

## Disinfection Procedures of Spa Pools for *Pseudomonas*

- A. Empty the spa pool.
- B. Rinse, scrub down the interior of the spa with a strong chlorine solution (recommend at least 50 ppm chlorine). It is recommended that dichloro-stabilized chlorine is used to make the solution.
- C. Dismantle the cartridge filter, if that's the type of filter utilized.
  1. Hose down the filter with a high-pressure nozzle on a garden hose.
  2. Soak the filter in a strong detergent (TSP) to cut the grease. Following the soaking, thoroughly hose down the filter again.
  3. Soak the filter in a 10% muriatic acid solution to remove calcium scale that may be present. Following the acid bath, hose the filter down again.
  4. Soak the filter for at least 3 hours in a minimum of 50 ppm chlorine concentration to disinfect the filter.
- D. After completing measures A-C, reassemble the cartridge filter, fill the spa with water and establish a high chlorine concentration in the water (preferably 50 ppm). After establishing the high chlorine concentration, recirculate the highly chlorinated spa water through the equipment for approximately 1 hour; then shut down the recirculation system and let the highly chlorinated water stand in the spa pool overnight.
- E. Upon return of the chlorine residual in the spa to a level less than 3 ppm free chlorine, it would be advised that a second water sample be taken and tested for *Pseudomonas*. Swabbing samples should also be taken from the cartridge filter and the skimmer area. If the culture is free of *Pseudomonas*, authorize use of the spa again.

If you're involved with a wooden hot tub at a private residence, it would be advised that, following the first negative water sample, a second sample be taken 4 to 5 days later to assure that *Pseudomonas* is not growing from interior layers of the wood back into the previously disinfected inner surface of the hot tub.