

The Nice Side of Ozone: For Natural Sanitation Ozone Earns Attention

Ozone is much more than the nasty air pollutant that everyone knows about. It's also the naturally occurring protective layer of ozone in the upper atmosphere. And it's the safest, most powerful natural sanitizing agent we have for a wide range of commercial, industrial, and residential applications.

Ozone generators replace or reduce chemicals in a variety of applications

Ozone generators turn pure oxygen into powerful and natural ozone that is used to oxidize, sanitize, and purify everything from hot tub water to municipal water. Quite often ozone can eliminate the need for chemicals and at minimum, ozone *reduces* the need for chemicals. For example, it is common to see a 60-90% reduction of chlorine use in pools and spas that use ozone for water sanitation.

The applications of ozone sanitation have even reached the on-premise laundry industry, where ozone laundering is used to reduce the amount of hot water and detergents needed to clean the laundry at hotels, universities, nursing homes, and more. In doing so, operators are seeing cost savings that deliver returns within several months of use.

The sanitizing power of ozone has proven to be 200 times more powerful than chlorine and, unlike many other forms of sanitation, ozone leaves behind no harmful chemical byproducts. In pools, ozone reduces the chlorine by-product, chloramines, that can cause skin irritations and illness, such as "lifeguard lung." Ozone also oxidizes hydrogen sulfides, iron, manganese, arsenic, and most chlorinated hydrocarbons found in water.

Center for Disease Control recognizes ozone

Ozone is becoming so well accepted that even the soon to be released Model Aquatics Health Code, sponsored by the Center for Disease Control, will include ozone among the two technologies it recommends for supplemental disinfection in public pools to reduce chloramines and fight recreational water illnesses (most notably, cryptosporidium) that chlorine alone cannot handle.

The hot tub industry caught on to ozone long ago and now, more than 80% of all spas use ozone generators to maintain clear, purified water. The trick is training hot tub owners to replace their spa ozone generators every 3 years, since the ozone generator will wear out long before the 10-year replacement period of a typical tub.

Ozone's biggest problem is perception

Probably the biggest problem ozone faces is public perception. When people hear ozone they immediately think "bad." In fact, the opposite is true of most ozone – from the protective layer in the upper atmosphere to the ozone technology used to clean water in zoos, aquariums, hot tubs, pools, and even laundry.

Quick Facts about Ozone Sanitation Technology

What Does Ozone Do?

- Ozone destroys bacteria, viruses, mold, and mildew.
- Ozone oxidizes iron, sulfur, manganese, and hydrogen sulfide.



- Ozone eliminates oils and other contaminants in water.
- Ozone keeps water fresh, clean, and clear.
- Ozone reduces or eliminates the need for chemicals.
- Ozone is 200 times more powerful than chlorine as an oxidizer of organic contaminants.

Is Ozone Safe?

When properly sized and installed (a simple task), ozone generators are safe for people and the environment.

- The only by-product resulting from ozone disinfection is oxygen – there are no chemical byproducts in water sanitized by ozone.
- Ozone is a naturally-occurring oxidizer for water treatment applications.
- Ozone prevents or destroys chloramines, which are known to form the carcinogen, trihalomethane.
- Ozone is 100% natural and biodegradable.

How is Ozone Being Used Today?

Ozone sanitation technology is being used in a variety of applications today:

- Supplemental water sanitation for pools, aquariums, zoos, and water parks.
- To clean waste water and toxic waste.
- Bottled water purification.
- To sanitize spa water.
- Municipal water purification.
- Well water sanitation.
- On premise laundry operations.
- And many more.

How can I learn more about ozone sanitation?

Founded in 1975, DEL Ozone of San Luis Obispo, CA has become the leading innovator in ozone technology worldwide. The company's technology has been used in high profile projects, including the Beijing Aquarium, the Bellagio Hotel in Las Vegas, Hilton Minneapolis, and Walt Disney World. Also, DEL is the leading supplier of ozone generators to hot tub manufacturers worldwide.

To learn more about ozone sanitation and or to purchase an ozone generator for your commercial, industrial, or residential application, visit www.delozone.com.