



Department of Public Works
Milwaukee Water Works

Mariano A. Schifalacqua
Commissioner of Public Works

James P. Purko
Director of Operations

Carrie M. Lewis
Superintendent of Water Works

October 16, 2002

Mr. Anthony Zielinski
Council Administration Manager
Common Council
Room 205 – City Hall

Dear Mr. Zielinski:

Here is the documentation for the communication file:

“Communication from Water Works regarding new information on the role of ozone in drinking water treatment.”

Please schedule this for the next meeting of the Utilities & Licenses Committee.

Very truly yours,

Carrie M. Lewis, Superintendent
Milwaukee Water Works

CML:mwb
Doc: ozone resolution



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To the Honorable
The Common Council

Dear Council Members:

This fall, Water Works will begin adding more ozone in the drinking water treatment process.

New research indicates that more ozone is required to inactivate *Cryptosporidium* in cold water (such as the Lake Michigan water which is the source of Milwaukee's drinking water) than was previously thought. Scientists and regulators are still reviewing research results to determine the actual dosages required to achieve a specific inactivation target.

Both the Linnwood and Howard Avenue Plants have ample capacity to generate higher ozone concentrations. However, if significantly higher dosages are necessary, modifications to related equipment will be required. The costs of these changes are being evaluated.

Public health will continue to be protected year round by Milwaukee Water Works' multiple barrier approach to water treatment. The barriers are source water protection, disinfection (with ozone and chlorine), coagulation and filtration (for physical removal of contaminants such as *Cryptosporidium*), monitoring, and a well-maintained distribution system. Each of these barriers has been improved and upgraded in the past ten years, and each adds a level of protection. Ozone forms just one of these multiple barriers.

Ozone plays an important part in the Water Works' treatment strategy. It has many beneficial effects in addition to protection against *Cryptosporidium* and other microorganisms. Ozone reduces tastes and odors, reduces chlorinated disinfection by-products, and improves the coagulation and filtration processes.

How safe is Milwaukee's water? Protection from *Cryptosporidium* is very nearly 100% due to the effectiveness of all the multiple barriers combined. The higher ozone dosages will add even better protection than we have had since ozone was fully operational four years ago.

To the Honorable
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Page 2
October 16, 2002

New technologies, such as ultraviolet treatment of water, are being researched for their ability to add additional protection against *Cryptosporidium*. Water Works and the Health Department will continue to evaluate whether this or other technologies offer significant improvements in the level of protection.

Do not hesitate to call me at Ext. 2801 if you wish additional information about this topic.

Very truly yours,

A handwritten signature in black ink that reads "CMLewis". The signature is written in a cursive style with a large initial "C" and "M".

Carrie M. Lewis, Superintendent
Milwaukee Water Works

CML:ps
Doc:ozone.ltr