



MAURA T. HEALEY
Governor

KIMBERLEY DRISCOLL
Lieutenant Governor

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
Bureau of Climate and Environmental Health
Community Sanitation Program
250 Washington Street
Boston, MA 02108-4619
Phone: 617-624-5757

KATHLEEN E. WALSH
Secretary

ROBERT GOLDSTEIN, MD, PhD
Commissioner

Tel: 617-624-6000
www.mass.gov/dph

May 21, 2024

Steve Berens, CEO
CLEAR COMFORT WATER
3063 Sterling Circle, Suite 8
Boulder, CO 80301

Re: Alternative Technology Conditional Approval – Clear Comfort Commercial Hydroxyl-Based Advanced Oxidation products

Dear Mr. Berens:

This letter is in response to Clear Comfort's request for alternative technologies approval of their product and systems, for use at Massachusetts public and semi-public swimming pools.

The regulations for public and semi-public swimming pools in Massachusetts, *105 CMR 435.00: Minimum Standards for Swimming Pools (State Sanitary Code: Ch V)*, have provisions in place to approve new and innovative equipment and procedures or disinfection methods if they demonstrate the application will achieve the intent of the regulations to provide a reasonably safe environment and without any hazard to the public's health (*105 CMR 435.37: New and Innovative Equipment and Procedures*).

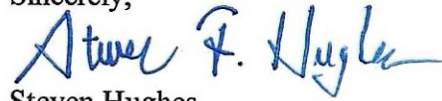
According to information provided, the Clear Comfort Commercial Hydroxyl-Based Advanced Oxidation products (CCW100, CCW300A, CCW300 & CCW500) are intended to provide supplemental disinfection for swimming pools, destroy chlorine-resistant contaminants (i.e. Cryptosporidiosis), diminish disinfection byproducts, and reduce the use of primary disinfectants, such as chlorine and bromine.

The hydroxyl gas injection system is certified under ANSI/NSF 50 using the NSF Component Certification Specification 14530: Gas Injection Systems. This certification is for dosing chemicals other than for disinfection into recreational water facilities. "Claims of ozone generation and advanced or enhanced oxidation disinfection are excluded from the scope of this standard" (NSF 2018). The NSF standard describes system components, materials, and design and performance requirements. As noted, these standards do not evaluate the efficacy of the product in disinfecting water. The system is also certified under UL 1563 for performance and safety using the basic standard used for products ANSI/NSF 50 certified.

Clear Comfort does not make any claims regarding the disinfection efficacy of its products, and therefore Clear Comfort technology can only be used as a supplementary water treatment system that could be installed at public and semi-public swimming pools, spas and interactive water features as a supplement to the primary water sanitation treatment. Massachusetts recognizes chlorine, maintained at a minimum 1.0-3.0 ppm, and bromine, maintained at a minimum 2.0-6.0 ppm, as primary disinfection chemicals. Provisions in the

regulations, 105 CMR 435.06: *Water Circulation and Filtration Systems* and 105 CMR 435.29: *Chemical Standards*, offer additional details regarding requirements for primary disinfection systems. The Community Sanitation Program recommends that Clear Comfort submit these products to the Council of Model Aquatic Health Code (CMAHC) Certification Process for approval regarding the disinfection capabilities.

Sincerely,

A handwritten signature in blue ink that reads "Steven F. Hughes". The signature is fluid and cursive, with the first name "Steven" and last name "Hughes" clearly legible.

Steven Hughes,
Director, CSP, BCEH

Cc: Ipswich Board of Health (electronic copy)