

Health Protection

Environmental Health Services

Basic Pool Safety Plan

September 2015

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Pool Information

Pool Administration / Information	
Facility Name	
Facility Address	Phone
Pool Safety Plan Prepared by	Date
Last Reviewed / Updated by	<i>(Required to be done at least once a year)</i> Date

Pool data sheets, engineered plans and/or pool drawings <i>(should be included if available)</i>			
Location of Pool Data Sheets <i>(It is recommended that a laminated copy be posted in the filter room)</i>			
Location of Engineered Plans and/or Pool Drawings			
Additional Information <i>(if required)</i>			
Contact Information			
Facility Owner or Strata	Name	Phone Number	Cell Number
Facility Manager	Name	Phone Number	Cell Number
Operator/Maintenance/Pool Company	Name	Phone Number	Cell Number

Pool Details <i>(Provide details for each pool in the facility)</i>			
Pool Name or Description <i>(e.g. main pool, hot tub)</i>	Pool 1 <input type="checkbox"/> N/A _____ Type _____ Name _____ Facility/Premises# _____ Date Constructed: _____ Indoor <input type="checkbox"/> Outdoor <input type="checkbox"/>	Pool 2 <input type="checkbox"/> N/A _____ Type _____ Name _____ Facility/Premises# _____ Date Constructed: _____ Indoor <input type="checkbox"/> Outdoor <input type="checkbox"/>	
	Bather Load		
	Surface Area of Pool		
	Volume		
	Depth		
Minimum _____ Maximum _____		Minimum _____ Maximum _____	
Design Flow Rate	Correct flow meter readings confirm flow through the main drain will not create a suction hazard and is adequate for the correct turnover rate. The flow rate can be found on the pool data sheet. <ul style="list-style-type: none"> ▪ All pools should have at least one flow meter. ▪ Hot tubs should have at least two flow meters. ▪ Pools with water features may have additional flow meters. 		
	Pool recirculation: _____ Water features: _____ or Hot tub recirculation: _____ Hot tub hydro air: _____	Pool recirculation: _____ Water features: _____ or Hot tub recirculation: _____ Hot tub hydro air: _____	

List of Equipment and Amenities	
Pool 1	Pool 2
<p>Choose all that apply (✓):</p> <p>Diving Board(s) <input type="checkbox"/></p> <p>Slides <input type="checkbox"/></p> <p>Ladder(s) # _____ <input type="checkbox"/></p> <p>Sauna <input type="checkbox"/></p> <p>Steam Room <input type="checkbox"/></p> <p>Underwater Lighting <input type="checkbox"/></p> <p>Other Features (<i>list</i>):</p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p>	<p>Choose all that apply (✓):</p> <p>Diving Board(s) <input type="checkbox"/></p> <p>Slides <input type="checkbox"/></p> <p>Ladder(s) # _____ <input type="checkbox"/></p> <p>Sauna <input type="checkbox"/></p> <p>Steam Room <input type="checkbox"/></p> <p>Underwater Lighting <input type="checkbox"/></p> <p>Other Features (<i>list</i>):</p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p>

Example of emergency phone script

1. **Dial 911** and specify police, ambulance or fire.
2. **State** who you are along with the address and the phone number you are calling from:
 - Hello, I'm _____ at _____
(name) *(facility)*
 - The address is _____
(facility street address)
 - The swimming pool phone number is _____
(facility phone number)
3. **State** the nature of the situation. If there is a fire, advise them of the chemical storage room location.

4. **Tell** them the best way to come to the facility *(provide directions)*
5. **Ask** what their estimated time of arrival is.
6. **Send** _____ *(title of individual)*
to meet and direct emergency personnel to scene.

Facility Emergency Response

These are only examples and do not cover all possible incidents or actions. Alter as appropriate.
(Attach blank copy of Incident Reporting Form and Emergency Site Plan)

Type of Incident	Facility Procedure	Prevention (may include)
Medical Emergencies <i>(near drowning/drowning, unconscious, chest pain, spinal/head injury, broken bones/sprains, seizures, allergic reactions, etc.)</i>	<ul style="list-style-type: none"> - Call 911 - Provide assistance as necessary - Record incident on records sheet 	<ul style="list-style-type: none"> - Signage posted and enforced - Staff Training - Good water quality - Depth markings visible - Pool monitored for slips and entrapment
Minor Incidents/First Aid	<ul style="list-style-type: none"> - Provide assistance as necessary - Advise patron to see his/her doctor - Record incident on records sheet 	<ul style="list-style-type: none"> - Signage posted and enforced - Pool monitored for slips and entrapment - First aid kit well stocked
Heat-Related Incidents	<ul style="list-style-type: none"> - Call 911 - Provide assistance as necessary - Record incident on records sheet 	<ul style="list-style-type: none"> - Hot Tub Max 40°C - Signage posted - Clock functioning - Sink and shower water max 49°C
Health / Hygiene Emergencies		
Fecal and Vomit Incidents	<ul style="list-style-type: none"> - See attached CDC Response Protocol - Record incident on records sheet - Contact Health Authority Environmental Health Officer 	<ul style="list-style-type: none"> - Signage posted
Blood and Body Fluid Incidents <i>(In and out of water)</i>	<ul style="list-style-type: none"> - Record incident on records sheet - Contact Health Authority Environmental Health Officer 	<ul style="list-style-type: none"> - Signage posted
Disease Outbreaks <i>(e.g. rashes, eye or ear infection, fungal infections)</i>	<ul style="list-style-type: none"> - Contact Health Authority - Advise patron to see his/her doctor - Record incident on records sheet - Check records to identify potential problems when client used facility and current conditions - Apply corrective action as necessary 	<ul style="list-style-type: none"> - Signage posted and enforced - Exclude patrons that are ill - Minimize contamination to pool - Provide soap at showers and sinks - Follow cleaning procedures - Balance pool chemistry - Ensure adequate level of disinfectant
Patron Related Emergencies		
Entrapment/Section Incident	<ul style="list-style-type: none"> - Shut down recirculation system if necessary - Call 911 if necessary - Close pool - Determine reason for entrapment - Apply corrective action - Record incident on records sheet - Contact Health Authority Environment Health Officer 	<ul style="list-style-type: none"> - Inspect pool facility regularly for entrapment hazards - Signage - Ensure proper flow through main drain - Ensure proper covers on main drain - Equalizer lines disabled

Type of Incident	Facility Procedure	Prevention <i>(may include)</i>
Hostile/Aggressive/ Difficult Person	<ul style="list-style-type: none"> - Call 911 if necessary 	<ul style="list-style-type: none"> - Staff training - No consuming alcohol or other intoxicants
Missing Person	<ul style="list-style-type: none"> - Call 911 if necessary - Record incident on records sheet 	<ul style="list-style-type: none"> - Signage - Parents supervise children
Facility Emergencies		
Gas Leak <i>(chlorine, ozone, natural gas, propane, etc.)</i>	<ul style="list-style-type: none"> - Call 911 if necessary - Clear the building - Record incident on records sheet 	<ul style="list-style-type: none"> - Know where and how to shut off gas - Preventative maintenance and checks - Monitoring systems - Staff training
Chemical Spill	<ul style="list-style-type: none"> - Call 911 if necessary - Record incident on records sheet 	<ul style="list-style-type: none"> - Staff training - Personal protective equipment present - Knowledge of chemicals and interactions - Proper storage - Material Safety Data Sheets (MSDS) present
Fire <i>(complete and attach an evacuation plan and site plan that includes locations of alarms, exits, extinguishers, etc.)</i>	<ul style="list-style-type: none"> - Call 911 - Inform fire department of chemical storage and location of store room - See evacuation procedure below - Record incident on records sheet - Contact Health Authority Environmental Health Officer 	<ul style="list-style-type: none"> - Staff training - Fire alarms and extinguishers - Exit sign clearly marked - Equipment maintenance - Proper chemical storage
Natural Disasters <i>(lightning, flood, earthquake, etc.)</i>		<ul style="list-style-type: none"> - Staff training

Evacuation Procedure	<i>Should include procedures for pool weather, persons with special needs, age groups, etc. Attach building plan with evacuation routes and designated meeting areas.</i>

Lifesaving, First Aid and Supervision

Emergency Equipment	Location(s)
<input type="checkbox"/> Non-conductive reaching assist at least 3.5 meters in length with a shepherd’s hook	
<input type="checkbox"/> Throwing ring with rope at least 6 mm in diameter and length of at least half the width of the pool plus 3 meters	
<input type="checkbox"/> Basic First Aid Kit <i>(Recommended)</i>	
<input type="checkbox"/> Personal protective equipment including pocket mask and gloves <i>(Recommended)</i>	
<input type="checkbox"/> Other _____	

Signage
<ul style="list-style-type: none"> ▪ Lifeguard on Duty When no lifeguard on duty, a clearly visible notice must be posted at each entrance to the pool. <div style="text-align: center; padding: 10px;"> <p>NO LIFEGUARD ON DUTY</p> <p>CHILDREN MUST BE SUPERVISED BY AN ADULT</p> </div> ▪ Pool Rules <ul style="list-style-type: none"> - Ensure you are not ill – including diarrhea, vomiting, open sore(s), bandages, head colds, discharging ears or noses, or ear infections. Persons with related symptoms should not enter the pool until 48 hours after cessation of these symptoms. - Wear clean and appropriate bathing attire. - Take a cleansing shower. - Ensure all children less than 7 years of age are closely supervised (within arm’s reach at all times) by a responsible person of at least 16 years of age. - Ensure infants and toddlers wear swim diapers and/or elastic swim pants. - Ensure one responsible person supervises a maximum of three children who are less than 7 years of age. - Report an injury suffered while in the pool enclosure, to the pool manager or lifeguard. - Report any contamination or fouling of the pool (e.g. urinating or defecating), to the pool manager or lifeguard. - No running, fighting or engaging in conduct likely to cause an injury. - No contaminating or fouling the pool. - No diving. ▪ Additional Signs Attach additional signs/rules for the safe use of hot tubs, saunas and other features. <ul style="list-style-type: none"> - No diving. - Don’t stay in the hot tub for more than 10 minutes at a time. - Don’t totally immerse your body. - No entry if under the influence of alcohol or other intoxicants. - Keep hair away from underwater fittings.

Pool Operation and Maintenance

Pool Operator Qualifications (training / experience)

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When to close the pool to swimmers

- When there is the presence of vomitus or feces.
- When minimum disinfection level cannot be maintained.
- When water is too cloudy to see the pattern of the main drain.
- When the recirculation system is not working.
- When there is a power outage.
- When superchlorinating or shocking.
- When adding chemicals directly to the pool.
- When any hazardous situation exists that could negatively impact the health and safety of swimmers (may require closure of the entire facility (e.g. chlorine gas leak, poor microbiology, suction hazard).
- When pH or other chemical parameters are out of required range.
- When instructed by the Health Officer.

Pool Water Chemistry Requirements

Parameters requiring testing	Minimum Testing Frequency	Test results required	
pH	2 x / day	Within range of 7.2 – 7.8	
Combined Chlorine	2 x / day	Less than 1 ppm	
Alkalinity	1 x / week	Within range of 80 – 120 ppm	
Cyanuric Acid	1 x / week	Less than 80 ppm	
Disinfectant		Water temp ≤ 30°C	Water Temp >30°C
Free Available Chlorine or	2 x / day	0.5 ppm or greater	1.5 ppm or greater
Chlorine Cyanurate (stabilized chlorine) or	2 x / day	1.0 ppm or greater	2.0 ppm or greater
Bromine	2 x / day	1.5 ppm or greater	2.5 ppm or greater

Name and Model of Test Kit _____

(may attach procedures for testing and calibration)

Name of Reagent	Manufacturer's Recommended Shelf Life

Written Procedures in the event test results fail

Troubleshooting Problem	Product Used to Correct	General Procedures <i>(e.g. describe dilutions or use product label)</i>
Disinfectant too high		
Disinfectant too low		
Combined chlorine too high		
pH too high		
pH too low		
Alkalinity too high		
Alkalinity too low		
Cyanuric acid too high <i>(if applicable)</i>		
Cyanuric acid too low <i>(if applicable – outdoor pools only)</i>		
Cloudy Water		

Safe Handling and Storage of Chemicals

Chemicals Used	Essenital Information, Precautions and Storage Details <i>(follow MSDS)</i>
E.g. Sodium hypochlorite	<i>(i.e. Corrosive, causes severe eye injury, skin burns, respiratory burns. Use protective gear to handle, do not mix with muriatic acid, chlorinator tank requires containment.)</i>

Maintenance of Mechanical Equipment *(Note: This list provides examples and is not intended to be a complete list. Modify as necessary.)*

Installation and operating manuals are located _____

Equipment	What Needs to be Checked	Frequency	Corrective Procedures <i>(for backwashing, replacing filter media, adjust flow and rate, etc.)</i>
Filters	Backwash gauges		
	Filter media		
Chemical Feeder	<ul style="list-style-type: none"> ▪ Tubing ▪ Pump 		
Pumps	<ul style="list-style-type: none"> ▪ Hair and lint strainer ▪ Cavitation, noise ▪ Leaks ▪ Losses prime 		
Water Temperature Heater	<ul style="list-style-type: none"> ▪ Water temperature too hot/cold ▪ Scaling/corrosion) 		
Flow Meter	<ul style="list-style-type: none"> ▪ Flow rate too high/low ▪ Meter corroded ▪ Float stuck 		
Ventilation			
Skimmers/Main	<ul style="list-style-type: none"> ▪ Weir function ▪ Proper % of flow 		
Ground Fault Interrupter	<ul style="list-style-type: none"> ▪ Test by tripping 		

General Maintenance Checklist

The following are some of the items that should be included in your schedule (*schedule may include a comments section*)

- Pool basin
 - Checked for entrapment hazard (gap between 3.5" and 9")
 - Check water intakes for possible suction hazards
 - Check for any safety hazard such as sharp projections
 - Main drain is secure and in good repair
 - Checked for signs of deterioration
 - Skimmer basket cleaned
- Handrails, ladders, deck equipment secure
- Water level is correct for removal of floating debris
- Depth markings clearly visible
- Steps are clearly marked in a contrasting colour
- Floors are in good condition with non-slip surfaces, free of pooled water, free of ice in freezing conditions
- Adequate fencing, doors, gates, alarms to prevent unauthorized entry
- Drinking water fountain is operational (clean and good pressure)
- First aid kit well stocked
- Rescue equipment in good condition and easily accessible
- Signage is in place
- Shower/sink temperature < 49°C
- Ground fault circuit interrupter for underwater lights functioning
- Backflow prevention devices/air gap are functional
- Clock in place and functional
- Adequate lighting for pool area
- Pool temperature \leq to 37°C
- Hot tub temperature \leq to 40°C
- Flow meters working properly
- Deck drains are secure and in good repair
- Floating weirs functioning

Pool Cleaning Schedule

Area	Chemical, Cleaner or Other Products Used	How to Handle Safely/Procedure <i>(refer to MSDS)</i>	Cleaning Frequency	Person or Position Responsible
Floors				
Change Room				
Showers/Washrooms				
Halls				
Pool Deck				
Floor/Deck Drains				
Other:				
Surfaces				
Benches/Lockers				
Shower Walls				
Toilet Bowls				
Sinks/Mirrors				
Pool Features				
Other				
Pool Basin				
Tiles at water mark				
Skimmer baskets				
Vacuuming				
Other				
Supplies				
Toilet paper/towels				
Soap				
Other				
Other Areas				