



June 2021

Good Morning!

I've had so many questions about chlorine in the last few weeks, I'm including a round up of the top three.

1) Is there a chlorine shortage?

Short answer: It depends where you're located in North America, and whether you work in the residential or commercial swimming pool industry.

Longer answer: News is cyclical - the media wants heartwarming stories for Christmas, and pool content for Victoria/Memorial Day as summer kicks off. [The Biolab factory burned down in August 2020](#), but hysterically overstating a chlorine shortage *now* makes for some pretty effective clickbait.

We've all experienced supply chain hiccups in the last year. Product prices will rise when there is (perceived) scarcity and strong demand. In this case, the item is stabilized chlorine tablets in a convenient smaller 3" size. People will either pay up, or decide using the pool this summer just isn't worth it.

Keep in mind - stabilized chlorine (dichlor, trichlor) is only permitted in outdoor swimming pools (commercial or residential). In Canada, most outdoor commercial pools, spray parks, splash pads, etc. use unstabilized chlorine and plumb liquid cyanuric acid directly into the line. This is because our sun exposure is quite low (we're further from the equator) and because preformulated tabs make harder to control the build up of cyanurate (health regs typically set upper limits).

TL;DR - I haven't spoken to a single client impacted by the chlorine shortage. If you do residential pool service in Florida, Texas, Arizona, the Greater Toronto Area (GTA), Lower Mainland BC - you're going to

be raising prices for stabilized chlorine because the supply is throttled. Now is a great time to upsell a chlorinator (chlorine generator i.e. salt water system) or investigate the appropriateness of alternative disinfection systems.

2) We want to switch - what's the best type of chlorine?

There is no "best" type of chlorine. Chlorine needs are specific to each aquatic facility. Two pools on the same block could have widely divergent -

- Facility size & operating schedule
- Average daily bather load
- Chemical storage & safety
- Facility staffing
- Water temperature
- Initial vs ongoing costs

Each facility will assess these factors differently. See the [Characteristics of Disinfectants](#) pulled from the [Certified Pool Operator \(CPO\) class](#) I teach (Chapter 5, page 52). It's also worth noting [research has shown lower/controlled pH](#) makes chlorine more effective.

Characteristics of Disinfectants

| | Sodium Hypochlorite | Calcium Hypochlorite | Lithium Hypochlorite | Gas Chlorine | Trichlor | Dichlor | BCDMH (Bromine) |
|----------------------|---------------------|-------------------------|----------------------|--------------|----------------|----------|-----------------|
| % Available Chlorine | 10-12% | 47-78% | 35% | 100% | 90% | 56-63% | 27% |
| % Active Strength | 10-12% | 47-78% | 29% | 100% | >99% | >99% | 95.5% |
| pH in 1% Solution | 9-14 | 8.5-11 | 10.8 | 0 | 2.8-3.5 | 6.5-6.8 | 4.8 |
| pH Effect in Water | Raises | Raises | Raises | Lowers | Lowers | Neutral | Lowers |
| Physical Appearance | Liquid | Granular, Tabs, Briquet | Granular | Gas | Granular, Tabs | Granular | Granular, Tabs |

Table 5-2. Characteristics of different forms of disinfectants.

3) We've been closed for a few months - or, we didn't open last summer - can I still use my old chlorine?

Short answer: NO!!!!

Longer answer: Always avoid using old chlorine. How old becomes bad depends on a variety of factors (storage location, temperature changes, unopened container, chemical purity from the original

distributor, light exposure, etc.) Why? The chlorine will become ineffective and/or it could actually be spoiled.

Last Friday (Victoria Day long weekend), I had a client working at a campground (commercial pool) call about failing the microbiological pre-season water test. Literally everyone booked into the campground would be unable to swim for the entire long weekend - it takes 3 days to get a new water test back.

The cause? They added chlorine ordered at the end of last season (Sept/Oct 2020) to the newly-filled pool. We don't know exactly how/why it was compromised, but that's the only possible explanation.

Buying in bulk only saves money if you actually need - or will use - the chemicals. In this case, someone else's decision to save money purchasing chem ahead will result in the opportunity cost to clients and the facility comping a lot of campsite fees.

What can you do with old chlorine? If it doesn't look like nuclear waste on *The Simpsons* (see below), use it for industrial cleaning in non-sensitive areas (e.g. restaurant floors, NOT bleaching laundry).

TL;DR - When in doubt, throw it out...by which I mean carefully dispose of it at the hazmat depot or send it back to your supplier. They may charge a disposable fee, other's don't if there's a container deposit.

Katie Crysedale
Founder, Lakeview Aquatic Consultants



Article by Katie Crysedale

Why pool professionals still need to talk about entrapment prevention

You know Virginia Graeme Baker, but do you know [Abigail Taylor](#)? Abbey was a 6-year-old girl eviscerated by a drain in the wading pool at the



Minneapolis Golf Club on June 29, 2007. Despite nine months of hospital care, 16 surgeries and multiple organ transplants, Abbey died from her injuries. Do you know Zachary Cohn? Zachary's arm was caught in a residential pool drain in Connecticut in 2007.

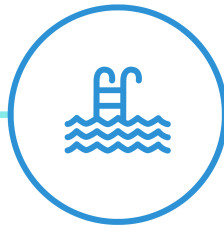
Keep Reading

Lakeview Aquatic Consultants Ltd.



TRAINING

100% live virtual Certified Pool Operator (CPO) training to meet your staff needs on your facility schedule



CONSULTING

360-degree analysis of how your aquatic facility operates from front door to filter room



COACHING

1:1 coaching and support for aquatic professionals of all types to build and grow capacity



POOLAIDE WEBINARS

Free professional development webinars connecting the global aquatic community



New on YouTube

How are candidates identified?









AV POD

CHAT

Katie Crysdale
Multicultural Perspectives on Lifesaving in Australia (Wed, March 24) **special time*

Katie Crysdale
You're good!

Katie Crysdale
If you can make it louder, that would be helpful

J. B.
the video sound is not coming through. I can only hear slight background movements


Katie Crysdale
If I can get the video, I will link on the show notes

POOLaide Indoor Pool Air Quality: Modern Research & Practical Solutions

Step 2: Enhance Water Circulation & Filtration

This is a major limiting factor due to existing facility infrastructure and design but in most cases there is room for improvement.

- Proper cleaning of high contamination areas (surge tank, gutters, removable stairs)
- Hydraulic dye test to minimize circulation dead zones
- Regular inspections of filter system
 - Media condition (appropriate for surface)
 - Measure pre/post filter chlorine
 - In-line turbidity pre & post filter
- Correct selection and dosing of coagulant/flocculent (charge optimized)
- Granular activated carbon (GAC)
 - o GAC filtration showed the highest removal of volatile DBPs. Almost the entire amounts of trichloramine, combined chlorine, and dichloroacetonitrile were removed by GAC filtration. (Skibinski, 2019)
 - o **Practical implementation:** it is possible to retro-fit a medium rate sand filter of sufficient depth to function as a multi-layer filter. Should be incorporated as part of a treatment process designed for swimming pool applications that addresses the need to re-activate the media. Carbon selection (source/grade/preparation treatment) is also critical.



AV POD

CHAT

Katie Crysdale
Indoor Pool Air Quality: Modern Research & Practical Solutions (Fri, March 26)

time**
bit.ly/poolaide21-22


Katie Crysdale
(recording not posted yet)

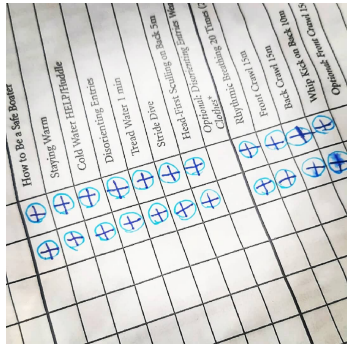
Katie Crysdale
This document is linked on the show notes

T. B.
Hi Brent


A. S.
What are your thoughts on Hydroxan as a combined chlorine mitigation product?

Instagram Posts



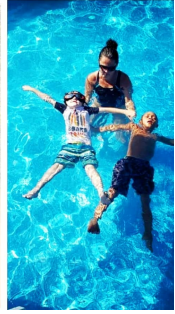


MOM A



lifeguardyourlittles

MOM B



Pool & Hot Tub Alliance (PHTA)

Certified Pool Operator (CPO) Class



CERTIFIED POOL OPERATOR CLASS

**July 19 - 22, 2021
10 am - 2 pm EST
100% Online**



www.LakeviewAquaticConsultants.com



Registration for the June CPO class closes tomorrow (Wednesday) at 12pm MST.

Public CPO classes on Zoom offered monthly throughout 2021. Private CPO classes available on your schedule via Zoom or workplace cohort as restrictions lift in different provinces.

7 year old me in a corner of the pool



Popular on Facebook

Items that had Facebook followers either ranting or raving!



**Las Vegas pool
installation
unearths bones
that date back to
ice age**



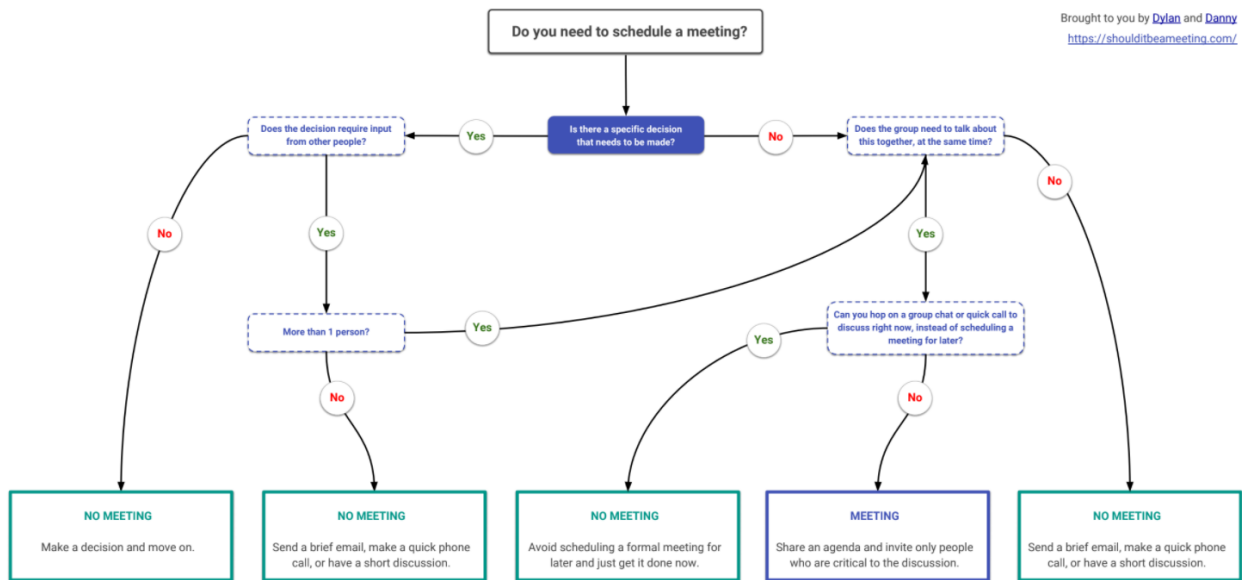
**Atlanta to
reopen, waive
fees for
swimming pools**



**Unlabeled Tanks
and
Unsupervised
Children: 2 Die In
Florida Swimming
Pool Scuba
Accident**



**Finding Freedom
in the Water**



Lakeview Aquatic Consultants Ltd.

Box 701
Okotoks, AB
T1S 1A8 Canada

info@lakeviewaquaticconsultants.com

You received this email because you signed up on our website.



[Unsubscribe](#)

mailer lite