



Panel Recommends Conventional Water Treatment plus Ozone Treatment

A panel of national experts in drinking water treatment and public health recommended in June that Tigard and Lake Oswego pursue conventional filtration plus ozone treatment to best protect public health in the long term.

The Lake Oswego Tigard Water Partnership plans to upgrade and expand Lake Oswego’s existing water treatment plant to serve both communities. A 2007 engineering report concluded the current direct filtration treatment process must be converted to reliably produce top quality drinking water.

The expert panel validated the 2007 report findings. The panel confirmed the quality of the Clackamas River – Lake Oswego’s drinking water source - is very good. They also found that combining conventional filtration with ozone treatment will meet future safe drinking water standards and provide additional assurance of safer, aesthetically pleasing drinking water. The panel recommendation was backed by an eight-member Citizen Sounding Board with representatives from Tigard and Lake Oswego.

Further work will determine costs for this element of the water supply system before each City Council is asked to consider the treatment recommendation in late 2010. Of the 18 alternatives examined, the recommended conventional / ozone treatment is considered mid-range in cost.

Introducing Ozone!

Ozone is oxygen (O₂) with an extra atom (O₃). Ozone treatment works through a process called “oxidation.” During oxidation, the extra atom oxidizes – or destroys – odor-causing material and microorganisms, leaving only pure oxygen in the water.

An ozone generator uses energy to produce ozone from oxygen for the water treatment process. Lightning storms naturally produce ozone; that is what creates the “clean” smell after a summer storm.

The use of ozone treatment offers multiple benefits at a minimum cost to an average household that:

- ✓ Provides an additional treatment barrier to protect public health
- ✓ Consistently produces water that is pleasant tasting, year-round.
- ✓ Reduces the amount of chlorine needed for disinfection.
- ✓ Is capable of meeting emerging concerns for pathogens, algal toxins, disinfection by-products, pharmaceuticals and personal care products.
- ✓ Represents proven technology, with the number of ozone installations increasing in Oregon and across the U.S. due to its ability to provide multiple water quality benefits.

“Of disinfectants evaluated, ozone provided the highest degree of contaminant removal.”

American Water Works Association (AWWA)
Research Foundation (2007)

Ozone Communities

Oregon

Medford
Wilsonville

Washington

Seattle
Tacoma
Walla Walla

Other US Cities

Dallas
Las Vegas
Los Angeles
Orlando

Around the World

Barcelona
Mexico City
Paris
Shanghai
Zurich



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