

## ILLINOIS POLLUTION CONTROL BOARD

VILLAGE OF HOMEWOOD,	
HOMEWOOD ILLINOIS,	
VILLAGE OF ORLAND	
PARK, ORLAND PARK	
ILLINOIS, VILLAGE OF	
MIDLOTHIAN, MIDLOTHIAN	
ILLINOIS, VILLAGE OF	PCB 16-14 (Homewood)
TINLEY PARK, TINLEY	PCB 16-15 (Orland Park)
PARK ILLINOIS,	PCB 16-16 (Midlothian)
EXXONMOBIL OIL	PCB 16-17 (Tinley Park)
CORPORATION, VILLAGE	PCB 16-18 (ExxonMobil)
OF WILMETTE, WILMETTE	PCB 16-20 (Wilmette)
ILLINOIS, CITY OF	PCB 16-21
COUNTRY CLUB HILLS,	(Country Club Hills)
COUNTRY CLUB HILLS	PCB 16-22
ILLINOIS,	(Noramco-Chicago)
NORAMCO-CHICAGO, INC.,	PCB 16-23
FLINT HILLS RESOURCES	(INEOS Joliet)
JOLIET LLC, CITY OF	PCB 16-25 (Evanston)
EVANSTON, EVANSTON	PCB 16-26 (Skokie)
ILLINOIS, VILLAGE OF	PCB 16-27 (IDOT)
SKOKIE, SKOKIE	PCB 16-29 (MWRDGC)
ILLINOIS, ILLINOIS	PCB 16-30
DEPARTMENT OF	(Richton Park)
TRANSPORTATION,	PCB 16-31 (Lincolnwood)
Metropolitan Water	PCB 16-33 (Oak Forest)
Reclamation District	PCB 19-7
OF GREATER CHICAGO,	(Village of Lynwood)
VILLAGE OF RICHTON	PCB 19-8
PARK, RICHTON PARK	(Citgo Holdings)
ILLINOIS, VILLAGE OF	PCB 19-9 (New Lenox)
LINCOLNWOOD,	PCB 19-10 (Lockport)
LINCOLNWOOD ILLINOIS,	PCB 19-12 (Crest Hill)
CITY OF OAK FOREST,	PCB 19-13 (Joliet)
OAK FOREST ILLINOIS,	PCB 19-14 (Morton Salt)
VILLAGE OF LYNWOOD,	PCB 19-15
LYNWOOD ILLINOIS,	(Palos Heights)
CITGO HOLDINGS, INC.,	PCB 19-16 (Romeoville)
VILLAGE OF NEW LENOX,	PCB 19-17
NEW LENOX ILLINOIS,	(IMTT Illinois)
CITY OF LOCKPORT,	PCB 19-18 (Stepan)
LOCKPORT ILLINOIS,	PCB 19-19 (Park Forest)
CATERPILLAR, INC.,	PCB 19-20

1	CREST HILL ILLINOIS,	PCB 19-21
	CITY OF JOLIET, JOLIET	(Ozinga Materials)
2	ILLINOIS, MORTON SALT,	PCB 19-22
	INC., CITY OF PALOS	(Midwest Marine)
3	HEIGHTS, PALOS HEIGHTS	PCB 19-23 (Mokena)
	ILLINOIS, VILLAGE OF	PCB 19-24 (Oak Lawn)
4	ROMEOVILLE, ROMEOVILLE	PCB 19-25 (Dolton)
	ILLINOIS, IMTT	PCB 19-26 (Glenwood)
5	ILLINOIS LLC, STEPAN	PCB 19-27 (Morton
	CO., VILLAGE OF PARK	Grove)
6	FOREST, PARK FOREST	PCB 19-28 (Lansing)
	ILLINOIS, OZINGA READY	PCB 19-29 (Frankfort)
7	MIX CONCRETE, INC.,	PCB 19-30 (Winnetka)
	OZINGA MATERIALS,	PCB 19-31 (La Grange)
8	INC., MIDWEST MARINE	PCB 19-33 (Channahon)
	TERMINALS LLC, VILLAGE	PCB 19-34 (CCDTH)
9	OF MOKENA, MOKENA	PCB 19-35 (Niles)
	ILLINOIS, VILLAGE OF	PCB 19-36 (Skyway)
10	OAK LAWN, OAK LAWN	PCB 19-37 (Elwood)
	ILLINOIS, VILLAGE OF	PCB 19-38 (Chicago)
11	DOLTON, DOLTON	PCB 19-40 (Crestwood)
	ILLINOIS, VILLAGE OF	PCB 19-48 (Riverside)
12	GLENWOOD, GLENWOOD	(Time-Limited Water
	ILLINOIS, VILLAGE OF	Quality Standard)
13	MORTON GROVE, MORTON	(Consolidated)
	GROVE ILLINOIS,	
14	VILLAGE OF LANSING,	
	LANSING ILLINOIS,	
15	VILLAGE OF FRANKFORT,	
	FRANKFORT ILLINOIS,	
16	VILLAGE OF WINNETKA,	
	WINNETKA ILLINOIS,	
17	VILLAGE OF LA GRANGE,	
	LA GRANGE ILLINOIS,	
18	VILLAGE OF CHANNAHON,	
	CHANNAHON ILLINOIS,	
19	COOK COUNTY DEPARTMENT	
	OF TRANSPORTATION AND	
20	HIGHWAYS, VILLAGE OF	
	NILES, NILES ILLINOIS,	
21	SKYWAY CONCESSION	
	COMPANY LLC, VILLAGE	
22	OF ELWOOD, ELWOOD	
	ILLINOIS, CITY OF	
23	CHICAGO, CHICAGO	
	ILLINOIS, VILLAGE OF	
24	CRESTWOOD, CRESTWOOD	

1 OF RIVERSIDE,  
2 RIVERSIDE ILLINOIS,

3 Petitioners,

4 V.

5 ILLINOIS ENVIRONMENTAL  
6 PROTECTION AGENCY,

7 Respondent.

8 REPORT OF THE PROCEEDINGS held in the  
9 above-entitled cause before Hearing Officer  
10 Bradley P. Halloran, called by the Illinois  
11 Pollution Control Board, taken by Kari  
12 Wiedenhaupt, CSR, at Michael A. Bilandic Building,  
13 160 North LaSalle Street, Chicago, Illinois, on  
14 the 18th Day of February 2020, commencing at the  
15 hour of 9:00 a.m.

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A P P E A R A N C E S

MS. BARBARA FLYNN CURRIE, Chairwoman  
MS. BRENDA CARTER, Board Member  
MS. CYNTHIA SANTOS, Board Member  
MR. ANAND RAO, Technical Unit  
MS. ESSENCE BROWN, Technical Unit

ALSO PRESENT:

Marie Tipsord, General Counsel

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I N D E X

WITNESS	EXAMINATION
THOMAS MINARIK	10
KIM PETERSON	39
SHANNON NICHOLE SCHAEFFER	48
ADAM JAMES	58
PRIYA THENNARASU	69
MICHAEL SILDARELLI	70
JIM HUFF	76
LAURA BARGHUSEN	94
SCOTT TWAIT	127

E X H I B I T S

NUMBER	MARKED FOR ID	ADMITTED
OZINGA Exhibit		
Nos. A-E	76	76
OPENLANDS		
No. 1	96	97
AGENCY		
No. 1	131	132

1 MR. HALLORAN: It's 9:00. My name  
2 is Brad Halloran. I am the Hearing Officer  
3 assigned to this matter, and this matter is PCB  
4 16-14, et al. It's a consolidated matter. I have  
5 given the court reporter all the PCB numbers,  
6 because it would take me five minutes to read them  
7 off. I believe there is 48 of them.

8 Today is February 18th, 2020 at  
9 9:00 a.m. This case was noticed up properly. The  
10 hearing will be conducted pursuant to Sections 101  
11 and 104.500 of the Board's procedural rules. And  
12 out of an abundance of caution, I think I am going  
13 to read a little bit of what I put in my order in  
14 December of 2019.

15 On July 24th, 2018, the  
16 Metropolitan Water Reclamation District of Greater  
17 Chicago filed an Amended Joint Petition for a  
18 chloride time-limited water quality standard,  
19 otherwise known as TLWQS, under Part 104, Subpart  
20 E of the Board's procedural rules. It's 35  
21 Illinois Administrative Code 104, Subpart E.

22 This consolidated matter  
23 involves 48 petitioners. The District and other  
24 Petitioner facilities are seeking to be covered by

1 chloride TLWQS for their respective discharges  
2 into portions of the Lower Des Plaines River  
3 watershed and portions of the Chicago Area  
4 Waterways System.

5                   On December 20th, 2018, the  
6 Board found that the District's Joint Amended  
7 Petition is in substantial compliance with the  
8 Environmental Protection Act and Board  
9 regulations. The Board directed the Hearing  
10 Officer to schedule a hearing, and we are here.

11                   I think the matters to be  
12 discussed here today are issues related to  
13 chlorides TLWQS applicable to discharges from the  
14 District and other Petitioners into portions of  
15 the river and the CAWS. The Board will be making  
16 a decision based on everything in the record,  
17 what's testified here to today and any public  
18 comments.

19                   The hearing will proceed as  
20 follows: All petitions, responses to the  
21 questions from Board, IEPA responses and replies  
22 to the Board and IEPA questions and responses and  
23 any pre-filed testimony will be admitted without  
24 further testimony. However, anyone may object at

1 hearing regarding any of these admitted documents.

2 An opening statement will be  
3 available to the parties, if they so choose. The  
4 Petitioners will commence the hearing with their  
5 witnesses, and Mr. Andes from the District is  
6 going to be so kind and read the order before we  
7 begin. The order of the Petitioners, again, has  
8 already been agreed to. We will find that out in  
9 a minute.

10 Questions may be directed to the  
11 witness by, including but not limited to, the  
12 Board and the IEPA. After Petitioners rest, the  
13 IEPA will present its witnesses. Questions may be  
14 directed to the witness by, including but not  
15 limited to, the Board and the Petitioners. After  
16 the IEPA rests, members of the public may ask  
17 questions, give testimony or comment. And I can  
18 make adjustments, if needed.

19 I am happy to announce we have  
20 numerous attorney advisors here, staff attorneys.  
21 We have general counsel, Marie Tipsord. We have  
22 our Chief Environmental Scientist, Anand Rao. We  
23 have another technical member, I believe, Essence  
24 Brown. I saw her somewhere, and we also have --

1 we also have Member Carter.

2 Member Carter?

3 MEMBER CARTER: Hi. I just wanted  
4 to welcome you all, and thank you all for coming.  
5 I know this is the first of its kind of this kind  
6 of matter. So I do appreciate all your effort and  
7 your collaboration. So welcome, and thank you.

8 HEARING OFFICER HALLORAN: Thank  
9 you, Member Carter.

10 I would ask Mr. Andes to read  
11 the agreed schedule of witnesses and Petitioners  
12 to the court reporter.

13 MR. ANDES: Sure. Fredric Andes,  
14 Barnes & Thornburg for Metropolitan Water  
15 Reclamation District of Greater Chicago.

16 The order of witnesses that has  
17 been agreed on by the parties is as follows:

18 First, MWRD; second, Morton Salt; third, Village  
19 of Frankfurt; fourth, Cook County; fifth, Village  
20 of Crestwood; sixth, Ozinga; seventh, Citgo;  
21 eighth, Openlands; ninth, Illinois EPA.

22 MR. HALLORAN: Thank you, Mr. Andes.  
23 Would anybody like to make an opening statement  
24 before we begin with the District?

1 (No response.)

2 HEARING OFFICER HALLORAN: Seeing no  
3 hands, Mr. Andes, you are up.

4 MR. ANDES: Okay.

5 MR. HALLORAN: Thank you.

6 MR. ANDES: Come on up.

7 (Whereupon, the witness was duly  
8 sworn.)

9 MR. ANDES: And also me.

10 (Whereupon, the witness was duly  
11 sworn.)

12 MR. HALLORAN: You may proceed.  
13 Thank you.

14 MR. ANDES: So as -- so my question  
15 first is, as to the questions raised by the Board,  
16 which are the ones that MWRD is answering, will  
17 the Board ask those questions, or do we simply  
18 respond?

19 MR. HALLORAN: Yeah, Mr. Andes,  
20 could you run that question by again? The court  
21 reporter has the Board's questions, and she can  
22 enter them as if read, so --

23 MR. RAO: If you just say which  
24 question number you are responding to, that will

1 be good.

2 MR. ANDES: Okay. So we will just  
3 specify the question we are responding to and then  
4 provide the answer.

5 So I will be providing answers  
6 to Questions 1, 6, 7 and 8.

7 Mr. Minarik will be providing  
8 answers to Questions 2, 3, 4, and 5.

9 "Question No. 1: Response to  
10 Board's Question 13(a) suggests changes to Table 1  
11 of the draft order. MWRD also suggests several  
12 changes to the draft order in response to Question  
13 20. The attached draft order includes changes to  
14 the order language, updated tables and a new  
15 watershed map provided by MWRD. Please comment on  
16 whether the attached draft order reflects MWRD's  
17 suggested changes."

18 As to Question No. 1, which asks  
19 the District to comment on whether the attached  
20 draft order reflects MWRD's suggested changes, we  
21 believe that it reflects a number of changes that  
22 have been suggested by the District. There are a  
23 few areas that we want to note.

24 First, in terms of Table 1 of

1 the draft order, two of the reaches of the North  
2 Shore Channel on page 14, the incorrect water  
3 quality standard is listed. It lists 302.208(g).  
4 It should list 302.407(g)(3). As to the remainder  
5 of the draft order, there are a number of specific  
6 issues on which the District changes were not --  
7 the changes the District suggested were not made  
8 in this draft order, and I will point those out.

9           There are -- and these are all  
10 reflected in the District's filing of  
11 September 23rd, 2019. One is that there are  
12 several places where it was mentioned that a  
13 report by the group would be publically available,  
14 and we suggested that that clarify that that could  
15 include making it available on the group's  
16 website. That change was not yet made.

17           Second, there is a provision on  
18 page 10 that requires the workgroups to convene at  
19 least semi-annually and continue meeting  
20 throughout the term of the TLWQS. While we are  
21 sure the groups would convene in some fashion, we  
22 don't think the Board has the authority to specify  
23 how often the group must meet. So we believe that  
24 provision should be deleted.

1 Another provision also on page  
2 10 requires the workgroup status report to  
3 identify and describe any financial, technical or  
4 other assistance the workgroup may be able to  
5 provide to individual dischargers. We think it's  
6 improper to require or imply any requirement in  
7 terms of the workgroup providing assistance to  
8 individual dischargers, although we expect that  
9 some assistance will likely be provided in some  
10 way by the workgroup. So we suggest at deleting  
11 that provision.

12 Finally, we have a broader  
13 concern about the number of places in the draft  
14 order where it specifies that the workgroup must  
15 do outreach and education, and that issue is  
16 detailed further in the response to Question 6.  
17 So I will describe that more fully in my response  
18 to that question. Those are the areas in which we  
19 believe further changes to the draft order are  
20 appropriate.

21 "Question No. 6: In response to  
22 Question 16(i) & (ii), MWRD states that requiring  
23 chloride workgroups specific and detailed measures  
24 goes beyond the Board's authority. Please

1 elaborate on the reasons why MWRD believes the  
2 other provisions concerning chloride workgroups  
3 are within the Board's authority, but no outreach  
4 and education provisions that are intended to  
5 reduce chloride levels in receiving streams.

6 Also, comment on whether the individual  
7 Petitioners should be required to implement the  
8 outreach and education provisions instead of the  
9 workgroups."

10 In responding to Question 6, we  
11 were asked to elaborate on the reasons why MWRD  
12 believes that outreach and education provisions  
13 are not within the Board's authority, and whether  
14 the individual Petitioners should be required to  
15 implement these requirements instead of the  
16 workgroups.

17 We believe the Board does not  
18 have the authority to require that the Petitioners  
19 educate and contact other parties, especially not  
20 parties over which they have no authority,  
21 including nonpoint sources and MS4 sources. That  
22 is Illinois EPA's obligation, to deal with those  
23 parties.

24 Petitioners should be required

1 to make best efforts to achieve loading  
2 reductions. That may include doing outreach and  
3 educating their own residents, but the value,  
4 feasibility and cost of those actions will differ  
5 from community to community. So there should not  
6 be any kind of uniform requirement for the  
7 Petitioners to all take measures in this area.  
8 This should not be required of the group or of  
9 individual dischargers.

10 In response to Question 7 --

11 MR. RAO: Mr. Andes?

12 MR. ANDES: Yes.

13 MR. RAO: Follow-up to your response  
14 to Question 6.

15 MR. ANDES: Sure.

16 MR. RAO: Are you saying, does the  
17 Agency have the authority to require these  
18 outreach and education provisions in permitting?

19 MR. ANDES: No. We believe that the  
20 Agency does not have that authority. What we are  
21 trying to say is if -- if contacts are needed and  
22 education is needed of, say, agricultural parties,  
23 Illinois EPA or other parts of the state  
24 government should be doing that. They should be

1 taking that action as to those independent  
2 parties. The Petitioners here should not be  
3 required to. We don't think that Illinois EPA  
4 could require in a permit that you do that kind of  
5 outreach.

6 MR. RAO: Okay.

7 "Question No. 7: In response to  
8 Question 18(a) regarding new sources of chloride,  
9 MWRD states that the eligibility criteria under  
10 draft Condition No. 1(c) must apply to new sources  
11 of chloride only if the discharge is  
12 'significant'. Please clarify what is meant by  
13 'significant' discharger. Comment on whether the  
14 eligibility criteria must include a numeric  
15 threshold value to define a 'significant' source  
16 or discharger."

17 MR. ANDES: In answer to Question 7,  
18 which concerns the requirements for new sources of  
19 chloride, the District had suggested those  
20 requirements should only apply to new sources that  
21 are significant, and we were asked to clarify what  
22 significant means.

23 We believe significant should be  
24 determined on a case-by-case basis by Illinois

1 EPA. There is not a single numeric threshold  
2 value that can be used to define "significance".

3 MR. RAO: Mr. Andes?

4 MR. ANDES: Yes.

5 MR. RAO: How will the Agency know  
6 who has to apply for coverage? Is it the  
7 Petitioner has to decide whether that's  
8 significant? What guidance will they have to come  
9 to the IEPA?

10 MR. ANDES: Well, we think that if  
11 you are going to have a new source of chlorides,  
12 that the Agency could certainly require you to  
13 notify them, and we think that would probably be  
14 required anyway. The question is, would they be  
15 subject to all of these requirements in the  
16 variance?

17 And we think that if it's a very  
18 minor source, the Agency would know about it  
19 through other means, but as -- so they would be  
20 notified, and then the Agency could say, "Okay.  
21 That is a significant enough source that it needs  
22 to be covered within these requirements for new  
23 sources, or it's so minor that it doesn't need to  
24 be addressed.

1                   So we think there would be an  
2 opportunity for the Agency to opine on that once  
3 they are notified that a new source is being  
4 proposed.

5                   MR. RAO: Okay. One of the reasons  
6 we asked this question was, you know, in case  
7 JCAR, which is a Joint Committee of Administrative  
8 Rules, they generally ask questions to the Board  
9 when we use these kinds of terms, like,  
10 "significant" without defining it. So we need to  
11 be able to provide a good answer to them. So  
12 that's the reason we asked the question.

13                  MR. ANDES: Well, no. I think that  
14 in terms of chlorides, over time it's likely that  
15 the Agency could begin to define certain types of  
16 sources that are clearly not significant sources.  
17 You might have a commercial building that we  
18 wouldn't expect to be discharging a lot of salt;  
19 whereas, if you are, say, putting in a new parking  
20 lot, that could more likely to be a source of  
21 significant salt.

22                   So I think that there probably  
23 are some basic concepts that the Agency could put  
24 forward, in terms of, you know, these are types of

1 situations where it's really unlikely that you  
2 would be subject to this; whereas, others, notify  
3 us, and we will make that decision.

4 MR. RAO: Thank you.

5 "Question No. 8: In response to  
6 Question 19 regarding compliance strategy, MWRD  
7 states that any revisions to the underlying  
8 designated uses and/or criteria would be  
9 proposed at the end of the full 15-year term.  
10 Please clarify whether the Joint Petitioners  
11 intend to perform specific toxicity studies to  
12 collect new or additional information necessary to  
13 revise the underlying designated use or criterion  
14 during the term of the TLWQS. If so, should the  
15 TLWQS include a condition requiring the Joint  
16 Petitioners to conduct additional toxicity  
17 studies?"

18 MR. ANDES: In response to Question  
19 8, this was concerning the statement in the joint  
20 petition that any revisions to the underlying  
21 designated uses and/or criteria would be proposed  
22 at the end of the full 15-year term, and we were  
23 asked to clarify whether the Petitioners intend to  
24 perform specific toxicity studies to collect new

1 information necessary to revise those uses or  
2 criteria. If so, should the TLWQS include a  
3 condition requiring the Petitioners to conduct  
4 those studies?

5 Our answers are no to those  
6 questions for the following reasons. We don't  
7 know what the status of the waters will be in  
8 15 years, other than we do not expect that the  
9 water quality standard will be fully attained. At  
10 that point, it may be appropriate to conduct a use  
11 attainability analysis to determine what the  
12 attainable use and criteria are over the  
13 long-term, or it may be appropriate to request  
14 another time-limited water quality standard  
15 without revising the use and criteria.

16 We do not expect that either of  
17 those actions would be based on toxicity issues.  
18 They would be based on whether the standard is  
19 attainable. Therefore, toxicity studies would not  
20 be relevant to further action by the Board at that  
21 point, particularly given that all of the  
22 practices that are being required in this TLWQS  
23 will be directed toward reducing chloride loading,  
24 not increasing it. We will be improving the

1 situation.

2                   So we do not believe that  
3 toxicity studies would be relevant at that point.  
4 Moreover, requiring the Petitioners to conduct  
5 toxicity studies at that time is not provided for  
6 in either the federal variance rules or the  
7 Board's TLWQS regulations. So the Board does not  
8 have the authority to require such studies.

9                   MR. RAO: Follow-up, Mr. Andes?

10                   MR. ANDES: Yes.

11                   MR. RAO: The reason we asked that  
12 question was because MWRD stated that any  
13 revisions to underlying designated uses and  
14 criterion would be proposed at the end of the term  
15 of 15 years.

16                   So if you are going to propose  
17 some change in the designated use, they have to be  
18 supported by toxicity studies, and the question is  
19 more towards, are you going to start looking into  
20 doing those studies 15 years from -- at the end of  
21 15 years, or will you have something that -- you  
22 know, those studies and results when you come back  
23 in 15 years?

24                   And just to add to that, we had

1 a chloride rulemaking in front of the Board, which  
2 kind of indicated that if there were certain  
3 studies that were done, we could have a revised  
4 chloride standard. So that's where the question  
5 comes from. Not about whether the Board has  
6 authority to require you to do it. It's just  
7 asking you the questions based on what you have  
8 said in your petition.

9 MR. ANDES: Well, let me clarify a  
10 couple of things. First, we don't believe that  
11 anything will be started at 15 years. We are  
12 entering into a long-term process with annual  
13 reports and five-year reviews, during which a lot  
14 of issues will be assessed, including what's a --  
15 what's the state of the water bodies, are the uses  
16 and criterion being attained, and particularly, in  
17 the last five years moving forward, understanding  
18 that at the end of that time we will have  
19 decisions to make about what the regulatory status  
20 will be after the 15 years.

21 So I am confident that work that  
22 needs to be done will be discussed and undertaken  
23 before the end of the term, but it's also  
24 important to keep in mind that revising underlying

1 use does not necessarily require toxicity studies.

2                   One of the concepts that's clear  
3 in the regulations is that uses have to be  
4 attainable, and if it's believed that a use is not  
5 attainable, having nothing to do with the  
6 underlying toxicity studies or any information  
7 about water quality in terms of fish or any other  
8 biota, if that number is simply -- that may be the  
9 proper water quality number, but if it is not  
10 attainable, then both the federal and the state  
11 regulations specify that you can do a use  
12 attainability analysis to revise the underlying  
13 use and criteria to be more attainable, even  
14 though you are not meeting the water quality  
15 number that would be preferred based on toxicity  
16 information.

17                   So it may be between now and  
18 15 years from now that the toxicity information  
19 has developed such that the underlying water  
20 quality standards are revised. That's certainly  
21 possible. As you said, the Board has already had  
22 one proceeding that raised those issues.

23                   And if those issues are  
24 addressed, then, you know, this variance will --

1 would likely need to be reviewed to determine how  
2 it would apply in that context. Although, we  
3 believe that even if the water quality standard  
4 were revised, it would -- certainly if the water  
5 quality standard would remain more stringent, our  
6 attainability issues would be even worse.

7           And if the water quality  
8 standard is revised to be less stringent, we still  
9 think, based on information that's available at  
10 this time, that we would still have attainment  
11 issues, and we would still need a variance or a  
12 TLWQS.

13           So toxicity studies and  
14 developing new water quality standards may  
15 proceed, but that would be on a separate track  
16 from this process, which is solely looking at  
17 whatever the water quality standard number is, is  
18 it attainable? And if it isn't attainable, then  
19 you can revise the underlying use and criteria.  
20 Even though you recognize we would like to get to  
21 "X", you recognize you can't get to "X". We will  
22 get as close to it as we can, and that's what you  
23 will do through either a new TLWQS or through a  
24 UAA.

1 MR. RAO: Okay. Thank you.

2 MR. ANDES: Those are the questions  
3 for me. I will now defer to Mr. Minarik to  
4 respond to the remainder of the questions to the  
5 MWRD.

6 Come on over here:

7 "Question No. 2: Response to  
8 Board's Question 15(i) notes that the relevant  
9 chloride concentration for Ruby Street (LDPRCW\_01)  
10 should be 234 mg/L instead of 255 mg/L. In light  
11 of this correction, please comment on whether the  
12 proposed interim winter chloride criterion of 280  
13 mg/L in draft Condition No. 5 needs to be revised  
14 to a lower concentration. If not, please explain  
15 why the correction of the Ruby Street chloride  
16 value has no bearing on the proposed interim  
17 chloride criterion."

18 MR. MINARIK: Okay. Good morning.  
19 Question No. 2 was asked of the District about a  
20 correction that was made for the chloride  
21 concentration reported for Ruby Street. It should  
22 have been 234 mg/L instead of 255. And the  
23 question was, in light of this correction, please  
24 comment on whether the proposed winter chloride --

1 interim winter chloride criterion of 280 mg/L  
2 needs to be revised, and if not, please explain  
3 why this correction with Ruby Street would have no  
4 bearing.

5 The proposed interim winter  
6 chloride criterion does not need to be revised.  
7 The Lockport location was used as the baseline and  
8 the seasonal weekly chloride data at Lockport was  
9 averaged over a five-year period. The projection  
10 for chloride reductions in the first five years  
11 was reasonably determined to be between 3 and  
12 7 percent, and the 280 mg/L was based off this.

13 So the Ruby Street chloride data  
14 was not used for this calculation, and that  
15 correction would not have any bearing on that 280  
16 mg/L number.

17 "Question No. 3: Response to  
18 Board Question 15(ii)(2) states that Compliance  
19 with the interim criteria would be assessed once  
20 every five years, based on the measurements  
21 collected on a weekly basis over the previous five  
22 years. Please explain the rationale for proposing  
23 a five-year period for assessing compliance with  
24 the interim criterion. Comment on whether the

1 compliance interval could be reduced to a shorter  
2 time interval."

3 Question No. 3. This had to do  
4 with the five-year period. Please explain the  
5 rationale for proposing a five-year period for  
6 assessing compliance with the interim criterion,  
7 and please comment on whether the compliance  
8 interval could be reduced to a shorter time  
9 interval.

10 As chloride concentrations can  
11 vary from year to year, some winters warrant more  
12 deicing events than others, and using a shorter  
13 compliance interval could buy us the assessment of  
14 compliance. The best approach would be to look at  
15 a long-term trend with respect to chloride  
16 concentrations, and it makes more sense to look at  
17 annual watershed seasonal averages over five years  
18 to identify those trends, as opposed to a shorter  
19 interval.

20 MR. RAO: So are you saying that you  
21 are looking more at the chloride trends over time  
22 than protection of aquatic life when it comes to  
23 such a long-term compliance period?

24 MR. MINARIK: Yes. We are looking

1 at the chloride concentration over time to see  
2 what progress is being made, based on all of the  
3 BMPs and the dischargers that are working towards  
4 reducing chloride.

5 MR. RAO: In terms of protecting  
6 aquatic life, do you think that such a long-term  
7 compliance period reflects what's actually going  
8 on in the streams?

9 MR. MINARIK: I think the -- the  
10 goal is to see chloride reduced over time, and if  
11 we can show that, then we are making progress.  
12 That's -- that's going to be a good thing for the  
13 aquatic life in the streams.

14 MR. RAO: Yes, I agree. And one of  
15 the things about the federal, you know, guidelines  
16 for this TLWQS is the interim criterion should be  
17 protective of the aquatic life.

18 So you are talking about  
19 reducing chloride levels and the compliance period  
20 over a five-year period. The question is whether  
21 this interim standard that you have proposed is  
22 that if it's protective of aquatic life, how will  
23 we know what's happening during that long-term  
24 period, you know?

1 MR. ANDES: Let me --

2 MR. MINARIK: Sure.

3 MR. ANDES: Let me try to clarify on  
4 that response. The interim criterion is not  
5 intended to be protective of aquatic life to the  
6 extent that it would require compliance with the  
7 water quality standard. We know we can't get to  
8 the water quality standard.

9 The real purpose of the interim  
10 criterion is to show -- is to reflect what is  
11 attainable during the interim time period. What  
12 we are saying is that we can't look at the data  
13 from one year and say, "Well, the level of  
14 chloride in that year was 250. That's  
15 attainable", because the level of chloride depends  
16 to a great extent on how much snow fell that year.

17 So the best way to look at if we  
18 are making progress, which is what the interim  
19 criteria are about, is showing that you are doing  
20 attainable things and making progress during the  
21 term of the variance. That the best way to show  
22 that is to look at long-term trends, because over  
23 a five-year period, you are more likely to get a  
24 variety of snow conditions, and therefore, if you

1 show that over time the amount of chloride being  
2 used is less, and the levels in the water body  
3 over time are less, it's likely that reflects  
4 something real. Whereas, the numbers in any  
5 particular year, and certainly any month, can go  
6 up and down for reasons that have nothing to do  
7 with the BMPs.

8 MR. RAO: Okay.

9 "Question No. 4: Response to  
10 Board Question 15(ii)(4) and (5) states that the  
11 compliance points for the CAWS and LDPR would be  
12 at the Lockport Forebay on the CSSC (RM 290.9) and  
13 the USGS gage at Channahon, Illinois,  
14 respectively. Please clarify whether these are  
15 the only two locations the interim criterion would  
16 be applicable during the term of the TLWQS."

17 MR. MINARIK: Okay. Moving on to  
18 Question No. 4. This question was asked of the  
19 District about the two compliance points for  
20 monitoring that were identified, the one for the  
21 CAWS at Lockport, and then the one for the Lower  
22 Des Plaines River in Channahon. And the question  
23 was asked, Please clarify whether these are the  
24 only two locations that the interim chloride

1 criterion would be applicable during the term of  
2 the time-limited water quality standard.

3 And the response is, yes, these  
4 are the only two locations.

5 MR. RAO: A follow-up question  
6 there.

7 So with this interim criterion,  
8 other than the District monitoring at these two  
9 locations, there cannot be any enforcement of the  
10 standard by the public if they go take some  
11 samples in some other location and say you are not  
12 complying with the standard by specifying these  
13 locations? Is this your understanding that, you  
14 know, only once in five years you can make  
15 compliance assessments at these two locations?

16 MR. ANDES: Let me answer that  
17 question.

18 Those points, those are the  
19 points where we are assessing the overall effect  
20 of all of the BMPs being applied and to determine  
21 if we are making progress. And particularly since  
22 the TLWQS applies on a watershed scale, it makes  
23 sense to look at it at those downstream places  
24 where we can see combined impacts.

1                   But it's important to recognize  
2                   that the compliance by the Petitioners will be  
3                   assessed in a different way. It would not be  
4                   appropriate for someone to just take one sample  
5                   from one place in the water bodies and say, "Well,  
6                   if it's above 500, you are all in violation."  
7                   Particularly, because we have recognized that the  
8                   500 can't be met, certainly not in the short-term.

9                   The way that people will be able  
10                  to measure compliance and assess compliance,  
11                  including with publically available information, is  
12                  by looking at the reports filed by the  
13                  Petitioners, each of whom will be producing a  
14                  report, and the groups will be producing reports  
15                  showing that, in fact, they have complied with the  
16                  requirements in the variance in terms of the  
17                  various practices.

18                  And if they are not filing the  
19                  reports or if the reports are inadequate, then  
20                  that will be a compliance issue, and that will be  
21                  a matter of public information.

22                  MR. RAO: Okay.

23                  "Question No. 5: Please explain  
24                  why the instream chloride level is not measured by

1 water sampling instead of monitoring specific  
2 conductance at Channahon."

3 MR. MINARIK: Okay. Moving on to  
4 Question No. 5. Please explain why the instream  
5 chloride level is not measured by water sampling  
6 instead of monitoring for specific conductance at  
7 the Channahon location.

8 So at Lockport, the MWRD has a  
9 long-term dataset for water quality, including  
10 chloride concentrations that are measured on a  
11 weekly basis. The MWRD continues to collect these  
12 weekly water quality samples at Lockport.

13 For the Lower Des Plaines River,  
14 a long-term dataset for chloride concentrations  
15 was lacking, and it was determined that the  
16 specific conductance measured continuously at the  
17 USGS site in Channahon would be appropriate to  
18 estimate the chloride concentrations. While no  
19 routine water quality samples are collected at  
20 Channahon, previous sampling and analysis has  
21 determined that there is a strong linear  
22 relationship between chloride concentrations and  
23 specific conductance.

24 MR. RAO: Have you submitted that

1 information into the record, of any analysis you  
2 have done to show that correlation?

3 MR. MINARIK: Yes. That was part of  
4 the initial --

5 MR. ANDES: I believe that  
6 information was provided in the Joint Petition,  
7 but we will -- we will check that and submit any  
8 additional information.

9 MR. RAO: Okay. Thank you.

10 MR. MINARIK: Okay. Thank you.

11 MR. ANDES: Thank you.

12 HEARING OFFICER HALLORAN: Yes,  
13 Mr. Ettinger?

14 MR. ETTINGER: Okay. At this time I  
15 am going to ask a question.

16 THE COURT REPORTER: What's your  
17 name, sir?

18 HEARING OFFICER HALLORAN: Yes, if  
19 you could tell the court reporter your name, and  
20 you can ask a question.

21 MR. ETTINGER: Yes. I'm Albert  
22 Ettinger. I am here for the Sierra Club and the  
23 Friends of Chicago River.

24 I just have a question regarding

1 the relationship between specific conductance and  
2 chloride, and do you have -- do you have a lengthy  
3 period of data specifically correlating specific  
4 conductance in this watershed or in these  
5 watersheds and chloride? Is that part of the  
6 submission?

7 MR. ANDES: Yes, there was -- I  
8 don't know if it was lengthy. I don't recall how  
9 lengthy it was, but there was information provided  
10 on that issue in the Joint Petition as to these  
11 waters. But we will review and provide any  
12 additional information we have on that issue.

13 MR. ETTINGER: You are aware, of  
14 course, that specific conductance -- the  
15 relationship between specific conductance and  
16 chloride can vary a great deal in different  
17 watersheds and water bodies; is that correct?

18 MR. ANDES: Understood.

19 MR. HALLORAN: Thank you,  
20 Mr. Etinger.

21 You may proceed.

22 MR. ANDES: I think we are done with  
23 all of our questions.

24 HEARING OFFICER HALLORAN: All

1 right. Very good.

2 Oh, we have another question.

3 Ms. Meyers?

4 MS. MEYERS: If I may, just one  
5 quick question.

6 HEARING OFFICER HALLORAN: Could you  
7 spell your name for the court reporter?

8 MS. MEYERS: My name is Stacy  
9 Meyers, M-E-Y-E-R-S. Stacy is, S-T-A-C-Y. I  
10 represent Openlands. I have a question for you,  
11 sir.

12 How many monitoring stations  
13 throughout Chicago Area Waterways does MWRD  
14 monitor for chlorides? And do we know exactly how  
15 often that data is collected?

16 MR. MINARIK: The MWRD has an  
17 ambient water quality monitoring program where  
18 they collect samples monthly at stations  
19 throughout the CAWS. Now, Lockport is the only  
20 station that's collected weekly. I believe there  
21 are 16 stations that are on the Chicago Area  
22 Waterway System that have that monthly chloride  
23 data that's collected.

24 MS. MEYERS: So that's already

1 occurring, and that data is already being  
2 collected?

3 MR. MINARIK: Yes, it is.

4 MS. MEYERS: But that's not being  
5 considered for compliance or integrated in any way  
6 into this time-limited water quality standard for  
7 monitoring purposes?

8 MR. ANDES: Well, those data are  
9 factored into the long-term averages that are used  
10 in the petition. So it's not that they are not  
11 considered, but the District's belief is that  
12 looking solely at monthly or weekly numbers in  
13 terms of whether they hit 500 or not is not  
14 appropriate, given the variability in chloride  
15 concentrations due to weather.

16 MS. MEYERS: As far as the amount of  
17 data collected, however often it is collected,  
18 however, the data is only to be collected from two  
19 points in creating a four-year average of the  
20 five-month seasonal data, correct?

21 MR. ANDES: The only data used to  
22 assess trends will be at those two locations  
23 downstream of where the combined impacts of all of  
24 the sources can be assessed.

1 MS. MEYERS: So that's the only  
2 thing on chlorides that we are going to be looking  
3 at for that five-year window or that four-year  
4 window, correct?

5 MR. ANDES: Within the terms of the  
6 variance, yes.

7 MS. MEYERS: Thank you.

8 HEARING OFFICER HALLORAN: Anyone  
9 else?

10 (No response.)

11 HEARING OFFICER HALLORAN: Thank  
12 you, Mr. Andes.

13 I think we have Morton Salt up  
14 next, and I am pleased to announce we have Member  
15 Santos joining the party.

16 MS. MEYERS: Hearing Officer, a  
17 point of process?

18 HEARING OFFICER HALLORAN: Off the  
19 record, please.

20 (Whereupon, a discussion was had  
21 off the record.)

22 (Whereupon, the witness was duly  
23 sworn.)

24 HEARING OFFICER HALLORAN: You may

1 proceed. Thank you.

2 MS. PETERSON: Hello, my name is Kim  
3 Peterson, and I am the Director of Environment and  
4 Sustainability Programs at Morton Salt, one of  
5 many Petitioners that supports and is committed to  
6 the implementation of a time-limited water quality  
7 standard for the defined Chicago Area Waterway  
8 System and the Des Plaines River Watershed.

9 Morton appreciates the opportunity to participate  
10 in today's hearing and is grateful for the efforts  
11 of the Board, the IEPA and other Petitioners and  
12 parties in this important matter.

13 My testimony will focus on two  
14 subjects. First, I will respond to the pre-filed  
15 questions directed to Morton Salt that Openlands  
16 filed on February 13th, 2020. Second, I will  
17 explain Morton's position with respect to the best  
18 management practices that the Board included in  
19 its pre-filed questions; specifically, the best  
20 management practices listed in Table 3 on pages 30  
21 and 32 that are applicable to salt storage  
22 facilities.

23 By way of background, Morton  
24 owns a large bulk salt storage facility and marine

1 terminal adjacent to the Calumet River known as  
2 the Calumet Site. At the Calumet Site, Morton  
3 typically stores hundreds of thousands of tons of  
4 bulk deicing salt on a year-round basis. Most of  
5 that salt is delivered to the Calumet Site by  
6 barge or vessel.

7 After the ships unload the salt  
8 at our site, the salt is then distributed by  
9 trucks to Morton's customers, which include  
10 municipalities in the Chicagoland area, along with  
11 both the Illinois and Indiana Department of  
12 Transportations. It's important to note that  
13 Morton is motivated to keep water away from its  
14 salt storage piles, because if it's our product,  
15 and if it comes into contact with rainwater, we  
16 would literally be dissolving away our own  
17 product.

18 Morton currently implements a  
19 set of best management practices to control its  
20 salt runoff and discharge. These include  
21 conveying stormwater away from the stockpile when  
22 the stockpiles are fully shaped, utilizing jersey  
23 barriers as mobile berms, cover the stockpile with  
24 tarps, and conducting regular monitoring

1 inspections and reporting to assess Morton's  
2 compliance with its discharge permit and  
3 applicable best practice -- best management  
4 practices.

5                   By joining the -- by joining the  
6 joint submittal, as well as filing its own  
7 individual submittal in support of the petition,  
8 Morton has committed to further improving its  
9 operations to control chlorides. Best management  
10 practices, or BMPs proposed in those documents;  
11 such, as the BMPs listed in Chapter 2 of the joint  
12 submittal include: Securing stockpiles with tarps  
13 at all times, except when the piles are in active  
14 use; conducting enhanced annual training;  
15 developing a pollutant minimization plan within  
16 six months of the effective date of the  
17 time-limited water quality standard; and filing an  
18 annual report as detailed in Chapter 9 of the  
19 joint submittal.

20                   In February, Openlands included  
21 its pre-filed questions, a set of questions  
22 directed to Morton. Those questions addressed  
23 three subjects; the feasibility of constructed  
24 mechanism such as berms and retention ponds, the

1 conveyance of stormwater away from salt piles when  
2 the piles are fully constructed, and the issue of  
3 tarping trucks that collect salt from the Calumet  
4 Site.

5                   With respect to constructed  
6 berms, Morton does not dispute that berms should  
7 be used as an essential aspect of controlling  
8 stormwater. In fact, Morton already uses mobile  
9 berms; such as, jersey barriers, to control the  
10 stormwater and minimize its runoff. From Morton's  
11 perspective, the primary issue with constructed  
12 berms is any mandated or suggested requirement for  
13 them to be permanent structures.

14                   This is incompatible with  
15 Morton's operations, because the salt piles are  
16 constantly being constructed and deconstructed on  
17 a year-round basis. In other words, the salt  
18 piles are frequently in active use. However,  
19 Morton does use a technique called stage tarping  
20 when the piles are being formed and shaped. This  
21 allows the majority of the pile to be covered at  
22 all times, while leaving the working face open.

23                   Because the shape of the piles  
24 constantly changes, Morton uses jersey barriers

1 that can be placed according to the shape of the  
2 piles, which in turn effectively controls  
3 stormwater run-off. Importantly, the jersey  
4 barriers are also used as hook points for the  
5 tarps that are constructed over the piles. Those  
6 jersey barriers need to be placed in precise  
7 configurations so that the piles can be safely and  
8 effectively tarped.

9 With respect to retention ponds,  
10 Morton agrees with and joins the concerns  
11 expressed by the Cook County Department of  
12 Transportation and Highways in its pre-filed  
13 testimony. Retention ponds are infeasible at  
14 Calumet, because they require an enormous amount  
15 of space, which Morton does not have and cannot  
16 obtain at the Calumet Site.

17 Morton's site is designed to  
18 minimize the amount of water that comes into  
19 contact with salt in the first place, and that  
20 design cannot be feasibly changed to channel water  
21 to a retention pond, even if there was space to  
22 build such a pond. There simply is no  
23 market-ready technology available to collect and  
24 store stormwater on a year-round basis.

1                   It's also worth noting that  
2 water collected in retention ponds cannot be  
3 cost-effectively converted into pre-wetting brine  
4 solution for road use. This type of brine has a  
5 precise concentration of chloride that is  
6 different from stormwater that would be collected  
7 in the retention ponds. This type of brine also  
8 has to be free of all -- of certain impurities.

9                   Lastly, with respect to the  
10 issue of trucks, Morton's position is that BMPs  
11 should not include any inflexible requirement for  
12 salt storage facilities to ensure that other  
13 parties who haul salt away from the facilities use  
14 tarps on their trucks. Morton does already  
15 include a truck tarping requirement in many of its  
16 contracts with its carriers, but it remains the  
17 case that the Calumet Site is visited by trucks  
18 from a variety of entities, whose operations are  
19 not within Morton control.

20                   This type of equipment is used  
21 by those companies and agencies very  
22 significantly, and not all their trucks are  
23 equipped with tarps. Those entities will  
24 themselves have to comply with the requirements

1 applicable to them in relation to the time-limited  
2 water quality standard.

3                   So it does not make sense to  
4 place a burden on other parties to ensure their  
5 compliance. This is especially true for large  
6 salt storage facilities who sell to numerous  
7 customers on a year-round basis.

8                   I will now turn to Morton's  
9 position with respect to the BMPs that the Board  
10 included in its pre-filed questions; specifically,  
11 the BMPs listed on Table 3 on pages 30 to 32 that  
12 are applicable to salt storage facilities. The  
13 exact language that Morton proposes for the BMPs  
14 can be found in the record in Morton's response to  
15 the questions of the Board dated September 23rd,  
16 2019. Morton respectfully requests that the Board  
17 adopt that language in the final time-limited  
18 water quality standard rule. However, Morton's  
19 position can be summed up in the following three  
20 points.

21                   First, Morton agrees with the  
22 Board's draft proposed order where the order does  
23 not apply BMPs I and J to salt storage facilities.  
24 Those BMPs contain requirements about fixed berms,

1 mobile berms and retention ponds that are not  
2 feasible for the reasons I set forth a moment ago.

3           Second, Morton requests that the  
4 Board not apply BMP H to salt storage facilities.  
5 BMP H states that working areas should be bermed  
6 and/or sloped to allow snow melt and stormwater to  
7 drain away from the area. In some cases, it may  
8 be necessary to channel water to a collection  
9 point; such as, a sump holding tank or a lined  
10 basin for collection.

11           If the Board ultimately chooses  
12 to have BMP H apply to salt storage facilities,  
13 Morton requests that the Board include an element  
14 of feasibility in its language. BMP H could  
15 state -- could instead state, for example, "The  
16 permittee should consider using berms and/or  
17 slopes where feasible, to allow snow melt and  
18 stormwater to drain away from the area."

19           Lastly, Morton suggests that the  
20 Board temper the language in BMP B in a similar  
21 fashion. BMP B, as currently shown in Table 3  
22 states, "Pads must be constructed to avoid  
23 drainage onto the pad. Any drainage that enters  
24 the pad should be directed to a stormwater

1 retention pond."

2 This BMP's requirement to  
3 utilize a stormwater retention pond is infeasible  
4 for the same reasons discussed a moment ago.  
5 Instead, Morton proposes that the second clause be  
6 changed to, "The permittee should consider  
7 directing any drainage that enters the pad to a  
8 collection point, where feasible."

9 In conclusion, Morton would like  
10 to express its appreciation to the Board, the  
11 other Petitioners, the IEPA and the other parties  
12 that have filed comments and participated in this  
13 proceeding. Morton supports the effort to  
14 establish a time-limited water quality standard  
15 and looks forward to a successful implementation.  
16 Thank you.

17 HEARING OFFICER HALLORAN: Any  
18 questions? Mr. Rao?

19 (No response.)

20 HEARING OFFICER HALLORAN: You may  
21 proceed. Thank you.

22 Thanks. All right. We have the  
23 Village of Frankfurt up. Raise your right hand  
24 and be sworn. Thanks.

1 (Whereupon, the witness was duly  
2 sworn.)

3 HEARING OFFICER HALLORAN: You may  
4 proceed.

5 MS. LAMORE: Thank you. Hannah  
6 Lamore, attorney on behalf of the Village of  
7 Frankfort.

8 Please state your name for the  
9 record.

10 MS. SCHAEFFER: Shannon Nichole  
11 Schaeffer.

12 MS. LAMORE: How are you currently  
13 employed, Ms. Schaeffer?

14 MS. SHAEFFER: I am a consulting  
15 engineer with Baxter and Woodman Consulting  
16 Engineers.

17 MS. LAMORE: And where is that  
18 located?

19 MS. SHAEFFER: My office is in  
20 Mokena, Illinois.

21 MS. LAMORE: Ms. Schaeffer, what is  
22 your educational background?

23 MS. SHAEFFER: I have an  
24 undergraduate in civil engineering with

1 environmental emphasis from the University of  
2 Iowa, and I have a Master's Degree in  
3 Environmental Engineering from the University of  
4 Iowa.

5 MS. LAMORE: Are you licensed with  
6 the State of Illinois?

7 MS. SHAEFFER: Yes. I am a  
8 professional engineer licensed with the State of  
9 Illinois.

10 MS. LAMORE: What do your  
11 professional experiences include?

12 MS. SHAEFFER: I assist a multitude  
13 of municipal clients with their NPDES permit  
14 discharge compliance with their -- for the  
15 wastewater treatment plants. I also focus on  
16 industrial pre-treatment and the regulation of  
17 industries as well.

18 MS. LAMORE: And how long have you  
19 been involved in that activity?

20 MS. SHAEFFER: I have been doing --  
21 focusing on those two things for the last  
22 11 years.

23 MS. LAMORE: Okay. What is your  
24 relationship to the Village of Frankfurt?

1 MS. SHAEFFER: I have been assisting  
2 the Village of Frankfurt since about 2012. I  
3 assisted the Village with an industrial user  
4 chloride survey to identify potential dischargers  
5 of chlorides from industrial and commercial  
6 sources, and then in 2015, I have begun assisting  
7 the Village with all their NPDES permit  
8 compliance.

9 MS. LAMORE: Okay. Is your  
10 curriculum vitae attached to the pre-filed  
11 testimony that was filed before this Court?

12 MS. SHAEFFER: It is.

13 MS. LAMORE: Now, at this time,  
14 Ms. Schaeffer, I would ask that you respond to the  
15 questions filed by Openlands.

16 MS. SHAEFFER: The first question  
17 is, In your testimony you state that the available  
18 data shows that in Hickory Creek just downstream  
19 of the regional wastewater treatment plant  
20 outfall, the chloride concentration had an average  
21 of 350 mg/L in January of 2019 and an average of  
22 53 mg/L in May to June 2019, in page 7, paragraph  
23 42.

24 The question -- the first

1 question from that set is, What is the source of  
2 the stream monitoring data?

3 And the Village of Frankfurt  
4 Public Works staff is currently monitoring  
5 chlorides in Hickory Creek, as per their NPDES  
6 permit.

7 The second question is, How  
8 often was stream monitoring done for chloride in  
9 Hickory Creek?

10 And that monitoring campaign  
11 began in January of 2019 and is ongoing, as per  
12 the NPDES permit.

13 The third question from that set  
14 is, How frequently were readings or samples taken  
15 to determine the average concentrations?

16 It is my understanding from  
17 speaking with the Village staff that they are  
18 fully compliant with their NPDES permit, and the  
19 requirements for monitoring for chlorides in  
20 Hickory Creek at the locations and the frequency  
21 as prescribed in their permit. How I determined  
22 the average was based on the data that was  
23 available to me as given by the Village at the  
24 time of my written affidavit. And at the time I

1 had three dates in January for both upstream and  
2 downstream of the regional plant and three dates  
3 in May of 2019, upstream and downstream of the  
4 regional plant. However, this data collection is  
5 ongoing.

6 The fourth question in that set  
7 is, Do you have any data regarding maximum  
8 concentrations of chloride during January of 2019  
9 and the May to June of 2019?

10 And the concentrations are the  
11 maximum in January. The maximum concentration of  
12 chlorides was 460 mg/L in Hickory Creek downstream  
13 of the wastewater treatment plant on January 18th  
14 of 2019, and then in the springtime, the max was  
15 150 mg/L at the same location on May 17th, 2019.  
16 That was the first set.

17 The second question was, You  
18 mentioned that the Village also utilizes a beet  
19 juice additive to reduce the amount of road salt  
20 applied to the Village-maintained roads. This is  
21 Page 7, paragraph 45.

22 The first question is, are there  
23 any BMPs that the Village is already using to  
24 achieve reductions in chloride concentrations?

1                   And I believe that in addition  
2 to the -- using the beet juice additive, the  
3 Village is very mindful and judicious about how  
4 much road salt they apply to their  
5 Village-maintained roads. They train their staff  
6 to not run the spinner and the applicator at  
7 intersections. And, again, the amount of road  
8 salt that is applied depends on the magnitude of  
9 the winter storm event.

10                   Again, salt costs money, and the  
11 beet juice helps to make the road salt stick to  
12 the roads instead of bouncing into the storm  
13 collection system. So yet less salt can be used  
14 with that additive, but again, they are very  
15 judicious and conscious of how much they are  
16 actually applying. Other than that, I am not  
17 aware of any other BMPs that the Village is using  
18 with respect to road salt or for reductions in  
19 chloride concentrations.

20                   A sub-question to that question  
21 was, If so, what was the basis for choosing the  
22 specific BMPs?

23                   And, again, salt costs money.  
24 They want to also reduce the impact of the

1 corrosiveness of road salt on the roadways, and of  
2 course, reduce the chlorides into the environment.

3           And the very last question in  
4 that set is, In your opinion, what other specific  
5 BMPs not already in use by the Village could  
6 reduce the amount of salt entering Hickory Creek  
7 from stormwater run-off from Village-maintained  
8 roads? And I am not aware of any other BMPs the  
9 Village is implementing at this time, other than  
10 utilizing the beet juice to reduce the amount of  
11 road salt that needs to be used. And, again, the  
12 road salt applied is completely based on the  
13 magnitude of storm events.

14           The last -- the last question,  
15 Question No. 3 is, You state in your testimony  
16 that while the Village can continue efforts to  
17 educate its water customers and residents on  
18 proper water softener settings and of the  
19 importance of doing so, the major factor  
20 contributing to chlorides in the tributaries of  
21 and into Hickory Creek is the application of road  
22 salts during winter storm events by entities other  
23 than the Village. And that was page 8, paragraph  
24 47.

1                   The first question is, Is the  
2 water passing through the regional wastewater  
3 treatment plant and being discharged into Hickory  
4 Creek softer as a result of the stated high use of  
5 water softeners?

6                   My answer is, Not that I am  
7 aware.

8                   The second question is, When did  
9 the Village of Frankfurt begin these efforts to  
10 educate its water customers and residents about  
11 water softeners?

12                   And this education campaign  
13 began in November of 2014. And the Village began  
14 publicizing in the Village newsletter  
15 recommendations on how to set the water softener  
16 per the water quality coming out of the drinking  
17 water source.

18                   And that was also put into  
19 pamphlets that went into water bills that went out  
20 to customers. Now, in addition, for those that  
21 have electronic water billing, the guidance that  
22 was in that pamphlet was posted on the Village's  
23 website, and is currently there still, and will  
24 stay there forever for educational purposes.

1                   Then, the next question was,  
2 What is entailed in these education outreach  
3 efforts?

4                   Again, the Village newsletter is  
5 published quarterly, and the Village does put in  
6 information about water softener recommended  
7 settings at least once a year. And it also  
8 contains information in the newsletter about the  
9 importance of doing so and to help reduce the  
10 amount of chlorides. Just try to get the public  
11 aware.

12                   The next question is, What  
13 reductions have you seen in the use of water  
14 softeners from these education and outreach  
15 efforts?

16                   Again, the Village does not tell  
17 the customers that they can't use water softeners.  
18 It is my understanding that there is also no  
19 official count of how many water softeners are in  
20 the Village with water customers. So I'm not sure  
21 how many people are stopping or ceasing use of  
22 water softeners. I don't think -- there is no way  
23 to quantify that.

24                   MS. LAMORE: Ms. Schaeffer, is there

1 any requirement for the Village to do so?

2 MS. SHAEFFER: No.

3 And the last question is, Has  
4 there been any measured decrease in chloride  
5 levels from this initiative? And, again, that  
6 is -- this is unknown. We are -- we do not know  
7 if it's working, if people are stopping using  
8 their softeners or not.

9 That is all.

10 MS. LAMORE: And unless there are  
11 further questions, Ms. Schaeffer will stand on the  
12 pre-filed testimony, which has been otherwise  
13 admitted.

14 HEARING OFFICER HALLORAN: Thank  
15 you. Mr. Rao?

16 (No response.)

17 HEARING OFFICER HALLORAN: Any  
18 questions? Yes.

19 MS. KORDAS: My name is Molly  
20 Kordas, Openlands.

21 HEARING OFFICER HALLORAN: Can you  
22 spell it? K-O-R --

23 MS. KORDAS: K-O-R-D-A-S.

24 HEARING OFFICER HALLORAN: Thank

1 you.

2 MS. KORDAS: Just getting back to  
3 the question about the beet juice additive. You  
4 said that you weren't aware of any other BMPs that  
5 the Village was using.

6 In your opinion, are there any  
7 other specific BMPs the Village could be using  
8 that would prevent higher chloride concentrations  
9 in Hickory Creek?

10 MS. SHAEFFER: Not that I am aware.

11 HEARING OFFICER HALLORAN: Okay.

12 You may step down. Thank you so much.

13 MS. SCHAEFFER: Thank you.

14 HEARING OFFICER HALLORAN: It looks  
15 like Cook County, Mr. Fronczak. Mr. James.

16 Gentlemen, I am going to have  
17 you raise your right hand, and the court reporter  
18 will swear you in.

19 (Whereupon, the witness was duly  
20 sworn.)

21 HEARING OFFICER HALLORAN: You may  
22 proceed.

23 MR. JAMES: Okay. Good morning. I  
24 am Adam James with the Cook County Department of

1 Transportation and Highways. I have to beg you,  
2 please excuse me. My voice, I am recovering.  
3 Talk about horrible timing. Friday afternoon I  
4 lost my voice, and I knew this hearing was coming  
5 up. So I will do the best I can. I apologize.

6 So I will be responding to  
7 pre-filed questions from the Illinois EPA and then  
8 also from Openlands. So response to Question  
9 No. 1 from Illinois EPA: If I can refer you to  
10 Exhibit 2 of our testimony, that's essentially  
11 what the concept proposed plan shows. Top of berm  
12 is labeled as proposed summit. Remember, the  
13 berms have to be traversable, so as to not affect  
14 with operations. This was a concern that we heard  
15 Morton Salt raise earlier this morning in their  
16 testimony as well.

17 Response to your Question No. 2.  
18 As you are aware, streams have complex hydrology.  
19 The timing of peak chloride concentration in a  
20 receiving stream is a function of many variables,  
21 including but not limited to, the size of the  
22 tributary area, land use and stormwater  
23 infrastructure.

24 It would be extremely difficult

1 to time a release from the site to correspond with  
2 a low chloride concentration in the receiving  
3 stream, and even if you could, that's only  
4 immediately at a site. There are numerous other  
5 dischargers -- discharges -- excuse me -- of  
6 chloride along a stream.

7 Then, you get into the stream  
8 only being a tributary to a larger stream with its  
9 own separate hydrology, and with the CAWS and  
10 Lower Des Plaines being further downstream of  
11 these tributaries, such timing -- such a timing of  
12 a release would become more or less impossible.

13 Question No. 3, Sub-Question A.  
14 As indicated in our filing, the conceptual example  
15 provided is meant to be representative of a  
16 typical existing transportation agency or public  
17 works facility where road salt is handled. So it  
18 would apply to all existing sites to a varying  
19 degree.

20 What we have presented in our  
21 testimony is meant to illustrate what would be  
22 required to comply with all aspects of BMP 16 as  
23 proposed. Our primary concern is with the  
24 efficacy of the collection aspect of BMP 16. In

1 other words, collection will not help achieve the  
2 common goal of reducing chloride concentrations,  
3 despite the expenditure of considerable sums of  
4 public funds. Furthermore, if we are practicing  
5 good housekeeping and sweeping our working areas,  
6 we can likely accomplish as much, if not more.

7 Sub-Question B response. Many  
8 likely do, as does the example of our filing, and  
9 may also have off-site areas that flow into the  
10 working areas like our example.

11 Sub-Question C. Each site will  
12 have variations, but the overall conclusion  
13 regarding BMP 16 as a whole, specifically with  
14 respect to collection and disposal, if required,  
15 would apply, due to the aforementioned efficacy  
16 concerns.

17 Question No. 4 asks -- excuse  
18 me -- that I read BMP 16. And also what is  
19 required by BMP 16?

20 So BMP 16 states, For working  
21 areas, provide berms and/or sufficient slope to  
22 allow snow melt and stormwater to drain away from  
23 the area. In some cases, it may be necessary to  
24 channel water to a collection point as -- such as

1 a sump holding tank or lined basin for collection.

2 That question also asks, What is  
3 required by BMP 16? And, again, I think it's the  
4 sloping of -- the sloping and berming, and that it  
5 may be necessary to channel water to a collection  
6 point for collection.

7 Question No. 5. I am going to  
8 go ahead and read the question, actually. In  
9 Exhibits 3 and 4, you calculate the amount of  
10 water that would be needed to collect -- I'm  
11 sorry -- would need to be collected and disposed  
12 of.

13 Sub-Question A, Is this required  
14 of BMP 16?

15 Our response. BMP No. 16  
16 indicates that the water may be required to be  
17 held for collection. It is not clear when  
18 collection would be required or whether the  
19 requirement could be interpreted as requiring  
20 disposal. As such, there is concern that the  
21 burden of interpretation of intent will fall to  
22 others in the future without being able to know  
23 the true intent of the Agency when the BMP was  
24 drafted.

1                   To that end, we felt it was  
2                   important to provide a quantitative example of the  
3                   volumes of run-off that could be expected during  
4                   this process. We would also note that the maximum  
5                   volume calculated in our example was only for the  
6                   10-year, 12-hour storm; whereas, proposed BMP J  
7                   for salt storage facilities, granted that's a  
8                   different classification of dischargers, we are an  
9                   MS,4. That was for salt storage facilities --  
10                  indicates that the permittee should consider the  
11                  retention of a stormwater -- of stormwater --  
12                  sorry -- which contacts the salt from a 25-year,  
13                  24-hour storm event where feasible, which would,  
14                  of course, result in even larger required  
15                  collection infrastructure.

16                               Sub-Question B asks, could the  
17                               water collected be used for pre-wetting or used  
18                               for brine make-up water?

19                                       Some could, yes, but given the  
20                                       volumes of run-off that could be expected, large  
21                                       storage infrastructure would still be required if  
22                                       run-off resulting from appreciable storm events  
23                                       were not permitted to be discharged from the  
24                                       working areas. I would also echo Morton Salt's

1 testimony this morning where they brought up  
2 specific concentrations and formulation that goes  
3 into production of brine.

4 Sub-Question C. Would the use  
5 of berms help to keep off-site waters from getting  
6 onto the working area?

7 Response: This is essentially  
8 what we have shown on our conceptual proposed  
9 example, plus provisions for collection and  
10 storage of run-off.

11 Berms can reduce the amount of  
12 off-site water flowing onto the working areas, and  
13 thereby, provide some benefit by reducing the  
14 amount of snow melt and stormwater that comes into  
15 contact with the working areas.

16 Sub-Question D. Would berms be  
17 more cost-effective?

18 Response: Incorporating berms  
19 or summits by themselves into new or reconstructed  
20 sites can often be accommodated fairly easily.  
21 This is why we took the Agency up on its offer to  
22 propose alternate language which eliminates the  
23 requirement for collection and uses to the extent  
24 practicable language.

1                   As an aside, the proposed  
2 alternate language in our filing did contain a  
3 typo. We are hoping to take this opportunity to  
4 correct that typo. The word "slipped" should have  
5 been "sloped". I think that's implied and  
6 obvious, but I just want to make sure the record  
7 corrects that.

8                   Sub-Question E. Have you  
9 amortized cost for a 30-year life of the facility?

10                   Not prior to receiving the  
11 Agency's pre-filed question, but in response to  
12 the question. We have prepared a rough estimate  
13 for sake of discussion.

14                   Assuming the capital  
15 improvements were paid for using proceeds from  
16 bonds with a 4 percent interest rate over 30  
17 years, the annual cost per facility for the  
18 capital improvements alone presented in our filing  
19 would be approximately \$31,500, or approximately  
20 \$126,000 annually in total for CCDOT's four  
21 maintenance facilities.

22                   However, as noted earlier, our  
23 example was based on a 10-year, 12-hour storm;  
24 whereas, the regulations could be interpreted

1 because of BMP J as requiring the 25-year, 24-hour  
2 storm, which would result in even larger and much  
3 more costly required collection infrastructure.  
4 Also, these costs do not include estimates for  
5 disposal, if applicable.

6 That concludes the IEPA  
7 questions and responses. Should I move to  
8 Openlands' questions?

9 HEARING OFFICER HALLORAN: Yes. You  
10 may proceed. Thank you.

11 MR. ADAMS: Okay. In response to  
12 Openlands' Question No. 1, the first bullet point,  
13 does CCDOT currently employ any practices at its  
14 maintenance facilities to prevent or minimize the  
15 amount of stormwater coming into contact with salt  
16 in the working area?

17 Response: Salt is stored in  
18 domes, and working areas are sloped away. We also  
19 employ good housekeeping practices; such as,  
20 sweeping up of the working areas.

21 Next bullet point. Are you  
22 aware of any alternative practices beyond  
23 retention of run-off, that would prevent or  
24 minimize the amount of stormwater coming into

1 contact with salt in a working area?

2 Response: Berming to minimize  
3 snow melt and stormwater from off-site areas  
4 contacting the working area.

5 Question No. 2. Your testimony  
6 proposes alternate language, "Working areas should  
7 be bermed and/or sloped -- and that should be  
8 sloped -- to the extent practicable."

9 Questions. There are three  
10 bullet point questions here. The first one, Is it  
11 your opinion that working areas which are bermed  
12 and/or sloped without retention would be more  
13 effective at minimizing the amount of snow melt  
14 and stormwater run-off coming into contact with  
15 salt in a working area?

16 Response: It is my opinion that  
17 berming and/or sloping without retention would be  
18 as effective.

19 Bullet No. 2 here. How could  
20 you feasibly do this to prevent contact between  
21 snow melt or stormwater run-off in salt?

22 Response: By incorporating  
23 berming and/or sloping into new or reconstructed  
24 facilities.

1                   Bullet Point No. 3, and this is  
2 the final. Are there other BMPs that you have  
3 considered and plan to implement? If so, what is  
4 your basis for choosing those specific BMPs?

5                   Response: Anti-icing; for  
6 example, applying brine solution to pavement  
7 before icing starts and pre-wetting of salt.  
8 Final implementation and equipment purchase  
9 decisions will be made based on the effectiveness  
10 of the BMPs and also what is ultimately required  
11 by the final time-limited water quality standard.

12                   HEARING OFFICER HALLORAN: Thank  
13 you. Any questions?

14                   (No response.)

15                   HEARING OFFICER HALLORAN: All  
16 right. Thank you, gentlemen. You can step down.

17                   The Village of Crestwood.

18                   I do want to note again for the  
19 record, and it's not the first time, there is a  
20 public comment sign-up sheet in the back, and we  
21 can get to that later if there is anybody or  
22 anybody wishes to give comment.

23                   Raise your right hand and the  
24 court reporter will swear you in.

1 (Whereupon, the witness was duly  
2 sworn.)

3 MS. THENNARASU: Priya Thennarasu  
4 from Sosin, Arnold & Schoenbeck on behalf of the  
5 Village of Crestwood. I believe there was just  
6 one question raised by the Board, which was  
7 whether the receiving waters in our individual  
8 submittal; the Tinley Creek, Laramie Ditch,  
9 Cal-Sag Tributary and East Crestwood Ditch to be  
10 included in Table 1 of the Board's proposed draft  
11 order.

12 In accordance with the  
13 administrative code, we do believe that the --  
14 those water bodies should be included in Table 1,  
15 because the code references water bodies and water  
16 bodies segments.

17 HEARING OFFICER HALLORAN: Thank  
18 you. Any questions?

19 (No response.)

20 HEARING OFFICER HALLORAN: Seeing  
21 none, thank you so much. Please step down.

22 It looks like we have Mr. Rick  
23 Porter up. Is he here?

24 MR. PORTER: Good morning. Rick

1 Porter on behalf of Ozinga Ready Mix Concrete,  
2 Incorporated; Ozinga Materials, Incorporated; and  
3 Midwest Marine Terminals, LLC.

4 HEARING OFFICER HALLORAN: And if  
5 your witness will raise his hand, the court  
6 reporter will swear you in and we can --

7 (Whereupon, the witness was duly  
8 sworn.)

9 MR. PORTER: And the individual who  
10 just got sworn in is Mr. Michael Saldarelli. He  
11 is an engineer.

12 Mr. Saldarelli, do you have a  
13 statement to present to us today?

14 MR. SALDARELLI: Yes, I do.

15 MR. PORTER: Please do.

16 MR. SALDARELLI: My name is Michael  
17 Saldarelli. I am the Director of Environmental  
18 Compliance at Ozinga Brothers, and I have personal  
19 knowledge regarding the operations and  
20 environmental law compliance for Ozinga Ready Mix  
21 Concrete, Ozinga Materials and Midwest Marine  
22 Terminals.

23 I am a licensed professional  
24 engineer in the State of Illinois, and I have a

1 Master's Degree in Engineering from the Stevens  
2 Institute of Technology and a Bachelor's of  
3 Science degree from the Rensselaer Polytechnic  
4 Institute.

5 I have been practicing  
6 environmental engineering for 15 years, and  
7 employed by the Ozinga since 2015. I brought with  
8 me my CV that our attorney has marked as Exhibit  
9 A.

10 As Director of Environmental  
11 Compliance, I am aware that Ozinga Ready Mix  
12 Concrete, Ozinga Materials and Midwest Marine  
13 Terminals are committed to implementation of a  
14 time-limited water quality standard for the  
15 defined Chicago Area Waterway System and the Des  
16 Plaines River Watershed. These companies  
17 appreciate the opportunity to participate in  
18 today's hearing and are grateful to the efforts of  
19 the Board, the Illinois Environmental Protection  
20 Agency and the other Petitioners in this important  
21 matter.

22 On behalf of these three  
23 companies, we filed PCB petitions 2019-20, 2019-21  
24 and 2019-22 concerning ten separate facilities.

1 In regards to PCB 2019-20, I executed individual  
2 submittals for eight separate facilities on behalf  
3 of Ozinga Ready Mix Concrete. PCB 2019-21 was  
4 brought on behalf of Ozinga Materials as to the  
5 facility of -- at 13100 South Ashland Avenue,  
6 Calumet Park, Illinois. PCB 2019-22 -- 2019-22  
7 was brought on behalf of Midwest Marine Terminals  
8 as to its facility at 11701 South Torrence Avenue,  
9 Chicago, Illinois.

10 When the petitions were  
11 originally executed, we identified the category of  
12 each of the ten facilities as industrial, in that  
13 we agreed to comply with the industrial source  
14 best management practice. Today we have with us  
15 amended individual submittals as to three  
16 facilities, which are not only industrial sources,  
17 but also salt storage facilities.

18 Specifically, the facility at  
19 11400 Old Lemont Road, Lemont, Illinois, 60439 is  
20 referenced in one of the individual submittals  
21 attached to Petition PCB 2019-20 and does not have  
22 a salt storage -- does have a salt storage  
23 operation, and accordingly, we are amending the  
24 individual submittal to identify it as not only an

1 industrial source, but also a salt storage  
2 facility, and, of course, we agree to implement  
3 all the best management practices for both  
4 categories.

5                   Likewise, as to Petition PCB  
6 2019-21, the Ozinga Materials site at 13100 South  
7 Ashland Avenue, Calumet Park, Illinois, has salt  
8 storage operations, as does the Midwest Marine  
9 Terminals' site at 11701 South Torrence Avenue,  
10 Chicago, Illinois, 60617, and accordingly, we are  
11 amending paragraphs 8 and 14 of those individual  
12 submittals to reflect that we will comply with the  
13 best management practices for both industrial and  
14 salt storage facilities.

15                   The amended individual submittal  
16 as to 11400 Old Lemont Road, Lemont, Illinois is  
17 being offered today as Exhibit B. The amended  
18 individual submittal for the 13100 South Ashland  
19 Avenue, Calumet Park, Illinois is marked as  
20 Exhibit C, and the amended individual submittal  
21 for the Midwest Marine Terminals facility at 11  
22 701 South Torrence Avenue is marked as Exhibit D.

23                   In regard to Exhibit C, an NPDES  
24 was pending as to the Calumet facility when the

1 petition was originally filed. The permit has now  
2 been issued as Permit No. ILR007572, and we have  
3 referenced such on the amended petition. The  
4 joint and the individual submittals clearly  
5 identified the reasons and necessity for the  
6 petitions. Further, we have agreed to comply with  
7 the best management practices for individual -- or  
8 excuse me -- industrial and salt storage  
9 facilities.

10 We do suggest that there be some  
11 minor changes to the best management practices  
12 submitted by the IEPA, which are reflected on our  
13 proposed changes to Table 3, which we have marked  
14 as Exhibit E. For the most part, these charges  
15 are similar or identical to those proposed by the  
16 Morton Salt Company in its pre-filed testimony.

17 The primary issues with the best  
18 management practices are that annual inspection  
19 reports should be completed when practical, as  
20 opposed to being required to be done prior to the  
21 winter season. Further, the use of berms should  
22 not be mandatory, and instead, should be based on  
23 analysis and determination of whether such is  
24 necessary or effective, particularly in situations



1 MR. PORTER: If anybody wants  
2 copies, I have extras. Just let me know. These  
3 are two sets of originals.

4 (Whereupon, OZINGA Exhibit Nos.  
5 A-E were marked for  
6 identification and admitted  
7 into evidence.)

8 HEARING OFFICER HALLORAN: Okay.  
9 Thank you, sir. You may step down. Thanks.

10 Let's go off the record for a  
11 minute.

12 (Whereupon, a discussion was had  
13 off the record.)

14 HEARING OFFICER HALLORAN: Back on  
15 the record. We are going to start with Citgo.  
16 Mr. Huff?

17 (Whereupon, the witness was duly  
18 sworn.)

19 MR. FORT: Good morning. My name is  
20 Jeff Fort with Dentons. We have represented the  
21 Citgo Lemont refinery for a long time, and in many  
22 ways this is like -- what year is this? We are  
23 very appreciative that Jim Huff came out of  
24 retirement to provide this testimony, and many of

1 you know that Citgo with Jim Huff and others  
2 presented testimony in the UAA Docket D on the  
3 topics of chloride toxicity in the winter and BMPs  
4 as a tool to mitigate the run-off from excessive  
5 salting, if we could call it that.

6 So we are very happy to get Jim  
7 out of retirement. It is a topic that I can say I  
8 have observed to be near and dear to his heart and  
9 to his professional training and recommendations.  
10 So we very much appreciate everybody accommodating  
11 our schedules and working with Openlands to try to  
12 get the similar subject matter testimony into one  
13 place in this record.

14 And I think that this is -- I  
15 will congratulate Ms. Diers and Mr. Andes for  
16 being able to pull together a bunch of parties  
17 that usually couldn't agree on much of anything.  
18 So, anyway, without any further, Jim is going to  
19 respond to the questions from the Board and from  
20 Openlands, and we can go from there.

21 MR. HUFF: Good morning. Again, my  
22 name is James Huff. I will just kind of summarize  
23 the questions and then provide a response.

24 Question 19A from the Board.

1 Please comment on whether USEPA, Illinois EPA, the  
2 MWRD or the Illinois Association of Wastewater  
3 Agencies are currently conducting or funding  
4 toxicity testing.

5                   And my response is, the MWRD was  
6 one of the participants that financially supported  
7 the cold temperature toxicity work that I  
8 directed. I am unaware of any cold temperature  
9 work currently being conducted, other than the  
10 fathead minnow work the consortium is funding as  
11 described in my testimony.

12                   I am happy to report that the  
13 acute toxicity testing by Dr. David Soucek has  
14 been completed on the fathead minnow, and  
15 temperature as a factor in chloride toxicity. The  
16 reported lethal concentrations 50s at three  
17 temperatures have been computed. At 25 degrees  
18 centigrade, the LC50 is 5,061 mg/L. At 17.5  
19 degrees centigrade, the toxicity LC50 increased to  
20 5,672 mg/L, and at 10 degrees centigrade, the  
21 toxicity LC50 increased to 5,869 mg/L.

22                   So there is a temperature effect  
23 on the fish that was tested as well. We added the  
24 17.5 degrees to give us three data points to try

1 to see if we could establish a linear or  
2 exponential relationship, and with the three data  
3 points, this fits the lineal relationship that was  
4 used in the previous cold temperature work that we  
5 had prepared. The chronic testing is scheduled to  
6 begin this week, and we will provide that as part  
7 of the record here once Dr. Soucek's report has --  
8 becomes available.

9 The Illinois Association of  
10 Wastewater Agency attorney, who also represents  
11 the MWRD, may be in a better position to answer  
12 the question of who is doing additional research,  
13 as they had indicated in our 1832 that USEPA would  
14 be issuing additional toxicity data soon, likely  
15 in the fourth quarter of 2019. I have not seen  
16 that work, but again, I am retired now. So I have  
17 been not totally current on that.

18 Question 19B. The question is,  
19 If not, should the proposed time-limited water  
20 quality standards include a condition requiring  
21 such studies be performed by the Petitioners?

22 This is an interesting question  
23 from a technical perspective. From the Illinois  
24 Association of Wastewater Agency comments in

1 R18-32, it was clear they wanted to defer any  
2 chloride water quality change until the USEPA  
3 issues its new toxicity data, while not addressing  
4 at all whether these data will include cold  
5 temperature data.

6           Based on the toxicity literature  
7 in the previous USEPA proposal, the federal  
8 proposed chloride water quality criteria are  
9 expected to be on the order of a 200 mg/L chronic  
10 criteria, and I would be surprised if there is any  
11 temperature factor in any current or pending USEPA  
12 proposal.

13           As the urban streams in this  
14 Northern Illinois don't currently meet the 500  
15 mg/L standard, when USEPA does come out with a new  
16 criteria, Illinois will be that much further away  
17 from attainment and will have to consider an  
18 alternative approach. The cold temperature  
19 consortium, which I put together, was intended to  
20 take an alternative approach that was  
21 scientifically supported.

22           Funding additional cold  
23 temperature toxicity research in this area sooner  
24 would be advantageous to both the regulated

1 community and to the regulators in Illinois. The  
2 challenge will be in developing a work plan that  
3 is supported by all stakeholders that is within  
4 the financial constraints of the Petitioners.

5 And Question 20, the  
6 paraphrasing of the question. Please explain the  
7 conditions that led to ten exceedances of the  
8 chronic standard in 2019 on the Chicago Sanitary  
9 and Ship Canal.

10 You may recall 2019 was a pretty  
11 brutal winter, and that had a lot that contributed  
12 to that. There was snow on January 23rd and  
13 January 24th of 2019 where deicing salt was  
14 applied across the County. This was followed by a  
15 predicted extremely cold temperatures lasting for  
16 four days, reaching minus 21 degrees Fahrenheit at  
17 Midway on January 30th.

18 I suspect the copious salt was  
19 being applied immediately prior to the predicted  
20 cold period, and also during a cold period where  
21 blowing snow caused black ice. This was followed  
22 on February 5th, 6th, 7th, and 8th with additional  
23 snow where salt was again applied. The elevated  
24 chlorides were observed during a cold period when

1 flows to the Chicago Sanitary and Ship Canal  
2 reached their lowest flow of the entire winter,  
3 reflecting less infiltration for dilution.

4 Chloride data from the Stickney  
5 Water Reclamation Plant are consistent with the  
6 Chicago data, with the Stickney effluent chlorides  
7 reaching 1,164 mg/L on January 20th, 2019, and  
8 then spiking at 1,573 mg/L on January 24th and  
9 remaining elevated through February 6th. At the  
10 same time, flows through the Stickney plant were  
11 below average reflecting, again, the lower  
12 infiltration rates at the colder temperatures.

13 In March, snow fell on  
14 March 13th, 14th, and 15th, and although  
15 temperatures -- temperature lows were at or near  
16 freezing, pavement temperatures were lower, and  
17 salt must have been routinely applied in the  
18 region.

19 With the warmer temperatures,  
20 the snow melt was rapid, carrying the salt over a  
21 short period of time. Flow rates in the Chicago  
22 Sanitary and Ship Canal saw a rapid increase on  
23 the 16th of March and a rapid decline the  
24 following two days, and this spike is associated

1 with the salt laden snow melt run-off that caused  
2 the other exceedance in 2019.

3                   And finally, Question 21 from  
4 the Board. Should outreach and education be an  
5 integral part of the time-limited water quality  
6 standards?

7                   My response is, for  
8 municipalities, outreach and education could be  
9 incorporated into the time-limited water quality  
10 standard from a technical perspective, including  
11 reaching out to private applicators that are a big  
12 source of the chloride load into the receiving  
13 waterways. There are examples of public outreach;  
14 such as, the DuPage River Salt Creek Work Group,  
15 as well as the Village of Northbrook, and there  
16 are others.

17                   For industrial facilities,  
18 perhaps this requirement could be directed at the  
19 employees. The Illinois Society of Professional  
20 Engineers has invited Huff & Huff, Inc. for the  
21 past five years to attend the DuPage Area Stem  
22 Expo for students kindergarten through 12th grade  
23 and put up a booth, and that booth that we have  
24 had for the last five years has included the

1 residential anti-icing program.

2                   That booth has been very popular  
3 among both the students and parents. There is no  
4 question that the public is very interested in  
5 reducing its impact on the environment, and public  
6 education will be well received. Deicing is a  
7 significant issue in Illinois, and I think it  
8 would absolutely benefit all of Illinois if the  
9 Illinois EPA took the lead on developing public  
10 outreach programs similar to what the AMC has done  
11 in areas like energy conservation.

12                   And that concludes the Board's  
13 questions. Do you want me to go on to Openlands?

14                   HEARING OFFICER HALLORAN: Yes.  
15 Unless, you know, anybody have any questions?

16                   (No response.)

17                   HEARING OFFICER HALLORAN: You may  
18 proceed, Mr. Huff.

19                   MR. HUFF: Openlands Question 1A.  
20 Do you know whether the 280 mg/L chloride water  
21 quality objective based on a four-year average of  
22 results will allow for spikes in chloride  
23 concentrations and how high those spikes could go?

24                   And my response is, there is

1 nothing in the proposed goal of 280 mg/L chlorides  
2 that would preclude spikes in chloride  
3 concentrations. As to how high those spikes would  
4 go, I would suggest that historical variation  
5 would provide an excellent estimate.

6 As currently proposed, the TLWQS  
7 variance focuses on overall salt reduction over a  
8 four-year season. While the current generally  
9 used water quality standard is a not to exceed  
10 limit. The result is a focus on best management  
11 practices that will reduce overall salt  
12 consumption, but does not focus specifically on  
13 salt application during worse case conditions when  
14 safety dictates more salt application.

15 Question 1B. Are you aware of  
16 the presence of the fat mucket mussels in water  
17 subject to the time-limited water quality  
18 standards?

19 My response is, my testimony was  
20 prepared on behalf of the Citgo refinery located  
21 on the Chicago Sanitary and Ship Canal, and to my  
22 knowledge, the fat mucket is not present on this  
23 waterway. I would defer to Ms. Barghusen on the  
24 question with respect to other waterways where she

1 has an -- identifies as one Hickory Creek as  
2 having fat mussels present, and Hickory Creek is  
3 part of the time-limited water quality variance.

4 Question 1C. Did you consider  
5 how to protect intolerant species; such as, the  
6 fat mucket, in former water quality standard  
7 proceedings?

8 My response, I assume you are  
9 referring to R18-32, where the work plan was  
10 developed that identified the four most sensitive  
11 species to chlorides, and those were tested at 10  
12 degrees C and 25 degrees C in an attempt to  
13 establish a winter standard. This testing did not  
14 include the fat mucket.

15 Question 1D. Could some spikes  
16 in chloride concentration be higher than the acute  
17 toxicity of mussels; such as, the fat mucket can  
18 withstand?

19 My response, I am unaware of any  
20 cold temperature mussel toxicity data, other than  
21 on the fingernail clam testing funded by the  
22 consortium that I put together. So I don't  
23 believe there is data available to answer this  
24 question specifically. I will note on Hickory

1 Creek where the fat mucket is, that we have  
2 recorded concentrations above 1,500 mg/L chloride  
3 on there, and there are fat muckets in there.

4 Question 2A. Does the refinery  
5 monitor or analyze receiving stretches on the  
6 Chicago Sanitary and Ship Canal?

7 My response, The refinery  
8 monitors the water intake station from the ship  
9 canal and does not monitor any other location on  
10 the canal. The data collected by Citgo would be  
11 representative of the Chicago Sanitary and Ship  
12 Canal from the Cal-Sag confluence to the Des  
13 Plaines River confluence below the Lockport lock  
14 and dam.

15 Question 2B. What is the  
16 distance between the water intake and outfalls at  
17 the Citgo refinery?

18 The water intake is located  
19 150 feet upstream of the outfall. So it's before  
20 any impact from what Citgo is discharging into the  
21 ship canal.

22 Question 3. What data are used  
23 to establish the historical salt usage?

24 And my response, The salt

1 purchases for deicing practices for 2009 through  
2 2012 were totaled and divided by four to give an  
3 annual average of the salt application. So we  
4 were using purchasing records to establish the  
5 baseline over a four-year period.

6 Question 4A. When did the  
7 refinery begin implementing best management  
8 practices?

9 And my response. Citgo's NPDES  
10 renewal was held up for several years as USEPA  
11 objected to the total dissolved solids variance  
12 the Board had granted previously to the refinery.  
13 Starting in the spring of 2013, the refinery began  
14 reviewing its deicing practices. The first best  
15 management practice plan for the refinery was  
16 prepared in 2014.

17 The new NPDES permit with a  
18 requirement to implement a 77-ton reduction in  
19 chlorides discharge was issued in June of 2016,  
20 triggering annual progress reports with respect to  
21 Citgo's best management practices and chloride  
22 reductions in deicing -- from deicing. I'm sorry.

23 Question 4B. Was there any  
24 tracking done linking reductions of chloride to

1 specific BMPs?

2                   The short answer is no. There  
3 are too many variables with respect to weather.  
4 However, I can state that the training sessions  
5 for the salt applicators and getting them involved  
6 in the goal was a crucial first step that resulted  
7 in significant salt application reductions in the  
8 first year.

9                   Question 4C. What level of  
10 reductions are expected to result from the  
11 installation of the reverse osmosis units?

12                   The reverse osmosis unit capital  
13 expenditure is not part of the refinery's BMP  
14 commitment. There has been talk of a trading  
15 program for chlorides, and the refinery would  
16 anticipate making these reductions available for  
17 offsets for future growths in the drainage basin  
18 either at the refinery or from a third party.

19                   While data are not yet available  
20 on the overall reduction in chlorides from the  
21 switch to reverse osmosis, it is anticipated that  
22 the reduction will be similar to that already  
23 achieved by the BMPs implemented from deicing  
24 practices.

1                   Question 4D. Are there any data  
2 available on the reverse osmosis effectiveness?

3                   And my response, The refinery  
4 continues to collect influent and effluent  
5 chloride data, and we anticipate that the 2020  
6 data for the complete year will be the first  
7 opportunity to quantify the reductions in  
8 chlorides discharge.

9                   Purchasing records for the  
10 zeolite softener salt will also be tabulated,  
11 which will provide a second method for calculating  
12 chloride discharge reductions from the reverse  
13 osmosis units. And that concludes the pre-filed  
14 questions.

15                   HEARING OFFICER HALLORAN: Any  
16 questions?

17                   MS. KORDAS: Molly Kordas again from  
18 Openlands. The tests that you reported at the  
19 beginning for the acute fat mucket chloride  
20 toxicities, do you know where the minnows were  
21 from, that -- what waterway or within Northeastern  
22 Illinois?

23                   MR. HUFF: I haven't seen  
24 Dr. Soucek's report, but my guess is they were

1 raised in captivity. That's pretty standard.

2 MS. KORDAS: And do you know the  
3 hardness of the water in those tests?

4 MR. HUFF: Medium hard.

5 MS. KORDAS: Okay. Thank you.

6 HEARING OFFICER HALLORAN: Mr. Rao?

7 MR. RAO: Mr. Huff, I have a  
8 question.

9 You indicated that Citgo started  
10 implicating these BMPs starting sometime around  
11 2016 or --

12 MR. HUFF: Before that. By 2013, we  
13 started trying to assemble the data. You know,  
14 that's kind of the key step is how much salt are  
15 we using? It's a simple question, but it --  
16 procedures aren't in place to really track that.  
17 It took while.

18 But we wrote the first BMP plan  
19 in 2014. So we really started in earnest in 2014  
20 on BMPs.

21 MR. RAO: How do the BMPs that you  
22 are currently implementing compare with those  
23 proposed by the IEPA?

24 MR. HUFF: I would say they are very

1 consistent. They are probably about -- I believe  
2 there is a couple that we will have to make some  
3 changes in the commitments that we have made, but  
4 90 percent of it are already in the Citgo plan.

5 MR. RAO: Because in your testimony  
6 you had indicated you may need some guidance in  
7 terms of how these BMPs will be implemented in  
8 your permit?

9 MR. HUFF: Well, I think the  
10 question was the guidance of what is controlling  
11 here. Our permit requires a 77-ton reduction in  
12 chlorides, as opposed to the time-limited water  
13 quality variance, which says 280 mg/L on a  
14 four-year seasonal average in the ship canal and  
15 the Des Plaines River.

16 So if this time-limited water  
17 quality variance goes through, what's going to be  
18 incorporated in Citgo's permit? Do we have two --  
19 two objectives, and everybody else has one, or are  
20 we going to eliminate the one? That's where the  
21 guidance would be helpful.

22 MR. RAO: Okay. Thank you very  
23 much.

24 HEARING OFFICER HALLORAN: Any

1 follow-up?

2 (No response.)

3 HEARING OFFICER HALLORAN: Thank  
4 you, Mr. Huff.

5 Mr. Fort?

6 MR. FORT: If I could just interject  
7 here. I think one of the issues is, as Jim said,  
8 are there two objectives or one objective? And  
9 Citgo has worked very closely with the Agency to  
10 put this BMP plan together, and it's been a good  
11 dialogue, and I think it's been enhanced by that  
12 conversation.

13 And I suppose I would have a  
14 concern that you write something now and put it in  
15 a Board reg and what kind of a -- future problems  
16 are we creating in terms of if somebody decides  
17 there is a better way to do that? And that's a  
18 classic Board/Agency authority issue. So I --  
19 when I look at a table that has all these very  
20 specific things in it, I think we have to be  
21 careful.

22 MR. RAO: We do have a question for  
23 the EPA on this issue.

24 MR. FORT: Good.

1 HEARING OFFICER HALLORAN: Thank  
2 you, Mr. Huff. I think I -- happy retirement. I  
3 think I first met you when I had hair back in  
4 1997, so --

5 MR. HUFF: I know I've been  
6 practicing 26 years.

7 HEARING OFFICER HALLORAN: Thank  
8 you, gentlemen.

9 How are we looking? Do you want  
10 to take a quick break before we get to Openlands?

11 MS. MEYERS: Yes.

12 HEARING OFFICER HALLORAN: Okay.  
13 Ms. Meyers says yes. So let's take a ten-minute  
14 one.

15 (Whereupon, a short break was  
16 taken.)

17 (Whereupon, the witness was duly  
18 sworn.)

19 MS. BARGHUSEN: I am Laura  
20 Barghusen. I am an aquatic ecologist at  
21 Openlands, and I am here today to testify  
22 regarding the aquatic life use in the system.

23 MS. MEYERS: And we have several  
24 entities which have provided questions to us. If

1 you would like, what we were thinking is we would  
2 first answer the Pollution Control Board's  
3 questions. I should probably actually state who  
4 the heck I am up here.

5 My name is Stacy Meyers, and I  
6 am senior counsel with Openlands, and I am here  
7 beside Laura for her testimony.

8 So we would first go through and  
9 respond to, as a matter of procedure, the Illinois  
10 Pollution Control Board's questions. We were  
11 thinking next then to be able to respond to the  
12 Agency's questions. After that, I believe we have  
13 questions from Citgo Holdings, and then I believe  
14 that's all that we have on file for Laura today.

15 So do you want to go forward?  
16 And we are not going to have an opening statement.  
17 We are waiving that. We are just going to delve  
18 right into the questions. Laura's CV is on record  
19 with her testimony, so we are standing on her CV.

20 Is that all right?

21 HEARING OFFICER HALLORAN: Thank  
22 you, Ms. Meyers. It is.

23 MS. BARGHUSEN: Okay. Starting with  
24 the questions from the Illinois Pollution Control

1 Board.

2 I have -- you mention the  
3 Chicago Wilderness Region several times in your  
4 testimony. Please clarify whether this region is  
5 within the watersheds affected by the proposed  
6 chloride time-limited water quality standards.

7 And the Chicago Wilderness  
8 Region is throughout Northeastern Illinois,  
9 Southeastern Wisconsin, and Northwest Indiana. So  
10 the watersheds affected by the petition are  
11 actually within the Chicago Wilderness Region.

12 Please submit a map of the  
13 Chicago Wilderness Region if one is available to  
14 Openlands.

15 And we have submitted a map  
16 showing the 22 counties that are either within or  
17 partially within the Chicago Wilderness Region.

18 (Whereupon, OPENLANDS Exhibit  
19 No. 1 was marked for  
20 identification.)

21 MS. MEYERS: As a point of process,  
22 we apologize for not electronically filing that  
23 within 24 hours of our testimony today. We were  
24 not accustomed to that, but we will make sure to

1 electronically file that exhibit, which is of the  
2 Chicago -- the Chicago Wilderness Area.

3 We have tendered that as  
4 Exhibit 1 to the Illinois Pollution Control Board  
5 with the request that they enter it as part of our  
6 testimony. We have also tendered a copy to the  
7 Illinois EPA, since it also pertains to their  
8 questions this morning, and we have copies  
9 available for anybody else who would desire to see  
10 it.

11 HEARING OFFICER HALLORAN: Thank  
12 you, Ms. Meyers.

13 Any objections to Openlands  
14 Exhibit 1?

15 (No response.)

16 HEARING OFFICER HALLORAN: Okay. So  
17 admitted.

18 (Whereupon, OPENLANDS Exhibit  
19 No. 1 was admitted into  
20 evidence.)

21 HEARING OFFICER HALLORAN: And then  
22 you will e-file it then, Ms. Meyers?

23 MS. MEYERS: Yes.

24 HEARING OFFICER HALLORAN: Thank you

1 so much. I have copies up here if anybody would  
2 like to take a gander. All right. You may  
3 proceed. Thank you.

4 MS. BARGHUSEN: Okay. Moving on to  
5 24. On page 3, you note that efforts are being  
6 made locally to improve conditions for the ellipse  
7 mussel to increase its population throughout the  
8 Chicago Wilderness rivers and streams. Please  
9 explain the reasons for focusing on the ellipse  
10 mussel in the Chicago Wilderness Area.

11 The ellipse mussel was included  
12 in an effort to have -- have a collaboration  
13 between agencies that were part of Chicago  
14 Wilderness in increasing populations and improving  
15 habitats for 12 priority species that were chosen  
16 by a board or by a committee within Chicago  
17 Wilderness, and the idea was to choose species  
18 that we could then, you know, motivate partners  
19 around and have them working together.

20 And the species basically stood  
21 for certain types of habitat, and the ellipse  
22 mussel was chosen to stand for small stream  
23 habitat. And the ellipse larvae have to have a  
24 fish host, and some of the fish that are hosts to

1 ellipse larvae are cold water headwater species.  
2 And so they were also in that sense at least in  
3 part standing for cold water headwaters, which was  
4 a habitat type that needs preservation. So that's  
5 basically some of the considerations that went  
6 into choosing the ellipse as one of the priority  
7 species of Chicago Wilderness.

8 MS. MEYERS: Laura, if I may quickly  
9 follow up with a -- just a point of clarification.

10 Were you part of that effort?

11 MS. BARGHUSEN: Yes. Well, I was  
12 not part of the effort that chose the ellipse, but  
13 after the ellipse was chosen, Openlands became  
14 part of the Ellipse Management Group, basically  
15 calling meetings and helping with issues of  
16 figuring out where the largest ellipse populations  
17 within Chicago Wilderness appear to be located,  
18 and then also trying to do extra monitoring to get  
19 more information and to look at what are our  
20 largest ellipse populations.

21 So, like, what could we expect  
22 from a recovered ellipse population in terms of,  
23 you know, density of ellipses per some unit area?  
24 So we kind of dove into those questions with the

1 group.

2 MS. MEYERS: And then I think we  
3 have a follow-up question on the next page.

4 MS. BARGHUSEN: And the follow-up  
5 question is, Also clarify whether ellipse mussels  
6 are classified as an endangered species.

7 And they are actually not an  
8 endangered species in Illinois. According to the  
9 Wildlife Action Plan, they are a species in  
10 greatest need of conservation. Chicago Wilderness  
11 also includes Indiana, and they were of special  
12 concern in Indiana, and they are threatened in  
13 Wisconsin. But in Illinois, they are in greatest  
14 need of conservation, according to the Illinois  
15 Wildlife Action Plan.

16 MR. RAO: Just a follow-up. You  
17 mentioned that there are other agencies that are  
18 involved in coming up with the ellipse mussel as  
19 one of the priority species. What other agencies  
20 are involved?

21 MS. BARGHUSEN: The other agencies  
22 that are involved in the group that is working on  
23 the ellipse are the Indiana Department of Natural  
24 Resources, the Wisconsin Department of Natural

1 Resources, the Illinois Natural History Survey,  
2 the DuPage County Forest Preserve District, the  
3 DeKalb County Forest Preserve District, Shedd  
4 Aquarium. I believe that's the list of those who  
5 are currently involved.

6           On page 8 you refer to the U.S.  
7 Army Corps of Engineers, Chicago River Restoration  
8 Framework Plan. Please clarify whether this plan  
9 focuses only on habitat restoration or the  
10 improvements also address broader issues, like  
11 reducing pollutant loadings, including chloride.  
12 Also comment on the implementation schedule of the  
13 projects included in the U.S. Army Corps of  
14 Engineers Plan.

15           This plan states that it will  
16 consider habitat improvements and also pollutants,  
17 water quality, sediment quality, and basically,  
18 it's -- it's now -- now the memorandum of  
19 understanding is being finalized that will lead to  
20 a three-year, \$3 million study that's going to be  
21 led by the U.S. Army Corps of Engineers and  
22 sponsored by the City of Chicago Department of  
23 Planning and Development.

24           And I believe the scope of work



1 MS. BARGHUSEN: Yes. Stacy has  
2 handed me a map that shows the Chicago Area  
3 Waterway System. It shows the location of  
4 Metropolitan Water Reclamation District ambient  
5 water quality monitoring points, and it also shows  
6 a location just of select species that are known  
7 to be chloride intolerant.

8 And, for example, the fat  
9 mucket, which is a mussel, is shown on here,  
10 because recent studies published in 2018 show  
11 this, that the larvae stage, the glochidia of  
12 these mussels, were quite sensitive to chlorides.  
13 I think at 100 hardness, the acute toxicity to the  
14 glochidia was 544 mg/L chloride.

15 So we have known fat mucket  
16 locations on this map, and we have separated them  
17 into dead, live and relic. And that's from  
18 2012 -- 2012 surveys done by the Illinois Natural  
19 History Survey. And so we have live fat muckets  
20 on Hickory Creek, on Tinley Creek close to the  
21 Cal-Sag Channel, on Plum Creek, on the DuPage  
22 River, on the Upper Des Plaines in Lake County.

23 We also showed locations of dead  
24 fat muckets and relic fat muckets. Dead fat

1 muckets, you know, often may still be in the  
2 system; whereas, relic shells are clearly very  
3 old, and it may indicate that they used to be in  
4 the system, but are no longer there.

5 And we also chose the two  
6 species of fingernail clam known to be chloride  
7 sensitive, and showed the locations of those as we  
8 got from 2001 to 2004 ambient water quality  
9 monitoring data from MWRD. So we showed the  
10 locations of those two.

11 So, basically, it's a map  
12 showing where some aquatic life that we know to be  
13 sensitive is in relation to MWRD water quality  
14 monitoring points.

15 MS. MEYERS: So is this map within  
16 your testimony that you submitted to the Illinois  
17 Pollution Control Board that we are discussing  
18 here today?

19 MS. BARGHUSEN: Yes. It is in  
20 there.

21 MS. MEYERS: And that's exactly the  
22 map that you are looking at right now?

23 MS. BARGHUSEN: Yes. That's right.

24 MS. MEYERS: Can I follow up with

1 one question with you, Laura? Does this map  
2 basically show all of the salt intolerant species  
3 throughout the system and all of the locations of  
4 even the types of species that are highlighted on  
5 the map?

6 MS. BARGHUSEN: No, it doesn't. It  
7 doesn't show everything. This is really just a  
8 selection to make the point that there are  
9 chloride intolerant species throughout the system.

10 MR. RAO: May I ask a follow-up?

11 MS. BARGHUSEN: Yeah.

12 MR. RAO: So are you proposing that  
13 there are only specific monitoring locations where  
14 weekly chloride monitoring should be done by the  
15 District, or are you generally saying weekly  
16 monitoring should be done at all monitoring  
17 locations?

18 MS. BARGHUSEN: Well, we are  
19 proposing that since these monitoring stations are  
20 in place -- and I understand from earlier  
21 testimony that they are collecting chloride data  
22 once per month -- that at least looking at that  
23 data, so that we could have -- as part of this  
24 time-limited water quality standard so that we

1 could have an idea of what's actually going on at  
2 different points in the system and understand how  
3 we are doing in relation to actually protecting  
4 the sensitive aquatic life, that that would make  
5 sense if we are going to be protecting aquatic  
6 life uses through these efforts and proceedings.

7           And I think that because  
8 chlorides can spike during snow melt, for example,  
9 that the more often they can be monitored, the  
10 better, for which reason we had in the testimony  
11 suggested weekly monitoring at these points.

12           Let's see. We are -- oh, yes.  
13 So please comment on whether weekly chloride  
14 monitoring should be included as a condition of  
15 the TLWQS.

16           And, yes, I think that, as I  
17 said, the more often and in more places that we  
18 can monitor the chlorides, the more likely we are  
19 to understand, you know, what the conditions are  
20 and to be able to act to protect the sensitive  
21 life in the system.

22           27. On page 9, you conclude  
23 that the proposed time-limited water quality  
24 standard does not adequately account for recent

1 research on the sensitivity of fingernail clams,  
2 the glochidia of fat mucket mussels and several  
3 other sensitive or intolerable species in the CAWS  
4 and LDPR. Please provide specific changes or  
5 additions to the proposed draft order, including a  
6 revised interim criterion that would address your  
7 concerns regarding protection of sensitive or  
8 intolerant species.

9                   And basically, for the draft  
10 order, what I think would be protective of the  
11 aquatic life in the system is that if someone  
12 could use -- could actually look at some of the  
13 more recent data in terms of what are the most  
14 sensitive aquatic life and at what life stages  
15 they are most sensitive, and put those into water  
16 quality equations and actually come up with a  
17 number that would be protective of the species in  
18 the system.

19                   And then once -- if we are  
20 monitoring, you know, at many more locations  
21 throughout the system, we can see, are there  
22 exceedances of those levels? And I don't have  
23 this number, but I feel that we could come up with  
24 it. We could come up with a number that included

1 the more recent data that we have, and that we are  
2 now getting with the more studies that have been  
3 mentioned that are going on.

4 MR. RAO: Just as a follow-up?

5 MS. BARGHUSEN: Yep.

6 MR. RAO: In response to Board  
7 questions Mr. Andes answered that these kinds of  
8 studies to come up with a new criterion that is  
9 protective of aquatic life could flow on a  
10 parallel -- you know, if not a rulemaking, it  
11 doesn't have to be part of the TLWQS. It should  
12 be done outside of this variance. Do you agree  
13 that could be a way to handle this?

14 MS. BARGHUSEN: I guess my main  
15 point would be that we should do the monitoring at  
16 the different stations, and then -- and I think to  
17 protect aquatic life, we need to adjust the  
18 standard. What kind of proceeding that happens  
19 in, I --

20 MR. RAO: But not this one, is what  
21 I was trying to --

22 MS. BARGHUSEN: Yeah, I don't know.

23 MS. MEYERS: I am going to -- I am  
24 going to raise a question here as to whether or

1 not this is attempting to gather whether or not  
2 this is the correct legal mechanism and whether or  
3 not this witness is going to be asking a legal --  
4 asked to provide a legal conclusion as to whether  
5 or not the process of time-limited water quality  
6 standard is the best process into which to address  
7 existing uses, versus a water quality standard.

8 I think in looking at the  
9 requirements of a time-limited water quality  
10 standard and the requirement of a water quality  
11 standard proceeding or an adjusted standard, for  
12 that matter, I think that's something that may be  
13 more for a brief rather than a fact witness  
14 answering on a scientific basis.

15 MR. RAO: Okay.

16 HEARING OFFICER HALLORAN: The  
17 record will so note. Is that an objection?

18 MS. MEYERS: That is an objection.

19 HEARING OFFICER HALLORAN: I am  
20 going to overrule it for now. Thank you.

21 MR. RAO: I just wanted to clarify  
22 exactly what Openlands is suggesting in the  
23 proposed order, whether you want a new standard,  
24 interim criterion or just monitoring. So what you

1 are trying to get at.

2 MS. BARGHUSEN: I do think we need a  
3 new standard and monitoring.

4 MR. RAO: Thank you.

5 MS. MEYERS: May I follow up with a  
6 question?

7 Do you think that some -- when  
8 you are saying that you need a new standard, are  
9 you stating that there need to be some numeric  
10 maximum criteria within this time-limited water  
11 quality standard, or are you saying that there  
12 needs to be a new standard set?

13 MS. BARGHUSEN: I think that there  
14 needs to be a new standard set based on more  
15 recent research into chloride toxicities. I am  
16 not sure I understand your question.

17 MS. MEYERS: Does that also apply to  
18 this time-limited water quality standard and the  
19 approach that we should take to salt discharges  
20 and the steps that we should take to protect  
21 aquatic life uses within this proceeding?

22 MS. BARGHUSEN: Yes.

23 MS. MEYERS: Does that answer your  
24 question?

1 MS. BARGHUSEN: Okay. I think that  
2 finishes up the questions from the Pollution  
3 Control Board.

4 IEPA next. Okay. So IEPA's  
5 questions. 1. On page 3 you state, allowing for  
6 a more lenient highest attainable condition and  
7 relaxed conditions in a time-limited water quality  
8 standard for chlorides, which would ultimately  
9 result in greater pollution in this waters, is  
10 it -- A, is it your understanding that by  
11 approving the chloride time-limited water quality  
12 standards, the effected parties would be  
13 discharging more chlorides than they do currently?

14 And my understanding is that we  
15 won't know what kind of chloride spikes would  
16 occur, because of the averaging used and the  
17 limiting monitor -- the limited monitoring across  
18 the big river system. And then it's unclear what  
19 the actual commitment is to reducing discharges in  
20 areas that harbor existing aquatic life.

21 And the second one, the second  
22 question is, so B. Is a time-limited water  
23 quality standard an interim approach to come into  
24 compliance with the existing water quality

1 standards.

2 MS. MEYERS: I'm going to object to  
3 this being a legal question.

4 HEARING OFFICER HALLORAN: I am  
5 going to overrule it. You may proceed.

6 MS. BARGHUSEN: So -- so my  
7 testimony is concerning whether spikes could occur  
8 within the four-year average or averaged  
9 five-month seasonal data that could adversely  
10 affect existing and attainable aquatic life use,  
11 like the mussel species that we spoke about  
12 earlier.

13 Question 2. What is meant by  
14 Chicago Wilderness rivers and streams on page 4?

15 And so Chicago Wilderness rivers  
16 and streams would refer to any river or stream  
17 within the Chicago Wilderness Area.

18 On page 5 you state, Studies  
19 show that greater exposure to chlorides could be  
20 especially detrimental to certain species of  
21 glochidia and juvenile mussels. Would you agree  
22 that this -- that this is something that should be  
23 brought up in the derivation of water quality  
24 standards and not in a time-limited water quality

1 standard?

2 MS. MEYERS: So I am going to -- I  
3 know you are probably going to overrule it, but I  
4 am going to make the same objection, that when  
5 looking at the legal mechanisms of a water quality  
6 standard versus a time-limited quality standard,  
7 you are asking a legal question to differentiate  
8 between the two legal processes.

9 HEARING OFFICER HALLORAN: Okay. I  
10 am going to overrule you, and I am sure the  
11 transcript will reflect it, and the Board will  
12 take it under consideration. Thank you,  
13 Ms. Meyers.

14 MS. MEYERS: Thank you.

15 MS. BARGHUSEN: So I think that in  
16 terms of what needs to be done to protect aquatic  
17 life, that the water quality standard is relevant  
18 to protect aquatic life.

19 MS. MEYERS: Is a time-limited water  
20 quality standard relevant to protecting aquatic  
21 life uses?

22 MS. BARGHUSEN: Yes, it is.

23 MS. MEYERS: So both are relevant?

24 MS. BARGHUSEN: Yes. On page 5 you

1 state, The Petitioners do not take a science-based  
2 approach to demonstrate the effect of its proposed  
3 time-limited water quality standards on existing  
4 aquatic life. A. Are you aware that this  
5 time-limited water quality standard will not  
6 increase the amount of chlorides being released  
7 into the receiving stream?

8 And because of the averaging and  
9 the limited monitoring, I think it's unclear what  
10 effect it will have on specific chloride  
11 reductions in places where existing aquatic life  
12 should be protected.

13 Are you aware that this is the  
14 start of a process to get BMPs applied to the use  
15 of salt, which will decrease the amount of salt  
16 used?

17 And I did not read anything that  
18 demonstrated that chlorides would be reduced and  
19 monitored in each stretch that has aquatic life  
20 uses with chloride intolerances. I just saw the  
21 average for the whole system and for large periods  
22 of time. And I am here to present testimony on my  
23 concerns about aquatic life uses.

24 On page 7 you state, Dischargers

1 could achieve compliance with the proposed interim  
2 criteria, allowing higher chloride concentrations  
3 within the range of thresholds known to have  
4 negative and lethal effects on aquatic life, so  
5 long as the average concentration throughout the  
6 entire system over the course of the first four  
7 years is 280 mg/L.

8 A. Have you ever led a program  
9 to reduce chloride use when the source of  
10 chlorides is dependent on the weather?

11 And the answer to that is no.  
12 That is not the subject of my testimony.

13 B. Are you aware that the  
14 DuPage River Salt Creek System has been reducing  
15 chlorides in their watershed?

16 I don't know about this in  
17 detail, but have heard references in the testimony  
18 of others.

19 C. Are you aware that they have  
20 had success in reducing chloride applications in  
21 the watershed?

22 And I was not aware of that. I  
23 have heard general discussions that they are  
24 working on that, but I am not aware of anything

1 specific, and I haven't seen or evaluated their  
2 data.

3 Are you also aware that they  
4 have had no success in demonstrating a link to the  
5 chloride concentration in the stream because of  
6 different storm events each year?

7 I actually was wondering if I  
8 could ask for a clarification on that question. I  
9 wasn't sure what the link was to. Is the link  
10 between BMPs and chloride concentration?

11 MR. TWAIT: We were asking about  
12 the --

13 THE COURT REPORTER: I'm sorry.  
14 What is your name?

15 MR. TWAIT: Scott Twait with the  
16 Illinois EPA, T-W-A-I-T.

17 We were asking about the  
18 chloride reductions due to the BMPs and the link  
19 with chloride in the receiving stream.

20 MS. BARGHUSEN: So the -- so there  
21 has been no success in -- in the link between the  
22 BMPs and the chloride concentration in the  
23 receiving stream, or --

24 MR. TWAIT: They have not been able

1 to demonstrate a link.

2 MS. BARGHUSEN: Okay. Thank you.

3 On -- I am here to make sure that existing uses  
4 are protected, looking at the existing uses, and  
5 basically making sure that spikes, if they are  
6 occurring, that we know about them and -- and that  
7 the levels of chlorides are not raising above what  
8 the sensitive aquatic life can bear. And I think  
9 if it's true, that BMPs haven't been linked to  
10 chloride improvements, and we should definitely  
11 work on linking them to that.

12 On page 7 you state, Taking into  
13 account these chronic and acute thresholds,  
14 nothing in the proposed time-limited water quality  
15 standards indicates that the suggested interim  
16 criterion assess for compliance only as a  
17 four-year seasonal average across the entire CAWS  
18 and LDPR would protect known aquatic life species.  
19 Is this a requirement of a TLWQS variance?

20 MS. MEYERS: Okay. This is  
21 absolutely an objection, because this is a legal  
22 question specifically about an element -- a legal  
23 element within the procedures for a time-limited  
24 water quality standard. This has nothing to do

1 with anything factual which could be linked to  
2 aquatic uses or Laura's testimony.

3 HEARING OFFICER HALLORAN: And I  
4 will sustain that question.

5 MS. MEYERS: Thank you.

6 MS. BARGHUSEN: All right. On page  
7 9 you state, Although Petitioners have only  
8 requested a time-limited water quality standard  
9 for winter months, chlorides can remain high into  
10 warmer months by deposit in soil and  
11 transportation through stormwater flow. Will  
12 reductions in the application of salt during the  
13 winter reduce the amount of salt that is deposited  
14 in soil and transported through stormwater flow  
15 during the warmer months?

16 So, again, our concern is that  
17 it will be unclear what the varied effects will be  
18 in different stretches since there would only be  
19 two data points for approximately 190 miles of  
20 waterways. Here, give me a moment here.

21 So I think what is being  
22 proposed here could allow practices that spike  
23 salt high enough to harm existing uses in  
24 particular stretches, or we won't know if that's

1 going on or not without more monitoring, and  
2 especially if we can't quantify how much BMPs are  
3 proven to improve water quality, then we need to  
4 do our best to evaluate what the water quality is  
5 to make sure that it continues to allow for  
6 existing uses.

7                   On page 10 you state, It should  
8 be considered when setting appropriate chloride  
9 levels in the time-limited water quality standard.  
10 Are you aware that this is a time-limited water  
11 quality standard variance procedure, and in  
12 addition to the BMPs required to reduce the salt  
13 application, facilities will be trying to link the  
14 reduced salt application to reduce chloride in the  
15 receiving stream?

16                   And, yes, we think that is  
17 great. And that it would be better to do that  
18 with the more frequent monitoring in more places  
19 throughout the system throughout the first five  
20 years. So we are in agreement on that.

21                   And now, we will move on to  
22 Huff's questions.

23                   MS. MEYERS: Citgo.

24                   MS. BARGHUSEN: Citgo. I'm sorry.

1                   Okay. So Question 1, page 2,  
2 first paragraph of your testimony. Could you  
3 explain how the time-limited water quality  
4 standards for chloride would ultimately result in  
5 greater pollution in these waters? With the  
6 implementation of BMPs by the regulated community,  
7 what is causing the increased pollution?

8                   And my point is that we need to  
9 monitor throughout the system so we know what the  
10 chlorides are at different points in order to  
11 protect aquatic life. The seasonal and four-year  
12 averages won't give us enough specific information  
13 to know what's happening at different locations.

14                   If -- so in Question 2, You cite  
15 Dr. Soucek's 2018 work on the fingernail clam  
16 sensitivity to cold temperature, and conclude  
17 chloride could have a chronic effect on fingernail  
18 clams in the winter months. As the chronic value  
19 generated at 10 degrees celsius by Dr. Soucek was  
20 1,664 mg/L of chloride, can you explain how the  
21 fingernail clam will be affected by the  
22 time-limited water quality variance?

23                   And, again, we need to monitor  
24 throughout the system so we know what the

1 chlorides are at different points in order to  
2 protect aquatic life. I don't think we can  
3 necessarily count on the idea that the cold water  
4 will mitigate effects based on the small amount of  
5 research that has been done thus far.

6           The fingernail clam is known to  
7 be reasonably sensitive to chlorides, with some  
8 studies showing inhibition concentrations 20 of  
9 579 mg/L. That was from Diamond Mine Study 2014,  
10 and it's an example of an invertebrate whose  
11 survival in the system could be threatened by  
12 chlorides, and there are others as well; such as,  
13 the fat mucket.

14           Question No. 3. In the  
15 conclusion section of your testimony, you  
16 indicated that recent studies produced by Wang for  
17 fat mucket and fingernail clam were added to the  
18 databases to calculate water quality criteria that  
19 would need to be lowered. Did Wang look at winter  
20 temperatures and therefore are relevant to the  
21 current time-limited water quality standard?

22           And, no, and he did not -- they  
23 did not look at winter temperatures. But in the  
24 absence of winter temperature data for the fat

1 mucket, I think we have to work with what we have  
2 from higher temperatures. We don't know that  
3 winter temperatures will affect chloride toxicity  
4 for the fat mucket at sensitive aquatic life  
5 stages, and if they do, how much. So my point was  
6 that Wang, et al's research is relevant to this  
7 proceeding, and we can't assume without testing  
8 that winter temperatures will protect sensitive  
9 life stages of the fat mucket from chlorides.

10 The last question. If  
11 Dr. Soucek's cold temperature chronic value of  
12 1,664 mg/L is included in the database, as was  
13 done in R18-32, is it your contention that this  
14 would result in a more restrictive water quality  
15 standard than the current 500 mg/L Illinois  
16 standard? And if yes, could you explain how this  
17 would be the case?

18 And in my testimony, I was  
19 pointing out that Wang and four other researchers  
20 from Columbia Environmental Research Center, from  
21 the USGS, and Edward Hammer and Candice Bauer from  
22 US Environmental Protection Agency, Region V,  
23 Water Quality Branch, Chicago, Illinois, stated in  
24 their publication, Wang et al, 2018, that if USEPA

1 included in their database the chronic values from  
2 Wang, et al, 2018 and any other recent  
3 publications to update the national chronic water  
4 quality criteria, this would probably lower the  
5 standard.

6 And my point was that to derive  
7 a standard, the recent acute and chronic chloride  
8 toxicities of the most sensitive life stages of  
9 the most sensitive organisms should be included in  
10 the database.

11 For example, the species mean  
12 acute value used for the fat mucket in the  
13 database that was used for R18-32 was listed as  
14 2,764.4 for its species mean acute value for  
15 chloride toxicity, and Wang et al found that  
16 glochidia of fat muckets had an acute chloride  
17 toxicity of 544 milligrams chloride per liter at  
18 100 hardness. So that's a lot lower.

19 My point is that these more  
20 sensitive life stages should be represented in a  
21 database. They should be represented when we are  
22 setting standards and considering variances. So I  
23 was speaking about including the most sensitive  
24 organisms at their most sensitive life stage and

1 not about including winter temperatures in my  
2 testimony.

3 My point about winter  
4 temperatures is that for the small amount of data  
5 we have about them, I do not think we can assume  
6 that they will reduce chloride toxicity for all  
7 sensitive organisms at their sensitive life stages  
8 without actually testing them so that we would  
9 know.

10 And where we do know things,  
11 like that the glochidia of fat muckets had an  
12 acute chloride toxicity of 544 milligrams of  
13 chloride per liter at 100 hardness, that that  
14 should be represented in the database.

15 And I think that concludes the  
16 questions.

17 HEARING OFFICER HALLORAN: Thank  
18 you. Any questions? Yes.

19 MS. BROWN: Melissa Brown, on behalf  
20 of the Illinois Environmental Regulatory Group or  
21 IERG.

22 And one follow-up question we  
23 have is whether Openlands agrees that the  
24 purported goal of the proposed BMPs is to reduce

1 run-off from salt storage or salt usage and other  
2 chlorides, other sources of chlorides in the  
3 waterways? Would you agree that those are the  
4 goals of the BMPs?

5 MS. BARGHUSEN: Is to reduce run-off  
6 of salt?

7 MS. BROWN: Yeah, from salt storage  
8 and other sources of chlorides.

9 MS. BARGHUSEN: I guess I would  
10 think it was to reduce salt loading in the  
11 waterways.

12 MS. BROWN: And our second question  
13 is just, is it your opinion that -- or whether  
14 sensitive species -- will sensitive species be  
15 exposed to greater chloride concentrations in this  
16 TLWQS, if adopted, than historically exposed?

17 MS. BARGHUSEN: I don't know.

18 MS. BROWN: Why don't you know? Can  
19 you elaborate?

20 MS. BARGHUSEN: Why don't I know?  
21 Because I feel like we really can't know, because  
22 we don't have the specific monitoring to figure  
23 that out.

24 MS. BROWN: Okay.

1 HEARING OFFICER HALLORAN: Thank  
2 you, Ms. Brown. Any other questions?

3 (No response.)

4 HEARING OFFICER HALLORAN: All  
5 right. Thank you, Ms. Meyers. You may step down.

6 MS. BARGHUSEN: Thank you.

7 MS. MEYERS: Thank you.

8 HEARING OFFICER HALLORAN: I guess I  
9 should have asked before -- the Petitioners rest,  
10 obviously, and at this point, I don't know how  
11 long -- Ms. Diers, how long do you think the IEPA  
12 is going to take? Do you plan on --

13 MS. DIERS: We're not -- all we are  
14 going to do is answer questions that were filed.

15 HEARING OFFICER HALLORAN: Okay.  
16 All right. Let's proceed.

17 And I guess while we are waiting  
18 for the change, I think we have to do post-hearing  
19 briefs, and you guys might want to start thinking  
20 about timing. I think the transcript will be  
21 finished February 25th. So any kind of  
22 post-hearing briefs, and simultaneous I think  
23 would be okay as well.

24 Okay. Raise your hand and the

1 court reporter will swear you in. Thank you.

2 (Whereupon, the witness was duly  
3 sworn.)

4 MS. DIERS: All right. My name is  
5 Stefanie Diers, counsel for Illinois EPA, and we  
6 have filed a recommendation and other responses to  
7 questions in this proceeding.

8 So at this time, we thought we  
9 would answer the questions by the Board first, and  
10 then I believe we have just other pre-filed  
11 questions from IERG.

12 MR. TWAIT: Question No. 9.  
13 Illinois EPA's response to the Board questions  
14 include several changes to the proposed draft  
15 order included in the July 24th, 2019 Hearing  
16 Officer order. As noted above, MWRD has also  
17 suggested changes to the draft order. Please  
18 comment on whether the changes to the attached  
19 draft order reflect IEPA's suggested changes.

20 We found a few issues, and we  
21 will address those in comments, but I would also  
22 like to point out that No. 7 of the best  
23 management practices was changed, and to the point  
24 that it changed the meaning of the -- of the BMP,

1 and that's on page 28. And we will address that  
2 in our comments.

3 No. 10. In response to the  
4 Board's Question 16(i). MWRD states that neither  
5 IEPA, nor the Board have the authority to require  
6 chloride workgroups to conduct outreach and  
7 education. Please comment on whether IEPA agrees  
8 with MWRD.

9 The Agency does not agree. We  
10 think that BMPs -- that outreach and education is  
11 a proven BMP.

12 If so, please clarify whether  
13 the Board -- if so, please clarify whether the  
14 Petitioner should be required to perform outreach  
15 and education. If not, comment on whether the  
16 Board should retain the outreach and education  
17 provisions under paragraph 4 of the draft order.

18 The Agency believes that  
19 outreach and education requirement 4E should  
20 remain. However, the Agency proposes some  
21 language changes. The second sentence should  
22 state, "workgroup must share these materials with  
23 other users of road salt in their local areas."  
24 And it should remove the language, "including

1 residents, road salt applicators, elected official  
2 and businesses." And this is just to make it less  
3 specific as to what's required.

4 No. 11. Regarding Board's  
5 Question 18 concerning off-sets for new sources  
6 seeking coverage under the time-limited water  
7 quality standard MWRD states, If an off-set  
8 requirement is adopted, then IEPA should be tasked  
9 with developing a trading system in consultation  
10 with stakeholders. MWRD response at 11. Please  
11 comment on whether IEPA intends to develop a  
12 system for trading chloride off-sets.

13 The Agency does not.

14 If so, what would be the  
15 timeline for the availability of the trading  
16 program? If not, comment on whether off-set  
17 requirements could be met on a case-by-case basis.

18 That was the Agency's intent was  
19 these off-sets would be based on a case-by-case  
20 basis.

21 No. 12. In response to Question  
22 20, IEPA states that it cannot comply with the  
23 90-day response deadline, because the NPDES  
24 permits include a 15-day notice to the facility,

1 along with a 30-day public notice. Please comment  
2 on whether a 120-day time limit is acceptable to  
3 IEPA. If not, please propose a reasonable  
4 response time.

5 For this question, there is just  
6 too many variables to set a time limit to issue  
7 the permit. We have issues related to the permit,  
8 public hearing requests and other things. For  
9 this, the Agency proposes that within 120 days we  
10 can let the permittee know the Agency's intention  
11 to be covered by a time-limited water quality  
12 standard.

13 No. 13. IEPA states that Table  
14 4 of the proposed order needs a column for work --  
15 chloride workgroups.

16 Upon further review, the Agency  
17 does not think a column for the chloride  
18 workgroups is necessary.

19 No. 14. IEPA states that the  
20 proposed time-limited water quality standard is  
21 consistent with applicable federal regulations.  
22 Please clarify whether the chloride standard for  
23 CAWS and Lower Des Plaines River have been adopted  
24 by USEPA in accordance with the requirements of 40

1 CFR Part 131 to ensure that the time-limited water  
2 quality standard is granted from currently  
3 applicable standards for Clean Water Act purposes.  
4 If so, please submit any approval documents into  
5 the record.

6 The rules were approved on  
7 June 24th of 2019.

8 MS. DIERS: I have -- I have yet to  
9 file electronically, but I do have -- I have  
10 probably ten copies of the approval letter, and I  
11 can put those online, too, when I get back to the  
12 office.

13 HEARING OFFICER HALLORAN: Okay.  
14 This will be Exhibit A.

15 (Whereupon, AGENCY Exhibit No. A  
16 was marked for identification.)

17 HEARING OFFICER HALLORAN: Any  
18 objection to the Agency's Exhibit A?

19 MR. ETTINGER: I'm not clear what it  
20 is.

21 HEARING OFFICER HALLORAN: It's  
22 Mr. Ettinger from Openlands -- or --

23 MR. ETTINGER: The Sierra Club.

24 HEARING OFFICER HALLORAN: The

1 Sierra Club.

2 MR. ETTINGER: Good enough.

3 Openlands.

4 MS DIERS: It's the approval letter  
5 from USEPA that they were asking for on the  
6 rulemaking that we did, what, Sub-dockets C and D,  
7 I believe.

8 MR. ETTINGER: So they are approving  
9 the rulemaking, but obviously, they are not  
10 approving this specific --

11 MS. DIERS: Correct. That's just --  
12 yes. That's just the rulemaking letter.

13 MR. ETTINGER: Thank you.

14 HEARING OFFICER HALLORAN: You may  
15 proceed. Thank you. I'm sorry. The Agency's  
16 Exhibit A is admitted.

17 (Whereupon, AGENCY Exhibit No. A  
18 was admitted into evidence.)

19 MR. TWAIT: No. 15. According to 35  
20 IAC 104.570, before a time-limited water quality  
21 standard becomes effective for Clean Water Act  
22 purposes, the Agency must submit the time-limited  
23 water quality standard to USEPA and obtain USEPA's  
24 approval in compliance with Section 303(c) of the

1 Clean Water Act, and 40 CFR 131.20 and 131.21.  
2 Please -- Part A. Please clarify whether IEPA has  
3 been engaged in discussions with USEPA regarding  
4 the joint submittal for chloride time-limited  
5 water quality standards.

6 Yes. We have been -- had  
7 discussions with USEPA.

8 If so, comment on whether IEPA  
9 has received any indication regarding the  
10 approvability of water quality standards requests.  
11 We have -- and please submit into the record any  
12 correspondence from USEPA regarding the joint  
13 submittal petition from the time-limited water  
14 quality standard.

15 We have not received any formal  
16 response from USEPA. Although, we have been  
17 addressing their issues as they've come up.

18 MS. DIERS: Can you explain any of  
19 the issues that have been raised in conversations  
20 that we have had with USEPA?

21 MR. TWAIT: Yeah. They have -- I  
22 had a list of them. One of their comments was  
23 that Factor 6, the economics was not justified,  
24 and Factor 3 was. And that's why we made the

1 comments to the Board. They had concerns that RO  
2 use was not fully analyzed, and in our response  
3 to -- in our recommendation, we -- we kind of  
4 fleshed out that -- the disposal methods.

5 They had some comments on BMPs,  
6 comments on the reevaluation, and they wanted a  
7 specific BMP that wanted the workgroup to identify  
8 assistance that was needed, whether it was  
9 financial or otherwise.

10 No. 16, Citgo's Jim Huff asked  
11 the Board for guidance on the impact of the  
12 time-limited water quality standard, if granted,  
13 on the current permit conditions contained in  
14 Citgo's NPDES permit. Please comment on how IEPA  
15 will implement conditions of the time-limited  
16 water quality standard with respect to Citgo's  
17 permit.

18 The permit condition will remain  
19 in the NPDES permit until the chloride  
20 time-limited water quality is adopted by the Board  
21 and the permit is modified. It was the Agency's  
22 intent to talk with Citgo and determine what  
23 requirements needed to be in the permit.

24 MR. RAO: Follow-up. Do you think

1 the proposed TLWQS order needs to address this  
2 issue any further than what's proposed in the  
3 draft order?

4 MR. TWAIT: I think it's the  
5 Agency's intent to put in the time-limited water  
6 quality standard requirements into their permit,  
7 rather than what's in the permit now.

8 MR. RAO: Okay.

9 HEARING OFFICER HALLORAN: Member  
10 Santos has a question.

11 MEMBER SANTOS: Yes. This is a  
12 question for the Agency. You mentioned that you  
13 received requests for hearing from the public or  
14 organizations?

15 MR. TWAIT: No.

16 MEMBER SANTOS: In your comments you  
17 said that with regards to the 120-day notice that  
18 you weren't able to --

19 MR. TWAIT: That was the Board  
20 wanted -- or the Board asked about putting in a  
21 90-day requirement that the permit be modified  
22 when somebody asked to join the time-limited water  
23 quality standard. And the Agency said that  
24 120-days or a 90-day response could not be met by

1 the Agency due to things such as a permit -- or a  
2 public hearing request. That delays the permit  
3 from getting issued.

4 MEMBER SANTOS: Okay. But to date,  
5 there has been no request from the public for a  
6 hearing?

7 MR. TWAIT: Not on -- not on the  
8 time-limited water quality standards.

9 MEMBER SANTOS: Okay. So --

10 MR. TWAIT: But we haven't -- we  
11 haven't started modifying permits. And I'm not  
12 sure that the Agency will be modifying permits,  
13 but as they come up for issuance, we will -- we  
14 will include their requirements.

15 MEMBER SANTOS: Okay. Thank you.

16 MR. ETTINGER: I'm not sure whether  
17 this is the right time or not, because I don't  
18 know what else you are going to say, but I'm -- we  
19 are interested in how these BMPs are going to be  
20 incorporated in permits. You say you are not  
21 planning now to reopen all the permits and add the  
22 BMPs that are required by this into their permits,  
23 or how does the Agency anticipate the best  
24 management practices will come to be in the

1 permits, if that's the plan?

2 MR. TWAIT: Well, through the  
3 granting of the time-limited water quality  
4 standard, they will have to do the BMPs, and as  
5 the permits come up for renewal or modifications,  
6 we will include the specific requirements.

7 MR. ETTINGER: Is that going to be  
8 done on a permittee-by-permittee basis? So, for  
9 example, we heard this today that Morton Salt  
10 doesn't want to have certain berms. Maybe berms  
11 would be appropriate for a different discharger.

12 Do you intend to incorporate  
13 specific BMPs as to each discharger?

14 MR. TWAIT: We anticipate including  
15 the BMPs that the Board requires as part of the  
16 permit.

17 MR. ETTINGER: Well, I guess, is  
18 this going to be done generically, or will the  
19 public be able to see, yes, the Village of  
20 Frankfurt is going to use these BMPs?

21 MR. TWAIT: I think it will be done  
22 generically.

23 MR. ANDES: I have a follow-up on  
24 that.

1 HEARING OFFICER HALLORAN: Yes,  
2 Mr. Andes.

3 MR. ETTINGER: Well, okay. I will  
4 probably have a follow-up on his follow-up.

5 MR. ANDES: And likewise. Isn't it  
6 the case under the time-limited water quality  
7 standard that while the BMP conditions in a  
8 variance are generic, each facility will be  
9 required to prepare a plan that lays out  
10 specifically how it would implement those BMP  
11 requirements?

12 MR. TWAIT: Yes.

13 MR. ANDES: Thank you.

14 HEARING OFFICER HALLORAN:  
15 Mr. Ettinger?

16 MR. ETTINGER: Yeah. Will that plan  
17 be a public document?

18 MR. TWAIT: I do not know the answer  
19 to that. It -- no. I'm sorry. I do know the  
20 answer to that. It will be a public document. I  
21 believe they have to turn it into the Agency.

22 MR. ETTINGER: And will compliance  
23 with that plan be a condition of the NPDES permit?

24 MR. TWAIT: I don't know that their

1 plan will be part of it. That's something that  
2 the Agency can consider.

3 MR. ETTINGER: Okay. Well, once the  
4 Agency has considered the plan and decided that  
5 some sort portion of it is a good plan and that it  
6 should be done, will that then be incorporated in  
7 the NPDES permit in some fashion?

8 MR. TWAIT: I'm not sure which parts  
9 of the plan would be incorporated into the permit.

10 MR. ETTINGER: Now, my understanding  
11 is, is it part of this process is that holders are  
12 going to file a yearly report saying how they have  
13 incorporated the plan; is that correct?

14 MR. TWAIT: Yes.

15 MR. ETTINGER: Is that going to be a  
16 public document that is filed like a discharge  
17 monitoring report?

18 MR. TWAIT: I think it will be a  
19 public document. I'm not sure -- it will probably  
20 be a requirement of the permit once it gets  
21 modified to include the annual report.

22 MR. ETTINGER: Okay. So the annual  
23 report -- the permit will be modified. It will  
24 have an annual report, and that will incorporate

1 the plan in some fashion?

2 MR. TWAIT: Yes, I believe so.

3 MR. ETTINGER: And members of the  
4 public would then be able to bring enforcement  
5 actions if the plan wasn't followed?

6 MR. ANDES: It seems like a legal  
7 question to me.

8 MR. TWAIT: We'll have to go back --

9 MR. ETTINGER: I am asking the  
10 Agency.

11 MR. TWAIT: We will have to go back  
12 and take a look and see how the permit is going to  
13 be written in that respect and what is  
14 enforceable.

15 MR. ETTINGER: Okay. We are done  
16 for now.

17 HEARING OFFICER HALLORAN: Thank  
18 you. You may proceed.

19 MR. TWAIT: Please comment on  
20 whether Cook County Department of Transportation's  
21 alternative language for BMP No. 16 is acceptable  
22 to the Agency.

23 I don't believe it is. The  
24 Agency believes that it's appropriate to consider

1 channeling water to a collection point on a  
2 site-specific basis.

3                   No. 18. IMTT's response  
4 questions whether IEPA or the Board has the  
5 authority to require membership in a workgroup as  
6 a component of permit or variance condition. IMTT  
7 notes that a membership in a workgroup is not  
8 specifically authorized by statute and forces the  
9 Petitioner to accept a compliance obligation over  
10 which it has no or limited control; i.e., the  
11 actions of the group. IMTT, Please comment on  
12 whether the provision to require mandatory  
13 participation in a chloride workgroup is within  
14 the Board's authority under the Act.

15                   We couldn't find anything that  
16 prohibits it, and we couldn't find anything that  
17 specifically mentions it. The Agency believes  
18 that participation in a workgroup is important for  
19 the reevaluation process and developing BMPs for  
20 the next cycle.

21                   HEARING OFFICER HALLORAN:

22 Mr. Andes?

23                   MR. ANDES: Thank you. If I can  
24 follow up back on the Question 10 concerning

1 outreach and education. I believe Mr. Twait has  
2 identified recommended changes the Agency is  
3 recommending as to paragraph E on pages 10 and 11,  
4 which regards sharing materials with other users  
5 of road salts in their local area, but the draft  
6 order also in Sections F and G requires the  
7 workgroups to identify MS4 permittees and must  
8 reach out to them and then must work with IEPA to  
9 reach out to nonpoint sources as well, neither of  
10 whom necessarily are in their local area or who  
11 they have any authority over.

12 Does the Agency believe that  
13 these requirements have authority, legal  
14 authority? If so, we would like to know the  
15 authority, or is the Agency thinking that the  
16 changes it suggested in E perhaps should be made  
17 to F and G as well?

18 MR. TWAIT: Yeah. We will have to  
19 take a look at them. It was the Agency's intent  
20 to notify the MS4 permittee holders that there is  
21 requirements under their general permit to be  
22 included in the workgroup or to join the workgroup  
23 and do the BMPs.

24 MR. ANDES: Thank you.

1 HEARING OFFICER HALLORAN: You may  
2 proceed.

3 MR. TWAIT: That concludes the  
4 questions from the Board.

5 I will move on to questions from  
6 IERG. Please summarize any feedback from USEPA,  
7 Region 5, as to IEPA's recommendation filed on  
8 April 15th, 2019 in the Board's time-limited water  
9 quality standard language contained in Question 20  
10 of the Board's questions dated -- I've -- yeah. I  
11 think I have already answered that.

12 Indicate that justification was  
13 needed beyond the six-year time frame was  
14 something I didn't mention.

15 USEPA is concerned that the  
16 petition only had enough justification for six  
17 years, rather than the fifteen years. USEPA and  
18 the Agency and MWRD and some other participants  
19 participated in a conference to demonstrate or to  
20 indicate that this is an iterative process, and  
21 the first six years was just kind of how they --  
22 the workgroup would start, but then knowing that  
23 it was an iterative process and that more BMPs  
24 would be added as necessary.

1 MS. BROWN: Follow-up. Melissa  
2 Brown from IERG. Was that discussion with USEPA  
3 before or after the Board's questions dated  
4 July 24th of 2019?

5 MR. TWAIT: That would have been  
6 before.

7 MS. BROWN: And also another  
8 follow-up. Have you had any specific  
9 conversations with the USEPA regarding the  
10 off-set, the proposed off-set requirements? And  
11 if so, what was the nature of those discussions?

12 MS. TWAIT: We have not.

13 HEARING OFFICER HALLORAN: Could you  
14 speak up, Ms. Brown?

15 MS. BROWN: Yes.

16 HEARING OFFICER HALLORAN: Thank  
17 you.

18 MR. RAO: Follow-up, Mr. Twait. So  
19 is your understanding now that USEPA agrees with  
20 your 15-year TLWQS terms or --

21 MR. TWAIT: I believe that's  
22 accurate.

23 MR. RAO: Okay. Thanks.

24 MR. TWAIT: Question No. 2. In

1 Illinois' response to the Board's July 24th, 2019  
2 questions, Illinois EPA stated, Also, it is the  
3 Agency's understanding that a workgroup is needed  
4 so that the USEPA will approve the time-limited  
5 water quality standard. Please explain the basis  
6 for IEPA's understanding that a workgroup  
7 requirement is necessary in order for the Board --  
8 in order for USEPA to approve the time-limited  
9 water quality standard.

10 Part of the time-limited water  
11 quality standard is the reevaluation. The Agency  
12 believes that a workgroup is necessary to provide  
13 the justification that the time-limited water  
14 quality standard should be extended beyond the  
15 first five years. And USEPA had some questions as  
16 to how the workgroup would work, and so that's  
17 just -- that's the basis for IEPA's understanding.

18 Question 3. Has USEPA Region 5  
19 identified any approvability issues as to the  
20 proposed water quality standard -- time-limited  
21 water quality standard? If so, identify these  
22 issues, and summarize the discussions with USEPA  
23 as to all such issues.

24 I believe I have mentioned them

1 already in the previous questions.

2 MS. BROWN: And just a follow-up  
3 before -- not really a follow-up, but an  
4 additional question on this subheading with  
5 discussions with USEPA. Do you know, does IEPA  
6 know the status of USEPA's efforts, if any, to  
7 revise the underlying chloride standard?

8 MR. TWAIT: I believe that they are  
9 working on a new chloride standard that will  
10 incorporate other parameters as part of the  
11 chloride standard.

12 MS. BROWN: Do you know where  
13 they're at in that process?

14 MR. TWAIT: Offhand, I don't know  
15 when they will be proposing anything.

16 MS. BROWN: Thank you.

17 MR. TWAIT: Question 4. Identify  
18 the Board's authority for imposing a workgroup  
19 requirement in issuing a time-limited water  
20 quality standard. And also identify Illinois  
21 EPA's authority for incorporating a workgroup  
22 requirement into the NPDES permit.

23 The Agency doesn't believe that  
24 there is any prohibition in requiring

1 participation in the workgroup. The workgroup is  
2 needed for the reevaluation so that the  
3 time-limited water quality standard can last more  
4 than five years. For a water quality -- for a  
5 watershed time-limited water quality standard to  
6 work, there is a need for a showing of a point and  
7 nonpoint source reductions.

8 Question No. 5. Is Illinois EPA  
9 aware of any precedent for a workgroup requirement  
10 for implementing watershed variances?

11 There are no other watershed  
12 variances that have been approved by USEPA.

13 The second part of the question.  
14 Are other states with recent multi-discharger  
15 variances; example, Montana, Wisconsin, Indiana,  
16 relying on workgroups for implementation of the  
17 multi-discharger variances?

18 I am unaware of any watershed  
19 groups being proposed for the multi-discharger  
20 variance. However, the MDVs are not based on  
21 watersheds. They are based on the type of  
22 discharger.

23 Question No. 6. Per Illinois  
24 EPA's recommendation dated April 5th, 2019, the

1 proposed workgroups will be responsible for  
2 certain education and outreach functions. Part A.  
3 Traditionally, wouldn't Illinois EPA or another  
4 Agency carry out the responsibilities proposed and  
5 envisioned for the workgroup?

6 As to my knowledge, the Agency  
7 has not had this type of outreach in the past.

8 Part B. Because environmental  
9 education and outreach is traditionally a  
10 responsibility of the Illinois EPA, please provide  
11 examples of other programs, either in Illinois or  
12 other states, where the regulated entities are  
13 responsible for educational outreach functions as  
14 a condition of compliance.

15 I don't know about it being a  
16 condition of compliance. However, other  
17 watersheds -- watershed groups do have outreach.  
18 The Salt Creek Watershed Group, they have an  
19 outreach program. The Lower Des Plaines Workgroup  
20 has an outreach program just for educational  
21 purposes to reduce the amount of salt, and I  
22 believe there -- I believe Fox River also has one.

23 Question No. 7. In it's  
24 response to the Board's July 24, 2019 questions,

1 Illinois EPA stated, the decision to participate  
2 is ultimately up to the discharger. However, one  
3 needs to participate in a workgroup to achieve a  
4 time-limited -- to receive a time-limited water  
5 quality standard. Question A. Why is  
6 participation in a workgroup a mandatory condition  
7 for requiring coverage under the time-limited  
8 water quality standard?

9 The most important portion of  
10 this is the reevaluation. Without the  
11 reevaluation being completed, which needs to be a  
12 group effort, the time-limited water quality  
13 standard ends at five years.

14 MS. BROWN: Follow-up. Is it your  
15 opinion that a workgroup would not be needed if  
16 the time-limited water quality standard had a term  
17 of less than five years, and thus, there would be  
18 no reevaluation?

19 MR. TWAIT: That would definitely --  
20 without the reevaluation, it may not be necessary.

21 Part B. Can a discharger be  
22 covered under this time-limited water quality  
23 standard without being a member of the workgroup?

24 As proposed, the answer would be

1 no. If the individual -- if the facility wanted  
2 to apply for an individual time-limited water  
3 quality standard, they would need to apply for an  
4 individual time-limited water quality standard.  
5 However, I will just mention that the burden is  
6 quite a bit different for an individual, as to --  
7 opposed to a watershed group.

8 Question No. 8. How does  
9 Illinois EPA define participation in the  
10 workgroups?

11 We have not defined  
12 participation in the workgroup. It's up to the  
13 workgroup to determine.

14 No. 9. What is the specific  
15 purpose of the workgroups? The specific purpose  
16 is for the reevaluation and determining the BMPs  
17 for the next five years.

18 No. 10. If the Board does not  
19 require the formation of a workgroup as a  
20 condition of this time-limited water quality  
21 standard, how could Illinois EPA's proposed  
22 objectives of the workgroup be met in its absence,  
23 and by whom?

24 I specifically don't know.

1 However, I will mention that if the reevaluation  
2 is not done, then the time-limited water quality  
3 standard ends at five years.

4 MR. ANDES: Can I follow-up on that,  
5 please?

6 HEARING OFFICER HALLORAN: You may.

7 MR. TWAIT: Yes.

8 MR. ANDES: It is your understanding  
9 that this workgroup -- these workgroups and all  
10 the Petitioners have specifically requested a  
11 15-year term for the TLWQS, correct?

12 MR. TWAIT: Yes.

13 MR. ANDES: Thank you.

14 MR. TWAIT: And just to be clear, I  
15 was only mentioning if -- if the workgroup didn't  
16 exist, and they didn't do -- and nobody was around  
17 to do the reevaluation.

18 MR. ANDES: Okay.

19 MR. TWAIT: No. 11. How does  
20 Illinois EPA envision interacting with the  
21 workgroups?

22 In a consultation and advisory  
23 role. We will help when needed.

24 No. 12. Clarify what Illinois

1 EPA means by all covered entities are individually  
2 responsible for ensuring the workgroup's success.

3 The Agency's intent by that was  
4 that we just wanted to let everybody know that if  
5 a reevaluation does not get finished on time and  
6 in a satisfactory condition, the time-limited  
7 water quality standard ends for everyone. So  
8 everybody needs to participate and just to -- to  
9 ensure that the reevaluation gets done timely.

10 No. 13. What recourse would a  
11 discharger covered under this time-limited water  
12 quality standard have if the workgroup is not  
13 adequately representing such discharger's  
14 interests?

15 The recourse that I would know  
16 of is to file an individual time-limited water  
17 quality standard.

18 No. 14. What is the Board's  
19 authority to require off-sets on a site-specific  
20 basis?

21 The goals of the time-limited  
22 water quality standard will only work if they are  
23 making continuous improvements. And it was the  
24 Agency's intent that if a new discharger came in

1 with salt, that the workgroup wouldn't -- or the  
2 watershed groups wouldn't have made improvements  
3 and then all those improvements be erased by a  
4 large chloride discharger or salt spreader.

5 The watershed group is needed to  
6 comply with the water quality standards, comply  
7 with the BMPs, and ensure that the variance -- and  
8 the off-sets ensure that the variance is achieving  
9 the water quality standards.

10 No. 15. Does IEPA envision that  
11 off-sets will be established through the  
12 permitting process? If so, please explain the  
13 process for establishing off-sets.

14 The answer is yes. The goals of  
15 the time-limited water quality standard will only  
16 work if you are making continuous improvements.

17 Question 16.

18 MS. BROWN: Follow-up?

19 HEARING OFFICER HALLORAN: Yes.

20 MS. BROWN: So can you just, please,  
21 elaborate on the process, the permitting process,  
22 to establish these off-sets? And this might get  
23 into a few of the later questions, but if you  
24 wouldn't mind just --

1 MR. TWAIT: Sure. If there is a new  
2 discharger, they are going to have to go through  
3 anti-deg, and one of the things that we are going  
4 to be looking at is having them offset their  
5 chloride contributions. And so it's going to be  
6 site-specific. They are going to have to come up  
7 with some proposals, and we will work that out  
8 during the permitting process.

9 MS. BROWN: And to follow-up back on  
10 Question 14, can you point to any specific  
11 authority in the Act or Board regs to require  
12 site-specific off-sets?

13 MR. TWAIT: No. However, we thought  
14 it was only fair to the current workgroup  
15 participants that if there was a new source of  
16 chlorides that we would make them offset their new  
17 chloride loading to the receiving stream, rather  
18 than introducing -- introducing a chloride load  
19 that would be counter to what the workgroup is  
20 trying to achieve.

21 Question No. 16. Please provide  
22 an example of an off-set requirement that is  
23 similar to the envisioned off-set requirement in  
24 this time-limited water quality standard in either

1 Illinois or other states.

2 We have no examples. However,  
3 it doesn't make sense for everyone to make  
4 reductions and then have a new source come in and  
5 erase all of the progress that's been made.

6 MR. HUFF: Then, follow-up question.  
7 Jim Huff. Wouldn't you say what Citgo did was  
8 exactly an off-set to allow that wet gas scrubber  
9 to discharge the TDS into the waterway? I mean,  
10 that's exactly what that was.

11 MR. TWAIT: Yes.

12 MR. HUFF: Thank you.

13 MR. TWAIT: And we would try to  
14 address that case by case, as we did in Citgo's  
15 case.

16 Question 17. Who does Illinois  
17 EPA envision the providers of the off-set  
18 requirements for the new sources of chlorides will  
19 be; point sources, nonpoint sources, et cetera?  
20 Please provide examples of the envisioned  
21 providers of the off-sets.

22 We have addressed that, and on  
23 page 8 of the Agency's responses to the Board's  
24 questions.

1                   No. 18. In its recommendation  
2                   dated April 5th, 2019, Illinois EPA recommends  
3                   that any discharger with a new source of chloride  
4                   must offset at least their additional loading  
5                   before receiving coverage under the time-limited  
6                   water quality standard. Please clarify what a new  
7                   source of chloride means.

8                   This would be a new loading of  
9                   chloride from a facility that does not exist or a  
10                  source that does not currently exist.

11                  Part B is, Please clarify what  
12                  the term "additional loading" means.

13                  It would mean a new loading of  
14                  chloride.

15                  Question No. 19.

16                  MR. RAO: Follow-up to that?

17                  MR. TWAIT: Yes.

18                  MR. RAO: The Board had questions  
19                  for the District about what would be a significant  
20                  "additional loading". So you used the term  
21                  "additional loading". Do you have any way to  
22                  describe what "additional loading" would be in  
23                  terms of a numeric loading number?

24                  MR. TWAIT: I don't. However, if

1 they just have a de minimus amount, then the  
2 off-sets would be rather minor. So I am not quite  
3 sure that -- that I could give a definition of  
4 "significant".

5 MR. RAO: So would the Agency  
6 require off-sets for any additional loading, or  
7 will you have -- will you do it on a case-by-case  
8 basis?

9 MR. TWAIT: I think we will do it on  
10 a case-by-case basis, because if somebody puts in  
11 a small parking lot, it may not need -- it may not  
12 need the scrutiny of somebody that was putting in  
13 a new salt storage facility.

14 Number 19. Per the response to  
15 the Board's July 24th, 2019 questions, Joint  
16 Petitioners believe that off-sets should be  
17 obtainable from currently covered dischargers that  
18 have made quantifiable and verifiable reductions.  
19 Please provide additional explanation as to IEPA's  
20 position as stated in its response to the Board's  
21 questions that dischargers will not be able to  
22 receive off-sets from dischargers currently  
23 covered by the time-limited water quality  
24 standard. This would impact the available

1 reductions that someone currently covered by the  
2 time-limited water quality standard would be able  
3 to make in the next round of BMPs mandated by the  
4 time-limited water quality standard.

5 The Agency believes that the  
6 off-sets should come from somewhere other than the  
7 participants of the time-limited water quality  
8 standard. And the reason being is that if -- if  
9 they currently don't have a BMP that -- that would  
10 give them additional chloride reductions, that may  
11 become -- that may become required in the future  
12 in the next set of BMPs.

13 MR. ANDES: Let me ask you a  
14 hypothetical. Say an industry wants to have a new  
15 source, and it talks to a community that can't  
16 afford to make further reductions and says, "We  
17 will pay you 'X' amount of money to do those  
18 further reductions that you couldn't afford  
19 otherwise", couldn't that be a potential credit  
20 toward an off-set?

21 Because that community couldn't  
22 do those reductions without that money. Now, if  
23 the industry is paying them to do it, that's an  
24 extra reduction that perhaps should be available

1 as an off-set.

2 MR. TWAIT: That's something that  
3 the Agency would have to consider on a  
4 case-by-case basis.

5 MR. ANDES: Thank you.

6 MR. TWAIT: Question No. 20. What  
7 ratio of a new source of chlorides are offset by  
8 contributing to or hosting training programs?

9 The Agency does not have any  
10 guidelines set. However, the off-sets should be  
11 based on literature results estimating the  
12 over-application of salt, and these off-sets  
13 should last until the time-limited water quality  
14 standard is no longer needed.

15 No. 21. Is Illinois EPA's  
16 intent that off-sets should be achieved by actions  
17 that are not considered part of the time-limited  
18 water quality standard best management practices?

19 The answer would be yes.

20 No. 22. Does IEPA agree with  
21 the Joint Petitioner's forecast that the proposed  
22 BMPs are not expected to result in compliance with  
23 the standards?

24 Certainly not at any point in

1 the near future. The Agency would agree with the  
2 near future and possibly long-term, and if -- if  
3 a -- if at the end of the term the water quality  
4 standard is not being met, I believe they would  
5 have two choices: Continue on with the -- or  
6 apply for a new time-limited water quality  
7 standard or do a use attainability analysis, and  
8 in which case, they would need to ensure that they  
9 are doing everything they can to reduce chlorides,  
10 and that would include all the BMPs that are  
11 currently being done -- or at that point.

12 Question 23. If noncompliance  
13 with the underlying chloride standard remains at  
14 the end of the proposed -- I think I just answered  
15 this question.

16 No. 24. If USEPA, and then  
17 subsequently the Board, revises the underlying  
18 chloride criteria to become more stringent, how  
19 does this affect the time-limited water quality  
20 standard?

21 At that point, I think the  
22 time-limited water quality standard would be even  
23 more important with the reductions of chloride.

24 And that concludes questions

1 from IERG.

2 HEARING OFFICER HALLORAN:

3 Ms. Diers, I just wanted to ask you, you said you  
4 were going to e-file this, Exhibit A?

5 MS. DIERS: Yes.

6 MR. FRONCZAK: I do have a question.

7 HEARING OFFICER HALLORAN: Yes.

8 Somebody had a question?

9 MR. FRONCZAK: One question. Jeff  
10 Fronczak with Cook County.

11 HEARING OFFICER HALLORAN: Could you  
12 stand, please, so we can -- thank you.

13 MR. FRONCZAK: Going back to BMP 16  
14 in your answer to the Board's Question No. 17, how  
15 will the Agency -- how will the Agency determine  
16 when a discharger needs to channel water to a  
17 collection point? In your answer, you mentioned a  
18 site-specific analysis, and then relatedly, when  
19 and how would that determination be made known to  
20 dischargers?

21 MR. TWAIT: I don't think at this  
22 point that the Agency is planning to make that  
23 decision. It's going to be something that the  
24 discharger will consider. And the Agency is not

1 making it a specific requirement that it's  
2 channeled, but it should be something that each  
3 facility considers.

4 MR. FRONCZAK: Thank you.

5 HEARING OFFICER HALLORAN: Yes, sir.

6 MR. ETTINGER: Yeah, I'm -- getting  
7 back to the mechanics here and the each facility  
8 considers problem here. So as I understand it, we  
9 are either going to in our next permits or through  
10 modifications of permits you are going to list a  
11 series of generic BMPs, and one of those generic  
12 BMPs will be that plan, an individualized plan,  
13 will be prepared by that discharger; is that  
14 correct?

15 MR. TWAIT: Yes.

16 MR. ETTINGER: Yes.

17 CHAIRWOMAN CURRIE: That's  
18 fascinating.

19 MR. ETTINGER: Will the public get  
20 to see that fascinating plan before -- while it's  
21 being considered by IEPA or some other way so that  
22 the public might comment and also be fascinated?

23 MR. TWAIT: Yeah. We're -- the  
24 Agency is going to have to do more consideration

1 on that. I am not -- I am not sure --

2 HEARING OFFICER HALLORAN: Could you  
3 speak up, please?

4 MR. TWAIT: Yeah. I am not sure  
5 that the Agency -- I am not sure that I am  
6 prepared to say how the Agency is going to handle  
7 that in the permitting process.

8 MR. ETTINGER: Okay. And maybe this  
9 is a rhetorical question, or maybe if you have an  
10 answer. Do you think that the Board should spell  
11 out rules for questions; such as, how the plan is  
12 going to be formulated, whether the public will  
13 comment on the plan, and whether the plan will be  
14 incorporated into the NPDES program?

15 MR. TWAIT: The plan will be a  
16 public document. I am just not quite sure if it's  
17 part of the permit.

18 HEARING OFFICER HALLORAN: Wait a  
19 minute, Mr. Porter, please.

20 I am pleased to announce we have  
21 Chairperson Currie joining.

22 CHAIRWOMAN CURRIE: Late, but she is  
23 here.

24 HEARING OFFICER HALLORAN: The court

1 reporter -- do you have a question?

2 CHAIRWOMAN CURRIE: Thank God for  
3 the court reporter.

4 HEARING OFFICER HALLORAN: Yeah. Do  
5 you have a question? She wasn't able to hear you.

6 CHAIRWOMAN CURRIE: No, no, no, no.  
7 I just -- I just wish the IEPA representative  
8 would speak a little louder.

9 HEARING OFFICER HALLORAN: Okay.  
10 Thank you. Mr. Porter?

11 MR. PORTER: Yes. Mr. Ettinger  
12 brought up the BMPs and particularly the berming.  
13 Would the Agency agree that there are several ways  
14 other than berming that one who stores salt can  
15 use to minimize stormwater coming into contact  
16 with salt piles?

17 MR. TWAIT: Yes.

18 MR. PORTER: And so it may be  
19 unnecessary for a best management practice to  
20 include berming; is that correct?

21 MR. TWAIT: Correct.

22 MR. PORTER: Thank you.

23 HEARING OFFICER HALLORAN: Thank  
24 you, sir.

1 MR. TWAIT: I believe our language  
2 doesn't specify that berms have to be used.

3 MR. PORTER: Would you agree with  
4 including in the best management practices the  
5 requirement that the permittee should consider  
6 using fixed and mobile berms where appropriate to  
7 redirect flow and taper over the edge of the pad  
8 where possible in order to minimize stormwater  
9 contact?

10 MR. TWAIT: Which -- which one?

11 MR. PORTER: That's actually  
12 proposed language, I believe, from Morton Salt  
13 originally.

14 MR. TWAIT: Do you know which  
15 requirement that was?

16 MR. PORTER: Well, it's in 16 and  
17 in --

18 HEARING OFFICER HALLORAN: Could you  
19 stand, Mr. Porter?

20 MR. PORTER: Sorry.

21 HEARING OFFICER HALLORAN: Thank  
22 you.

23 MR. PORTER: It's in Best Management  
24 Practice 16 in the storage. We proposed it as H.

1 We, being the Ozinga entities. You don't have  
2 that document in front of you.

3 MR. TWAIT: We have taken the  
4 language for letter H from our general permit, and  
5 it just says that working areas should be bermed  
6 and/or sloped to allow snow melt and stormwater to  
7 drain away from the areas. In some cases, it may  
8 be necessary to channel water to a collection  
9 point; such as, a sump holding tank or a lined  
10 basin for collection.

11 MR. PORTER: So you would agree that  
12 there are methods beyond just berming or sloping  
13 that could be utilized to accomplish that same  
14 purpose, correct?

15 MR. TWAIT: Possibly.

16 MR. PORTER: Thank you.

17 HEARING OFFICER HALLORAN: Yes.

18 Mr. Briscoe?

19 MR. BRISCOE: This is Tim Briscoe,  
20 counsel for Morton Salt.

21 Would you agree when you use --  
22 referring to BMP H again, would you agree that  
23 using the word "bermed" can refer to both mobile  
24 and permanent berms?

1 MR. TWAIT: Yes.

2 HEARING OFFICER HALLORAN: Any other  
3 questions? Yes. Mr. Andes?

4 MR. ANDES: Yes. Going back to the  
5 issue of the plan for each Petitioner, let me make  
6 sure, Mr. Twait, that I have identified the areas  
7 where information is publically available.

8 On page 7 in the Board's latest  
9 draft order and in Section 3A there it says, by  
10 specific deadline the dischargers must each  
11 prepare a pollutant minimization program for their  
12 own operations, and then in B, by certain  
13 deadlines they must submit an annual report to  
14 IEPA and make it publically available, which  
15 includes detailed information about what they are  
16 doing, which I expect would incorporate a lot of  
17 the information from their pollutant minimization  
18 program.

19 And then, finally, if you go to  
20 page 10, by a certain deadline, the workgroup has  
21 to submit annual status reports to -- and make  
22 them publically available, which combine and  
23 analyze -- compile and analyze the individual  
24 annual reports into a watershed-wide report as

1 well. Am I correct in all of those aspects, and  
2 the Agency agrees with those aspects of the draft  
3 order?

4 MR. TWAIT: Yes.

5 MR. ANDES: Thank you.

6 HEARING OFFICER HALLORAN: Thank  
7 you. Yes. Ms. Brown?

8 MS. BROWN: To follow-up on your  
9 response to IERG's Question No. 24, which I will  
10 repeat. If USEPA, and then subsequently the  
11 Board, revises the underlying chloride criteria to  
12 be more stringent, how does that affect this  
13 time-limited water quality standard?

14 And your response was, it would  
15 be even more important at that time, which we  
16 agree. But our question is, do you think that or  
17 is it your opinion that any -- anything  
18 procedurally will need to be done to modify the  
19 current time-limited water quality standard to  
20 reflect that updated underlying standard, or if a  
21 more stringent standard is put in place, would  
22 this time-limited water quality standard  
23 automatically provide relief from that more  
24 stringent standard?

1 MR. TWAIT: Yeah. That's a good  
2 question, and I am not quite sure that I know the  
3 answer to that right now.

4 MS. BROWN: Is that the something  
5 you could follow-up with in post-hearing comments?

6 MR. TWAIT: Yeah. We can do that.

7 HEARING OFFICER HALLORAN: Any  
8 questions for the Board?

9 (No response.)

10 HEARING OFFICER HALLORAN: All  
11 right. I do want to note that I had a public  
12 comment sign-up sheet in the back. No one has  
13 signed it.

14 Does any member of the public  
15 want to make a statement before we go off the  
16 record?

17 (No response.)

18 HEARING OFFICER HALLORAN: Seeing no  
19 hands, thank you, Ms. Diers. We will go off  
20 record for a minute and talk about post-hearing  
21 briefing schedules. Thank you.

22 (Whereupon, a discussion was had  
23 off the record.)

24 HEARING OFFICER HALLORAN: In any

1 event, we discussed the transcript would be  
2 finished on February 25th. The parties are going  
3 to e-mail me tomorrow, at the latest Thursday, to  
4 see what their briefing schedules -- what they  
5 have suggested. And then I want to echo  
6 Mr. Fort's sentiments and thank Mr. Andes and  
7 Ms. Diers for pulling everybody together, and  
8 thanks for putting up with me for the last few  
9 years. I know those conference calls were heck.

10 But in any event, I don't really  
11 have anything more to say until I get my order out  
12 regarding the post-hearing briefing schedule.

13 Any other questions?

14 (No response.)

15 HEARING OFFICER HALLORAN: All  
16 right. Thank you so much. I appreciate it.

17 (END OF PROCEEDINGS.)  
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I, KARI WIEDENHAUPT, do hereby certify that the foregoing was reported by stenographic and mechanical means, which matter was held on the date, and at the time and place set out on the title page hereof and that the foregoing constitutes a true and accurate transcript of same.

I further certify that I am not related to any of the parties, nor am I an employee of or related to any of the attorneys representing the parties, and I have no financial interest in the outcome of this matter.

I have hereunder subscribed my hand on the \_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
KARI WIEDENHAUPT, CSR

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