ILLINOIS POLLUTION CONTROL BOARD

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

CREST HILL ILLINOIS, CITY OF JOLIET, JOLIET ILLINOIS, MORTON SALT, INC., CITY OF PALOS HEIGHTS, PALOS HEIGHTS ILLINOIS, VILLAGE OF ROMEOVILLE, ROMEOVILLE ILLINOIS, IMTT ILLINOIS LLC, STEPAN CO., VILLAGE OF PARK FOREST, PARK FOREST ILLINOIS, OZINGA READY MIX CONCRETE, INC., OZINGA MATERIALS, INC., MIDWEST MARINE TERMINALS LLC, VILLAGE OF MOKENA, MOKENA ILLINOIS, VILLAGE OF OAK LAWN, OAK LAWN ILLINOIS, VILLAGE OF DOLTON, DOLTON ILLINOIS, VILLAGE OF GLENWOOD, GLENWOOD ILLINOIS, VILLAGE OF MORTON GROVE, MORTON GROVE ILLINOIS, VILLAGE OF LANSING, LANSING ILLINOIS, VILLAGE OF FRANKFORT, FRANKFORT ILLINOIS, VILLAGE OF WINNETKA, WINNETKA ILLINOIS, VILLAGE OF LA GRANGE, LA GRANGE ILLINOIS, VILLAGE OF CHANNAHON, CHANNAHON ILLINOIS, COOK COUNTY DEPARTMENT OF TRANSPORTATION AND HIGHWAYS, VILLAGE OF NILES, NILES ILLINOIS, SKYWAY CONCESSION COMPANY LLC, VILLAGE OF ELWOOD, ELWOOD ILLINOIS, CITY OF CHICAGO, CHICAGO ILLINOIS, VILLAGE OF CRESTWOOD, CRESTWOOD

PCB 19-21 (Ozinga Materials)
PCB 19-22 (Midwest Marine)
PCB 19-23 (Mokena)
PCB 19-24 (Oak Lawn)
PCB 19-25 (Dolton)
PCB 19-26 (Glenwood)
PCB 19-27 (Morton Grove)
PCB 19-28 (Lansing)
PCB 19-29 (Frankfort)
PCB 19-30 (Winnetka)
PCB 19-31 (La Grange)
PCB 19-33 (Channahon)
PCB 19-34 (CCDTH)
PCB 19-35 (Niles)
PCB 19-36 (Skyway)
PCB 19-37 (Elwood)
PCB 19-38 (Chicago)
PCB 19-40 (Crestwood)
PCB 19-48 (Riverside)
(Time–Limited Water Quality Standard)
(Consolidated)

OF RIVERSIDE,
RIVERSIDE ILLINOIS,

Petitioners,

V.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY,

Respondent.

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

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

I N D E X

E X H I B I T S

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

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

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

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

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

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

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

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

hearing regarding any of these admitted documents.

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

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

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

we also have Member Carter.

Member Carter?

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

HEARING OFFICER HALLORAN: Thank you, Member Carter.

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

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

The order of witnesses that has been agreed on by the parties is as follows: First, MWRD; second, Morton Salt; third, Village of Frankfurt; fourth, Cook County; fifth, Village of Crestwood; sixth, Ozinga; seventh, Citgo; eighth, Openlands; ninth, Illinois EPA.

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

(No response.)

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

MR. ANDES: Okay.

MR. HALLORAN: Thank you.

MR. ANDES: Come on up.

(Whereupon, the witness was duly sworn.)

MR. ANDES: And also me.

(Whereupon, the witness was duly sworn.)

MR. HALLORAN: You may proceed. Thank you.

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

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

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

be good.

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

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

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

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

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

First, in terms of Table 1 of

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

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

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

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

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

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

elaborate on the reasons why MWRD believes the other provisions concerning chloride workgroups are within the Board's authority, but no outreach and education provisions that are intended to reduce chloride levels in receiving streams. Also, comment on whether the individual Petitioners should be required to implement the outreach and education provisions instead of the workgroups."

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

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

Petitioners should be required

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

In response to Question 7 --

MR. RAO: Mr. Andes?

MR. ANDES: Yes.

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

MR. ANDES: Sure.

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

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

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

MR. RAO: Okay.

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

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

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

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

MR. RAO: Mr. Andes?

MR. ANDES: Yes.

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

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

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

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

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

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

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

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

MR. RAO: Thank you.

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

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

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

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

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

situation.

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

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

MR. ANDES: Yes.

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

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

And just to add to that, we had

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

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

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

use does not necessarily require toxicity studies.

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

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

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

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

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

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

MR. RAO: Okay. Thank you.

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

Come on over here:

"Question No. 2: Response to Board's Question 15(i) notes that the relevant chloride concentration for Ruby Street (LDPRCW_01) should be 234 mg/L instead of 255 mg/L. In light of this correction, please comment on whether the proposed interim winter chloride criterion of 280 mg/L in draft Condition No. 5 needs to be revised to a lower concentration. If not, please explain why the correction of the Ruby Street chloride value has no bearing on the proposed interim chloride criterion."

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

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

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

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

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

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

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

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

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

MR. MINARIK: Yes. We are looking

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

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

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

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

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

MR. ANDES: Let me --

MR. MINARIK: Sure.

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

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

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

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

MR. RAO: Okay.

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

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

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

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

MR. RAO: A follow-up question there.

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

MR. ANDES: Let me answer that question.

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

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

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

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

MR. RAO: Okay.

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

water sampling instead of monitoring specific conductance at Channahon."

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

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

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

MR. RAO: Have you submitted that

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

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

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

MR. RAO: Okay. Thank you.

MR. MINARIK: Okay. Thank you.

MR. ANDES: Thank you.

HEARING OFFICER HALLORAN: Yes, Mr. Ettinger?

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

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

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

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

I just have a question regarding

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

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

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

MR. ANDES: Understood.

MR. HALLORAN: Thank you, Mr. Ettinger.

You may proceed.

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

HEARING OFFICER HALLORAN: All

right. Very good.

Oh, we have another question. Ms. Meyers?

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

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

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

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

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

MS. MEYERS: So that's already

occurring, and that data is already being collected?

MR. MINARIK: Yes, it is.

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

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

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

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

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

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

MS. MEYERS: Thank you.

HEARING OFFICER HALLORAN: Anyone else?

(No response.)

HEARING OFFICER HALLORAN: Thank you, Mr. Andes.

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

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

HEARING OFFICER HALLORAN: Off the record, please.

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

(Whereupon, the witness was duly sworn.)

HEARING OFFICER HALLORAN: You may

proceed. Thank you.

MS. PETERSON: Hello, my name is Kim Peterson, and I am the Director of Environment and Sustainability Programs at Morton Salt, one of many Petitioners that supports and is committed to the implementation of a time-limited water quality standard for the defined Chicago Area Waterway System and the Des Plaines River Watershed. Morton appreciates the opportunity to participate in today's hearing and is grateful for the efforts of the Board, the IEPA and other Petitioners and parties in this important matter.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

retention pond."

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

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

HEARING OFFICER HALLORAN: Any questions? Mr. Rao?

(No response.)

HEARING OFFICER HALLORAN: You may proceed. Thank you.

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

(Whereupon, the witness was duly sworn.)

HEARING OFFICER HALLORAN: You may proceed.

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

Please state your name for the record.

MS. SCHAEFFER: Shannon Nichole Schaeffer.

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

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

MS. LAMORE: And where is that located?

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

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

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

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

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

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

MS. LAMORE: What do your professional experiences include?

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

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

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

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

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

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

MS. SHAEFFER: It is.

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

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

The question -- the first

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

My answer is, Not that I am aware.

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

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

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

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

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

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

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

MS. LAMORE: Ms. Schaeffer, is there

any requirement for the Village to do so?

MS. SHAEFFER: No.

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

That is all.

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

HEARING OFFICER HALLORAN: Thank you. Mr. Rao?

(No response.)

HEARING OFFICER HALLORAN: Any questions? Yes.

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

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

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

HEARING OFFICER HALLORAN: Thank

you.

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

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

MS. SHAEFFER: Not that I am aware.

HEARING OFFICER HALLORAN: Okay. You may step down. Thank you so much.

MS. SCHAEFFER: Thank you.

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

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

(Whereupon, the witness was duly sworn.)

HEARING OFFICER HALLORAN: You may proceed.

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

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

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

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

It would be extremely difficult

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

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

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

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

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

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

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

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

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

a sump holding tank or lined basin for collection.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

contact with salt in a working area?

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

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

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

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

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

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

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

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

HEARING OFFICER HALLORAN: Thank you. Any questions?

(No response.)

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

The Village of Crestwood.

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

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

(Whereupon, the witness was duly sworn.)

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

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

HEARING OFFICER HALLORAN: Thank you. Any questions?

(No response.)

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

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

MR. PORTER: Good morning. Rick

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

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

(Whereupon, the witness was duly sworn.)

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

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

MR. SALDARELLI: Yes, I do.

MR. PORTER: Please do.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

where salt piles have been tarped or are under cover.

Accordingly, we hereby offer Exhibits A through E, and respectfully request that the Petition Nos. 2019-20, 2019-21 and 2019-22 be granted and the minor proposed changes we have offered to the best management practices be adopted. I would be happy to answer questions if you have any.

HEARING OFFICER HALLORAN: I'm sorry. Was that Exhibit A, B, C and D is in dog?

MR. PORTER: A through E.

HEARING OFFICER HALLORAN: A through E. Okay. Thank you. Mr. Rao?

MR. RAO: No.

HEARING OFFICER HALLORAN: Any questions?

(No response.)

HEARING OFFICER HALLORAN: Any objection for taking the exhibits?

(No response.)

HEARING OFFICER HALLORAN: So admitted. Thank you. Exhibits A through E admitted.

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

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

HEARING OFFICER HALLORAN: Okay. Thank you, sir. You may step down. Thanks. Let's go off the record for a minute.

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

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

(Whereupon, the witness was duly sworn.)

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

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

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

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

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

Question 19A from the Board.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

residential anti-icing program.

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

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

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

(No response.)

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

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

And my response is, there is

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

And my response, The salt

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

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

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

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

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

specific BMPs?

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

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

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

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

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

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

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

HEARING OFFICER HALLORAN: Any questions?

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

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

raised in captivity. That's pretty standard.

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

MR. HUFF: Medium hard.

MS. KORDAS: Okay. Thank you.

HEARING OFFICER HALLORAN: Mr. Rao?

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

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

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

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

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

MR. HUFF: I would say they are very

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

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

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

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

MR. RAO: Okay. Thank you very much.

HEARING OFFICER HALLORAN: Any

follow-up?

(No response.)

HEARING OFFICER HALLORAN: Thank you, Mr. Huff.

Mr. Fort?

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

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

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

MR. FORT: Good.

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

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

HEARING OFFICER HALLORAN: Thank you, gentlemen.

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

MS. MEYERS: Yes.

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

(Whereupon, a short break was taken.)

(Whereupon, the witness was duly sworn.)

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

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

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

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

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

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

Is that all right?

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

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

Board.

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

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

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

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

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

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

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

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

HEARING OFFICER HALLORAN: Thank you, Ms. Meyers.

Any objections to Openlands Exhibit 1?

(No response.)

HEARING OFFICER HALLORAN: Okay. So admitted.

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

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

MS. MEYERS: Yes.

HEARING OFFICER HALLORAN: Thank you

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

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

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

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

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

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

Were you part of that effort?

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

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

group.

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

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

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

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

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

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

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

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

And I believe the scope of work

will be determined during this planning period, and then after the three-year period, there was an estimation of 21 million for restoration funding that would be made available by U.S. Army Corps of Engineers, and would be paired with Great Lakes Restoration Initiative funding to make improvements all throughout the Chicago River System.

And moving on to the next question. Regarding chloride monitoring, page 8 to 9, you recommend that MWRD must monitor chloride at least once per week at locations within the vicinity of known chloride intolerant aquatic uses.

A. Please clarify if you are aware of the specific locations in the affected waterways with known chloride intolerant aquatic life uses. If so, would it be possible to identify such locations with reference to the nearest MWRD ambient water quality monitoring sites?

MS. MEYERS: Can you please, Laura -- I am handing you a map. Can you please tell me what that's a map of?

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

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

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

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

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

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

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

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

MS. BARGHUSEN: Yes. It is in there.

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

MS. BARGHUSEN: Yes. That's right.

MS. MEYERS: Can I follow up with

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

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

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

MS. BARGHUSEN: Yeah.

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

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

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

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

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

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

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

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

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

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

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

MR. RAO: Just as a follow-up?

MS. BARGHUSEN: Yep.

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

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

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

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

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

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

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

MR. RAO: Okay.

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

MS. MEYERS: That is an objection.

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

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

are trying to get at.

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

MR. RAO: Thank you.

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

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

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

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

MS. BARGHUSEN: Yes.

MS. MEYERS: Does that answer your question?

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

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

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

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

standards.

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

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

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

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

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

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

standard?

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

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

MS. MEYERS: Thank you.

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

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

MS. BARGHUSEN: Yes, it is.

MS. MEYERS: So both are relevant?

MS. BARGHUSEN: Yes. On page 5 you

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

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

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

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

On page 7 you state, Dischargers

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

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

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

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

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

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

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

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

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

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

MR. TWAIT: We were asking about the --

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

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

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

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

MR. TWAIT: They have not been able

to demonstrate a link.

MS. BARGHUSEN: Okay. Thank you. On -- I am here to make sure that existing uses are protected, looking at the existing uses, and basically making sure that spikes, if they are occurring, that we know about them and -- and that the levels of chlorides are not raising above what the sensitive aquatic life can bear. And I think if it's true, that BMPs haven't been linked to chloride improvements, and we should definitely work on linking them to that.

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

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

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

HEARING OFFICER HALLORAN: And I will sustain that question.

MS. MEYERS: Thank you.

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

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

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

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

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

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

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

MS. MEYERS: Citgo.

MS. BARGHUSEN: Citgo. I'm sorry.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

not about including winter temperatures in my testimony.

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

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

And I think that concludes the questions.

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

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

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

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

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

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

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

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

MS. BARGHUSEN: I don't know.

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

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

MS. BROWN: Okay.

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

(No response.)

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

MS. BARGHUSEN: Thank you.

MS. MEYERS: Thank you.

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

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

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

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

Okay. Raise your hand and the

court reporter will swear you in. Thank you.

(Whereupon, the witness was duly sworn.)

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

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

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

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

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

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

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

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

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

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

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

The Agency does not.

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

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

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

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

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

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

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

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

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

The rules were approved on June 24th of 2019.

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

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

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

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

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

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

MR. ETTINGER: The Sierra Club.

HEARING OFFICER HALLORAN: The

Sierra Club.

MR. ETTINGER: Good enough.

Openlands.

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

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

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

MR. ETTINGER: Thank you.

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. RAO: Follow-up. Do you think

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

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

MR. RAO: Okay.

HEARING OFFICER HALLORAN: Member Santos has a question.

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

MR. TWAIT: No.

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

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

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

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

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

MEMBER SANTOS: Okay. So --

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

MEMBER SANTOS: Okay. Thank you.

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

permits, if that's the plan?

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

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

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

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

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

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

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

HEARING OFFICER HALLORAN: Yes, Mr. Andes.

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

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

MR. TWAIT: Yes.

MR. ANDES: Thank you.

HEARING OFFICER HALLORAN: Mr. Ettinger?

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

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

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

MR. TWAIT: I don't know that their

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

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

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

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

MR. TWAIT: Yes.

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

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

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

the plan in some fashion?

MR. TWAIT: Yes, I believe so.

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

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

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

MR. ETTINGER: I am asking the Agency.

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

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

HEARING OFFICER HALLORAN: Thank you. You may proceed.

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

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

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

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

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

HEARING OFFICER HALLORAN:

Mr. Andes?

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

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

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

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

MR. ANDES: Thank you.

HEARING OFFICER HALLORAN: You may proceed.

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

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

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

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

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

MR. TWAIT: That would have been before.

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

MS. TWAIT: We have not.

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

MS. BROWN: Yes.

HEARING OFFICER HALLORAN: Thank you.

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

MR. TWAIT: I believe that's accurate.

MR. RAO: Okay. Thanks.

MR. TWAIT: Question No. 2. In

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

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

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

I believe I have mentioned them

already in the previous questions.

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

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

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

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

MS. BROWN: Thank you.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

As proposed, the answer would be

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

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

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

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

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

I specifically don't know.

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

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

HEARING OFFICER HALLORAN: You may.

MR. TWAIT: Yes.

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

MR. TWAIT: Yes.

MR. ANDES: Thank you.

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

MR. ANDES: Okay.

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

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

No. 12. Clarify what Illinois

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

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

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

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

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

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

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

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

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

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

Question 16.

MS. BROWN: Follow-up?

HEARING OFFICER HALLORAN: Yes.

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

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

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

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

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

Illinois or other states.

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

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

MR. TWAIT: Yes.

MR. HUFF: Thank you.

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

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

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

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

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

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

It would mean a new loading of chloride.

Question No. 19.

MR. RAO: Follow-up to that?

MR. TWAIT: Yes.

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

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

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

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

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

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

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

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

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

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

as an off-set.

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

MR. ANDES: Thank you.

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

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

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

The answer would be yes.

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

Certainly not at any point in

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

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

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

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

And that concludes questions

from IERG.

HEARING OFFICER HALLORAN: Ms. Diers, I just wanted to ask you, you said you were going to e-file this, Exhibit A?

MS. DIERS: Yes.

MR. FRONCZAK: I do have a question.

HEARING OFFICER HALLORAN: Yes. Somebody had a question?

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

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

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

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

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

MR. FRONCZAK: Thank you.

HEARING OFFICER HALLORAN: Yes, sir.

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

MR. TWAIT: Yes.

MR. ETTINGER: Yes.

CHAIRWOMAN CURRIE: That's fascinating.

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

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

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

HEARING OFFICER HALLORAN: Could you speak up, please?

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

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

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

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

I am pleased to announce we have Chairperson Currie joining.

CHAIRWOMAN CURRIE: Late, but she is here.

HEARING OFFICER HALLORAN: The court

reporter -- do you have a question?

CHAIRWOMAN CURRIE: Thank God for the court reporter.

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

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

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

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

MR. TWAIT: Yes.

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

MR. TWAIT: Correct.

MR. PORTER: Thank you.

HEARING OFFICER HALLORAN: Thank you, sir.

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

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

MR. TWAIT: Which -- which one?

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

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

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

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

MR. PORTER: Sorry.

HEARING OFFICER HALLORAN: Thank you.

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

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

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

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

MR. TWAIT: Possibly.

MR. PORTER: Thank you.

HEARING OFFICER HALLORAN: Yes. Mr. Briscoe?

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

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

MR. TWAIT: Yes.

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

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

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

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

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

MR. TWAIT: Yes.

MR. ANDES: Thank you.

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

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

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

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

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

MR. TWAIT: Yeah. We can do that.

HEARING OFFICER HALLORAN: Any questions for the Board?

(No response.)

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

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

(No response.)

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

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

HEARING OFFICER HALLORAN: In any

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

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

Any other questions?

(No response.)

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

(END OF PROCEEDINGS.)

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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