

The Real Source of “Chlorine Smell”

There’s a common misconception that a strong chemical aroma in a pool room is the result of “too much chlorine” or even that it’s to be expected. In reality, that smell is chloramines, dangerous chemical compounds that pose a threat to human health, the very structure housing the pool room, and the equipment installed to control the environment.

Where do chloramines come from?

The short answer is people...combined with the chlorine (and/or other substances) added to the water to counteract the effect of the people in the water.

Compounds such as ammonia and nitrogen found naturally in perspiration, urine, body oils, saliva, and other human excretions interact with treated pool water to form chloramines. Add in lotions, deodorants, cosmetics, and other embellishments to the human body and you have a nasty cocktail of off gassing toxic waste dump that destroys everything it comes in contact with—and it’s hellbent on migrating to carry out its mission to the fullest potential.



This dehumidification system was destroyed by corrosion resulting from poor pool chemistry



This is a Water Quality Issue and Not an Air Quality Issue

It is crucial to understand that a dehumidification system and HVAC system cannot and will not control a water quality issue. It **MUST** be addressed by controlling the water quality and the pool chemistry. Otherwise, everything else is affected by this all too common and destructive weak link in the chain.

That also means that many conventional attempts to control this problem are inherently flawed. Any “solution by dilution” methods such as trying to extract contaminated air from the surface above the water aren’t solving the problem, but creating additional ones, like the “chill effect” on pool users. Moving air across the water surface is seriously bad advice.

The only effective way to remedy a water quality problem is to address it as a water quality issue. Chloramines are 100% water quality and cannot be resolved with air movement. Air movement attempts to solve the problem are not only ineffective, they result in higher energy costs because they are also inefficient.

What Can Be Done to Control This Problem?

The primary means of controlling the problem is to control the source. Requiring pool users to shower before pool use is your first line of defense. Enforcing compliance is admittedly challenging, but a strategic set of pool use rules helps stress the importance of safety for all users. We welcome input from pool owners who have experienced increased success in raising compliance rates through creative signage and other measures.

Another item of absolute necessity is a strict prohibition of infants and children in diapers from using the pool. There is no such thing as a leakproof diaper and the contamination introduced into a pool by naive parents is a serious public health risk. It needs to be treated as such with policies that make non compliance unthinkable.

Consulting with pool chemistry professionals is highly recommended and all staff need to be properly trained in monitoring and maintaining pool chemistry. Intervals for checking the pool chemistry vary based on use but can be as frequent as hourly during heavy pool use. Secondary disinfection systems such as ultraviolet light or ozone may also be employed.

Please be sure to review our *Stink or Swim* pool chemistry bulletin which covers this vitally important topic in greater detail.