



Spa Decontamination Procedure

This procedure is intended to describe how to decontaminate a spa. Some signs of possible contamination/infestation include: slime formation, cloudy water, and musty odors, or bather rash. If you suspect contamination/infestation, this procedure should be followed as a precaution. If the spa water has become infested with bacteria, the plumbing system and filter may be harboring excessive amounts of bacteria and bacterial by-products. Replacing the spa water is a good practice, however, water replacement will not completely eliminate the bacteria from a severely infested spa. The spa and its circulation systems and airlines should be thoroughly decontaminated.

Here's what to do!

This procedure should be used to decontaminate an infested spa. It may also be used as a general maintenance step when a spa is going to be drained.

Three main steps are involved:

- 1.) Draining and decontamination
- 2.) Water replacement and treatment
- 3.) Verification

DECONTAMINATION STEPS

A. Decontamination

- 1.) Filters

Cartridge Filters: Remove the filter cartridge and either clean or replace it.

If cartridge filter is a year or more old, or in bad condition, discard. To clean a cartridge filter, first use a filter cleaner as per label directions. After rinsing the cartridge, completely submerge the cartridge in a 1/10 dilution of sodium hypochlorite (liquid bleach) from one to four hours. Inspect and clean the filter housing interior. Rinse thoroughly before placing back in the spa.

- 2.) Raise the water level in the spa to ½ inch above the high water mark.
- 3.) Add at least 100 ppm chlorine to the spa per the chart below.***

Chlorine Source	Amount Required to Yield 100 ppm Chlorine in a Spa	
	Ounces per 100 gallons	Ounces per 500 gallons
Granular Sodium Dichlor	2.5	12.5

***For spas treated with a polyhexamethylene biguanide (Biguanide, PHMB) such as BaquaSpa®, or Free®, sanitizer, drain and refill the spa prior to adding any chlorine.

- 4.) If possible, cover the spa
- 5.) Circulate the water at a maximum rate for 30 minutes - 45 minutes and ensure the jets are on maximum. During this step, ensure the air controls are open, the diverter valves are in combo (turned to the middle) and the waterfall valve (if installed) is in the middle position (halfway open).
- 6.) While the water is circulating, turn the aerator (blower) if your hot tub has one, on and off every 5 minutes. Some spas that have air injector (venturi) systems may require the pump to be turned on and off every 5 minutes. This will help ensure that air lines are disinfected as well.
- 7.) Stop the circulation by turning the jets and aerator off.
- 8.) Drain the spa.
- 9.) While the spa is draining, rinse the sides several times.
- 10.) Clean the spa with a surface cleaner, then rinse off surfaces to remove cleaner.

B. Water Replacement and Treatment

- 11.) Refill the spa with water; replace the filter with a cleaned, sanitized, or new filter cartridge.

At this point, you may choose to resume normal start-up and maintenance routines, or alternatively, a **verification step** may be carried out to ensure that no excessive sanitizer demand remains.

C. Verification Step

12.) To verify decontamination, shock treat the spa with 10 ppm of chlorine. Allow the spa to circulate for a period of 8 hours - 12 hours, then check the sanitizer level in the spa. If no free chlorine residual is present, excessive demand may still exist. Repeat the Decontamination Procedure again from the first step. Prevent chlorine losses due to sunshine degradation by keeping spa covered and/or carrying out verification step overnight. If two attempts at decontamination fail to produce a chlorine residual, contact your local dealer for advice.

13.) If residual free chlorine sanitizer is found in #13, proceed with routine maintenance of the spa.

NOTE: If residual chlorine is above 5 ppm after verification, reduce it to 3-5 ppm by draining a portion of the spa water and replacing with fresh, or allow chlorine to dissipate naturally prior to using the spa.

14.) If after two successive attempts to decontaminate the spa, evidence of contamination persists, a serious problem may exist. Do not resume use of the spa until the problem has been resolved by a qualified professional.