them to the pool.



Chemical Safety Reference Guide

The most effective measure in preventing a chemical safety hazard is staff training.

Safe Chemical Storage

- Store chemicals in a cool, dry and well-ventilated space (away from hot and flame)
- Store chemicals in original containers
- Seal chemical containers when not in use
- Do not eat, drink or smoke where chemicals are used or stored
- Chemical storage areas must be kept locked at all times

Store ACIDS (e.g. muriatic acid/cyanuric acid) **separate from BASES** (e.g. soda ash/liquid chlorine)

Store LIQUID and POWDERED CHLORINE separately

Safe Chemical Handling:

- Store Material Safety Data Sheets (MSDS) on-site for every chemical used
- Check MSDS for chemical hazards, proper handling and recommended personal protective equipment
- Have personal protective equipment available (e.g. rubber gloves, respirators, apron, eye goggles)
- Handle chemicals with clean and dry scoops. Each chemical should have its own scoop
- Clean up all spills right away
- Do not add chemicals to the pool while bathers are present
- Never add water to the chemical, always add the chemical to the water

WHMIS symbols that may be found at a recreational water facility:

CLASS A: Compressed gas



This class includes compressed gases, dissolved gases and gases liquefied by compression or refrigeration.

CLASS B: Flammable and combustible material



This class includes solids, liquids and gases capable of catching fire in the presence of a spark or open flame under normal working conditions.

CLASS C: Oxidizing material



These materials increase the risk of fire if they come in contact with flammable or combustible materials.

CLASS D: Poisonous and infectious material

Division 1: Materials causing immediate and serious toxic effects



These materials can cause immediate injury or death when a person is exposed to small amounts. Examples: sodium cyanide, hydrogen sulphide.

CLASS E: Corrosive material



This class includes caustic and acid materials that can destroy the skin or eat through metals. Examples: sodium hydroxide, hydrochloric acid, nitric acid.

Please post this guide in your chemical storage area as a quick reference.



First Aid Box Requirements for Public Swimming Pools

O. Reg. 565/90 section 20(1)

A first aid box is required to contain the medical supplies listed below. It may be helpful to store this list in the box to assist in maintaining the supplies.

The minimum requirements are:

- A current copy of the St. John Ambulance or the Canadian Red Cross Society First Aid Manual
- 12 safety pins
- 24 adhesive dressings individually wrapped (regular bandages)
- 12 sterile gauze pads, each 75 mm x 75 mm
- 4 rolls of 50 millimetre gauze bandage
- 4 rolls of 100 millimetre gauze bandage
- 4 sterile surgical pads suitable for pressure dressings individually wrapped
- 6 triangular bandages
- 2 rolls of splint padding
- 1 roll-up splint
- 1 pair scissors

* **Suggested items:** disposable non-latex gloves and resuscitation pocket mask

Daily Record of Swimming Pool Operation

Retain record for one year.

Pool Location: _____

Operator: _____ Month: _____ Year: _____

		Mon	Tues	Wed	Thurs	Fri	Sat	Sun
	Day:							
Record 1/2 hour prior to opening each day	Time & initial							
	Water clarity							
	Ground fault							
	Emergency telephone							
	FAC/Total bromine							
	pH							
Record every 2 hour until close	Time & initial							
	FAC/Total bromine							
	pH							
	Time & initial							
	FAC/Total bromine							
	pH							
	Time & initial							
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	pH							
	Time & initial							
	FAC/Total bromine							
pH								
Record daily	Total chlorine							
	Number of bathers							
	Water meter reading							
Record weekly	Total alkalinity							
	Cyanuric acid (outdoor)							
Record every 30 days date/time/initial	Outlet (main drain) covers							
	Emergency stop button (if applicable)							
Emergencies / rescues / equipment breakdowns (include date/time):								

Clarity Test: Pool water is of clarity to permit the black disc to be clearly visible from any point on the deck 30 ft/9 m away.

Free Available Chlorine (FAC): 0.5 mg/L minimum (1 mg/L minimum where stabilized)

Total Chlorine (TC): use this value to obtain Combined Chlorine (CC) value: $CC = TC - FAC$ **CC is not to exceed 0.5 mg/L**

Total Bromine: 2 mg/L minimum **Cyanuric Acid:** 60 mg/L maximum **pH:** 7.2 – 7.8 **Make-up Water:** 20 L/bather/day

Total Alkalinity: 80 mg/L minimum **Note:** 1 mg/L = 1 p.p.m





Swimming Pool and Spa Operator Training

The following companies and agencies offer training for swimming pool and spa operators. Self-study, online courses may be available - please contact the company or agency for details.

Swimming Pool and Spa Operator Training

Acapulco Pools Limited

1550 Victoria Street North
Kitchener, Ontario, N2B 3E2
Phone: (519) 743-6357
Fax: (519) 743-1059
Toll Free: 1-800-567-0500
Email: info@acapulcopools.com
Website: www.acapulcopools.com

Advanced Commercial Pool & Spa Products

135 Matheson Blvd. E.
Mississauga, Ontario, L4Z 1R2
Phone: (905) 755-8884
Fax: (905) 501-7211
Toll Free: 1-800-661-4820
Email: info@advancedcpg.ca
Website: www.advancedcpg.ca

Swimming Pool Operator Training

Ontario Recreation Facilities Association (ORFA)

1 Concorde Gate, Suite 102
Toronto, Ontario, M3C 3N6
Phone: (416) 426-7062
Fax: (416) 426-7385
Toll Free: 1-800-661-ORFA (6732)
Email: info@orfa.com
Website: www.orfa.com

Lowry School for Pool & Spa Chemistry

1151 Gorham St., Unit 4
Newmarket, Ontario, L3Y 8Y1
Phone: 1-800-391-8378
Fax: (905) 895-4539
Email: admin@lowryschools.com
Website: www.lowryschools.com

Pool and Hot Tub Council of Canada

242 Applewood Cres., Unit 10
Vaughan, Ontario, L4K 4E5
Phone: (905) 761-7920
Fax: (905) 761-8827
Toll Free: 1-800-879-7066
Email: office@poolcouncil.ca
Website: www.poolcouncil.ca

Lifesaving Society

400 Consumers Road
Toronto, Ontario, M2J 1P8
Phone: (416) 490-8844
Fax: (416) 490-8766
Email: michaels@lifeguarding.com
Website: www.lifesavingsociety.com

Note: This list does not constitute an endorsement by the Halton Region Health Department of the companies/agencies listed above. Other swimming pool and spa operator training courses may be available – check your local listing.