

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
AMENDMENTS TO PRIMARY DRINKING) R15-23
WATER STANDARDS) (Rulemaking - Water)
35 ILL. ADM. CODE 611)

NOTICE OF FILING

PLEASE TAKE NOTICE that I have electronically filed today with the Illinois Pollution Control Board Illinois EPA's ILLINOIS EPA'S RESPONSE TO BOARD QUESTIONS for the above captioned rulemaking, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/Joanne M. Olson
Joanne M. Olson
Assistant Counsel
Division of Legal Counsel

DATED: June 25, 2015

1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	R15-23
AMENDMENTS TO PRIMARY DRINKING)	(Rulemaking - Water)
WATER STANDARDS)	
35 ILL. ADM. CODE 611)	

ILLINOIS EPA'S RESPONSE TO BOARD QUESTIONS

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA" or "Agency"), by one of its attorneys, and respectfully responds to questions raised by the Illinois Pollution Control Board ("Board") in its June 4, 2015 Opinion and Order. The Illinois EPA states as follows:

1. Illinois EPA filed the instant rulemaking on May 20, 2015. Included in the rulemaking proposal was a motion for an emergency rulemaking.

2. On June 4, 2015, the Board reserved ruling on the Agency's emergency motion and requested the Illinois EPA provide additional information.

3. The Board presented the Agency with the following five questions, to which Illinois EPA restates and answers:

- a) Provide the number of households or individuals served by the community water suppliers that add fluoride.

Illinois EPA's Response: Illinois EPA estimates that approximately 11,825,891 people are served by community water supplies that add fluoride.

- b) Provide the basis upon which the calculations of savings were made.

Illinois EPA's Response: The Illinois EPA asked the City of Chicago, Aqua Illinois and Illinois American Water Works how much money it would save by reducing the fluoride feed to meet a 0.7mg/l standard. The City of Chicago's response is attached as Exhibit 1; Aqua Illinois response

is attached as Exhibit 2. Illinois American Water Works' response is attached as Exhibit 3.

The total population using water with fluoride addition is approximately 11,825,891. Chicago's population served is approximately 5,409,202. Chicago's estimated savings is approximately \$1,000,000. Illinois American Water Company's population served is 932,688. Their estimated savings is approximately \$150,000.

Extrapolation #1

$$11,825,891/5,409,202 * \$1,000,000 = \$2,186,254$$

Extrapolation #2

$$11,825,891/932,688 * \$150,000 = \$1,901,904$$

Based upon these the two cost saving estimates provided, the Agency projects a cost savings of approximately \$2,100,000 for the entire population of the State of Illinois.

- c) Address whether, and if so, why, the prospect of community water suppliers not realizing the estimated cost savings for a 5 month period reasonably constitutes a threat to the public interest, safety or welfare

Illinois EPA's Response: Mandating community water supplies to spend approximately \$1 million dollars every six months to meet an outdated standard is a threat to the public's interest and welfare for two reasons. First, legislation has already been passed in Illinois that establishes the proper fluoridation levels in Illinois; the statute requires the fluoridation level to be based on the recommendation of the U.S. Department of Health and Human Services. Public Water Supply Regulation Act, 415 ILCS 40/7a (2014). The current Board fluoridation requirements are higher than the U.S. Department of Health and Human Services' recommendation, and are therefore overly burdensome when compared to the level intended by the Public Water Supply Regulation Act. Second, requiring community water supplies to spend taxpayer dollars to meet the Board's current rule, which is inconsistent with state law, and federal recommendations, is against the public's interest. Rather than being spent on complying with an incorrect fluoride standard, this money could be better used to improve the community water supply itself or other programs in the community funded by taxpayer dollars. For example, the City of Chicago may fund other projects or programs with the \$500,000 it would cost to continue to add fluoride according to the Board's current standards.

- d) Provide specific hardships or detrimental effects to community water suppliers that are more likely than not to result if an emergency rule is not granted.

Illinois EPA's Response: Most community water supplies in Illinois are publically owned, and therefore funded by taxpayer dollars. The Agency anticipates that communities could use the money saved by complying with a lower fluoride requirement on other aspects of water treatment and distributions, on projects or programs within the community at large, or pass the savings on to the taxpayers through rate reductions.

- e) Indicate what, if any, significant public health impacts would result to the customers of community water systems if the amount of fluoridation were reduced as proposed.

Illinois EPA's Response: The Illinois EPA did not base its motion for an emergency rule on the argument that the rule is needed to avoid significant public health impacts. Rather, as further discussed in the answers above, the motion argued that unnecessary expenditure of taxpayer dollars for increased fluoridation costs related to an outdated standard constituted a threat to the public interest or welfare. Given that the fluoride requirement itself is not a health-based standard, no impacts as described would result.

WHEREFORE, for the reasons set forth above, the Illinois EPA respectfully requests that the Board grant Illinois EPA's motion for Emergency Rulemaking.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/Joanne M. Olson
Joanne M. Olson
Assistant Counsel
Division of Legal Counsel

Joanne M. Olson #6293500
Illinois Environmental Protection Agency
Division of Legal Counsel
1021 N. Grand Ave. East
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(217) 782-5544



DEPARTMENT OF WATER MANAGEMENT
CITY OF CHICAGO

Mr. David McMillan, Manager
Division of Public Water Supplies
Illinois Environmental Protection Agency
1021 N. Grand Avenue East
Springfield, IL 62702

May 15, 2015

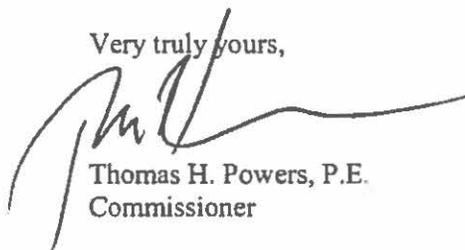
Subject: Fluoride Inquiry

Dear Mr. McMillan,

Per your inquiry, the Department of Water Management fully supports the change of Fluoride dosage from 1.0ppm to 0.7ppm. This change would result in cost savings of almost one million dollars per year. Please see attached calculations. Therefore, the City of Chicago's Department of Water Management supports Illinois EPA's and Illinois Pollution Control Board's expedited rule making proposal to lower the Fluoride dose from 1.0 ppm to 0.7 ppm.

Finally, should you have any further questions, please contact Alan Stark at (312) 742-0168.

Very truly yours,



Thomas H. Powers, P.E.
Commissioner

attachments



JWPP Calculation for lowering fluoride target.

Average Fluoride usage for the years 2012, 2013, 2014 = $(1249150+1360450+1247750)/3$ Lbs = 1,285,783 lbs

a) Cost at the target dosage of 1 ppm

First we have to account for naturally occurring F residual of 0.2 ppm in the raw water. So the actual dosage will be $(1.0-0.2)$ ppm = 0.8 ppm.

Now, at 0.8 ppm we feed on the average 1,285,783 lbs F. The cost involved for using 1,285,783 lbs of "F" is equivalent to 7,061,211 lbs (3531 tons) of liqd H₂SiF₆.

(Note: $1,285,783$ lbs "F" Wt / $0.23/0.7917 = 7,061,211$ lbs liqd H₂SiF₆)

We know the current contract price is \$478.6 /Ton of liqd H₂SiF₆

So the total cost involved at 1 ppm is $3531 \times 478.6 = \$1,689,936$

b) Cost at the target dosage of 0.7 ppm

Like before, we have to account for naturally occurring "F" of 0.2 ppm in the water. So the actual dosage will be $(0.7-0.2)$ ppm = 0.5 ppm

So we will use $(1,285,783 \times 0.5) / 0.8$ for this dosage which is 803,614 lbs of "F" which is =

$803,614 / .23 / 0.7917$ lbs. of H₂SiF₆ or 4,413,254 lbs H₂SiF₆ or 2207 tons Liqd H₂SiF₆.

At the current price of \$478.6/Ton of Liqd H₂SiF₆ the cost is $2207 \times 478.6 = \$1,056,270$

So the anticipated annual savings for lowering the fluoride target dose from 1 ppm to 0.7 ppm is (a-b) which is \$ 633,666.

Olson, Joanne

From: McMillan, Dave
Sent: Monday, May 11, 2015 11:47 AM
To: Randy.Pankiewicz@amwater.com
Subject: RE: Fluoride Savings

Thank you.

From: Randy.Pankiewicz@amwater.com [<mailto:Randy.Pankiewicz@amwater.com>]
Sent: Monday, May 11, 2015 11:31 AM
To: McMillan, Dave
Subject: Re: Fluoride Savings

Dave,

Approximately 150K per year for all ILAWC

Randy

Randolph Pankiewicz
Manager Water Quality and Environmental Compliance
Illinois American Water Company
100 N Waterworks Drive
Belleville, IL 62223

Telephone 618-239-3249
Cellular 618-910-7242
randy.pankiewicz@amwater.com

From: "McMillan, Dave" <DAVE.MCMILLAN@Illinois.gov>
To: "alan.stark@cityofchicago.org" <alan.stark@cityofchicago.org>, "Randy.Pankiewicz@amwater.com" <Randy.Pankiewicz@amwater.com>, "KMCulver@aquaaamerica.com" <KMCulver@aquaaamerica.com>,
Cc: "Olson, Joanne" <Joanne.Olson@Illinois.gov>, "Johnson, Steve C." <STEVE.C.JOHNSON@Illinois.gov>, "Cook, David" <DAVID.COOK@Illinois.gov>, "Cobb, Rick" <RICK.COBB@Illinois.gov>
Date: 05/11/2015 10:13 AM
Subject: Fluoride Savings

Alan, Randy and Kevin-

Do you have a guess on how much money you will save by reducing your fluoride feed to meet the new .7 ppb CDC recommendation? I am working on a rulemaking and any estimate you could make would be very helpful. (Randy and Kevin- Even if you can give me a WAG from just one of your systems that would be fine.)

Any help will greatly appreciated. We are going to try to get this regulatory package in internal sign-off this week and to the Board as soon as possible. Thanks-

Dave

W. David McMillan, P.G.
Manager, Division of Public Water Supplies
Bureau of Water



Illinois Environmental Protection Agency

Phone: 217-524-8111

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American Water Works Company Inc., 1025 Laurel Oak Road, Voorhees, NJ 08043 www.amwater.com

Olson, Joanne

From: McMillan, Dave
Sent: Friday, June 19, 2015 9:11 AM
To: Olson, Joanne
Subject: FW: Fluoride Savings

FYI

From: Culver, Kevin M. [<mailto:KMCulver@aquaamerica.com>]
Sent: Tuesday, May 12, 2015 7:43 AM
To: McMillan, Dave
Subject: RE: Fluoride Savings

Dave,
Sorry but I was out of the state yesterday trying to respond to a few quick emails. We projected to save a total of 17,000- 20,000 between the 2 large plants. The higher range would be a WAG for all of our operations in the state.
Kevin

From: McMillan, Dave [<mailto:DAVE.MCMILLAN@Illinois.gov>]
Sent: Monday, May 11, 2015 11:05 AM
To: Culver, Kevin M.
Subject: RE: Fluoride Savings

Kevin-
Just so I do not over state this. You would project \$17-20,000 cost savings at each (total saving of \$34-40,000).

From: Culver, Kevin M. [<mailto:KMCulver@aquaamerica.com>]
Sent: Monday, May 11, 2015 11:01 AM
To: McMillan, Dave
Subject: RE: Fluoride Savings

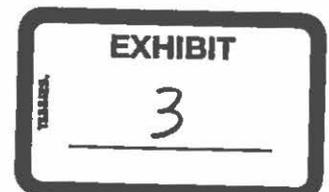
17-20K annual savings per year between both Aqua surface water plants.
Good Luck,

AQUA.

Kevin M. Culver
Regional Environmental Compliance Mgr.
Aqua Illinois
1000 S. Schuyler Avenue, Kankakee, IL
O: 815.614.2057 M:815.791.7178


From: McMillan, Dave [<mailto:DAVE.MCMILLAN@Illinois.gov>]
Sent: Monday, May 11, 2015 10:24 AM
To: Culver, Kevin M.
Subject: RE: Fluoride Savings

Kevin-



Could you make a guess for just Kankakee? I don't have to say the name of the water system in my testimony. I can just say I have communicated with three large CWS that currently add fluoride. These systems could see a cost savings of from "x" to "y."

From: Culver, Kevin M. [<mailto:KMCulver@aquaaamerica.com>]
Sent: Monday, May 11, 2015 10:19 AM
To: McMillan, Dave
Subject: RE: Fluoride Savings

Dave,

Without speaking to each operation a \$ figure would be impossible but a savings of 20-30% just on the amount fed is anticipated. Other facilities will not have to feed at all with the new target saving even more expense on operations and equipment maintenance.

Thanks,

AQUA.

Kevin M. Culver
Regional Environmental Compliance Mgr.
Aqua Illinois
1000 S. Schuyler Avenue, Kankakee, IL
O: 815.614.2057 M: 815.791.7178



From: McMillan, Dave [<mailto:DAVE.MCMILLAN@Illinois.gov>]
Sent: Monday, May 11, 2015 10:14 AM
To: alan.stark@cityofchicago.org; Randy.Pankiewicz@amwater.com; Culver, Kevin M.
Cc: Olson, Joanne; Johnson, Steve C.; Cook, David; Cobb, Rick
Subject: Fluoride Savings

Alan, Randy and Kevin-

Do you have a guess on how much money you will save by reducing your fluoride feed to meet the new .7 ppb CDC recommendation? I am working on a rulemaking and any estimate you could make would be very helpful. (Randy and Kevin- Even if you can give me a WAG from just one of your systems that would be fine.)

Any help will greatly appreciated. We are going to try to get this regulatory package in internal sign-off this week and to the Board as soon as possible. Thanks-
Dave

W. David McMillan, P.G.
Manager, Division of Public Water Supplies
Bureau of Water
Illinois Environmental Protection Agency

Phone: 217-524-8111

CERTIFICATE OF SERVICE

Joanne M. Olson, Assistant Counsel for the Illinois EPA, herein certifies that she has served a copy of the foregoing NOTICE OF FILING; and ILLINOIS EPA'S RESPONSE TO BOARD QUESTIONS upon persons listed on the Service List by mailing, unless otherwise noted on the Service List, a true copy thereof in an envelope duly addressed bearing proper first class postage and deposited in the United States mail at Springfield, Illinois on June 15, 2015.

/s/Joanne M. Olson
Joanne M. Olson

THIS FILING IS SUBMITTED ON RECYCLED PAPER

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Paper Document Service

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