

## June 15, 2020, TRC Call Chat Record

00:31:00 dewey case: the emails are regarding the TRC chart of work. it's internal to the TRC.

01:04:20 Steve Mueller: I have experience in both water treatment systems and air handling systems. The air side of the pool industry is entirely separate, with little to no overlap, from the pool water treatment industry. In some ways the mechanical air design is similar to building structural design. Both require pool specific design but have no connection with water treatment design. The pool industry, in general, has little to no experience in the intricacies of air system design and operation. While air quality is an important part of pool safety, the solution is a water treatment issue, not air handling. If we decide to write MAHC language for air systems that section would require language well beyond current ASHRAE and will become very lengthy. I would suggest the air system simply be referred to ASHRAE for their guidelines.

01:11:51 Terrance Ewuell: @Steve Mueller which do u feel is the best practice to ensure safety?

01:21:54 Steve Mueller: Unfortunately, ASHRAE doesn't address air quality, only humidity, dew point, air flow, turnover, etc. If our intent is to assure safe air quality, we need to define maximum levels of airborne nitrogen trichloride (trichloramine), chloroform and cyanogen chloride. Some European countries address this specifically with maximum levels of airborne trichloramine and maximum water levels of chloroform. The ideal is to define results based guidelines. There are very accurate sensors, both manual and automatic, for airborne trichloramine available today. But again, air quality is a water treatment issue. While ASHRAE could be expanded. I see no issues with the current ASHRAE guidelines.

01:25:17 Terrance Ewuell: @ steve, but u do feel ashrae can be expanded to cover air quality in more depth?

01:33:42 Steve Mueller: Yes, but ASHRAE is a big ship and slow to turn. Because the pool industry is a very small part of the air business, there isn't much interest or concern for our issues. The typical air rep firm, pool air systems is less than 10% of their business. Ralph Kittler has years of experience in pool air handling discussions with ASHRAE can better comment on changing guidelines. We could offer MAHC air quality standards to ASHRAE to include in their language. It is worth restating, that unsafe air quality is rarely an issue with air systems, it is water treatment. Poor air quality can only be addressed by replacing all air in the natatorium, and even then it is only a temporary resolution.

01:36:59 Terrance Ewuell: understood

01:37:03 Terrance Ewuell: thank you

01:37:17 Terrance Ewuell: \*understood

02:54:38 Terrance Ewuell: i am willing to assist

02:58:59 Terrance Ewuell: good day