

BEFORE THE POLLUTION CONTROL BOARD

STATE OF ILLINOIS

IN THE MATTER OF:)
)
PUBLIC WATER SUPPLIES:)
PROPOSED NEW 35 ILL. ADM.) R18-17
CODE 604 AND AMENDMENTS) (Rulemaking - Water)
TO 35 ILL. ADM. CODE PARTS)
601, 602, 607, AND 611)

ILLINOIS POLLUTION CONTROL BOARD HEARING

OCTOBER 17, 2017

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E X H I B I T S

| EXHIBIT | DESCRIPTION | ID/ADMIT |
|-----------|---|----------|
| Exhibit 1 | Free Chlorine Residual Requirements | 33/35 |
| Exhibit 2 | Total Chlorine Residual Requirements | 35/37 |
| Exhibit 3 | Total Coliform Positives in Surface Water (2006-2011) | 39/42 |
| Exhibit 4 | E. Coli & Fecal Coliform Positives in Surface Water (2006-2011) | 42/45 |

(Original exhibits retained by Hearing Officer Fox and not attached.)

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ILLINOIS POLLUTION CONTROL BOARD HEARING held
on October 27, 2017, between the hours of 10:00 A.M.
and 11:33 A.M. of that day, at the Illinois
Environmental Protection Agency, 1021 North Grand
Avenue East, Springfield, Illinois, before Robin A.
Enstrom, a Registered Professional Reporter and
Certified Shorthand Reporter within and for the
State of Illinois.

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A P P E A R A N C E S

FOR THE ILLINOIS POLLUTION CONTROL BOARD:

Timothy Fox, Hearing Officer

Katie Papadimitriou, Chair

Brenda Carter, Member

Cynthia Santos, Member

Anand Rao, Technical Staff

FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY:

Rex L. Gradeless, Assistant Counsel

Joanne Olson, Deputy General Counsel

W. David McMillan, Manager, Division of Public
Water Supplies

Richard P. Cobb, P.G., Deputy Division
Manager, Division of Public Water Supplies

David C. Cook, P.E., Acting Manager, Permit
Section, Division of Public Water Supplies

Stephen C. Johnson, P.E., Champaign Region,
Division of Public Water Supplies (Retired)

FOR CITY WATER, LIGHT AND POWER:

Deborah J. Williams, Regulatory Affairs
Director

Court Reporter:
Robin A. Enstrom, RPR, CSR
Illinois CSR #084-002046

1 (On the record at 10:00 A.M.)

2

3 HEARING OFFICER FOX: Good morning, and
4 welcome to this Illinois Pollution Control Board
5 hearing. My name is Tim Fox, and I am the hearing
6 officer for this proceeding which is entitled Public
7 Water Supplies, Proposed New 35 Illinois
8 Administrative Code 604 and Amendments to 35
9 Illinois Administrative Code Parts 601, 602, 607,
10 and 611. The Board docket number for this
11 rulemaking is R18-17.

12 Quick introductions: Also present from
13 the Board today at your far left is our Board's
14 chairman, Katie Papadimitriu. Next to her is Board
15 member Brenda Carter, and at your far right, Board
16 member Cynthia Santos, who are the assigned Board
17 members for this rulemaking. At my immediate left
18 is Anand Rao of the Board's technical staff who is
19 probably familiar to virtually everyone in the room.

20 The rule -- generally speaking, I wanted
21 to cover a couple of ground rules. This hearing is
22 governed by the Board's procedural rules so that all
23 information that is relevant and that is not
24 repetitious or privileged will be admitted into the

1 record.

2 Please bear in mind that any questions
3 today that are posed by the Board, its members, or
4 its staff are intended solely to help clarify and
5 develop the record, and they don't reflect any kind
6 of prejudgment or decision on the merits of the
7 proposal or the testimony or the questions.

8 And as our court reporter mentioned, for
9 her sake, for the sake of a clear transcript, please
10 speak as clearly as you can and avoid speaking at
11 the same time as anyone else.

12 Moving on, the Illinois Environmental
13 Protection Agency initiated this proceeding. They
14 filed a proposal with the Board on August 3rd of
15 2017, and in an order dated August 17th, the Board
16 accepted that for hearing.

17 Today we are, of course, holding the
18 first hearing in this proceeding. The Board
19 published notice of it on August 25, 2017, in the
20 State Journal-Register of Springfield and a day
21 later, on August 26th, in the Chicago Tribune.

22 In an order that was dated on August
23 23rd, the hearing officer directed participants who
24 intended to testify at this hearing today to prefile

1 that testimony by September 7th, and early on August
2 31st, the Board received prefiled testimony from the
3 Agency by Mr. Cobb, Rick Cobb; Mr. David Cook;
4 Mr. Stephen Johnson; and Mr. David McMillan -- all
5 of whom are present here today with us.

6 That hearing officer also directed
7 participants to prefile written questions based upon
8 the Agency's prefiled testimony by October 2nd, and
9 on that date, the Board received one set of prefiled
10 questions from the City of Springfield's Office of
11 Public Utilities known, of course, as City Water,
12 Light and Power. And also on the 2nd, a Board
13 hearing officer order included the Board's questions
14 that were based on the Agency's testimony.

15 I do want to note that, after the
16 deadline to prefile questions, the Board received
17 six public comments, the first of which from the
18 Illinois Association of Plumbing, Heating, and
19 Cooling Contractors, and then Public Comments 2
20 through 6 -- all of which reflect the positions of
21 the Backflow Committee of the Water Works
22 Association. Those 2 through 6 are substantially
23 similar to one another.

24 The Agency has indicated that it will be

1 preparing written responses to the comments and
2 proposals that are made in those two sets of
3 comments and intends to file those with the Board in
4 time for the deadline to submit testimony for the
5 second hearing, and that deadline is November 9th.
6 And I've spoken with the representatives of those
7 agencies, and that deadline and that procedure
8 appears to be satisfactory to them.

9 On Thursday, October 12th, the Agency
10 filed written responses to the questions that came
11 in from CWLP and from the Board. Those were not
12 required. They weren't the subject of any deadline
13 in the hearing officer order, and the Board
14 appreciates, on the record, the time and effort the
15 Agency committed to those. We do have some
16 follow-up questions, and we can turn to those fairly
17 quickly.

18 In addition, we'll also hear any
19 testimony or any questions on the Board's request,
20 as required by the Environmental Protection Act,
21 that the Department of Commerce and Economic
22 Opportunity perform an economic impact study of the
23 proposal. We'll deal with that shortly before we
24 adjourn today.

1 All of the documents that I've referred
2 to, including that letter, have been posted to the
3 Boards web page under the clerk's office online or
4 COOL. Those are very easy to review, to save, or to
5 download from there if you have not already done so.

6 We have set up a signup sheet for anyone
7 who wished to offer general public comments at this
8 hearing, and shortly before we began, I checked that
9 sheet, and no one had indicated that they wished to
10 do so.

11 We will turn, then, in this hearing to
12 the Agency's prefiled testimony. Section 104.424(f)
13 of the Board's procedural rules provides that all of
14 that prefiled testimony will be entered into the
15 record as if it had been read here, but the Agency,
16 if it wishes, may begin with a quick introductory or
17 summary, if desires to do that. And then we'll turn
18 to the prefiled questions that were directed to the
19 Agency's witnesses.

20 As we discussed off the record the
21 procedural issue of how to proceed specifically,
22 CWLP, the Agency, and the Board concluded that it
23 made most sense in this specific proposal,
24 particularly, to proceed in numerical order by the

1 section that's proposed to be amended. So we'll
2 begin on Section 601.101, moving to 602, 604, 607,
3 and 611. While certainly we'll be addressing the
4 questions that were filed by the participants, by
5 the Board, and by CWLP, if there are follow-up
6 questions that the Agency's written responses have
7 raised for any other of the participants, please let
8 us know, and we will put those questions and answers
9 into the record.

10 After all of those questions have been
11 dealt with, we'll see if there is anyone who does
12 wish to file a public comment, and that should bring
13 us to the end of our business.

14 Any questions about our proceeding at
15 all today?

16 (No response.)

17 HEARING OFFICER FOX: Very good.

18 Why don't we turn to the Agency and its
19 witnesses. Mr. Gradeless, is the Agency ready to
20 swear in its witnesses and begin?

21 MR. GRADELESS: Yes.

22 HEARING OFFICER FOX: Very good.

23 And if the court reporter would swear in
24 the Agency's four witnesses who have prefiled

1 testimony today.

2 (Agency witnesses were sworn.)

3 HEARING OFFICER FOX: Very good.

4 Mr. Gradeless, having taken care of
5 that, does the Agency, before turning to questions,
6 wish to offer any kind of an introduction or summary
7 this morning?

8 MR. GRADELESS: Yes, briefly.

9 HEARING OFFICER FOX: Please go ahead.

10 MR. GRADELESS: Thank you.

11 My name is Rex Gradeless, assistant
12 counsel of the Environmental Protection -- on behalf
13 of the Illinois Environmental Protection Agency. We
14 are here in the matter of Public Water Supplies,
15 Proposed New 35 Illinois Admin. Code 604 and
16 Amendments to Parts 601, 602, 607, and 611.

17 Generally speaking, the proposed new
18 Part 604 governs the design, operation, and
19 maintenance of community water supplies in Illinois.

20 The proposed amendments to Parts 601,
21 602, 607, and 611 contain minor changes as a result
22 of this proposal to 604.

23 The Agency believes these substantive
24 rules governing the community water supply should be

1 promulgated by the PCB, and as a result, it will
2 repeal 653, 654, 651, and 602.115. The industry
3 believes that these proposed rules will provide and
4 ensure safe and clean drinking water across the
5 state.

6 In support of this matter -- along with
7 the statement of reasons, the prefiled testimony,
8 and the responses already filed to the prefiled
9 questions -- we have four witnesses, and I'll just,
10 I guess, identify them in the room.

11 On the end here, we have Stephen
12 Johnson, a former manager of the Champaign Region,
13 Division of Public Water Supplies. On the other
14 end, we have David Cook, acting manager of the
15 Permit Section of the Division of Public Water
16 Supplies. To my right, Rick Cobb, deputy division
17 manager, Division of Public Water Supplies and the
18 manager of the Groundwater Section. And to my left,
19 David McMillan, Illinois Drinking Water
20 Administrator, the manager of the Division of Public
21 Water Supplies.

22 With that, the Agency is ready to
23 proceed and respond to any follow-up questions.

24 HEARING OFFICER FOX: Very good,

1 Mr. Gradeless.

2 I think we can jump right in. The
3 written questions submitted by the Board begin with
4 Section 601.101, and I want to begin specifically
5 with questions No. 2 and 3 in the Board's written
6 questions that were submitted on October 2nd. These
7 refer to subsections (b)(2) and (b)(3), specifically
8 the language that substances used in treatment
9 "should remain" in the water at particular
10 concentrations and that concentrations "should not
11 be exceeded."

12 And we certainly appreciate the answer
13 that the proposal originates with existing Board
14 regulations at Section 611.121(b)(2). In looking at
15 the Board note for that provision, Section 611.121,
16 it reflects that it is based on a definition of
17 "maximum contaminant level" in the Code of Federal
18 Regulations from 2002.

19 And forgive my long lead-in, Mr.
20 Gradeless. My question is whether the Agency would
21 be willing to look at the current definition of
22 "maximum contaminant level," which appears to differ
23 in some significant respects, and let the Board know
24 in a written response for the second hearing whether

1 that amended current definition affects the
2 answer -- the Agency's response to the wording of
3 subsections (b) (2) and (b) (3).

4 MR. GRADELESS: Okay. Yes.

5 HEARING OFFICER FOX: Very good.

6 Thanks. And we can discuss before we adjourn any
7 procedures or deadlines for submitting that, but we
8 appreciate your willingness to look into that.

9 Rather than -- why don't I take some of
10 these questions in a group. The Board questions 1
11 through 5 -- are there any participants who wish to
12 ask any follow-up questions about the Agency's
13 written responses to those questions?

14 MR. RAO: I have a follow-up on 3.

15 HEARING OFFICER FOX: Mr. Rao, please go
16 ahead.

17 MR. RAO: In response to our question 3
18 regarding the meaning of what "good practice" means
19 in the context of these rules, the Agency had
20 indicated that the language comes from an existing
21 Board regulation and that they'd rather defer to the
22 Board's interpretation of what that means.

23 While I recognize it's in the Board
24 regulations, the reason for asking the question was

1 sometimes JCAR will ask us what "good practice" or
2 any of those vague terms mean in the regulations,
3 and we'd rather the Agency shed light on this
4 interpretation than for the Board to come up with
5 something, you know, whenever JCAR comes up with
6 questions for us. So it would be helpful if you
7 could take a look at it and tell us what the phrase
8 means.

9 For the court reporter, JCAR stands for
10 Joint -- oh, you know that.

11 COURT REPORTER: That may be the only
12 thing I know today.

13 HEARING OFFICER FOX: Apparently
14 everyone knows JCAR.

15 MR. GRADELESS: We can provide a
16 follow-up response to that.

17 HEARING OFFICER FOX: Once again, the
18 Agency's responses to Board questions 1 through 5,
19 any additional follow-up?

20 (No response.)

21 HEARING OFFICER FOX: Why don't I take
22 the next batch, the Agency's responses to Board
23 questions 6 through 10. Does anyone wish to
24 follow-up with the Agency's written responses to

1 those questions?

2 (No response.)

3 HEARING OFFICER FOX: Neither seeing nor
4 hearing a hand or any other indication, I note that
5 Mr. Rao had a question with -- had a follow-up
6 question with No. 12.

7 Would you like to go ahead with that,
8 Mr. Rao?

9 MR. RAO: Question No. 12 relates to the
10 permit-by-rule form that the Agency is developing.
11 And all I wanted to ask the Agency was, when you
12 have those forms ready, would it be able for the
13 Agency to submit it into the record even if it's at
14 the first notice?

15 MR. GRADELESS: Yes. Absolutely.

16 MR. RAO: Thank you.

17 HEARING OFFICER FOX: And the Agency's
18 responses to Board questions 11 through 15 -- is
19 there anyone who wishes to ask a follow-up question
20 on the basis of those responses?

21 (No response.)

22 HEARING OFFICER FOX: Again, seeing --
23 neither seeing nor hearing any, we'll we move on to
24 the next batch. I know Mr. Rao has a question about

1 No. 20, and we can turn to that and then see if 16
2 through 19 -- 15 through 19 raise any questions.

3 MR. RAO: Okay. In response to the
4 Board's question regarding the average daily usage
5 number that the Agency has picked in Section
6 604.115, you had indicated that the average daily
7 usage must be based on 75 gallons per person per day
8 based on the information that the Agency had from
9 United States Geologic Survey and also some data
10 from the U.S. EPA.

11 And my question is will this increase in
12 the daily pumpage have economic impact on the public
13 water supplies in terms of sizing their facilities?

14 MR. COOK: I don't believe it will have
15 an economic impact because most sizing for new
16 facilities is generally based on higher numbers than
17 what's in the existing requirement of 50 gallons per
18 minute.

19 MR. RAO: Okay. So the increase from 50
20 to 75 will have no significant impact. Is that what
21 you're saying?

22 MR. COOK: It reflects the current
23 industry practice; so I don't anticipate any change.

24 MR. RAO: Okay. Thank you.

1 HEARING OFFICER FOX: On the Agency's
2 responses to questions No. 15 through 20, then, is
3 there any other participant who wishes to raise a
4 follow-up?

5 Ms. Williams, please, for the record,
6 first identify yourself, if you would, and go ahead,
7 by all means.

8 MS. WILLIAM: I'm Deborah Williams. I'm
9 here for Springfield City Water, Light and Power.

10 And I just wanted to make sure I was
11 clear on the answer to question 18. The Agency's
12 response indicates that Section 604.110 will apply
13 to both new and existing facilities.

14 Can you just sort of clarify for the
15 record a little bit what would happen to an existing
16 facility in the event of a flood of record of a new
17 level; right? A flood of record that's exceeded
18 both the historical and any previous flood.

19 MR. MCMILLAN: Well, by way of example,
20 this is a --

21 I'm sorry. Dave McMillan.

22 COURT REPORTER: Thank you.

23 MR. MCMILLAN: This is something that
24 is, again, standard practice at this time. This is

1 not a deviation from our current regulations.

2 And the example would be the city of
3 Jacksonville had a situation where the flood of
4 record did not previously impact the water treatment
5 facility, but that did occur several years ago. We
6 worked with the city at that time to, you know,
7 redesign and build a new water treatment facility.

8 So once it becomes a matter of concern,
9 then, you know, we --

10 MS. WILLIAMS: The facility would have
11 to relocate, basically.

12 MR. MCMILLAN: Or provide us plans on
13 how to further protect their facility.

14 MS. WILLIAMS: Okay. Thank you.

15 HEARING OFFICER FOX: Very well,
16 Ms. Williams.

17 Anyone else who wished to follow up on
18 questions 16 through 20, then?

19 (No response.)

20 HEARING OFFICER FOX: Neither seeing nor
21 hearing any, I know Mr. Rao had a question about
22 question No. 24. We'll go to that and then see if
23 anyone else has questions about 21 through 25.

24 MR. RAO: In response to our question

1 24, the Agency indicated that the monitoring -- the
2 continuous monitoring is a requirement that
3 community water supplies will have to implement, and
4 my question is, is there a section in the Public
5 Water Supply Regulations that specifies the
6 monitoring requirements for these facilities?
7 Because as proposed, it seems like the monitoring
8 requirement is embedded in the monitoring equipment
9 provision?

10 MR. MCMILLAN: Dave McMillan.

11 The question, I believe, revolves around
12 what monitoring requirements are for community water
13 supplies.

14 MR. RAO: Yes.

15 MR. MCMILLAN: Those monitoring
16 requirements are in Part 611, and those are the
17 maximum contaminant level constituents.

18 This particular instance, we have a
19 specific instance where we're doing nitrate removal.
20 So, in this instance, we want to make sure that,
21 because nitrate is an acute contaminant, and the
22 type of treatment, were it to fail, we could put an
23 acute contaminant in the distribution system. So
24 that was the intent of this specific thing -- to

1 relate that information in the regulation.

2 MR. RAO: Okay. Thank you.

3 HEARING OFFICER FOX: On questions --
4 the Agency's written responses to questions 21
5 through 25, is there anyone who wishes to pose any
6 other follow-up questions?

7 (No response.)

8 HEARING OFFICER FOX: Neither seeing nor
9 hearing any, we'll move on to 26 through 30.

10 Mr. Gradeless, I did have a question on
11 No. 28. The Board had asked about the circumstances
12 in which the Agency may issue a boil order, if
13 necessary, and the response was clear that "may" was
14 used instead of "shall," or a requirement, to
15 reflect cases where the mitigation or the corrective
16 action may come more quickly than the notification
17 can be prepared.

18 My question is this: The proposed
19 wording of subsection (c)(1)(C) deals specifically
20 with cases where the owner or custodian has failed
21 to take that action. So if I understand correctly,
22 there appear to be some circumstances where an owner
23 who fails to take that mitigation action would not
24 necessarily trigger a boil order from IEPA. And I

1 wonder what the circumstances would be in which that
2 failure to take action would not trigger a boil
3 order.

4 MR. MCMILLAN: David McMillan.

5 The situation here that we're trying to
6 address is that we have taken an action or the water
7 system has taken an action. While they did not
8 issue a boil order, some corrective action occurred.
9 For example, a water system that had lost pressure.
10 Pressure was restored. Routine bacteriological
11 samples were taken, you know, per the 611
12 regulations, and therefore we have data to show that
13 there was no contaminant present.

14 So it would be a false sense of alarm to
15 send a notice out saying that there, you know, was a
16 boil order for something that happened two days
17 previously.

18 HEARING OFFICER FOX: Am I
19 understanding -- and correct me, Mr. McMillan --
20 that there may be cases where mitigation actions,
21 corrective actions wouldn't be necessary to
22 alleviate the problem that might trigger a boil
23 order?

24 MR. MCMILLAN: No. The mitigat -- the

1 mitigating circumstance would be that there was
2 something that occurred almost concurrently with a
3 contamination event, loss of pressure. Whatever
4 instances might trigger a boil order, we may have
5 something that also occurs at the same time that
6 would -- that would negate the need for the boil
7 order in that specific instance. So it -- and,
8 again, it would be we have additional monitoring
9 data or something of that nature whereby the Agency
10 would not need to make that public notice because it
11 was, you know, almost de facto.

12 HEARING OFFICER FOX: Mr. McMillan,
13 thank you. I appreciate your response to that.

14 Were there any other participants who
15 had a follow-up question based on the Agency's
16 response to questions 26 through 30?

17 (No response.)

18 HEARING OFFICER FOX: Neither seeing nor
19 hearing any, let's turn to the Agency's written
20 responses to questions 31 through 35. Any follow-up
21 that anyone wishes to offer?

22 MS. WILLIAMS: Just real quick on
23 No. 35.

24 If you know -- I guess I would like to

1 clear up for the record: Is it the Agency's
2 understanding that -- and this is with regards to
3 having a chemical safety plan -- that if there are
4 other OSHA or EPA requirements that address this
5 issue at water treatment plants now?

6 MR. MCMILLAN: Dave McMillan.

7 Yes. Department of Labor or OSHA would
8 be the regulatory authority for this situation.

9 The Agency's intent here is to draw
10 attention to the fact that there are worker safety
11 issues that need to be addressed. However, it's not
12 our regulatory authority.

13 MS. WILLIAMS: Thank you.

14 HEARING OFFICER FOX: Anything further,
15 Ms. Williams?

16 MS. WILLIAMS: Nope.

17 HEARING OFFICER FOX: Very good.

18 MR. RAO: Will the Agency review those
19 plans to make sure that these community water
20 supplies do have the plans, or you just want to put
21 them on notice?

22 MR. MCMILLAN: It is our intention that
23 they be noticed that there are requirements for the
24 plans and that they have to comply with either OSHA

1 or Department of Labor requirements. So we would
2 not be reviewing the plans.

3 MR. RAO: I have follow-up on 32.

4 I have a follow-up on 32. This question
5 asked the Agency to clarify what "significant"
6 increase in turbidity or decrease in residual
7 chlorine mean.

8 And in your response, you indicate that
9 significant increase in turbidity or decrease in
10 residual chlorine are test results outside the
11 historical record.

12 So my question is, when you compare
13 these numbers to the historical record, will the
14 community water supplies be required to kind of
15 establish a range beyond which it will become
16 significant, or will there be some kind of a set
17 statistical measure that will be used?

18 MR. MCMILLAN: The intent here was not
19 to establish a statistical reference. The intent
20 was for the community water supply to establish a
21 normal operating range for both turbidity and
22 disinfectant residual.

23 MR. RAO: So it's a range that they look
24 at?

1 MR. MCMILLAN: Correct.

2 MR. RAO: Thank you.

3 HEARING OFFICER FOX: Any further
4 questions about the Agency's responses to questions
5 31 through 35?

6 (No response.)

7 HEARING OFFICER FOX: Neither seeing nor
8 hearing any, let's turn to questions -- the
9 responses to questions 36 through 40. Is there
10 anyone who has a follow-up question for the Agency
11 that they'd like to raise?

12 (No response.)

13 HEARING OFFICER FOX: Not seeing a hand
14 or any other indication, let's move on to questions
15 41 through 45 and the Agency written responses. Is
16 there anyone who would like to ask the Agency a
17 follow-up question on those?

18 MR. RAO: I have a follow-up on 42.
19 This question is under Section 604.205, and it asked
20 the Agency to define the term "drought,"
21 "one-in-fifty-year drought," and "extreme drought of
22 record."

23 And you had indicated that the Water
24 Dictionary defines the term "drought"; but, also,

1 your response suggests that there is no
2 straightforward way to identify the drought in terms
3 of, you know, one in fifty years or extreme drought
4 of record.

5 But you did indicate that Illinois State
6 Water Survey has maps which indicate departure in
7 precipitation as a percent from normal on a
8 statewide basis.

9 My question is would it be acceptable to
10 tie this requirement to precipitation instead of
11 drought if the term "drought" is so difficult to use
12 in the regulations? Is it something that the Agency
13 wants to look at and get back to us?

14 MR. COBB: I don't think that would be
15 appropriate either because that's not the way the
16 state climatologist has done it. I think it's --
17 you know, I think "drought" is a very difficult
18 thing as Dr. Angel and others at the State Water
19 Survey have described here in this information I
20 provided. But they do have those maps, actually,
21 that look at departures of precipitation from
22 normal, and they do break it out by fifty-year -- by
23 occurrence time. So one can do that.

24 They are the experts. I mean, I

1 can't -- if the state climatologist hasn't defined
2 it as "precipitation," I don't think I'm qualified
3 to; so --

4 MR. RAO: So the question here is, if
5 someone wants to, you know, determine what is
6 one-in-fifty-year drought, where would they go to
7 find that infor -- will they approach the ISWS --
8 that's the State Water Survey -- and see what --

9 MR. COBB: They'd go right to this
10 web page and the URL that I listed, and that's the
11 URL for the worst-case fifty-year return period for
12 a sixty-month duration.

13 So, in particular, for surface water
14 supplies such as, like, Springfield or Lake Decatur
15 where we have more vulnerable systems, those have
16 already been identified by the survey as vulnerable
17 systems under certain conditions. So they could go
18 right to this web page and see where they're
19 located.

20 Or better yet, just talk to Jim Angel,
21 if he's still there, and -- so I think it's -- it's
22 a pretty straightforward process. They have this in
23 a web service that you can go right to that, see
24 where you're located.

1 to pose to the Agency?

2 (No response.)

3 HEARING OFFICER FOX: Again, neither
4 seeing nor hearing any indication that there is,
5 we'll move ahead to 51 through 55. Is there anyone
6 who wishes to follow up with the Agency's responses
7 to those Board questions?

8 (No response.)

9 HEARING OFFICER FOX: Again, seeing --
10 neither seeing nor hearing any, the next batch of
11 questions, No. 56 through 60. Any follow-up based
12 on those responses?

13 (No response.)

14 HEARING OFFICER FOX: Again, neither
15 seeing nor hearing any, questions No. 61 through 65.
16 Anyone wishing to raise a follow-up question with
17 the Agency?

18 (No response.)

19 HEARING OFFICER FOX: Neither seeing nor
20 hearing any, Nos. 66 through 70 of the Agency's
21 responses to the Board. Any follow-ups?

22 (No response.)

23 HEARING OFFICER FOX: Neither seeing nor
24 hearing any there, questions No. 71 through 75.

1 Does anyone wish to follow up with the Agency on
2 those?

3 (No response.)

4 HEARING OFFICER FOX: Again, seeing --
5 neither seeing nor hearing any, questions No. 76
6 through 80?

7 (No response.)

8 HEARING OFFICER FOX: Neither seeing nor
9 hearing any follow-up questions to those, numbers 81
10 through 85?

11 (No response.)

12 HEARING OFFICER FOX: Again, no
13 indication of any questions.

14 Agency responses to Board questions
15 No. 86 through 90.

16 (No response.)

17 HEARING OFFICER FOX: Seeing no hands or
18 any other signals, let me limit the next batch to
19 questions No. 91 through 93. Before we turn to some
20 of the CWLP questions, does anyone have a follow-up
21 based on the Agency's response to Board question 91,
22 92, or 93?

23 (No response.)

24 HEARING OFFICER FOX: Neither seeing nor

1 hearing any, Ms. Williams, my notes reflect that we
2 have come to the Agency's proposed Section 604.725
3 about which CWLP had some questions. Please go
4 ahead, if you're set.

5 MS. WILLIAMS: Great. Yeah.

6 First I want to just thank the Agency
7 again for taking the time to prefile the answers to
8 these questions so we could narrow the issues for
9 follow-up.

10 I just have a few follow-up questions,
11 and I want to enter a couple exhibits. And if maybe
12 you would indulge me, if someone could read into the
13 record, just so that the record's clear what I'm
14 asking about, the answer to the first question,
15 1(a).

16 MR. MCMILLAN: The question was "Explain
17 the technical basis for this change to the free
18 chlorine residual minimum requirement."

19 The Agency response was "The basis for
20 the change from .2 milligrams per liter to .5
21 milligrams per liter revolves around limitations in
22 instrumentation and recent studies by the U.S. EPA
23 Office of Research and Development, ORD, and Office
24 of Water, OW. The detection limit for most test

1 equipment utilized by water supply operational staff
2 and Illinois EPA staff do not reliably report
3 concentrations of 0.2 milligrams per liter.

4 "Additionally, ORD and OW have presented
5 information to states that indicates concentrations
6 above 0.5 milligrams per liter significantly reduce
7 the number of samples that are positive for total
8 coliform bacteria. See webinar presentation found
9 at <https://www.youtube.com/watch>, et cetera."

10 MS. WILLIAMS: Thank you.

11 I just want to ask a couple questions
12 about the webinar that you referenced, and I have
13 prepared a couple exhibits of charts from that that
14 I think would be helpful. I'm not sure they're the
15 best to start with, but I'll make sure everyone has
16 one.

17 Do you want to identify them for the
18 record first or --

19 The first one, I think, is titled Free
20 Chlorine Residual Requirements, if I handed them out
21 in the same order.

22 HEARING OFFICER FOX: And, Ms. Williams,
23 just to be clear, at the bottom it indicates the
24 source or authority of Wahman and Pressman, the year

1 2015. I assume JAWWA is the Journal of American
2 Water Works Association?

3 MS. WILLIAMS: Yes.

4 HEARING OFFICER FOX: Very good.

5 MR. MCMILLAN: So this is not
6 necessarily from that webinar; correct?

7 MS. WILLIAMS: No, it is from that
8 webinar, but I guess -- I was going to ask you that.
9 Would you agree this is one of the slides presented
10 at that webinar?

11 MR. MCMILLAN: I do not recall.

12 MS. WILLIAMS: Okay. Have you ever seen
13 the chart before?

14 MR. MCMILLAN: I don't recall seeing
15 this chart, no, but I do recall the webinar, but
16 that's quite some time ago.

17 MS. WILLIAMS: Okay. So the chart
18 purports, anyway, to be a summary of various state
19 requirements for free chlorine residuals, and then
20 do you have it -- or for total -- are we doing free?
21 Free now? Yes.

22 MR. MCMILLAN: We're on -- we're on
23 free.

24 MS. WILLIAMS: Does it -- do you believe

1 it accurately represents information you presented
2 with your testimony of the other state requirements
3 for free chlorine residuals?

4 MR. MCMILLAN: I believe this is
5 probably accurate, yes.

6 MS. WILLIAMS: Can I move to have the
7 first chart entered as an exhibit?

8 HEARING OFFICER FOX: Ms. Williams has
9 moved to introduce into the record as Hearing
10 Exhibit No. 1 a document entitled Free Chlorine
11 Residual Requirements, by Wahman and Pressman. Is
12 there any objection to the motion to so admit it?

13 MR. GRADELESS: No objection.

14 HEARING OFFICER FOX: Neither seeing nor
15 hearing any, it will be admitted, Ms. Williams, and
16 marked as Exhibit No. 1 in this proceeding.

17 MS. WILLIAMS: And the same question
18 with the second chart I presented titled Total
19 Chlorine Residual Requirements. I'm assuming you
20 don't recall if this was in the webinar, but would
21 you be willing to testify that it's an accurate
22 representation of the total chlorine residual
23 requirements?

24 MR. MCMILLAN: Yes.

1 I would also reference CWLP's question
2 No. 9, which I think I also kind of summarized this
3 data; so -- it was an independent summary from
4 another source. So I think it probably is accurate
5 just by the few I've spot-checked.

6 MS. WILLIAMS: And so on this chart,
7 there is a dark blue color that indicates states
8 with a minimum total chlorine residual requirement
9 of 1 milligram per liter; is that correct?

10 MR. MCMILLAN: And we're referencing the
11 total chlorine chart? Yes, that's correct.

12 MS. WILLIAMS: And black is the color
13 that represents the one state with a higher number
14 than that of 1.5 of Iowa; correct?

15 MR. MCMILLAN: Correct.

16 MS. WILLIAMS: Okay. So we have five
17 states that would have a minimum requirement
18 equivalent or greater than that proposed by the
19 Agency.

20 MR. MCMILLAN: Correct.

21 MS. WILLIAMS: And then can you also
22 just mention for the record what would be the
23 federal comparable requirement?

24 MR. MCMILLAN: There is no federal

1 comparable requirement.

2 MS. WILLIAMS: I'll move to have the
3 second exhibit entered also.

4 HEARING OFFICER FOX: And, Ms. Williams,
5 just to be clear, it's the document entitled Total
6 Chlorine Residual Requirements, again, with the
7 authorities of Wahman and Pressman?

8 MS. WILLIAMS: Correct.

9 HEARING OFFICER FOX: Ms. Williams has
10 moved the admission of that Exhibit No. 2 in our
11 record today. Is there any objection to the motion?

12 MR. GRADELESS: No objection.

13 HEARING OFFICER FOX: Neither seeing nor
14 hearing any, Ms. Williams, it's so admitted and
15 marked as Exhibit No. 2.

16 Please go ahead whenever you're ready.

17 MS. WILLIAMS: So with regard to your
18 statement -- I'm look --

19 MR. MCMILLAN: That's fine.

20 MS. WILLIAMS: -- I'm directing to you.
21 I'm sorry.

22 But with regard to the Agency's
23 statement that U.S. EPA has provided information to
24 states that concentrations above 0.5 milligrams per

1 liter significantly reduce the number of samples
2 that are positive for total coliform bacteria,
3 that's correct.

4 MR. MCMILLAN: Correct.

5 MS. WILLIAMS: Would you -- is it your
6 testimony that information in that webinar is
7 primarily how that has been communicated and
8 presented? What you're relying on for that
9 statement?

10 MR. MCMILLAN: Two -- as I said in my
11 written response, there's two areas of concern with
12 respect to free chlorine residual. One is limits in
13 instrumentation, and the other is the information
14 provided in that webinar.

15 MS. WILLIAMS: And with regard to limits
16 in instrumentation, we're talking about the need to
17 have 0.5 milligrams per liter as a minimum?

18 MR. MCMILLAN: Correct.

19 MS. WILLIAMS: Okay. So with regard to
20 the information in the webinar, did you review --
21 there was a study discussed in the webinar that was
22 identified at EPA-810-R-16-10 that involved, I
23 believe it's called, six-year review where they --
24 where they studied -- where they studied levels of

1 chlorine residual as compared to levels of total
2 coliform bacteria or E. coli in the --

3 MR. MCMILLAN: No. I took -- I took the
4 information provided by ORD at face value.

5 MS. WILLIAMS: In the webinar.

6 MR. MCMILLAN: In the webinar.

7 MS. WILLIAMS: So you didn't go back to
8 the study.

9 MR. MCMILLAN: No, I did not go back to
10 the study.

11 MS. WILLIAMS: Okay. I am going to show
12 you a chart titled Total Coliform Positives in
13 Surface Water, 2006 to 2011, and can you tell me if
14 that's the information from the webinar that you're
15 referring to? Do you recall this chart?

16 MR. MCMILLAN: Again, I don't
17 specifically remember the chart and didn't produce
18 it prior to coming here; so -- but I don't
19 disbelieve that this is from the webinar. I do
20 recall similar presentations.

21 MS. WILLIAMS: And would you agree that
22 this chart shows significant improvements at the
23 level of .2 to .5 milligrams per liter? As opposed
24 to levels below .2 milligrams per liter.

1 MR. MCMILLAN: Yes. I would agree that
2 anything greater than .2 does show an improvement.

3 MS. WILLIAMS: Can you explain how this
4 data supports the conclusion that levels above .5
5 milligrams per liter show significant improvement?

6 MR. MCMILLAN: Well, I believe it -- the
7 chart demonstrates that, that there's a significant
8 improvement.

9 MS. WILLIAMS: And what is that level
10 that is significant?

11 MR. MCMILLAN: Greater than .2.

12 MS. WILLIAMS: I mean what is the level
13 of improvement that you're considering significant?

14 MR. MCMILLAN: The percentages of
15 detections, and I believe that this is not all of
16 the data that I viewed in that webinar either. I
17 believe that, if memory serves, there was a chart
18 that showed the concentration of .5 having a
19 significant effect, and the presenter also observed
20 the limitations in equipment also; so --

21 MS. WILLIAMS: Do you recall them saying
22 something that -- that it's -- in the webinar that
23 .2 milligrams per liter throughout the system is the
24 well-documented best practice?

1 MR. MCMILLAN: No, I don't recall that.

2 MS. WILLIAMS: Do you recall him saying
3 that at levels between .2 and .5 you need to keep an
4 eye on things?

5 MR. MCMILLAN: Yes.

6 MS. WILLIAMS: And that greater than .5,
7 you're probably pretty healthy?

8 MR. MCMILLAN: Correct.

9 MS. WILLIAMS: Okay. Do you see any
10 basis in this data to conclude that levels greater
11 than 1 milligram per liter achieve an improvement
12 over levels from .5 to 1?

13 MR. MCMILLAN: Again, I -- I don't
14 recall the context of this chart; but, yeah, that --
15 that would be a -- I would think that would be a
16 valid observation.

17 MS. WILLIAMS: Can I move to enter this
18 exhibit into the record?

19 HEARING OFFICER FOX: And, Ms. Williams,
20 just to be clear, that's the document entitled Total
21 Coliform Positives in Surface Water, 2006 to 2011?

22 MS. WILLIAMS: Correct.

23 HEARING OFFICER FOX: Ms. Williams has
24 moved admission of that exhibit into the record at

1 this hearing as Exhibit No. 3. Is there any
2 objection?

3 MR. GRADELESS: No objection.

4 HEARING OFFICER FOX: Neither seeing nor
5 hearing any, Ms. Williams, it will be marked as
6 Exhibit 3.

7 MS. WILLIAMS: Just to complete the
8 record, I don't necessarily have any additional
9 questions unless you'd like to add anything,
10 Mr. McMillan, but I'm presenting a chart titled --
11 from the same source, same design titled E. Coli and
12 Fecal Coliform Positives in Surface Water, 2006 to
13 2011.

14 In this case with regard to E. coli and
15 fecal coliform positives, do you have an opinion on
16 what this data shows about the level of residual
17 that results in improvements to bacteria
18 concentrations?

19 MR. MCMILLAN: One observation I would
20 make on the context of these -- both of these
21 charts, we're talking about percentages and not
22 numbers of systems or numbers of samples collected.
23 And the number of surface waters that utilize free
24 chlorine residuals has dropped over the years as a

1 result of the formation of disinfection by-products.
2 So while we're seeing percentages here, we need to
3 keep in mind the context of what those percentages
4 mean.

5 MS. WILLIAMS: So do you think the total
6 chlorine residual data would be more valid, for that
7 reason, than the free?

8 MR. MCMILLAN: When we're talking about
9 surface water systems, it could be. And, again, the
10 data set is from 2006 to 2011. I would imagine that
11 the data set from 2011 to 2017, if looked at, would
12 show the number of water systems that are using
13 total chlorine residuals to have even more
14 increased; so --

15 MS. WILLIAMS: Are you aware of any
16 available data sets from that period?

17 MR. MCMILLAN: We have data sets at
18 Illinois EPA that reflect disinfection residuals and
19 total coliform monitoring data. Have we done a
20 detailed analysis of those? No, we have not.

21 MS. WILLIAMS: Okay. Thank you.

22 And one thing I got out of -- I very
23 much enjoyed the webinar, by the way. Thank you.

24 One thing I got out of reading the

1 webinar -- or listening to the questions -- and I'd
2 just like to ask you if you have any different
3 information than the presenters did. There was a
4 question in that presentation about whether they
5 were aware of any data that addressed whether states
6 with greater chlorine residual minimum requirements
7 had more trouble meeting disinfection by-product
8 limits or not. And their response was, "No, we're
9 not aware of any data on that issue."

10 Are you aware if there's any data on
11 that issue?

12 MR. MCMILLAN: I think we are aware of
13 data that would indicate that maintaining free
14 chlorine would increase the likelihood of having
15 disinfection by-products from surface water.

16 We -- that's what I was alluding to
17 previously -- that the use of chloramination and a
18 combined residual was one of the measures taken by
19 surface water systems to reduce disinfection
20 by-products.

21 MS. WILLIAMS: Thank you. I just have a
22 couple more on some of the other responses.

23 HEARING OFFICER FOX: Ms. Williams, the
24 chart that you last distributed, did you --

1 MS. WILLIAMS: Did I not enter it into
2 the record? No, I did not.

3 HEARING OFFICER FOX: I don't believe
4 so.

5 MS. WILLIAMS: I would like to move to
6 enter the second -- the chart entitled E. Coli and
7 Fecal Coliform -- was that the second chart? --
8 Positives in Surface Water, 2006 to 2011.

9 HEARING OFFICER FOX: You've heard the
10 motion to admit as Exhibit No. 4. Is there any
11 objection to the admission?

12 MR. GRADELESS: No objection.

13 HEARING OFFICER FOX: Neither seeing nor
14 hearing any, Ms. Williams, that will be marked as
15 Exhibit No. 4.

16 Please go ahead whenever you're ready.

17 MS. WILLIAMS: Your response to question
18 1(b) references study AWWA M-56, and I guess I would
19 just ask if maybe we could have that study entered
20 into the record. Not today but --

21 MR. MCMILLAN: Cost is an issue.

22 MS. WILLIAMS: Then I guess maybe --
23 maybe -- and that -- I think before I would insist
24 on it, I guess I'd just be more clear about what

1 we're relying on that study to show or support
2 specifically. I think your testimony indicates it
3 supports the concept that there are benefits to
4 chlorine levels over 1.5 milligrams per liter?

5 MR. MCMILLAN: That is correct.

6 MS. WILLIAMS: And is it your testimony
7 that that can be translated to a benefit of a
8 minimum chlorine residual of that level?

9 MR. MCMILLAN: Please reask the
10 question. I'm sorry.

11 MS. WILLIAMS: Well, I read the
12 testimony to indicate that it would be even better,
13 maybe, if we required the minimum residual level to
14 be 1.5 milligrams per liter, and that conclusion
15 concerned me because that's out of line, I think,
16 with what other states are doing and seemed to me to
17 have potential for other negative consequence. I
18 wanted to under -- if that's what you're testifying
19 that it shows, then I want to understand that.

20 MR. MCMILLAN: The M-56 document alluded
21 to that a combined residual between 1.5 and 2
22 improved the likelihood that you could control
23 nitrification in the distribution systems of water
24 supplies.

1 The position we took in our proposal and
2 the reason we used 1 is because I think 1 reflects
3 best practices or normal practices in Illinois water
4 supplies that appear to be maintaining an adequate
5 level of nitrification control.

6 MS. WILLIAMS: So your position is that
7 systems with 1 milligram per liter reflect best
8 practices and are not showing issues with
9 nitrification.

10 MR. MCMILLAN: Our inclination to
11 believe right now, based upon the data that I
12 reviewed, was that, in the total coliform data
13 reported, that we have most water systems that are
14 using a combined residual greater than 1 in all
15 areas of their distribution system and that that
16 level appears at this time to be controlling
17 nitrification.

18 MS. WILLIAMS: Okay. We can come back
19 to that.

20 I will leave it to the Board whether --
21 I mean, that's really, I guess, up to the Board to
22 determine if this is -- if this is data or a study
23 that's being relied on in developing this
24 requirement, I think it's going to need to be part

1 of the record, but I think -- I mean, obviously, I
2 think we have some concerns about the proposal as it
3 stands right now anyway. So I'm not sure, depending
4 on where the Board is headed, whether it's needed or
5 not. So we can move on --

6 MR. RAO: You mentioned the cost of the
7 document. Do we know how much it costs?

8 MR. GRADELESS: We're going to have to
9 figure out the cost and get back with you on whether
10 that can be -- I'm not sure on the cost.

11 MS. OLSON: It might be a copyrighted
12 document; so I don't know --

13 MR. GRADELESS: So a publication issue.

14 MS. OLSON: Yeah.

15 -- if we can -- I'm not sure. We'd have
16 to contact the publisher, figure out what the cost
17 would be.

18 HEARING OFFICER FOX: Mr. Gradeless, why
19 don't we ask you to do this: If you could explore,
20 based on the financial or copyright issues, what
21 obstacles there are or may be, more accurately, to
22 putting it into the record. I do note that it is
23 not precisely the proposal that the Agency has
24 placed in front of the Board, but Mr. McMillan has

1 cited it, I think, as support for what the Agency
2 has proposed, and our inclination would be to want
3 to see that, but we certainly want to respect any
4 issues with copyright requirements and finances as
5 well.

6 Ms. Williams, does that address your
7 position?

8 MS. WILLIAMS: Absolutely. Yeah.

9 HEARING OFFICER FOX: Very good.

10 MS. SANTOS: Tim?

11 I'd also like to ask Ms. Williams if you
12 could just repeat your concerns about these levels.
13 Just -- I mean --

14 MS. WILLIAMS: Well, I don't want to --
15 I don't want to testify today. I think we wanted to
16 get some clarity on the Agency's position on this
17 requirement in particular, and then at the next
18 hearing, we anticipate that we would have our water
19 division manager present some testimony specific to
20 this unless -- you know, unless we all reach
21 agreement.

22 MS. SANTOS: Okay. I just wanted to be
23 clear on that.

24 MS. WILLIAMS: Thank you. I'm sorry.

1 MS. SANTOS: Thank you.

2 HEARING OFFICER FOX: And just -- and to
3 be clear, we'll work out before we adjourn today
4 deadlines for prefiling testimony and not leave that
5 unaddressed before we conclude.

6 But, Ms. Williams, I think we were
7 dealing with your questions No. 1 through 11, and if
8 we've addressed the AWWA study satisfactorily, why
9 don't we return --

10 MS. WILLIAMS: Yes. I'll move on.

11 HEARING OFFICER FOX: -- to any
12 follow-up questions you may have.

13 MS. WILLIAMS: I just have a couple more
14 related more to the issue you were discussing about
15 what you're finding in the system -- across the
16 system.

17 So you were referencing examples of what
18 you've seen at systems with 1 milligram per liter
19 throughout. Can you explain? Do you expect samples
20 entering a well-run community water supply system to
21 vary along the system from what they are entering to
22 the far ends of the system?

23 MR. MCMILLAN: I will try to answer what
24 I think your question is.

1 MS. WILLIAMS: Okay. Thanks.

2 MR. MCMILLAN: So I believe what you're
3 asking is would we expect the entry point from the
4 treatment plant to be higher than the remote -- more
5 remote areas of the distribution system. Is that --

6 MS. WILLIAMS: Oh, that's a good way to
7 put it. Yes.

8 MR. MCMILLAN: Okay. So the answer
9 would be yes.

10 MS. WILLIAMS: Okay. And can you -- can
11 you -- is that quantifiable at all?

12 MR. MCMILLAN: We collect information at
13 the treatment plant from monthly operating reports
14 for all water systems, and we also collect data from
15 the Revised Total Coliform Rule for any
16 bacteriological samples that are collected from the
17 water supply distribution system. So, yes, it is.

18 MS. WILLIAMS: But would it be
19 quantifiable to determine, maybe, for any given
20 system what level of chlorine residual you would
21 need at the entry point to increase the levels at
22 the remote parts of the system by .5 milligrams per
23 liter?

24 MR. MCMILLAN: To frame your question,

1 you're asking whether or not the Agency could
2 quantify the degradation of disinfection at a
3 particular water supply. No, we can't quantify
4 that. Every water system is unique.

5 MS. WILLIAMS: And if you have a water
6 system currently that is achieving .5 milligrams per
7 liter -- and we're talking about total residual at
8 this point --

9 MR. MCMILLAN: Okay.

10 MS. WILLIAMS: -- at the very far
11 reaches of the system or maybe areas of a system
12 that get fairly minimal use, do you know what best
13 practices they would have to implement to make sure
14 those numbers could be increased to 1 milligram per
15 liter?

16 MR. MCMILLAN: Our experience with best
17 practices would include looping of water mains,
18 flushing hydrants, automatic flushing hydrants,
19 potentially mixers in water towers, and other ways
20 to -- to turn water over and keep water fresh in the
21 distribution system.

22 MS. WILLIAMS: But in my example -- and
23 I think that's a great point. But in the example
24 I'm giving -- so we're talking about a system that's

1 already achieving .5 milligrams per liter all -- at
2 the most remote area of the system. Would you
3 imagine that that system would poss -- would likely
4 not be doing those things already and not be
5 implementing those practices? Or that those
6 practices would be enough to raise it to twice the
7 concentration?

8 MR. MCMILLAN: Well, from the data that
9 I reviewed, most water systems -- 80 percent of the
10 water systems in June of 2017, the reported combined
11 residuals were maintaining greater than 1; so --

12 MS. WILLIAMS: That was question 4;
13 right? Okay. 80 -- so 20 percent were not
14 maintaining 1?

15 MR. MCMILLAN: Correct. And of that 20
16 percent, 10 percent of that 20 -- half of that --
17 half of that number would not have been meeting the
18 .5 either.

19 MS. WILLIAMS: Right. So I think we can
20 say, at least for this discussion, maybe you have
21 some issues where you -- you know that 10 percent
22 that's not meeting .5, you might have some clear
23 recommendations for improvements.

24 But for the 10 percent that is falling

1 between .5 milligrams per liter and 1.0 now -- so 10
2 percent, one out of ten sam -- is that samples or
3 individual systems?

4 MR. MCMILLAN: It's samples.

5 MS. WILLIAMS: Okay. So it could be
6 less or more. No, it could be more. Do we know
7 what percentage of the facilities?

8 MR. MCMILLAN: I --

9 MS. WILLIAMS: So it could be one
10 facility may have more sam --

11 MR. MCMILLAN: Correct. Correct.

12 MS. WILLIAMS: We're only looking at one
13 month. You've only looked at this for one month.

14 MR. MCMILLAN: Correct. Correct.

15 MS. WILLIAMS: So it could vary quite a
16 bit but --

17 MR. MCMILLAN: I tried to select a month
18 where we expected warm weather would put a higher
19 demand on the distribution system.

20 MS. WILLIAMS: So -- but -- but you are
21 testifying that there are 10 percent of facilities
22 that are currently in full compliance that would be
23 out of compliance under the new proposal.

24 MR. MCMILLAN: 10 percent of the samples

1 collected --

2 MS. WILLIAMS: Collected in June.

3 MR. MCMILLAN: -- would not have
4 complied with the new -- the proposed revision to 1
5 part per million.

6 MS. WILLIAMS: It's your testimony that
7 you think those facilities could correct this issue
8 without the addition of more chemicals?

9 MR. MCMILLAN: Correct.

10 MS. WILLIAMS: That all of those are the
11 result of poor management practices?

12 MR. MCMILLAN: I would not necessarily
13 call it "poor management practices." I would say
14 that it's currently a situation where water systems
15 are maybe not being encouraged to the level that
16 they should be by the Agency to do water quality
17 management in their distribution systems.

18 So I'm not -- I'm not accusing anybody
19 of falsifying data or anything of that nature. I
20 just think that we have some distribution systems
21 out there that could be better managed.

22 MS. WILLIAMS: And with the 10 percent
23 of facilities that you pointed out would not have
24 been meeting the current --

1 MS. OLSON: I think you mean samples.

2 MR. MCMILLAN: It's samples --

3 MS. WILLIAMS: Sorry.

4 MR. MCMILLAN: -- not -- it's not
5 facilities. Yeah.

6 MS. WILLIAMS: We don't know what
7 percent of facilities; right?

8 MR. MCMILLAN: Right.

9 MS. WILLIAMS: For those samples at
10 those facilities, what type of recommendations does
11 the Agency make for them?

12 MR. MCMILLAN: We would encourage them
13 to look at the age of the water. If they have a
14 dead end in the distribution system where water is
15 stagnating, what might be possible solutions to
16 overcome those stagnation areas -- be it tank
17 mixing, looping the water mains, scheduling
18 flushing, or installation of automatic flushing
19 hydrants. There's a number of ways to improve water
20 quality management in these systems.

21 MS. WILLIAMS: And did the Agency
22 attempt to put a cost on requiring those
23 improvements in developing this regulation?

24 MR. MCMILLAN: We looked at the cost and

1 feel that it is an incremental cost. In other
2 words, when we identify an area, then we would
3 expect the water system -- there's so many tools in
4 the toolbox -- to address the issue. We feel it's a
5 manageable cost.

6 MS. WILLIAMS: Are you concerned at all
7 that, for maybe a small system that may not be
8 ideally managed now, the easiest and cheapest way to
9 deal with this change to the regulation would be to
10 just dump more chemical?

11 MR. MCMILLAN: The concern with adding
12 additional chemicals is that we don't want to create
13 additional water quality problems through just
14 zapping something with more chemicals.

15 We want to look at -- we want to look at
16 the system holistically. We want to find out why
17 these areas of the distribution system are not able
18 to meet, you know, the standards. Why -- why -- if
19 other water systems can maintain these residuals,
20 why are they having a difficulty? Is it
21 nitrification in the distribution system? Is it
22 their chemical addition is not adequately
23 controlled? It may not be that -- it may be such a
24 thing as their ammonia is not being fed in the

1 proper proportion. So there are a number of
2 questions we would need to look at in addressing the
3 concern.

4 MS. WILLIAMS: So I think you're
5 saying -- and I agree with you -- that, yeah, it is
6 a concern that maybe people would just choose the
7 easier route of dumping chemicals, and you'd
8 rather --

9 MR. MCMILLAN: Correct.

10 MS. WILLIAMS: -- see them do it
11 differently.

12 Okay. I think that's pretty much all I
13 have on this section.

14 MR. RAO: I have a follow-up to
15 Ms. Williams' question.

16 Mr. McMillan, you mentioned that, when
17 you did look at the one month of data that you have,
18 those 10 percent of the samples were noncompliant?

19 MR. MCMILLAN: 10 per -- yes. That's
20 correct.

21 MR. RAO: So my question is, is there
22 some way, you know, you could translate this
23 information into how many facilities are
24 noncompliant?

1 MR. MCMILLAN: Yes. We could do that.

2 MR. RAO: Yeah. It would be helpful to
3 the Board to see --

4 MR. MCMILLAN: Okay.

5 MR. RAO: -- how many facilities, and
6 also if you can include the size of the facilities.

7 MR. MCMILLAN: Okay. Yes, we can
8 certainly do that.

9 MS. OLSON: I have a follow-up too, if
10 you're done. Are you done?

11 MR. RAO: I'm done.

12 MS. OLSON: Mr. McMillan, if a system
13 were to just dump chemicals to meet this new
14 requirement, could they possibly have problems
15 meeting 611 requirements -- MCL requirements in 611?

16 MR. MCMILLAN: Yes.

17 MS. OLSON: Can you explain?

18 MR. MCMILLAN: Overfeeding of chemicals
19 and presence of organic materials could result in
20 disinfection by-product violations. So dumping
21 additional chemicals, so to speak, is not the right
22 answer. It's adequate chemical addition --

23 MR. JOHNSON: That's not how I would
24 phrase it.

1 MR. MCMILLAN: What's that?

2 MR. JOHNSON: That's not how I would
3 phrase it.

4 MR. MCMILLAN: Well, go ahead.

5 MR. JOHNSON: I mean, it's adding
6 additional chemical. You're not dumping. I mean,
7 dumping is --

8 MR. MCMILLAN: Well, I was using
9 somebody else's --

10 MR. JOHNSON: I mean, that's the
11 question she -- the way she asked it, I think, but
12 it's just --

13 HEARING OFFICER FOX: We need one person
14 at a time, please.

15 I do understand your point.

16 MR. JOHNSON: Sorry.

17 MS. OLSON: That's all I have.

18 HEARING OFFICER FOX: Nothing further
19 from you, Ms. Olson. Very good.

20 Ms. Williams, you were addressing your
21 questions regarding the Agency's proposed Section
22 604.725. You also had at least one question with
23 some subparts on Section 604.730. Do you have any
24 follow-ups to those responses from IEPA?

1 MS. WILLIAMS: I think maybe just one
2 real quick.

3 HEARING OFFICER FOX: Take a moment, if
4 you need to.

5 MS. WILLIAMS: Okay. Let's just look
6 quickly at the Agency's response to question 12(b),
7 with reference to Section 604.730, Continuous
8 Chlorine Analyzers, and we ask, "Would this
9 provision require all surface water plants to have
10 their chlorine analyzer shut down water production
11 if the analyzer residuals fall below the new minimum
12 chlorine residual requirements of proposed Section
13 604.725?"

14 And the answer was "Yes."

15 I just wanted to be clear for the record
16 that this requirement, then, would require a
17 retrofit at any existing facility that doesn't
18 currently have -- is that what you mean by "Yes"?
19 It will require retrofit?

20 MR. MCMILLAN: David, can you get that
21 one?

22 MR. COOK: It would require a change to
23 their control system to shut down the high-service
24 pumps, yes.

1 MS. WILLIAMS: Okay. And do you know
2 what percentage of facilities do not currently have
3 automatic shutdown on their chlorine analyzers?

4 MR. COOK: I do not know that.

5 MS. WILLIAMS: Do you know any
6 information about the cost of this retrofit?

7 Yeah, I -- question (e), we did ask
8 about the cost, and I guess the answer was that you
9 believe minimal?

10 MR. COOK: Correct.

11 MS. WILLIAMS: Is it possible to be more
12 specific than that?

13 Not necessarily today; but, I mean, is
14 it just possible in general to put information in
15 the record more specifically towards what the cost
16 of the retrofit requirements would be?

17 MR. COOK: We can research that and
18 provide comment, yes.

19 MS. WILLIAMS: I think that addresses
20 that section.

21 HEARING OFFICER FOX: And, Ms. Williams,
22 just to be clear, that's the extent of your
23 follow-ups to Section 604.725 and 730 regarding
24 chlorination?

1 MS. WILLIAMS: Correct.

2 HEARING OFFICER FOX: Very good.

3 We can jump back to some of the Board's
4 questions. We had ended with question No. 93. Let
5 me see if there are any follow-ups to the Agency's
6 response to Board questions No. 94 to 100. Does
7 anyone wish to ask a follow-up question of the
8 Agency on the basis of those questions?

9 (No response.)

10 HEARING OFFICER FOX: I'm not seeing or
11 hearing any.

12 Let me move on, then. We're going to
13 come back to some of your questions, Ms. Williams.

14 Are there any follow-ups to the Board's
15 questions No. 101, 102, and 103? Follow-ups to the
16 Agency's response to those Board questions?

17 (No response.)

18 HEARING OFFICER FOX: Neither seeing nor
19 hearing any, Ms. Williams, my notes reflect that we
20 have come to your questions No. 13 and 14 which
21 address the Agency's proposed Section 604.1150, and
22 that is fluoridation, I believe.

23 MS. WILLIAMS: Okay. I just quickly
24 want to make sure that I am clear on the Agency's

1 answer with regards to the questions on the design
2 requirements in 604.1150, Fluoride.

3 Is it the Agency's position that
4 statutory language limits the Board's authority to
5 establish a design requirement that's
6 technologically feasible?

7 MR. MCMILLAN: I think the Agency's
8 position is that the statute established the
9 standard and did not allow for a range for fluoride
10 addition, and I believe this regulation was put in
11 place -- Rex, when did we --

12 MR. GRADELESS: Two -- two years ago?

13 MR. MCMILLAN: -- two years ago, yeah,
14 based upon Health and Human Services and the CDC's
15 requirement that was placed into state law.

16 MS. WILLIAMS: And that the
17 interpretation is that design requirements are
18 subject to the same limitation that -- I mean, I
19 think I understand, but I just want to make sure
20 it's clear for the record that that would -- that
21 would carry over, then, also to the Board's
22 authority in establishing the design requirements,
23 that they must also --

24 MR. MCMILLAN: That's -- yeah.

1 MS. WILLIAMS: -- meet that.

2 MR. MCMILLAN: I mean, it didn't -- did
3 not give us the ability to establish a range as the
4 past statute did.

5 MS. WILLIAMS: Okay. Thank you.

6 HEARING OFFICER FOX: Anything further,
7 Ms. Williams?

8 MS. WILLIAMS: No.

9 HEARING OFFICER FOX: Very good.

10 We're back to the Board's questions.

11 Again, we're going to run into some questions
12 Ms. Williams may have on behalf of CWLP, but let me
13 see if the Agency's responses to Board's questions
14 104 to 110 had generated any follow-up questions on
15 anyone's part.

16 (No response.)

17 HEARING OFFICER FOX: Neither seeing nor
18 hearing any follow-up questions, Ms. Williams that
19 brings us back to you. You have questions No. 15
20 through 20 regarding the Agency's proposed Section
21 604.1340 addressing elevated storage. Do you have
22 any follow-ups that you'd wish to ask to the Agency?

23 MS. WILLIAMS: Very briefly, yes.

24 I just want to be clear that -- on the

1 record of the Agency's interpretation of what the
2 new wording of the elevated storage requirement will
3 mean.

4 My understanding from the answer to the
5 questions and reviewing the record is that you have
6 taken the existing requirement in Part 653 that an
7 engineering study be performed to determine the
8 appropriate amount of storage and also included the
9 requirement from the recommended standards that
10 storage be equal to average daily usage and
11 presented those as alternatives. You can do one or
12 the other; right? Okay.

13 I just want to be sure --

14 MR. MCMILLAN: Correct.

15 MS. WILLIAMS: I just want to be sure
16 that we're clear in doing that that we all agree on
17 the meaning and that there's not a change in the
18 meaning of existing language by pairing it up with
19 this language from the recommended standards.

20 So previously -- can you explain under
21 the current rules what an engineering study of
22 storage needs is designed to show?

23 MR. COOK: Larger systems that do not
24 have storage equivalent to average daily usage would

1 submit a report recommending a volume of elevated
2 storage to satisfy their peak hourly flow and
3 fire-fighting needs that would be less than average
4 daily usage.

5 MS. WILLIAMS: So -- okay. So it
6 wouldn't be necessary now for -- under the current
7 language, for a facility to show that -- with an
8 engineering study that they're equivalent to average
9 daily usage or anything like that. It would be the
10 same -- whatever's appropriate --

11 MR. COOK: Whatever is appropriate.
12 It's either/or, yes. Either the study or average
13 daily usage.

14 MS. WILLIAMS: And that the only change
15 would be this would be an option for a smaller
16 system to just say, "Yeah, I don't need to do a
17 study. I have the average daily usage." Correct?

18 MR. COOK: Which isn't a change. That's
19 the current practice, yes.

20 MS. WILLIAMS: You would have let them
21 get -- not do a study now --

22 MR. COOK: Yes.

23 MS. WILLIAMS: -- based on the
24 recommended standards.

1 MR. COOK: Yes.

2 MS. WILLIAMS: Okay. Great. Thank you.

3 HEARING OFFICER FOX: Anything further
4 at all, Ms. Williams, on the elevated storage
5 requirements that are proposed by the Agency?

6 MS. WILLIAMS: No. That's it. Thank
7 you.

8 HEARING OFFICER FOX: Very good.

9 We can turn back to the Board's
10 questions. We were at question No. 111 to 115. Is
11 there anyone who wishes to pose a follow-up question
12 to the Agency based on its written responses to
13 those questions?

14 (No response.)

15 HEARING OFFICER FOX: Neither seeing nor
16 hearing any, I do want to note, for our commenters
17 that had filed comments on the cross-connection
18 requirements, we'll address responses that the
19 Agency has agreed to supply before we adjourn today.
20 So I don't mean to suggest that we're overlooking
21 those. We'll deal with those separately in a short
22 time.

23 Then, finally, we've come to the end of
24 the Agency -- I'm sorry -- the Board's questions for

1 the Agency, Nos. 116 to 120. Is there anyone who
2 has a follow-up question based on those?

3 (No response.)

4 HEARING OFFICER FOX: Neither seeing nor
5 hearing any, do any of the Board members wish to
6 raise a question before we move on?

7 (No response.)

8 HEARING OFFICER FOX: Ms. Williams, do
9 you have any additional follow-ups?

10 (No response.)

11 HEARING OFFICER FOX: Is there anyone
12 else in the Agency who, as we begin to wrap up,
13 wishes to follow up with the Agency on any of its
14 written responses or its answers here today?

15 (No response.)

16 HEARING OFFICER FOX: I'm not seeing or
17 hearing any.

18 Why don't we take one moment very
19 quickly to address the issue of an economic impact
20 statement. Forgive my mechanical reading here.
21 "Section 27(b) of the Environmental Protection Act
22 provides that the Board must request that the
23 Department of Commerce and Economic Opportunity or
24 DCEO, as it's often referred to, conduct an economic

1 impact study of proposed rules before the Board
2 adopts them. The Board must then make either the
3 economic impact study or DCEO's explanation for not
4 conducting one available to the public at least 20
5 days before a hearing."

6 Now, I do expect to bring this up again
7 at the second hearing, but I did want to afford you
8 the opportunity to respond.

9 In a letter dated August 28th, our
10 chair, Katie Papadimitriou, requested that DCEO do
11 conduct that study and asked them to submit a
12 response by October 13th, which was, of course,
13 Friday. The Board has to date received no request
14 to that response.

15 While I, again, will provide an
16 opportunity to address this at the second hearing
17 next month, is there anyone who wished to testify or
18 comment on either the Board's request or DCEO's
19 response at this point?

20 (No response.)

21 HEARING OFFICER FOX: Neither seeing nor
22 hearing none, why don't we go off the record just
23 for a moment, and before we adjourn we can take up a
24 couple of procedural questions.

1 (Discussion off the record.)

2 HEARING OFFICER FOX: The participants
3 have gone off the record briefly to discuss
4 procedural requirements regarding filing deadlines
5 in the second hearing. The second hearing is
6 scheduled to take place on Thursday, November 16,
7 2017, at 9:00 A.M., by videoconference between the
8 Board's Chicago office and the Board's Springfield
9 office.

10 I do want to note that Thursday,
11 November 16th, is the date of a regularly scheduled
12 Board meeting at 11:00 A.M. on that date. So that,
13 if necessary, we would adjourn shortly before 11:00
14 o'clock for that Board meeting to take place, and
15 then resume as quickly as we can after that Board
16 meeting concludes. That may not, of course, be an
17 issue at all.

18 The deadline to prefile testimony for
19 the hearing on November 16th is November 9th, and as
20 reflected in the hearing officer order, quote, "To
21 expedite the second hearing and make it more
22 efficient, the Board strongly encourages any
23 participant who has questions based on this
24 testimony -- referring to the second hearing -- to

1 prefile those questions with the Board before
2 hearing begins."

3 In addition, the Agency has
4 committed -- and we appreciate the Agency's
5 willingness to do this -- to respond to issues
6 raised and language proposed both in Public Comment
7 No. 1 -- which was filed on October 5th by the
8 Association of Heating, Plumbing, and Cooling
9 Contractors -- and Public Comments 2, 3, and 4 also
10 filed on the 5th and Public Comments 5 and 6 filed
11 on October 10th. Those were filed by a number of
12 different parties, all involved with the Backflow
13 Committee of the Water Works Association, and in
14 each of those six comments, there were some
15 questions raised about the Agency's proposed subpart
16 (o) dealing with cross-connection requirements. So
17 we appreciate the Agency's willingness to address
18 those in writing, and Mr. Gradeless has agreed to
19 submit those on November 9th, on the date of
20 prefiling testimony for the second hearing.

21 In addition, we have raised some issues
22 during this hearing on which the Agency has agreed
23 to do a little additional research or consideration.
24 Those are identified in the transcript, and they

1 have agreed that they will make every effort to
2 prepare a written response to those questions in
3 time for the prefiling deadline on November 9th, but
4 we recognize there may be some issues that can't be
5 resolved fully at that time, and we look forward to
6 what the Agency is able to submit to us either in
7 terms of responses or a status report on that
8 information on November 9th.

9 Are there any other issues that need to
10 be addressed before we adjourn the hearing today?

11 (No response.)

12 HEARING OFFICER FOX: I'm seeing no
13 gestures and hearing no questions. So we are ready
14 to adjourn.

15 Thanks to the Agency and to CWLP for its
16 testimony and questions and to the Agency's
17 witnesses, in particular, for their role today.

18 We're adjourned. Thanks very much,
19 everyone.

20 (Hearing adjourned at 11:33 A.M.)

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