

**Safe Water Program
Public Spas Questions and Answers**

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Q #1: Where would a spa owner/operator get the expertise and equipment to satisfy Section 10 (a), (b) or (c)? Does the Health Unit require something in writing from the owner/operator?

A: Section 10. Every owner shall ensure that the suction system that serves the public spa is equipped with a vacuum relief mechanism that includes,

- (a) a vacuum release system
- (b) a vacuum limit system; or
- (c) another engineered system designed, constructed and installed to conform to good engineering practice appropriate to the circumstances

Section 10 is identical to the requirement under the Ontario Building Code Act regulations. The owner/operator of the spa would likely need to consult with a spa industry installation company to ensure that the suction system that serves the spa is equipped with a conforming vacuum relief system. If the inspector needs confirmation, something in writing from the operator would be appropriate to request.

Q #2: What is the meaning of "another engineered system designed, constructed and installed to conform to good engineering practice"? The Coroner's recommendation asked for three specific requirements and a number of spas did conform to these recommendations, are these considered under subsection c.

A: Yes, the coroner's recommendations are/were considered, and are captured under Section 10 (c) of the regulation.

If a mechanism is designed as a vacuum release and is installed as per manufacturer's specifications and is operational, it would be an acceptable system.

Q #3: Section 6(d). Are only ORP controllers acceptable, and would a controller that measures in parts per million be contrary to the regulation?

A: The ORP nomenclature is only necessary for saline pools. The equivalent of 700mV in parts per million would be 5ppm. A part per million reading is acceptable. What is important is the actual acceptable free available chlorine level, not the nomenclature reading unit.

Q #4: Are the higher required levels of Cl/Br in a spa a function of the spa's temperature or because the spa is aerated?

A: The higher level of chlorine and bromine in a spa (AKA hot-tub) is due to the spas' higher temperature. Temperature is not included in the definition because of the need to be consistent with the wording of the Ontario Building Code Act requirements for spas. However, the term "spa" is commonly understood to be a vessel containing heated water. That is why there is a maximum temperature requirement in the regulation under Section 8(a).

Q #5: What would be considered an acceptable tamper proof upper limit cut-off switch? Is a locked room sufficient or is there a specific device that is required?

A: What is required is a device that cannot be adjusted by a spa user and that ensures that the unit cannot reach a setting greater than 40C if tampered with.

A locked room which is inaccessible to spa users would be acceptable, however if the device is encased in a locked plexi-glass case and located in the vicinity of the spa, that also would be acceptable. The intent of the regulation is to prevent spa users from having the opportunity/access to raise the water temperature above the max temperature of 40C.

Q #6: Section 3, Subsection (2): What constitutes “training”?

A: Section 3(2) (2) every operator shall be trained in public spa operation and maintenance, filtration systems, water chemistry and all relevant safety and emergency procedures.

Being trained means, to have enough knowledge so as to be able to operate the spa in a competent manner as required by the regulations. Formal training, would, of course, be acceptable. If the operator has been a spa operator for several years and the pool has been well maintained and operated, this would indicate that the operator is competent, so to speak, and does not require formal academic training. The PHI needs to be satisfied that the operator knows what he/she is doing. The condition (number and type of violations), and the inspection history of the spa can also be considered as a measure of the operator’s competency/training. The PHI is the only person that can make that assessment and ascertain the operator’s competency during a routine inspection.

Q #7: What constitutes “inaccessible” in Section 5, Subsection (2)? Would draining the pool be an option?

A: Section 5(2) states that every owner and operator shall ensure that, except during the daily use period, the public spa is inaccessible to persons who are not involved with its operation, inspection or maintenance.

Ideally, a definite barrier such as a wall would be preferred. However, tarp/chain/cone markers over/around the spa, something that would not only indicate to people the spa is not open for use, but if possible would actually prevent use when not suitable for use. However, that being said, it is not always possible to have a wall when a spa is located adjacent to a swimming pool. In that case the PHI must assess the location, frequency of use, age of clientele, etc, and decide what is acceptable.

Emptying the pool would render it inaccessible, but, consideration must be given to the volume of the pool to be feasible to do so, and not to impose onerous undue restrictions on the owner/operator of the spa. Also, the onus is on the operator/owner to clearly indicate that the spa is not open for use and a tarp /cone markers /wall, etc., with a sign indicating the spa is “closed/do not use” would clearly show the operator’s intent to warn users not to enter the pool. Some responsibility lies on the user to obey the barrier warning.

Q #8: What constitutes a “chemical feeder” in Section 6, Subsection (1)?

A: A chemical feeder is a device/unit which is part of the water treatment system that adds chemicals to the water on a continuous basis to maintain the following water quality parameters at all times during the daily use period:

- a) the total alkalinity is not less than 80 milligrams per litre
- b) the pH value is within the range of 7.2 to 7.8
- c) there is a residual of free available chlorine or total bromine of at least five but not more than 10 milligrams per litre
- d) if the public spa is equipped with an automatic sensing device, the Oxidation Reduction Potential value is not less than 700 mV; and
- e) where cyanurate stabilization is maintained, there is a cyanuric acid concentration of not greater than 150 milligrams per litre.

The requirement with regard to total alkalinity is the same requirement as O. Regulation 565 Public Pools. Higher total alkalinity levels above 80mg/l, is an indication of poor pool operation, not specifically a problem to health if all other water quality parameters are met. A spa is a body of hot water being agitated and containing a free available chlorine or total bromine of greater than 5 mg/l. Considering both the harsh conditions and higher level of disinfectant required, a level of cyanurate stabilization of up to 150 mg/l was not seen as being detrimental. Note, that cyanurate stabilizer is only permitted in outdoor spas.

Q #9: Who is responsible for determining “the total estimated # of bather uses per operating day...?” Section: 7, Subsection (3)?

A: The operator is responsible for tracking the number of bathers.

Q #10: Section 14, (1 c): Where does the audible and visual signal have to be located?

A: The location would depend on the location of the spa. If the spa is adjacent to a supervised swimming pool, the audio/visual signal may be located within the pool area. If the spa is located in an unsupervised or low traffic area it may be located outside the spa enclosure. However, that being said, if an alarm is loud enough and can be heard outside a spa enclosure, it can be in the spa area regardless of low traffic. The intent of having an audible/visual signal is to alert others of an emergency/potentially dangerous situation at/in the spa. The PHI would need to assess the location for effectiveness.

Q #11: Section 15, (1b): The use of a throwing aid in a whirlpool/spa that has an inner horizontal dimension greater than 3 meters? Why?

A: The throwing aid is to assist a rescuer that may not be able to reach the victim from the side of the pool for whatever reasons (i.e., disability, fear, bodily strength, personal health and safety, etc.).

Q #12: Do spas where chlorine/bromine pucks are currently placed in the skimmer or in a floating dispenser meet the Section 6 requirement of a “chemical feeder” or do they require the in-line installation of true chlorinators/brominators?

A: Yes, but only in an outdoor spa, no roof or canopy. Note: stabilized products can only be used outdoors. It is unlikely that all other conditions with regard to the chemical balancing of the spa could occur without difficulty using such a system. One could also question the safety of such a device, of having a concentrated chemical in a semi-wet state that could be tampered with by anyone. Therefore, pucks should not be used.

Q #13: Section 6(d), pertaining to automatic sensing devices, specifies a minimum ORP reading of 700mV. This number appears however to be irrespective of pH. Is that because the device also checks for pH and adjusts the sanitizer accordingly to achieve the 700+ level?

A: Sections 6 (a), (b), (c), and (e) does not override 6 (d). Section 6 (d) is a recognition that if all else is suitable an acceptable level of disinfectant would be available if an automatic sensing device indicated a better than of 700 mV.

Q #14: Section 1 There is no depth restriction in the definition. We have a few therapeutic pools that are hard to distinguish from spas. Was there some thought about the distinction between the two and if depth could affect the definition?

A: Under O.R. 565 – Public Pools, a pool is exempt if it is less than 0.75 metres deep or a hydro massage pool. The spa regulation includes pools that are hydro-massage. So if the pool was over 0.75 metres and not a hydro massage pool you should have been inspecting it as a swimming pool, if under 0.75 meters and a hydro massage pool you would now inspect it as a public spa.

Q #15: Why was the ceiling lifted on total alkalinity there was one in the guidelines of 200mg/L? All our training with pools lead us to believe that cyanurate stabilizer would cause a "chemical lock" if you exceeded 100 mg/L. The maximum for pools is 60mg/L but for spas the maximum is now 150mg/L. There is presumably something different with spas. Is it the water temperature? Do you know what the reasoning is for such a high ceiling?

A: The requirement with regard to total alkalinity is the same as the public pool regulation. Higher levels, for example, above 200mg/l, would be an indication of poor pool operation not specifically a problem to health if all other issues are dealt with. A spa is a body of hot water being agitated and containing a free available chlorine or total bromine of greater than 5 mg/l. Considering both the harsh conditions and higher level of disinfectant a level of cyanurate stabilization of up to 150 mg/l was not seen as being detrimental.

Q#16: Section 6 (3) states, every owner and operator shall ensure that the public spa water is of a clarity to permit the owner or operator to see the lowest water outlet drain when the spa water is in a non-turbulent state.

Swimming pools have the black disk test. We are afraid there will be room for disagreement with operators as this test is somewhat ambiguous. Why not the bottom of the spa or a black disk at the bottom of the spa be required to be "clearly visible"?

A: Individuals do not swim along the bottom/floor of a spa as they do in a swimming pool. Even with a black disc one can say they see it clearly and another not. This may appear to be a lesser test if the outlet is 12 inches wide and black on a white pool bottom. This may appear to be a very stringent test if the outlet is only 4 inches and is white on a white pool bottom. The important point is that the water is clear enough to determine that one can identify a drain, and therefore would be able to determine if a person was on the bottom.

Q #17: Section 8(b)states, every owner shall ensure that the public spa water heater is equipped with a tamper-proof upper limit cut-off switch that, (b) is independent of the spa's water temperature thermostat.

Is there a way we can recognize if the switch is independent?

A: They can be two separate devices or, one device with 2 indicators. The thermostat tells the heater when to add more heat; the upper limit cut-off switch shuts the system down when the reading starts to rise over 40C.

Q #18: Section 9(1)(c) (1) states, every owner and operator of a public spa containing hydro-massage jet fittings shall ensure that the spa is equipped with a timing device that(c) is placed in a location that requires a bather to exit the spa to reset it.

We have spas that require the people to get up to reset the timer but they do not have to completely get out of the water. Would something like this meet the intent of this clause? There are locations where the only other alternative would be to rewire the system onto a wall that is a significant distance away from the spa.

A: Exit, would imply that one removes themselves from the spa vessel. The location should be far enough from the spa that one could not be both in the spa and operating the timing device.

Q #19: Is there a way to test the vacuum release? We were also curious as to why the engineered alternatives were approved. There were no alternatives given by the coroner. Do the alternate systems have to be approved by a professional engineer only and be site specific only?

A: This requirement is the same requirement as the Ontario Building Code requirement for spas. The owner/operator of the spa would likely need to consult with a spa industry installation company to ensure that the suction system that serves the spa is equipped with a conforming vacuum relief system.

Q #20: Section 13(1) states, every owner shall ensure that there is a land line emergency telephone located within 30 metres of the public spa that connects directly to an emergency service or the local telephone utility. Is there a minimum distance for the phone? We would think there would be safety concerns with having the phone available while sitting in the hot tub.

A: It would need to be determined whether the phone carries sufficient electrical current to be of a safety concern for electric shock. The Building Code and the Public Pool regulation have not required this and it is unclear why an operator would place an emergency phone in situation that would lead to misuse or abuse. If, however, this phone could carry sufficient current to be of a shock hazard, the Building Code would require a ground fault detector be installed.

Q #21: Is a land line the only acceptable emergency telephone communication if there are no landlines available in remote areas with resorts with spas?

A: Obviously if a land line is not available, a land line telephone cannot be provided. This should not prevent a spa from operating in remote areas if a PHI is satisfied that every reasonable attempt is made by the owner to provide alternative telecommunications in the event of an emergency, such as mobile phone, radio or satellite communication device.

Q #22: Section 13(3) (c) states, every owner shall ensure that a notice is posted at the emergency telephone that(c) lists the full name and address of the public spa facility location and all of the facility's emergency telephone numbers. For clarity, we are presuming that posting 911 for all emergencies is sufficient. Is this correct or would we also need to include the full phone numbers of each emergency service?

A: 911 for emergency help if that is all that is required to get help for resuscitation, medical aid and fire services would meet the requirements of section 13 (3) (b).

Q #23: Can the emergency phone located in the spa area be connected to the front desk phone at a hotel? In which the person at the front desk calls 911?

A: The intent of the emergency phone is to connect to an emergency service as quickly as possible. If there is no direct emergency service hook up, the PHI would need to be satisfied the reception desk is staffed continuously and the caller would not be intercepted with a busy signal.

Q #24: Section 14(1)(b) states, every owner shall ensure that all pumps used in the operation of the public spa are capable of being deactivated by an emergency stop button that(b) is located within the immediate vicinity of the spa.

Would an emergency button be acceptable where you can activate it from the spa? Sometimes the next available wall is long distance away. The owner/operator is likely to want to locate all the wiring together- the phone, timer and emergency button. There will be expenses if they have to be separated.

A: A hydraulic switch unit could be installed in the pool. This is an emergency device, that if needed needs to be accessed quickly. The switch should be located close enough as not to cause a second danger: electrocution. Under the Building Code those items that can be an electrical hazard also require a ground fault detector to be installed.

Q #25: Section 18 addresses the sign requirements. The bullet from the guidelines about alcohol/drugs is omitted:

Avoid using the spa if you have taken alcohol or drugs that cause drowsiness or raise/lower blood pressure.

Do you know why?

A: The concept of alcohol use is not considered appropriate for this regulation. The taking of drugs would fit under “medical conditions” which is in sentence two under CAUTION of section 18.

Q #26: Section 22(1) (b) states, every operator shall ensure that the emergency stop button and vacuum release mechanism, if any, are tested and inspected.....

If there is a way to test the vacuum release should this be included to be tested on a regular basis too?

A: Both systems mentioned can be tested by putting a blockage in front of the drains. If the blockage can not be removed by normal human effort then none of the required safety

features are in place or are working. This test should be included on a regular basis as per section 22(1)(b).

Q #27: Are spas in personal service settings such as full day spas and massage parlours covered in this regulation?

A: No. However, if a health unit is aware of a spa that is not subject to O.R. 428, it is a requirement under the Mandatory Health Programs and Services Guidelines that health units provide education and outreach to spa owners/operators. If a PHI or MOH has reasonable and probable grounds that a health hazard exists in an unregulated spa they can issue a Section 13 order under the *Health Protection and Promotion Act* to the spa owner/operator to abate the health hazard, if the requirements of s. 13 are met.

Q #28: Are domestic style 2 person spas located on an outdoor patio of a single unit rental intended to comply with the new Spa Regulation?

A: The 2 person domestic spas located on the patio of a unit/suite that are included with the rental of that unit/suite would not be subject to the O.R. 428 Public Spas. If there is also a general use spa in an inn/hotel/resort that is for use by all of the inn guests, that spa would be subject to O.R. 428.

Q #29: What do we do, if anything if a spa does not fall under O.R. 428?

A: Even though a spa may be exempt it does not preclude a health unit from providing best practices advices to the owner, which is in the owner's best interest to follow. Education and outreach continues to be a part of all our mandatory health programs.

Also, if a health unit has reason to believe that a spa poses a health hazard, even if not subject to O.R 428, a public health inspector or a medical officer of health can issue a Section 13 order under the HPPA as a last resort to have the public health hazard eliminated.

Q #30: Are depth markings required for spas that have an inner horizontal dimension of greater than 3 metres but have no depth changes or breaks in slope?

A: If the entire spa is the same depth at all locations, depth markings of the actual depth should be provided at both ends.

Q #31: If a first aid box is currently available for the adjacent swimming pool does the operator need to provide a second first aid box? Although it appears the contents for the spa first aid box is a little different than the pool regulation.

Comment: the spa first aid box seems to be better equipped.

A: An operator would not be required to provide 2 separate first aid boxes. However, since the Spa regulation first aid box is better equipped, it is expected that the contents of the box be upgraded as per the Spa regulation requirement.

Q #32: Would a first aid kit be considered conveniently located at the spa or front desk/reception area of hotel, motel resort?

A: Either, the PHI needs to be satisfied that the kit is readily available. If the spa is located close enough to the front desk and continuously staffed, and the location of the kit is clearly available to spa users, the reception desk would be acceptable. The PHI would be able to assess a suitable location after an inspection assessment.

Q #33: Sec 6(4) (a) &(c) filtration system - what constitutes filtration? Can cartridges be used or can it only be sand and/or diatomaceous.

A: Cartridges can be used if they are specifically designed to filter spa water.

Q #34: Sec 9(1) timing device - does device have to be a dial or could it be a push button that runs pump for 15 minutes.

A: The device can be either. As long as the dial cannot be reset until the 15 minutes has lapsed, a dial would be acceptable.

Q #35: Section 14 (1) (b) states that the emergency stop button “is located within the immediate vicinity of the spa”. What is considered as “immediate vicinity”?

A: The intent of the requirement is to ensure that the emergency stop button is readily accessible and within the room the spa is located in. A stop button located several metres from the spa would be considered accessible if there is no barrier, such as a wall to access it. The PHI would be able to assess a suitable location after an inspection assessment.