



ETS-UV™ DISINFECTION

EDGEWATER RESORT & WATERPARK

After Cryptosporidium outbreak, waterpark invests in an ETS-UV™ system

UV DISINFECTION INACTIVATES CHLORINE TOLERANT MICROORGANISMS SUCH AS CRYPTOSPORIDIUM

Customer Profile

The Edgewater Hotel and Waterpark is a popular destination located on the western shores of Lake Superior. The resort features an outdoor pool and hot tub, an indoor waterpark with three pools and a hot tub, as well as a long list of amenities including a miniature golf course and arcade.

Challenge

The Edge waterpark meets or exceeds industry standards and health codes concerning water quality, yet still suffered from an outbreak of Cryptosporidiosis. "Crypto" is a chlorine tolerant pathogen responsible for 75% of Recreational Waterpark Illnesses (RWI's) reported to the CDC. This chlorine tolerant parasite is spread through the fecal discharge of infected people and spreads when other swimmers ingest contaminated water.

In March of 2012, dozens of possible cases of Cryptosporidiosis were traced to the waterpark. After learning that people had become ill, the waterpark was quickly closed and a 13-hour super dose of chlorine was applied to disinfect Crypto. The Edge Waterpark was proactive and honest with the community. They worked closely with the local media and sent 25,000 letters to notify recent guests.

When the Edge was built in 2005, UV was not well known in the industry. At the time of the 2012 Crypto outbreak, the waterpark met all health code requirements. Detailed logbooks on the measures that were taken to safeguard patrons were reviewed. The facility utilized a highly functional filtration system and tested the chlorine and pH levels every two to three hours, much more frequently than required by code. Swimmers were required to shower before entering the pool. It was mandatory for babies and toddlers to wear swim diapers, which were provided at no cost. Staff at The Edge were at a loss over what could have been done differently to protect patrons from Crypto.

Industry

Aquatic, Waterpark

Challenge

Restoring faith of public health to protect patrons against future Crypto breakouts

Keys to Success

ETS-UV disinfection is 99.9% effective at inactivating Crypto in a way that normal levels of chlorine will not.

Solution

ETS-UV systems were chosen because of the third party validation with the U.S. EPA and the excellent reputation held in the industry for supporting installations long after the sale.



Shown above is an ETS-UV ECF system installed

The Solution

ZMC Hotels, which owns Edge, made an investment to make sure a large Crypto outbreak does not happen again. ZMC chose ETS-UV™ disinfection systems because they are the market leader in UV and have an excellent reputation for supporting installations long after the sale. UV technology is 99.9% effective inactivating Crypto in a way that normal levels of chlorine will not. This level of disinfection has been proven by validation, using independent third-party testing with U.S. EPA drinking water standards (USEPA UVDGM). The UV systems also dramatically improved the air quality by controlling the malodorous and corrosive byproducts of chlorine disinfection.

Validated UV has become the standard for improving air and water quality at commercial pools. UV not only controls corrosive chloramines, but it also highly disinfects chlorine tolerant pathogens responsible for most of the Recreational Water Illnesses reported to the CDC. Health officials are increasingly addressing Crypto concerns by adding requirements for UV on public pools and water features.



“The sales team was very knowledgeable about the concerns our facility faced. I found the company to be responsive and proactive, from relay of information of installation to operation, it was a very smooth process. The results we experienced were astronomical; our combined chlorine has been nearly eliminated, our chemical readings have been right on, and our equipment is lasting longer. Installing ETS-UV disinfection was the best thing we could have done to improve our facility”

**Hannah Jansen
Director of Operations**



About Cryptosporidium

Cryptosporidium is a chlorine tolerant organism that is common and resilient. It can survive for months in water or soil as an infectious oocyst that has been shed by an infected host. As a parasite, it requires a host to multiply. When people drink water containing the oocysts, they quickly multiply. When this happens, boil notices are issued. Public outbreaks have now occurred in North America, Europe, Asia, South America where immunocompromised patients, infants, and the elderly are typically the most vulnerable.



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