

# NEWS ARTICLE

## “DOES OZONE LAUNDRY REALLY WORK?”

A user's report - Feature Article - excerpt of interview with - Penacook Place Nursing and Rehabilitation Center executive Julian Rich  
*Nursing Homes Magazine*

Employed as early as 1906 to treat the water supply in Paris, France, and used today in some processes for producing bottled water, ozone is known for its bleaching action and ability to kill bacteria and viruses. This “cousin” of oxygen also has a practical, money-saving application: treating water used in laundry operations.

Ozone - which, simply put, is oxygen plus an extra atom (O<sub>3</sub>) as opposed to (O<sub>2</sub>) is formed when oxygen comes into contact with highly charged electrical energy. Systems that generate ozone and inject it into laundry water can dramatically reduce hot water use in large laundry operations, as well as reducing the amount of cleaning chemicals used and producing cleaner, brighter linens and clothing.

Penacook Place Nursing and Rehabilitation Center, a 160 bed facility in Haverhill, Mass., had two ozone generators installed in its laundry room in January of 2002. Nursing Homes/Long Term Care Management spoke with Julian Rich, Penacook's president and CEO, and Bob Rawding, its director of building services, about how this addition has affected their facility's laundry operation.

### What prompted you to consider using ozone generators in your laundry room?

**Rich:** I was initially interested because of the potential for cost savings from reduced hot water use. Based on the calculations of a vendor I spoke to at a conference, it appeared that the ozone generators would pay for themselves within approximately two years of their installation. With a savings potential like that, the decision was a “no-brainer” for me. Now we're tracking the actual savings, and after one year we're right on track with the projected savings.

### Are there other benefits of using an ozone system besides saving hot water?

**Rich:** Yes, there are some benefits we weren't even aware of when we purchased the system. For example, the laundry turns out much whiter. You can set towels washed with ozonated water

next to towels washed traditionally, and the superior whitening effect of ozone is immediately and dramatically obvious.

Another benefit is that the laundry room is much cooler in the summer. The decreased need for hot water reduces room temperature by a great deal, and anything we can do to make our staff more comfortable at work is a plus.

**Rawding:** Specifically, using ozonated water has eliminated approximately 75 to 80% of our hot water use, and our gas bill has declined by 25 to 30% since the ozone generators were installed.

Not only is the laundry whiter and brighter, but it's also fluffier. This means we are sending out a product that residents enjoy more. You can also stack towels and washcloths washed in ozonated water next to a stack of the same number washed in non-ozonated water, and the ozone-treated pile will be twice as high. This is because using ozone in the water opens the fabrics' pores. For this reason, in addition to using less hot water, laundry washed with ozonated water dries faster, so there is less energy used for drying and there are fewer dryer cycles to raise the room temperature in warm weather.

### Did you have to obtain regulators' approval for installing the ozone generators?

**Rich:** We checked with the state, because we didn't want to discover we had any inappropriate sanitation issues with the ozone system. The state was very comfortable with our plans and approved the system.

### How long did installation take?

**Rawding:** It took one day for installation, followed by a few hours the next day after start-up for adjustments.

### How many washing machines do you have connected to each ozone generator?

**Rawding:** We have two washers per generator, which works well.

### Can you use ozonated water on colored fabrics, or just on whites?

**Rawding:** We can use it on everything we wash.

### Are there any disadvantages to be aware of when considering the installation of this sort of equipment?

**Rawding:** One thing you have to be aware of is that the laundry area needs to be well ventilated; ozone does have a slight odor. But if the laundry is properly vented, the presence of the ozone doesn't affect anyone.

**Rich:** Initially we had some leakage that had to be repaired, which caused one employee some discomfort, but it was remedied immediately, and she suffered no harm.

**Rawding:** It's also important to know that ozone deteriorates rubber. As a result, we had to replace some rubber hoses on our washers.

### How much maintenance do the ozone generators require?

**Rawding:** Very little. There are some small filters we have to keep clean, but overall they perform well without much routine maintenance.

### Do you feel you made the right decision when you purchased the ozone generators?

**Rawding:** It was a good investment. I have to admit that I was a little leery going in, but it has definitely worked well for our facility.

**Rich:** We're extremely happy with our decision.

For more information about laundry and ozone please contact 800-262-0203 or visit our web site at [www.cwtozone.com](http://www.cwtozone.com).