



1 HEARING OFFICER HORTON: Good morning  
2 everyone, I think we'll get started, I think we've  
3 got most everyone we're expecting so... Alrighty,  
4 my name is Vanessa Horton and I am the Hearing  
5 Officer for this rulemaking proceeding entitled In  
6 The Matter of Proposed Amendments to Groundwater  
7 Quality, 35 Illinois Administrative Code 620. The  
8 board docket number for this rulemaking is  
9 R22-18. Also present today from the Board are  
10 Chair of the Board Barbara Flynn Currie; Board  
11 member Michelle Gibson; attorney advisor to  
12 Michelle Gibson Chloe Salk; Environmental  
13 Scientist, Essence Brown and Chief Environmental  
14 Scientist to the Board, Anand Rao.

15 This hearing is governed by the Board's  
16 procedural rules. All information that is  
17 relevant and that is not repetitious or privileged  
18 will be admitted into the record. Please bear in  
19 mind that any questions posed today by the Board  
20 and its staff are intended solely to help develop  
21 a clear and complete record for the Board's  
22 decision and do not reflect any decision on the  
23 proposal, testimony or other questions.

24 For the sake of our court reporter,

1 please speak clearly and avoid speaking at the  
2 same time as another person so that we can help  
3 produce a clear transcript. If you're asking a  
4 question, each time you do so please state your  
5 name and the organization you represent prior to  
6 any questions or statements today. Also if  
7 talking about -- talking about sections of the  
8 rules, please spell out the section letter such as  
9 620.101D as in dog.

10 We'll have a lot of chemical names  
11 coming up today so I will be doing my best with  
12 attempting to pronounce them but again for the  
13 sake of our court reporter and me, please go slow  
14 when saying either the full chemical name or its  
15 abbreviation and Ms. Court Reporter, please feel  
16 free to stop any of us if we're going too fast or  
17 speaking too softly. There is a sign up sheet at  
18 the back table over there to sign up for public  
19 comments so if there are any members of the public  
20 in person here today, please go ahead and write  
21 your name on the list. Also anyone can submit  
22 written public comments to the Board's clerks  
23 office on line and the Board weighs oral and  
24 written public comments equally.

1           On December 7, 2021, the Illinois  
2 Environmental Protection Agency proposed that the  
3 Board amend part 620 of its groundwater quality  
4 regulations. Included with its initial filing was  
5 the Agency statement of reasons as well as the  
6 prefiled testimony of two Agency witnesses, Carol  
7 Hawbecker and Lynn Dunaway. Our first hearing was  
8 held on March 9, 2022, and at the close of that  
9 hearing it was decided that there is a need for  
10 further follow up questions from participants to  
11 the Agency witnesses. That is the focus of the  
12 second hearing. Notice for this hearing was  
13 posted on March 23, 2022, in the Chicago Sun Times  
14 and March 24, 2022, in the Springfield Journal  
15 Register.

16           The Board received four sets of prefiled  
17 follow up questions from different participants  
18 and in addition, the Board itself filed its own  
19 set of prefiled follow up questions for Agency  
20 witnesses. The Agency has filed prefiled answers  
21 to the participants follow up questions. As to  
22 the order of today's proceedings, I propose we  
23 begin with swearing in the two Agency witnesses  
24 and then moving onto the questions from the

1 participants. To simplify things, the order I  
2 have chosen for participant follow up questions is  
3 the order in which the participants prefiled their  
4 questions with the clerk.

5 So we will begin with the National Waste  
6 and Recycling Association, then the American  
7 Chemistry Council, then the PFAS Regulatory  
8 Coalition, then Dynegy, then any other participant  
9 who is present here today who has follow up  
10 questions, then the Board's questions and then any  
11 public comment from members of the public who are  
12 here today. I anticipate taking a ten minute  
13 break around 10:30 a.m. and then breaking for an  
14 hour at lunch from noon to one p.m. and then  
15 another afternoon break at around three. We'll  
16 end today at around five. At that point we can  
17 discuss where we are with the questions and  
18 answers and come up with a plan for tomorrow. If  
19 we have just a handful of members of the public  
20 who are here today to make public comment, I will  
21 ask that we do public comment after we return from  
22 our morning break at around 10:45 a.m. and before  
23 we move onto the questions, I'd just like to take  
24 a minute here at the start of the day to let

1 everyone know our plans for the third hearing of  
2 this rulemaking.

3 I believe at our prehearing conference  
4 and at the end of the Hearing Officer order that  
5 followed, I said that we would have dates and  
6 locations for the third hearing. The third  
7 hearing will focus on testimony from participants  
8 and happily I can announce today that we have  
9 reserved a room in Chicago with videoconferencing  
10 ability for November 1, 2 and 3. The room is in  
11 the State's new building at 555 West Monroe in  
12 Chicago and I will issue a hearing officer order  
13 with notice of the hearing on Thursday. The  
14 hearing officer order will also include a schedule  
15 for prefiling deadlines and we will set July 29 as  
16 the date for participants to prefile testimony.  
17 We will set September 15 as the date for everyone  
18 to prefile questions for those witnesses and then  
19 we will set October 15 as the date for  
20 participants to prefile answers.

21 Okay, are there any questions about the  
22 order of today's proceedings or any questions  
23 about the schedule? All right, if not we'll move  
24 onto swearing in the Agency witnesses. Ms. Court

1 Reporter, could you please swear in Mr. Lynn  
2 Dunaway.

3

4 (LYNN DUNAWAY, being first duly sworn,  
5 will testify under oath in today's proceedings.)

6

7 HEARING OFFICER HORTON: Could you  
8 please swear in Carol Hawbecker.

9

10 (CAROL HAWBECKER, being first duly  
11 sworn, will testify under oath in today's  
12 proceedings.)

13

14 MS. TERRANOVA: We actually have two  
15 other members that are available to provide  
16 answers to questions if you want to swear them in  
17 now.

18 HEARING OFFICER HORTON: Sure, that'd be  
19 great if you could say your name and spell it for  
20 the court reporter and she can swear you in.

21 MR. SUMMERS: Michael Summers,  
22 S-u-m-m-e-r-s.

23

24 (MICHAEL SUMMERS, being first duly

1 sworn, will testify under oath in today's  
2 proceedings.)

3  
4 MR. DUNN: Greg Dunn, D-u-n-n.

5  
6 (GREG DUNN, being first duly sworn, will  
7 testify under oath in today's proceedings.)

8  
9 HEARING OFFICER HORTON: So the Agency's  
10 prefiled testimony has already been entered into  
11 the record as a thread and for the sake of  
12 expediency, I will enter the prefiled follow up  
13 questions and IEPA's follow up answers now as  
14 exhibits. I will also issue an updated exhibit  
15 list at the end of this hearing so we left off at  
16 the end of our first hearing with Exhibit 15 so  
17 Exhibit 16 will be the National Waste and  
18 Recycling Association prefiled follow up  
19 questions. Exhibit 17 will be the American  
20 Chemistry Council prefiled follow up questions.  
21 Exhibit 18 will be PFAS Regulatory Colalition  
22 prefiled follow up questions. Exhibit 19 will be  
23 Dynegy prefiled follow up questions. Exhibit 20  
24 will be the Pollution Control Board's prefiled

1 follow up questions and Exhibit 21 will be IEPA's  
2 prefiled answers to follow up questions. If the  
3 Agency is ready we will move onto questions.  
4 Alright, first up is the National Waste and  
5 Recycling Association. I put a podium up here if  
6 people want to come up for questions or if you  
7 want to stay in your seat.

8 MS. MANNING: Good morning, Madame  
9 Hearing Officer, Madame Chairman, members of the  
10 Board and representatives of the Board and  
11 representatives of EPA, thank you for being here  
12 and thank you for your good work on this proposal,  
13 all of the work on this proposal. Claire Manning  
14 with the National Waste and Recycling  
15 Association. I think I'll start with our question  
16 No. 25B which deals with the practical  
17 quantification limit and it states that in the  
18 question we asked, the importance of the  
19 elimination of the PQL and the Agency agreed that  
20 it never proposed before the removal of the PQL,  
21 the practical quantification limit, and you said  
22 that the practical quantification limit is being  
23 replaced due to updates to the SW846 methodology.  
24 Would you agree that the practical quantification

1 limit has been a foundational aspect of  
2 environmental regulation under the Groundwater  
3 Protection Act since its inception and that  
4 laboratories currently use the PQL to determine  
5 the appropriate standards?

6 MS. HAWBECKER: For the first part of  
7 your question, yes, I agree that the PQL has  
8 previously been used as the foundation however the  
9 methodology the SW846 on which the PQL has been  
10 based has no longer, they have updated their  
11 levels of quantitation and they now use the LLOQ,  
12 the lower level of quantitation.

13 MS. MANNING: But the PQL itself, the  
14 current definition which is being proposed to be  
15 removed already talks about it says practical  
16 quantification limit means the lowest  
17 concentration or level that can be reliably  
18 measured within specified limits of precision and  
19 accuracy during routine laboratory operating  
20 conditions in accordance with test methods for  
21 evaluating solid waste and it refers to EPA  
22 publication SW846, so in that, that particular  
23 methodology has already incorporated into the  
24 definition of PQL, why does the Agency feel it

1 necessary to remove the definition of PQL?

2 MS. HAWBECKER: Well, some of the labs  
3 have moved from PQL to LLOQs and minimum reporting  
4 levels, not all of them but some have and again  
5 due to the updates with SW846 which is now  
6 considering the LLOQ as being the lowest level of  
7 quantitation instead of the practical quantitation  
8 limit or level, it's -- that is why it's being  
9 updated is because of updates that have been made  
10 within the SW846 series.

11 MS. MANNING: Which is incorporated  
12 already in the definition which is being removed?

13 MS. HAWBECKER: Right.

14 MS. MANNING: And the agency on the  
15 basis of your answer it appears that the Agency  
16 understands that only a limited number of  
17 laboratories understand how to do the new  
18 methodology that's proposed in this rules; is that  
19 correct?

20 MS. HAWBECKER: I don't know the number  
21 of laboratories that understand how to use the  
22 updated methodology that is recommended in SW846,  
23 I don't know the number of labs.

24 MS. MANNING: But your answers do

1 suggest that you are aware that many do not?

2 MS. HAWBECKER: Some do not, I am sure,  
3 however again this is an update that is in the  
4 SW846 so it's something that they will need to  
5 transition over with the methodologies.

6 MS. MANNING: Did the Agency -- and I  
7 think evident from your answers as well is the  
8 Agency does not consider that the cost of  
9 laboratories doing that should be a consideration  
10 that the Board considers in this rulemaking, is  
11 that a correct statement?

12 MS. HAWBECKER: I can't speak to cause,  
13 that's -- my background is risk assessment and  
14 toxicology, I don't know what the costs would be.  
15 Again updating lab equipment is the cost of doing  
16 business for a lab. Updating methodologies is a  
17 normal again cost of doing business but I don't  
18 know what a national cost would be.

19 MS. MANNING: Let me ask you this, but  
20 for the inclusion of the new PFAS constituents, I  
21 am going to use PFAS just to include them all, I  
22 am not going to get into any specifics, but for  
23 the inclusion of the PFAS constituents, would the  
24 Agency have come here today and proposed the PQL

1 which now is going to be eliminated for all  
2 constituents?

3 MS. HAWBECKER: No, it's the proposal of  
4 the elimination of the PQL is independent of the  
5 introduction of PFAS.

6 MS. MANNING: Okay, thank you.

7 MR. RAO: May I ask a follow up  
8 question?

9 MS. MANNING: Sure.

10 MR. RAO: Wanted to know if USEPA is  
11 also replacing PQL with the LLOQ in their  
12 regulations?

13 MS. HAWBECKER: That I do not know, they  
14 are moving on a different pace than we are. We  
15 know we will have to update several regulations by  
16 removing the PQL and changing the terminology. I  
17 am sure EPA will be doing the same, however again  
18 it's not based on changes in methodology that we  
19 have made, it's based on changes in methodology  
20 that SW846 has made.

21 MR. RAO: Do you believe that this  
22 change would be consistent with whatever is being  
23 utilized at the federal level in other programs?

24 MS. HAWBECKER: I am not aware, I do not

1 know.

2 MS. MANNING: Are you aware that or is  
3 anybody at the Agency aware that the USEPA still  
4 uses that methodology 846, it's embedded in the  
5 RPR program, the PQL is, I am sorry.

6 MS. HAWBECKER: Right, however again  
7 when they make up dates with the SW846, I believe  
8 that should be updated on the federal level, I  
9 cannot say whether it would be.

10 MS. MANNING: You also indicated, the  
11 Agency indicated, that it considered all of the  
12 comments of all the stakeholders in coming forward  
13 with this proposal to the Board, yet at least one  
14 of the stakeholders I know, the PFAS Coalition  
15 suggested in their comment that you wait because  
16 of the laboratory issues and because of the  
17 insecurity or instability or unknowns about  
18 whether laboratories can actually meet this new  
19 kind of methodology, that there be a phased in  
20 approach. Other stakeholders suggested, including  
21 the Groundwater Advisory Committee, that you wait  
22 for the Federal Government to do something first,  
23 so could you answer why those -- how you consider  
24 those comments and why you rejected them?

1 MS. HAWBECKER: Well, one of the reasons  
2 why is the uncertainty, there's not much  
3 uncertainty with the drinking water levels with  
4 PFAS. Method 537.1 has been around for a few  
5 years now starting with 537 and then with  
6 revision. Those minimum reporting levels can meet  
7 to parts per trillion. We now have method 533  
8 that's coming online or I should say is a final,  
9 that's another drinking water method and they have  
10 their MRLs too so there is not a whole lot of  
11 uncertainty with the ability for sites or samples  
12 to meet the minimum reporting limits.

13 MS. MANNING: And again your testimony  
14 would suggest that the Agency understands that the  
15 -- that the proposed number is a drinking water  
16 limitation?

17 MS. HAWBECKER: Yes.

18 MS. MANNING: Based on drinking water  
19 safety?

20 MS. HAWBECKER: Well, it's a potable  
21 water.

22 MS. MANNING: Drinking?

23 MS. HAWBECKER: Standard.

24 MS. MANNING: Right.

1 MS. HAWBECKER: Which includes  
2 groundwater, we are groundwater quality standards  
3 are potable resource groundwater.

4 MS. MANNING: Part of the reason you are  
5 driving this proposal now and immediately as I  
6 understand is the information you receive from  
7 your survey which you attached much of that  
8 information in attachment 1 which we thank you for  
9 but we have a little bit of questions about it.  
10 Did you put all of the data from the laboratory  
11 analysis that was relevant to that survey in  
12 attachment 1 or do you have that data and would  
13 you provide it in this record so that our folks  
14 can look at the actual data that led to your  
15 conclusions in attachment 1?

16 MS. HAWBECKER: Well, it would be  
17 thousands and thousands of pages for one, I am not  
18 sure what it would tell you more than what the  
19 table did -- would tell you. Do you have a  
20 specific question regarding it or concern?

21 MS. MANNING: Yes, were samples below  
22 the PQL eliminated in evaluating the number that  
23 the Agency came up with?

24 MS. HAWBECKER: Which number?

1 MS. MANNING: Well, the appropriate  
2 standard, the number that you are bringing here to  
3 the Board, you know, as the standard for the PFAS  
4 whichever number applies to whichever -- when you  
5 evaluated the data, did you eliminate certain  
6 samples if they were not quantifiable?

7 MS. HAWBECKER: Quantifiable as in they  
8 were below the minimum reporting level?

9 MS. MANNING: Yes.

10 MS. HAWBECKER: Yes.

11 MS. MANNING: They were eliminated  
12 then?

13 MS. HAWBECKER: Yes.

14 MS. MANNING: So did you utilize the PQL  
15 in coming up with the proposal?

16 MS. HAWBECKER: No, we utilized the MRL.

17 MS. MANNING: What technical basis does  
18 the Agency site for the assumption and I think  
19 this is throughout your answers that method 8327  
20 is capable of achieving the same quantitation  
21 limits as method 537, if I am wrong about that  
22 conclusion let me know.

23 MS. HAWBECKER: Yes, that's not  
24 accurate. Method 8327 first of all is a

1 nonpotable groundwater method, however the primary  
2 issue with being able to use it or not is whether  
3 it can meet the quantitation limits and at this  
4 point it cannot meet quantitation limits. For  
5 PFOA at the very least and I believe PFOS may be  
6 an issue with that one too where it cannot meet  
7 the proposed groundwater quality standard but  
8 again it's a nonpotable method so we would expect  
9 MRLs to be higher.

10 MS. MANNING: Excuse me just a minute.  
11 Part of the reason you are moving forward as I  
12 understand it from your answers with the -- with  
13 the standard as the drinking water standard with  
14 the strictness of the standard and the potable,  
15 you site various types of Groundwater Protection  
16 Act and you site the Board's early determination  
17 in the late '80s about resource waters and that,  
18 you know, that if something could possibly be  
19 drinking water, it ought to have a drinking water  
20 standard for groundwater protection standard as  
21 opposed to some sort of other risk based standard,  
22 is that a fair characterization of the Agency's  
23 rational here?

24 MS. HAWBECKER: Yes, a potable resource

1 groundwater is considered just that, capable of  
2 being turned into drinking water at any time.

3 MS. MANNING: Since the Board's decision  
4 in the late '80s related to the groundwater -- the  
5 groundwater standards, various risk based  
6 approaches to protection of the environment have  
7 been established, the site remediation program,  
8 the TACO rules, the UST as well that consider that  
9 where water is not really subject to being  
10 drinking water, that that risk base approaches  
11 would be appropriate. Did the Agency take any  
12 approach in terms of risk based approaches to its  
13 standard where it's not at all likely that the  
14 water -- the groundwater that's being monitored  
15 say at landfills or SRP sites or old industrial  
16 sites would be subject to be drinking water?

17 MS. HAWBECKER: Again in the general  
18 sense with 742 in cleanup sites, if it is not  
19 going to be considered for us to be not  
20 considering it as potable resource, then they  
21 would have to have an institutional control that's  
22 stating that that groundwater cannot be used as a  
23 potable resource.

24 MS. MANNING: And an institutional

1 control is only allowed for as I understand the  
2 SRP program pursuant to parts?

3 MS. HAWBECKER: Well, any program that  
4 utilizes section 742.

5 MS. MANNING: Right. For example at  
6 landfills where landfills have a groundwater  
7 management zone or groundwater impact assessment  
8 and they find proximate to the landfill PFAS in a  
9 well that is not likely to ever become a potable  
10 drinking water well, nonetheless that standard  
11 would apply; is that correct?

12 MS. HAWBECKER: I don't know, can you  
13 speak to the landfills?

14 MR. DUNN: Repeat the question, please.

15 MS. MANNING: Could you repeat the  
16 question?

17 MR. DUNN: I was listening, I just want  
18 to make sure I got it right.

19 MS. MANNING: That's alright, I don't  
20 want to repeat myself and change it so I'd rather  
21 have her do it for us.

22 (Court reporter read back the question.)

23 MS. MANNING: Yes.

24 MR. DUNN: The standards, again

1 throughout all the programs we define groundwater  
2 as class 1, class 2, class 3 or class 4, that's  
3 identified in the 620 regulations so whether a  
4 monitoring well can be used as a drinking water  
5 source has no bearing on it, you are still trying  
6 to determine the class of groundwater to determine  
7 whether it is a class of groundwater that could be  
8 used for potable drinking.

9 MS. MANNING: But the -- as I understand  
10 it, this proposal has the same number for the PFAS  
11 constituents regardless of whether it's class 1,  
12 class 2 or class 3 groundwater; is that correct?

13 MS. HAWBECKER: Yes, that is correct, I  
14 am sorry.

15 MS. MANNING: Thank you.

16 MR. RAO: Is it alright if I --

17 MS. MANNING: Please.

18 MR. RAO: For landfills, is there -- do  
19 landfills come in a class 4 groundwater, you know,  
20 the zone of contamination in landfills --

21 COURT REPORTER: Could you please repeat  
22 the last part?

23 (Mr. Rao took mask off.)

24 MR. RAO: I'm sorry, Ms. Manning was

1 asking you about the application of PFAS and the  
2 proposed PFAS standards when you are dealing with  
3 monitoring wells for landfills and my question was  
4 whether those monitoring wells for landfills in  
5 the part 811 are classified as class 4 groundwater  
6 and if so whether these PFAS standards apply to  
7 those class 4 waters?

8 MR. DUNN: You still have to address the  
9 PFAS whether the groundwater has a class 1 or  
10 class 4, it doesn't matter, you still have to  
11 address the contamination within that groundwater,  
12 did I answer your -- I don't think I answered your  
13 question.

14 MR. RAO: My question was whether the  
15 proposed standards apply to the landfills, you  
16 know, because if you look at class 4 criteria and  
17 under 620, class 4 includes the zone of  
18 contamination for landfills so it is class 4, it  
19 is not class 1 or class 2 or class 3, the question  
20 is whether these standards that you propose apply  
21 to those landfills under part 811 or 814?

22 MR. DUNN: Yes, they would apply, it'd  
23 be no different than any other contaminants coming  
24 off the landfill, you still have to address them.

1 MS. MANNING: So to follow up with  
2 that -- I'll let you follow up with that, go  
3 ahead.

4 MR. DUNN: Let me clarify, so in a  
5 landfill you have leachae, you have groundwater  
6 coming through, you have background wells to  
7 determine what your background concentrations are,  
8 that's what you are trying to do is trying to  
9 determine what is the landfill, what are the  
10 groundwater -- what is the groundwater coming  
11 through the landfill, what is it picking up and  
12 migrating down to the downgradient wells? So we  
13 have a background concentration and then we have  
14 our downgrading concentrations. Well, we would  
15 have to address anything that is exceeding that  
16 background concentration so we have to address  
17 that one way or another. Hopefully I have  
18 clarified sort of.

19 MR. RAO: I think you have but my  
20 question was what number applies for the landfills  
21 downgradient whether class 1 standard or class 2  
22 standard or something based on their background  
23 values.

24 MR. DUNN: Right, okay.

1 MR. RAO: I am done, Ms. Manning.

2 MS. MANNING: Thank you. So if a  
3 downgradient well from a landfill contains PFAS  
4 and it's detected in the landfill, it's the  
5 Agency's expectation, is it not, that that is an  
6 immediate violation if there is an exceedance of  
7 the number that's proposed in this proceeding?

8 MR. DUNN: It is an immediate, is that  
9 what you said?

10 MS. MANNING: Yes.

11 MR. DUNN: It would be handled like all  
12 of our other exceedances as we go through, you  
13 have an exceedance at the downgradient wells, it's  
14 no different than any other exceedance that you  
15 have whether it be for lead, for iron or whatever,  
16 whatever contaminant you have.

17 MS. MANNING: The -- we asked a lot of  
18 questions related to the groundwater management  
19 zone that's contained in part 620 and that is  
20 already contained in part 811, the landfill  
21 regulations and the answers were a bit confusing  
22 but let me try to clarify to ask the Agency a  
23 couple of questions about what the Agency's  
24 intention is now as to whatever changes they may

1 contemplate to the 811 series to change how the  
2 ground water management zone works right now. My  
3 understanding from your answers is that you intend  
4 the same groundwater management zone structure  
5 that exists, part 620, to apply to landfills which  
6 already is the case so the Agency contemplates no  
7 change to that, is that my understanding? Am I  
8 correct in that understanding?

9 MR. DUNN: Yes.

10 MS. MANNING: One of the comments that  
11 the stakeholders made, I think it was National  
12 Waste and Recycling Association, during your  
13 stakeholder comment was that the Bureau of Land  
14 please vet these regulations so -- so that they  
15 would have a better understanding of what the cost  
16 of corrective action may be because corrective  
17 action is going to be very, very important given  
18 this particular proposal. Has the Bureau of Land  
19 vetted these regulations prior to promulgating  
20 them with the Board seeking their promulgation?

21 MR. DUNN: As far as the cost for  
22 remediation, is that what your question relates  
23 to?

24 MS. MANNING: Yes, and in this

1 particular proposal and whether there is any  
2 contemplated changes to part 811 that would lessen  
3 the cost of corrective action?

4 MR. DUNN: We will definitely look at  
5 changes to part 811. As far as the cost, that is  
6 hard because we don't know what the number is  
7 going to be in the end. This is a hearing to  
8 determine the concentrations for PFAS and until we  
9 know what those are, we don't have a universe of  
10 sites to the determine what is going -- or what  
11 will be needed to be cleaned up and what those  
12 costs will be.

13 MS. MANNING: Bur you are proposing a  
14 particular standard that will be applicable as I  
15 understand your testimony?

16 MR. DUNN: Bureau of Land is separate  
17 from the 620 groundwater quality standards.  
18 Bureau of Land has -- our cleanup programs has the  
19 landfills of -- the 620 groundwater quality  
20 standards are outside of that, we have our own set  
21 of regulations such as as you said before the site  
22 remediation program, the underground storage tank  
23 program, RPRRA, our landfills and to vet the cost,  
24 we are not sure yet until we actually have

1 concentrations that we know that we can go forward  
2 and figure out what those costs will be and I  
3 guess that is it, yeah.

4 MS. MANNING: Historically though any  
5 newly adopted groundwater standard immediately  
6 becomes enforceable in the context of whatever  
7 regulatory programs utilize such standards, would  
8 you agree with that? I mean if a program adopts  
9 the groundwater standard which all the regulatory  
10 programs do, you have to meet the groundwater  
11 standards?

12 MR. DUNN: Uh-huh.

13 MS. MANNING: Why are not costs not a  
14 valid consideration right now in terms of what the  
15 standard is being proposed?

16 MR. DUNN: Because we don't know what  
17 those costs are and we don't know, as you start  
18 alluding to some of the programs, landfills are  
19 different from the site remediation program and  
20 the underground storage tank program, where those  
21 costs may be very minimal or none depending on the  
22 use of 742.

23 MS. MANNING: 742, the site remediation  
24 program?

1 MR. DUNN: Site remediation program uses  
2 742 so therefore you can --

3 MS. MANNING: Right, but landfills don't  
4 use part 742?

5 MR. DUNN: No, they do not, that's why I  
6 said that separately.

7 MS. MANNING: While an institutional  
8 control might be relevant to a groundfill  
9 remediation, it is not relevant to a landfill?

10 MR. DUNN: Correct.

11 MS. MANNING: In fact, landfills will  
12 not be able to achieve a closure if these  
13 groundwater standards are proposed and they are  
14 not met, correct me if I am wrong.

15 MR. DUNN: It'd be no different than any  
16 other contaminant they have through the landfill,  
17 if they have exceedances of other contaminants,  
18 they still would not be able to be closed, yes.

19 MS. MANNING: Except this particular  
20 contaminant when you are talking about PFAS, would  
21 you agree it's a bit different in that it's  
22 ubiquitous in the environment and it's not  
23 something that is related to the operation of the  
24 landfill or -- but it's within what the landfill

1 accepts and is now obligated to treat?

2 MR. DUNN: I could not answer that  
3 question whether it's ubiquitous or not.

4 MS. MANNING: In response to our  
5 question 15E, you state that you don't have the  
6 authority to excuse compliance with the Board  
7 regulation or waive its enforcement, I take that  
8 to mean if there is an exceedance of a groundwater  
9 standard you are going to immediately have the  
10 authority to file a violation notice. If it's  
11 true that the Agency doesn't have the authority to  
12 excuse compliance with the Board regulation, is  
13 there no flexibility then in your Agency  
14 discretion to determine whether something's a  
15 violation of the Act or not?

16 MR. DUNN: You know, we will do what we  
17 can to work with stakeholders as we have said in  
18 the past and again those changes especially for  
19 landfills, we're going to have to take a look at  
20 those set of regulations and if changes need to be  
21 made, we will make those changes in a separate  
22 rule maybe, sorry.

23 MS. MANNING: Your answer to 15E  
24 suggests when we ask the same line of questioning,

1 you stated that establishment of these standards  
2 should not be delayed in favor of administrative  
3 cleanup of other rules or programs that utilize or  
4 incorporate the 620 standards. Does this  
5 statement then mean that the Agency only  
6 contemplates the administrative cleanup of part  
7 811 and 807 following the Board's promulgation of  
8 this rule?

9 MR. DUNN: Only 807 and 811, no, we are  
10 going to have to look at all of our set of  
11 regulations if that was the question. We are  
12 going to have to look at all set of regulations,  
13 742 has changes that will need to be made along  
14 with 807, 811 and again we get back to what is the  
15 purpose of 620 and I am going off script here a  
16 little bit, sorry, but the purpose of 620 is to  
17 define or establish groundwater quality standards  
18 that are protective to the human health and the  
19 environment, that's what we are trying to do here  
20 and outside of that, we will take a look at the  
21 regulations for the landfills and any other  
22 programs that need to be changed at that point at  
23 a separate rulemaking.

24 MS. MANNING: Understood, but other

1 states have taken other approaches related to the  
2 PFAS regulations, would you agree with that?  
3 Other states have strategies that don't start with  
4 groundwater values and standards to look at first,  
5 that instead they do strategies in turn looking at  
6 the source of the PFAS and has the Agency thought  
7 of a broader approach as opposed to coming to the  
8 Board with a groundwater standard that has not  
9 been legislatively vetted but that is really a  
10 very major concern for how it's going to play out  
11 much different than other groundwater standards  
12 might be, ammonia, nitrogen, everybody understands  
13 those but PFAS is something different, has the  
14 Agency looked at other approaches as opposed to  
15 starting with groundwater quality standard?

16 MS. HAWBECKER: I am not aware that we  
17 have, groundwater quality standards is where we  
18 normally start. Once again for the 620s when it's  
19 detected in groundwater, that is where it sits off  
20 the requirement for establishing numeric standards  
21 so in looking at it in other contexts so far as  
22 the 620 goes, no, we have not because we're again  
23 looking at groundwater quality and protection of  
24 groundwater.

1 MS. MANNING: In our question 31 you  
2 state in answer to our question 31, you stated  
3 addressing the source of background concentrations  
4 in groundwater is beyond the scope of this part  
5 620 rule making, sounds consistent with your  
6 answer here, how and when would the Agency support  
7 that question being addressed? Will the Agency  
8 agree that it's important to address the  
9 background concentrations of PFAS that already  
10 exist as opposed to starting with a groundwater  
11 quality standard that treaters such as wastewater  
12 treatment plants and landfills are going to have  
13 to treat to a drinking water standard?

14 MS. HAWBECKER: Yeah, again the answer  
15 is the same as, right, what we are dealing with  
16 are groundwater quality and the provisions that  
17 set numeric standards and the requirements within  
18 620 have -- this is where the basis is, I agree  
19 that there is other media that may be involved,  
20 there are other studies coming out however the  
21 groundwater is something that we know about and  
22 that we have toxicity criteria for so that we can  
23 set standards so that is where we begin.

24 MS. MANNING: The Groundwater Protection

1 Act in section 8 sets various factors that the  
2 Board needs to consider in terms of whether it  
3 develops a certain specific standard or not and  
4 one of the factors is that the experience that  
5 other states may have had related to their  
6 groundwater standard program, so we have asked you  
7 previously to let us know and put on the record  
8 how the Agency evaluates the approaches of other  
9 states. Your answers have given the Board  
10 information related to other states but I don't  
11 see any answer that the Agency articulates what  
12 experience they took from other states to develop  
13 the proposal they are raising with the Board right  
14 now.

15 MS. HAWBECKER: Well, again other states  
16 use different requirements, other states use their  
17 own requirements, we have our specific  
18 requirements that are in 620 for how those  
19 standards are developed. These are not -- other  
20 states do other things within their own regulatory  
21 framework, we have to work within Illinois'  
22 framework.

23 MS. MANNING: Has the Agency considered  
24 actually going to the legislature to have a more

1 robust and entirety of treatment of the PFAS  
2 issue?

3 MS. HAWBECKER: I am not aware, I don't  
4 know, that's not something that I address.

5 MS. MANNING: I think that is all I have  
6 at this time. May I come back for follow-up if I  
7 need to?

8 HEARING OFFICER HORTON: Yeah, that  
9 sounds good. Next up in my order is American  
10 Chemistry Council.

11 MR. RISOTTO: Good morning, I am Steve  
12 Risotto like the rice dish, R-i-s-o-t-t-o, I'm  
13 from the American Chemistry Council, appreciate  
14 the opportunity to be here this morning and I  
15 appreciate Ms. Manning's asking a lot of questions  
16 to give me a chance to get organized. So I guess  
17 I want to ask sort of an elephant in the room  
18 question, last week EPA announced interim lifetime  
19 health advisories for two of the substances  
20 included in this proposal, PFOA and PFOS that are  
21 lower than what is in this proposal, how will that  
22 impact this proposal if at all?

23 MS. HAWBECKER: At this time it does not  
24 impact at all, the toxicity assessments that are

1 going on at the federal level for which those  
2 health advisories were based, they're still in  
3 peer review and they are also still in draft form  
4 and at this point we do not feel comfortable using  
5 draft toxicity values or proposals in the 620  
6 regulations. We are monitoring what is happening  
7 on the federal level and when they become final,  
8 we will evaluate them but at this point the  
9 interim health advisory levels are based on draft  
10 toxicity values for PFOA and PFOS. The PFBS and  
11 HFPO-DA, those are based on final toxicity data  
12 and it is the same toxicity data that we are using  
13 to propose groundwater quality standards.

14 MR. RISOTTO: We are so glad to hear  
15 that you are not going to follow up on EPA's draft  
16 numbers for PFOA and PFOS but do I ask about PFBS  
17 EPA's lifetime health advisories are considerably  
18 higher than what is in this proposal. If the  
19 IEPA's hierarchy is to use EPA finalized toxicity  
20 values, will you then realize your value to EPA's  
21 lifetime health advisory?

22 MS. HAWBECKER: What we are doing is,  
23 the difference is the toxicity is the same however  
24 the exposure assessments are not the same and

1 that's where the difference is and what we are  
2 proposing to do in the 620s is to use a child  
3 exposure across the board for noncarcinogens and  
4 that is the difference as PFBS at the federal  
5 level I believe is using an adult and we propose  
6 to use a child across the board is more sensitive  
7 receptor, we do not wish to break out into an  
8 adult versus a child and individual exposure  
9 assessments for each one, we would prefer to use  
10 the standard one across the board and that's the  
11 difference.

12 MR. RISOTTO: Do you recall what health  
13 end point the PFBS number is based on?

14 MS. HAWBECKER: I believe it is thyroid.

15 MR. SIROTTA: Do you have a reason to  
16 believe that children are more sensitive than  
17 adults for that end point or any other end point  
18 actually?

19 MS. HAWBECKER: I do not, I do not know  
20 that. I do know that as children are getting  
21 exposed, they are reaching the concern for a  
22 children's body weight and ingestion for  
23 groundwater and so that they should also be  
24 protected.

1 MR. SIROTTA: I apologize, I am not from  
2 around here so I don't understand some of the  
3 background and the regulations that are already in  
4 place so excuse if some of my questions are not as  
5 well informed as they should be but I wanted to  
6 follow up on a question from the previous speaker  
7 and also our question 1 on lab certifications, I  
8 believe that I heard you say in response to the  
9 question that labs had to certify to these  
10 methods, why would they have to?

11 MS. HAWBECKER: Certify to these  
12 methods, I am not exactly sure, could you --

13 MR. RISOTTO: Sure, certification for  
14 537.1 and 533 which are two -- at least two of the  
15 primary standards that you are pointing to for  
16 this rulemaking.

17 MS. HAWBECKER: Are you discussing  
18 accreditation?

19 MR. RISOTTO: You want to have labs that  
20 are accredited to do the methods?

21 MS. HAWBECKER: Right.

22 MR. RISOTTO: Your answer to our  
23 question in previous is that you don't know how  
24 many labs in the state are accredited?

1 MS. HAWBECKER: No, we just began the  
2 scope of accreditation, I know there are several  
3 that have already signed up and are going through  
4 the accreditation process as we speak, it does  
5 change on a weekly basis, the number of labs that  
6 have requested and the accreditation and are  
7 moving through that process.

8 MR. RISOTTO: So onto the question of  
9 hierarchies for the selection of values that the  
10 Agency uses and this is I think responsive to our  
11 questions, follow up questions, 2, 3 and 4. In  
12 the case of three of the substances, you are using  
13 values from ATSDR, the Agency for Toxic Substances  
14 and Disease Registry and for another you are using  
15 a value from California's Health Hazard Assessment  
16 Office, all three or both of those if I understand  
17 it are tier 3 sources of data, have I got that  
18 right?

19 MS. HAWBECKER: Yes, according to the  
20 USEPA, that is how they rate.

21 MR. SIROTTA: In those tier 3 are other  
22 state evaluations, other government agency  
23 evaluations like Health Canada for example, so my  
24 question is what basis does the Agency use to

1 decide which of those tier 3 values to use?

2 MS. HAWBECKER: The ranking, the ranking  
3 is ATSDR is No. 1, Cal EPA is No. 2, let me see  
4 what No. 3 is, what is it, it's perhaps the PPRTV  
5 appendix values and then there is one final  
6 ranking in there I believe.

7 MR. RISOTTO: So apology, so there's a  
8 subtier, within tier 3 there is a subtier of --

9 MS. HAWBECKER: Tier 3 ranks within  
10 itself, yes.

11 MR. RISOTTO: So actually I do want to  
12 -- I do want to acknowledge we are in agreement  
13 on at least one issue that the chemicals GenX are  
14 not used in firefighting foam, I appreciate it.

15 MS. HAWBECKER: Yes, I was confused with  
16 another one, there are so many, it gets difficult  
17 and I should have known with GenX because that is  
18 a manufacturer, that's a manufacturing process.

19 MR. RISOTTO: We can be overly sensitive  
20 on things like that, I appreciate that. But that  
21 sort of I guess kind of goes sort of raises the  
22 question of how you selected these six PFAS so if  
23 I look at the information in the record in terms  
24 of occurrence, you only found GenX at one

1 location?

2 MS. HAWBECKER: Thus far.

3 MR. RISOTTO: Thus far, and because it  
4 is a processing aid for the production of  
5 fluoropolymers, it's unlikely that you're going to  
6 find it in many places cause it's not used in all  
7 -- in other than a very select number of places  
8 so why is Genx on the list, why are the GenX  
9 chemicals on the list?

10 MS. HAWBECKER: Because it was detected  
11 in groundwater and it is a threat to human health.

12 MR. RISOTTO: Now onto dose edition and  
13 I apologize, I know this is a process you have had  
14 in place but I don't understand it, I am willing  
15 to bet I am not the only person in the room and we  
16 had asked a follow up question but your answer was  
17 not clear, so if I have two substances that are  
18 designated as being -- as affecting the same  
19 health end point, let's say liver toxicity and  
20 both of those substances have groundwater standard  
21 values of a hundred parts, parts whatever and in a  
22 particular sample I find 75 parts of each of those  
23 two, so now my health index for the two substances  
24 is going to be above one which triggers action,

1 what happens after that, it's not clear to me how  
2 do you address that noncompliance?

3 MS. HAWBECKER: It depends on the  
4 program you are within, again part 742 has --  
5 basically states you have to meet the adjusted  
6 standards or the adjusted remediation objectives.  
7 What it is is when you have two that are affecting  
8 the same target organ or have the same health  
9 effect, it's going to be a double whammy on the  
10 system and so we can't have them to keep  
11 individuals if they are found within the same  
12 groundwater sample, then we would need to evaluate  
13 them as a mixture and then they would have to  
14 either do pathway exclusion or something else for  
15 remediation.

16 MR. RISOTTO: I mean could the approach  
17 be addressing just one of the two and getting it  
18 below a hundred parts?

19 MS. HAWBECKER: Absolutely.

20 MR. RISOTTO: Or one or the other or  
21 both?

22 MS. HAWBECKER: The requirement is  
23 simply it has to meet a hazard index of 1.

24 MR. RISOTTO: Very good. All right, I

1 think that is all the questions I have. I may  
2 reserve the opportunity to come back but thank you  
3 very much.

4 HEARING OFFICER HORTON: Sounds good,  
5 next on my list is the PFAS Regulatory Coalition.

6 MR. ANDES: Good morning, good morning,  
7 I'm Fred Andes for the PFAS Regulatory Coalition  
8 and I have a few questions, first on the  
9 analytical method issue, as I understand it and  
10 correct me if this is not correct, the only method  
11 the EPA has approved for groundwater programs is  
12 8327; is that correct?

13 MS. HAWBECKER: For nonpotable water.

14 MR. ANDES: For SW846 which governs  
15 groundwater generally, it's not limited to  
16 nonpotable water?

17 MS. HAWBECKER: SW8327 states it's for  
18 nonpotable water.

19 MR. ANDES: So as to -- and the only  
20 method approved for -- the only methods approved  
21 for drinking water are 533 and 537.1?

22 MS. HAWBECKER: Yes, that is correct at  
23 this time.

24 MR. ANDES: So as to classes of

1 groundwater in Illinois, other than class 1, what  
2 method would be required to be used?

3 MS. HAWBECKER: Well, the class 2  
4 groundwater quality standard is the same as the  
5 class 1 because the treatment is not available at  
6 this point so you would still need to use method  
7 537.1 at a minimum to meet the PFOA proposed  
8 groundwater quality standard, it's the only one  
9 it's the lowest concentration MRL.

10 MR. ANDES: But it's not approved for  
11 nonpotable groundwater, correct?

12 MS. HAWBECKER: Right, because it's not  
13 nonpotable groundwater.

14 MR. ANDES: Right, but you are  
15 specifying drinking water generally is looked upon  
16 as a fairly clean matrix, right?

17 MS. HAWBECKER: Uh-huh.

18 MR. ANDES: And class 2 groundwater is  
19 not potable but you are requiring use of a  
20 drinking water method?

21 MS. HAWBECKER: Yes, and that's common,  
22 there are several class 2 standards that require  
23 drinking water standards. If they do not have the  
24 chemical specific criteria in order to be allowed

1 a treatment factor to be applied to the class 2,  
2 then they are class 1 and it is more than PFAS,  
3 there are several of them and the reason why is  
4 because part of the class 2 circumstance is to  
5 be -- the ability to bring it into class 1  
6 standards if necessary.

7 MR. ANDES: So EPA has not gone through  
8 an approval process for those methods for use in  
9 nonpotable situations, right?

10 MS. HAWBECKER: Which methods?

11 MR. ANDES: 533 and 537.1.

12 MS. HAWBECKER: No, they are for potable  
13 resource.

14 MR. ANDES: But you are requiring them  
15 be used for nonpotable resource just to be clear,  
16 don't say you do it in other situations, question  
17 is do you require it to be used in a nonpotable  
18 situation?

19 MS. HAWBECKER: For which contaminant  
20 because several of them we do require them to use  
21 class 1.

22 MR. ANDES: For PFOA or PFOS.

23 MS. HAWBECKER: Yes, they don't have the  
24 treatability factors that allow them to allow for

1 a treatment factor that would allow them to become  
2 a class 1 standard if necessary so therefore yes,  
3 that would be the same.

4 MR. ANDES: So one could be found liable  
5 for violations of a class 2 standard based on a  
6 method that hasn't been approved by EPA?

7 MS. HAWBECKER: Again I am not  
8 understanding what you are saying. Could you  
9 rephrase it.

10 MR. ANDES: Those two methods, 533 and  
11 537.1, have not been approved by EPA for use of  
12 nonpotable groundwater, correct?

13 MS. HAWBECKER: Yes, however for class 2  
14 for the PFOA and PFOS we must continue to consider  
15 it with the class 1 standard so they can meet --  
16 if they can meet the class 1 standard which is  
17 also the class 2 standard, then they should be  
18 able to be fine.

19 MR. ANDES: They should be able to be  
20 fine but they are using methods not approved for  
21 that situation so what confidence can we have in  
22 the results when you are using a method that is  
23 not approved for that particular matrix?

24 MS. HAWBECKER: Well, again it's general

1 class for groundwater that you're working with  
2 that you were talking about, class 2, so one of  
3 the provisions is that class 2 groundwater has to  
4 have an ability or I should say treatments should  
5 be available in order to allow it to become class  
6 1 groundwater if needed. So in the case of PFOA  
7 and PFOS, they do not have the treatment factors  
8 that will allow it to be treated to become a class  
9 1 source, therefore in the case of PFOA and PFOS  
10 and several other chemicals, then the class 2  
11 standard remains with the class 1 standard, again  
12 it's got to be considered as a potable source.

13 MR. ANDES: You are requiring use of a  
14 nonapproved method?

15 MS. HAWBECKER: I am requiring use of a  
16 method that can meet the standard.

17 MR. ANDES: Second of all, let's go back  
18 to the cost of compliance issue and I think we  
19 heard from different bureaus here but I want to  
20 ask this question as the Agency as a whole and you  
21 all can answer separately if you'd like but the  
22 Agency so far has made no attempt to determine the  
23 cost for compliance with these proposed standards  
24 for PFOA and PFOS; is that correct?

1 MR. DUNN: The cost of compliance will  
2 depend on the program and that will be taken care  
3 of through the program itself.

4 MR. ANDES: So the answer is yes then,  
5 you have made no attempt -- the Agency has made no  
6 attempt yet to determine the compliance cost for  
7 these numbers that are being proposed by the  
8 Agency?

9 MR. DUNN: Cause it depends on the  
10 program --

11 MR. ANDES: Please answer yes or no.

12 MR. DUNN: Yes, it is because it depends  
13 on the program, yes.

14 MR. ANDES: So as of yet, the Agency,  
15 please state yes or no, has made no attempt to  
16 determine the cost to comply with the proposed  
17 standards?

18 MR. DUNN: Yes.

19 MR. ANDES: Thank you.

20 HEARING OFFICER HORTON: Asked and  
21 answered, Mr. Andes.

22 MR. ANDES: Now, as to groundwater  
23 standards being set by other states, we had  
24 provided information particularly in a report from

1 ECOS concerning various other state programs and I  
2 will refer and I have copies of the -- this is  
3 Exhibit C to our questions from March 18, 2022, so  
4 it should already be in the record and I'll go --  
5 I'd like to review some of the information in that  
6 exhibit because we had asked for the Agency's  
7 analysis and assessment of this information and  
8 really have not obtained that yet so I'm going to  
9 go to appendix B of that report which specifically  
10 concerns state groundwater PFAS guideline  
11 criteria, not drinking water standards or other  
12 standards but groundwater standards and if the  
13 Agency witnesses have copies, they can please  
14 refer to those, if not I have extra copies here.

15 MS. TERRANOVA: Did you say Exhibit B?

16 MR. ANDES: It was Exhibit C to the  
17 questions of March 18.

18 MS. HAWBECKER: Did you have a question,  
19 I am sorry.

20 MR. ANDES: I have some specific  
21 questions, so as to appendix B to just walk  
22 through a few numbers, the Alaska number for PFOA,  
23 let's focus on PFOA for a moment, their guideline  
24 level is 0.4 as compared to the Illinois level of

1 0.002. Has the Agency made any attempt to assess  
2 that number and -- but not only part of my  
3 question is not only the number because I know  
4 that the Agency's position is that other state  
5 levels are automatically unranked tier 3 levels  
6 therefore the Agency did not assess them but my  
7 question is more not only did the Agency assess  
8 this number which is significantly higher than the  
9 Illinois number but also you will notice these  
10 tables show all the assumptions and values that  
11 went into their evasion (spelled phonetically) of  
12 those state levels. Have you assessed how those  
13 state inputs in other states including Alaska,  
14 let's start with them, differ from Illinois in  
15 whether -- and compared those to determine whether  
16 there are any aspects of these other state  
17 approaches that should be followed here?

18 MS. HAWBECKER: Well, no, again we deal  
19 with Illinois regulations that is specified within  
20 the 620 is how we set the numbers. Other states  
21 have their own requirements and so we look at them  
22 and we see what they're doing but ultimately we  
23 have to rely on our own regulations.

24 MR. ANDES: But my question is not about

1 the regulations, my question is for example if the  
2 state used a different end point or a different  
3 relative source contribution or a different  
4 drinking water intake rate or a different  
5 reference dose, those are not -- have you assessed  
6 those scientific end points where they make  
7 different choices than Illinois made to determine  
8 why they made those choices which invariably end  
9 up with higher numbers?

10 MS. HAWBECKER: We made choices based on  
11 our hierarchy for our toxicity value doses. We  
12 made choices for our exposure assessment based on  
13 RSL, the regional screening levels, and their  
14 methodology for using a child for noncarcogenic  
15 values plus its a more sensitive end point than an  
16 adult which is what we currently have in part 620  
17 which we want to update to a child. Other than  
18 that, with the RSEs, we are going with the USEPA  
19 RSEs. We still believe that there is a great deal  
20 of other sources for groundwater other than  
21 groundwater to contribute to that to the source  
22 contribution so yes, we did not -- again we base  
23 it on what Illinois does, we do not base it on  
24 what other states do. We can pick and choose

1 every kind of toxicity data we want but again that  
2 is why we have a hierarchy.

3 MR. ANDES: But when another state  
4 decided in reviewing some of the same studies to  
5 base their levels on other -- on other studies  
6 than you did, have you looked at those studies and  
7 those choices by those states including their  
8 rational to determine whether perhaps they in a  
9 way that's allowable under Illinois regulations  
10 made different choices that perhaps you should  
11 follow?

12 MS. HAWBECKER: Again we worked on the  
13 hierarchy that we have discussed since 2008 and  
14 620 regulations, these are the basis, that is why  
15 we chose the ATSDRs for example as opposed to  
16 individual states. I do not know what the State  
17 of Alaska did, I assume they used their  
18 regulations for developing this.

19 MR. ANDES: So you haven't reviewed the  
20 basis set forth here say by Alaska or by Florida  
21 which is higher than Illinois or in Michigan which  
22 is higher than Illinois or North Carolina or  
23 Minnesota --

24 MS. TERRANOVA: I think it's been asked

1 and answered, I think he's restated the same  
2 question, it's been asked and answered.

3 HEARING OFFICER HORTON: Granted.

4 MR. ANDES: You have not reviewed their  
5 rational --

6 HEARING OFFICER HORTON: Mr. Andes, the  
7 witness has said she has not so please move on.

8 MR. ANDES: Well, I'm unclear on whether  
9 you reviewed any of their documents to determine  
10 how they made their choices?

11 MS. HAWBECKER: Again I am saying that  
12 we have our own regulations that we must deal  
13 with. Our Office of Toxicity Assessment consists  
14 of three people, we do not have time to look at  
15 every individual state specifically when we do not  
16 have -- when we have our own regulations that we  
17 deal with and our own hierarchy that we work  
18 with.

19 MR. ANDES: So I take it from that that  
20 your staff here of three has not reviewed any of  
21 the rationals from these other states?

22 MS. HAWBECKER: We reviewed the ATSDR  
23 rationals which is the ones we used, again it was  
24 on the hierarchy. We used California EPA for the

1 dot -- for the toxicity that they had, again it  
2 was on the hierarchy. We used PPRT for PFBS  
3 because again it was on the hierarchy. I mean  
4 these are -- the hierarchy is what we use to  
5 develop our toxicity assessments.

6 MR. ANDES: Where is the hierarchy  
7 specified in the regulations?

8 MS. HAWBECKER: The hierarchy was  
9 discussed in the previous rulemaking of which the  
10 Board agreed and the hierarchy was used in the  
11 previous rulemaking in the 2008 which promulgated  
12 in 2012.

13 MR. ANDES: But the hierarchy itself is  
14 not in the regulations, am I right?

15 MS. HAWBECKER: No, it just -- it is in  
16 620 reg -- it's in the 620 testimony and the  
17 rulemaking.

18 MR. ANDES: So it's in the Agency's  
19 testimony and the rulemaking?

20 MS. HAWBECKER: That this is the  
21 hierarchy that is to be used, yes.

22 MR. ANDES: And is the Agency's vision  
23 there's no flexibility to depart from their  
24 hierarchy?

1 MS. HAWBECKER: We don't see a point in  
2 this particular case cause we have toxicity data  
3 that is available within our hierarchy.

4 MR. ANDES: So the answer then is -- my  
5 question was does the Agency have flexibility to  
6 depart from the hierarchy, period?

7 MS. HAWBECKER: We don't see a reason  
8 for it.

9 MR. ANDES: So even if other states have  
10 solid scientific rationals that perhaps could add  
11 to the scientific validity of what Illinois does,  
12 you don't see a reason to review that  
13 information?

14 MS. HAWBECKER: We review the toxicity  
15 sources that are within our hierarchy which are  
16 all considered acceptable sources and they are  
17 considered acceptable sources by the USEPA. In  
18 fact in the May 22 RSL updates, ATR was included,  
19 ATSDR, the values were included for the PFAS  
20 constituents that ATSDR evaluated so no, I don't  
21 feel there is a need that we need to move on to  
22 what each individual state does because again they  
23 have their own requirements.

24 MR. ANDES: That's all the questions I

1 have, thank you.

2 HEARING OFFICER HORTON: Dynegy, would  
3 you like to start? We are going to take a break  
4 at 10:30, Ms. Joshi, do you have any follow up  
5 questions?

6 MS. JOSHI: No, I don't have any follow  
7 up.

8 HEARING OFFICER HORTON: Sounds good, so  
9 I think that that moves us to any other  
10 participants here today who would like to ask  
11 follow up questions and I had talked to -- I am  
12 sorry.

13 SONDRA: Sondra.

14 HEARING OFFICER HORTON: Sondra from the  
15 International Molybdenum Association, so how about  
16 you go and then IERG. If you could state your  
17 name and your organization.

18 SONDRA CARY: Of course. Yes, good  
19 morning everyone, I'm Sondra Cary from the  
20 International Molybdenum Association, we call it  
21 Moly for short, it's easier. The gentleman from  
22 the American Chemistry Council said that he felt  
23 that he was a little distant to Illinois, well I  
24 have come over from England so I would just like

1 to ask a procedural question really first of all.  
2 We submitted comments on the 25th of June 2021 to  
3 the IEPA and then we noticed later on that we  
4 weren't listed so then I made contact with IPCB  
5 and they indicated that the comments that we had  
6 sent to IEPA haven't been received by IPCB, they  
7 now have been, we have now been added to the  
8 list. I noticed that there are answers, written  
9 answers, to prefiled questions, we haven't seen  
10 anything from ours so I'd just like to ask may we  
11 expect to receive written response to our  
12 questions?

13 HEARING OFFICER HORTON: I believe your  
14 questions were filed on the date of our last  
15 hearing which was after the date that we required  
16 prefiled questions to be filed so it was entered  
17 in as a public comment so it is in the record,  
18 it's in the Board's docket. There are some  
19 miscommunication so perhaps now would be the time  
20 that you could ask those questions that have not  
21 been answered to the witnesses who are here before  
22 you.

23 MS. SONDRRA CARY: That means that we  
24 won't receive written answers and now is the

1 opportunity to ask the questions?

2 HEARING OFFICER HORTON: I don't believe  
3 so because it was filed as public comment, I will  
4 leave it up to you Ms. Terranova.

5 MS. TERRANOVA: Can you repeat the  
6 question, if we will be responding to them?

7 HEARING OFFICER HORTON: Yes, it was  
8 filed as a public comment on March 9 which is the  
9 day of our first hearing so --

10 MS. TERRANOVA: We don't have a problem  
11 responding to them, we can do that as part of  
12 another proposed hearing in follow up so yeah,  
13 we're happy to answer them.

14 MS. SONDR A CARY: If you could we would  
15 appreciate it, so thank you. We did have a  
16 question about the methodology that was being used  
17 because it uses child intake and I was hearing  
18 just now that -- my question was are you just  
19 doing that for molybdenum or are you doing that  
20 across the board for all substances?

21 MS. HAWBECKER: All substances.

22 MS. SONDR A CARY: You are doing that for  
23 all substances.

24 MS. HAWBECKER: It's to allow for a more

1 sensitive receptor, it's not just PFAS, it's all  
2 substances that have health based guidelines or  
3 health based groundwater quality standards  
4 developed which is not all of our groundwater  
5 quality standards and again it's for  
6 noncarcinogens, yes.

7 MS. SONDRRA CARY: Molybdenum may be a  
8 little different to other substances being looked  
9 at today in a sense that molybdenum is an  
10 essential element for human health, plants and  
11 animals, so I was just wondering do you make any  
12 distinction then within that methodology to  
13 account for essentiality?

14 MS. HAWBECKER: Can you repeat that, I  
15 am sorry.

16 MS. SONDRRA CARY: Molybdenum may be a  
17 little different to other substances being looked  
18 at here in that molybdenum is an essential trace  
19 element so it's necessary for all human, plants  
20 and animal life.

21 MS. HAWBECKER: Right.

22 MS. SONDRRA CARY: So I am just wondering  
23 within your methodology if you take that  
24 essentiality into account, if you factor that in

1 when you are making calculations?

2 MS. HAWBECKER: Well, no because what we  
3 do is we based it on adverse risk for molybdenum.

4 MS. SONDR A CARY: You based it on  
5 adverse risk?

6 MS. HAWBECKER: Yes, it's based on a  
7 reference dose, the level at which no adverse risk  
8 occurs.

9 MS. SONDR A CARY: The reference dose is  
10 based on -- is that the IRIS dose.

11 MS. HAWBECKER: I believe it's the IRIS  
12 but I would have to doublecheck.

13 MS. SONDR A CARY: Because that is just  
14 my -- my third question is a concern about the  
15 data source, data sources that are being used in  
16 the sense that the IRIS database for molybdenum  
17 was last updated in 1992 so that is 30 years out  
18 of date.

19 MS. HAWBECKER: I agree.

20 MS. SONDR A CARY: There has been very  
21 significant advances in terms of chemical  
22 management which has meant a huge amount of work  
23 is being done in terms of generating protocol  
24 compliance and test data and you were just

1 mentioning to the previous person that you use  
2 ATSDR and I --

3 MS. HAWBECKER: For some chemicals, yes.

4 MS. SONDRRA CARY: So my question is will  
5 you use it for molybdenum?

6 MS. HAWBECKER: We would have to take a  
7 look, again the toxicity hierarchy in 2021 have  
8 updated and has recognized what you are saying is  
9 that some of these IRIS values are incredibly old  
10 and there's more updated information with the  
11 ATSDRs and some of the other toxicity sources that  
12 we use and so USEPA for their hierarchy which  
13 again is the hierarchy that we use is going  
14 through and making changes to certain chemicals  
15 regarding that very circumstance and I would have  
16 to look back to see one, if molybdenum is one of  
17 those or if it's going to be one of those that  
18 they intend to update but I am aware that that is  
19 happening. MS. SONDRRA CARY: Well, that is  
20 positive and for the case of molybdenum as I said  
21 the IRIS database is 1992 but there is a US ATSDR  
22 molytox profile, toxicology profile for molybdenum  
23 which was published in 2020 and that does actually  
24 take huge amounts --

1 MS. HAWBECKER: Yes, it has.

2 MS. SONDRRA CARY: Much better into  
3 account all the more recently and more robust data  
4 that scientist is being generated on molybdenum  
5 effect.

6 MS. HAWBECKER: I agree, and what it is  
7 again IRIS is the No. 1 source and -- but again  
8 the recognition within the hierarchy and the USEPA  
9 is that some of those IRIS numbers are out of date  
10 and they have begun to make changes in updates  
11 throughout their regional screening levels,  
12 toxicity of sources to use ATSDRs, more up to date  
13 subchronic levels as they call it because when  
14 they use the PK they can adjust it with to make it  
15 chronic so that is what they have been in the  
16 process of doing.

17 MS. SONDRRA CARY: Well, thank you, it's  
18 excellent that there is that recognition as well  
19 as we been saying with the ATSDR profile in 2020  
20 we would hope that that can be referenced as a  
21 data source, that is all, thank you very much.

22 HEARING OFFICER HORTON: Great. Would  
23 you like to go before the break, IERG?

24 MS. BROWN: Yes, we just have a couple.

1 HEARING OFFICER HORTON: Okay, great.

2 MS. BROWN: Hi, I am Melissa Brown,  
3 M-e-l-i-s-s-a B-r-o-w-n, with the Illinois  
4 Environmental Regulatory Group also known as IERG,  
5 I-E-R-G, we just have a few follow up questions  
6 from responses we have heard today, first one  
7 having to do with communications with USEPA and  
8 specifically whether the Agency has had any  
9 dialogue or communications with USEPA concerning  
10 the recent interim updated drinking water health  
11 advisory either during its development stage or  
12 after it's been published?

13 MS. HAWBECKER: Yes.

14 MS. BROWN: What is the nature of those  
15 communications?

16 MS. HAWBECKER: Just discussions  
17 regarding the rule out of the health advisory  
18 limits and discussions of the basis and things  
19 more of those nature, not necessarily of the  
20 development of the HALs themselves.

21 MS. BROWN: Can you provide more  
22 information on what USEPA said as to the rule out  
23 and the development of the health advisory?

24 MS. HAWBECKER; Basically what it was is

1 they provided us all their question and answer  
2 sheets, talking points, things like that and  
3 that's really about as far as it went, just  
4 discussing the -- you know, the difference between  
5 the interims based on the drafts and then the two  
6 that are also final, you know, the differences and  
7 things of that sort.

8 MS. BROWN: Were those communications  
9 specific to this hearing or generally just IEPA  
10 reaching out to USEPA regarding these interim  
11 health advisories or was it also specific to the  
12 development of the drinking water MCLs for PFAS?

13 MS. HAWBECKER: Well, this isn't for  
14 MCLs, this is particularly 620 as groundwater, it  
15 is not an MCL although I understand that the  
16 toxicity assessments are part of the USEPA's  
17 process to develop an MCL but no, it wasn't  
18 anything like that. Those toxicity assessments  
19 because they are still in draft form and still in  
20 peer review, those are subject to change so no, we  
21 don't feel like we are going to be making any  
22 changes until something becomes final and then we  
23 will be looking at it to see what -- you know, to  
24 see what the evaluations are but no, there's not

1 been any, you know, we didn't contact them and say  
2 we are proposing these values, they are not  
3 consistent with the interim HALs cause again they  
4 are based on draft toxicity.

5 MS. BROWN: Right, and when you say when  
6 we are proposing these values, you mean the part  
7 620 values in this rulemaking?

8 MS. HAWBECKER: Yes.

9 MS. BROWN: Outside of those  
10 communications regarding the interim updated  
11 drinking water health advisory, has the Agency had  
12 any additional communications with USEPA since our  
13 last hearing about the proposed standards and its  
14 rulemaking?

15 MS. HAWBECKER: No.

16 MS. BROWN: At the last hearing the  
17 Agency said that it was just beginning the process  
18 of establishing the MCLs for drinking water for  
19 PFAS, I was wondering if the Agency could provide  
20 an update today about the status of the  
21 development about the MCLs?

22 MR. SUMMERS: At this point there is no  
23 update, we are still in the process of organizing  
24 internal organization and looking for the ability

1 to promulgate and determine what the values,  
2 appropriate values, are so no change.

3 MS. BROWN: So there is no -- at this  
4 point no estimated timeframe for when there might  
5 be some stakeholder outreach?

6 MR. SUMMERS: Not at this time.

7 MS. BROWN: On the development of the  
8 drinking water MCLs for PFAS, has the Agency  
9 considered USEPA's recently updated drinking water  
10 health advisory?

11 MR. SUMMERS: At this point in time we  
12 are still -- there's been no change, it's still  
13 extremely preliminary, that has not been  
14 considered at this point in time.

15 MS. BROWN: Following up on a question  
16 from the PFAS Coalition, so it was made pretty  
17 clear that during this rulemaking, the costs of  
18 compliance of using the proposed standards here is  
19 not being considered because the costs are  
20 specific to the different programs that would use  
21 whatever standard is adopted here so I just wanted  
22 to confirm and really just clarify that whatever  
23 standard is adopted in this rulemaking, there will  
24 be ample opportunity in future rulemakings such as

1 the rulemaking to incorporate the standard into  
2 part 742 into the TACO program, there will be  
3 ample opportunity during that rulemaking to  
4 consider and really evaluate technical feasibility  
5 of using the standard as well as economic  
6 reasonableness, cost of compliance, etc.?

7 MR. DUNN: Yes.

8 MS. BROWN: That's all I have, thank you  
9 very much.

10 HEARING OFFICER HORTON: Great, we will  
11 adjourn for a ten minute break, let's say, we will  
12 come back at 10:40. I'd like to go off the record  
13 here.

14 (Short break was taken.)

15 HEARING OFFICER HORTON: We're at I  
16 think 10:42, all right, welcome back everyone, we  
17 will go back on the record. As I mentioned before  
18 or before the break why don't we go with any  
19 questions -- any public comments from members of  
20 the public who are here today, we will do those  
21 then we'll ask the Board's follow up questions and  
22 then any remaining follow up questions from  
23 participants and then we'll adjourn.

24 MS. TERRANOVA: We have a follow up

1 statement that we wanted to make in response to a  
2 question and I am just not sure when we should do  
3 that or what would be best.

4 HEARING OFFICER HORTON: Is it lengthy?

5 MS. TERRANOVA: No, it was just in  
6 response to Mr. Andes' question regarding the  
7 consideration of other states, in particular  
8 Florida, Alaska and -- was it Florida?

9 MS. HAWBECKER: Florida.

10 MS. TERRANOVA: It was Florida, Alaska  
11 and Florida, I did want -- Carol has an additional  
12 response to that question.

13 HEARING OFFICER HORTON: Let's do that  
14 now, Ms. Hawbecker.

15 MS. HAWBECKER: I did want to follow up,  
16 I did take a look at the appendix B state  
17 groundwater PFAS guide line criteria for Alaska  
18 and Florida and they both appear to use the  
19 toxicity data that was available for developing  
20 the 2016 health advisories which the USEPA said  
21 are no longer in effect, so they would not be  
22 adequate to use in any case but I just wanted to  
23 clarify that, that those particular ones that were  
24 specifically mentioned are relying on point of

1 departure developed from the 2016 health  
2 advisories.

3 HEARING OFFICER HORTON: We'll continue  
4 on with comments from members of the public and I  
5 have five people who signed up. If somebody  
6 hasn't signed up, still needs to, there is still  
7 another sheet back there so we'll begin and I'd  
8 like -- we got five people so let's limit  
9 ourselves to five minutes per comment if that is  
10 okay. First Ray McElheny, sorry if I'm  
11 mispronouncing it.

12 MR. MCELHENY: Hi, my name is Ray  
13 McElheny, I am here with my wife and my wife's  
14 niece as well as a group of friends, we are from  
15 the south side of Chicago area of Joliet,  
16 Crestwood. We are here today to encourage the  
17 Illinois Pollution Control Board to apply these  
18 standards as soon as possible. We think it's very  
19 important to protect the health of Illinois  
20 citizens, I am sorry, I get nervous.

21 HEARING OFFICER HORTON: No problem,  
22 take your time.

23 MR. MCELHENY: I feel like there is so  
24 much to say especially after listening to the

1 various questions and comments. Obviously there  
2 is always a business concern and I totally  
3 understand that perspective but the perspective of  
4 protecting health especially the health of  
5 children which by the way thank you very much for  
6 moving towards that standard is I believe  
7 paramount. Illinois EPA made it very clear that  
8 they will consider in the future in future  
9 hearings how to approach enforcement of these  
10 rules with stakeholders if there might be  
11 adjustments to other parts of the rules, I believe  
12 742 was mentioned, several other parts of the  
13 rules so with that in mind I think it's super  
14 important that we apply the suggestions, we  
15 actually accept them, we use them for our state.  
16 The truth is and I know various people because of  
17 their interest probably don't want to admit this  
18 but the standards probably should be even lower.  
19 The parts per trillion, the nanograms per liter,  
20 the science is moving in a direction, we can argue  
21 about 10 years ago, 15 years ago but currently we  
22 are definitely moving towards every year we know  
23 more about how hierachs (spelled phonetically)  
24 happen and from my position it would be tempting

1 to think well, let's hold on, let's get the  
2 strictest standard but I know that is exactly what  
3 various business interests want to do, they want  
4 to push this out as long as possible, delay,  
5 delay, delay so even though I'd like a higher  
6 standard, I am really advocating for us to adopt  
7 the current standards as soon as possible. Thank  
8 you very much.

9 HEARING OFFICER HORTON: Thank you.  
10 Next Sam Bilijan, sorry.

11 MS. BILIJAN: Bilijan.

12 HEARING OFFICER HORTON: Bilian, sorry.

13 MS. BILIJAN: So that was my husband so  
14 there is going to be some crossover, my name is  
15 Sam Bilijan, I live in Crestwood, Illinois and I  
16 grew up in Orland Park, I went to school on the  
17 south side of Chicago, Mother McAuley and  
18 St. Xavier and currently I'm a research analyst.  
19 I first heard of PFAS several years ago. I knew  
20 about other bad things first, things like EPA and  
21 microplastics but I watched a documentary and  
22 found out about the nature of these chemicals and  
23 how even in 2020 ones that had been phased out  
24 were found in Ohio's rainwater, how all of us

1 annoyingly have them in our bodies. I have no  
2 doubt that like many things, these chemicals have  
3 not been destructive and harmful all the time in  
4 every capacity but I do have every belief that  
5 when you know better, the moment you know  
6 something about things like this that have this  
7 level of persistence and the laundry list of  
8 issues they have, you have to stop.

9 I work in business where bottom lines  
10 and margins are frequently mentioned but so is  
11 another buzz word something called future  
12 thinking. I don't know that I will have children,  
13 I'm newly married but I may one day and if I don't  
14 actively speak up now about something very  
15 important such as water and making it clean and  
16 accessible, my children and my children's future  
17 could be negatively impacted so no one is immune  
18 to these kinds of health threats that these  
19 chemicals create, anything from reproductive  
20 issues, endocrine disruption, birth defects and so  
21 on. We cannot allow them in our waterways and I  
22 strongly believe that any level is too high in our  
23 water but I can concede that having to start  
24 somewhere is important and delaying right now

1 would make this problem even worse. Thank you  
2 very much.

3 HEARING OFFICER HORTON: Thank you. Next  
4 Marvin Fourte.

5 MR. FOURTE: Good morning everyone, my  
6 name is Marvin Fourte, I'm a public policy student  
7 from the University of Chicago, just wanted to  
8 make a public statement in that I support the  
9 standards outlined in the proposal from the IEPA.  
10 The standards I believe are comparable to the  
11 standards in turn by the USEPA guidelines after  
12 consideration for the laws and regulations in the  
13 State of Illinois. I personally believe that the  
14 standards could be lower for substances present in  
15 our environment and hopeful that Illinois will  
16 move to support that in the future but I am  
17 impressed by the inclusion of the six PFAS. The  
18 questions and comments before the group today did  
19 not quite give us an idea of how comparing our  
20 methods and analyses to other states would benefit  
21 the health and well being of citizens in Illinois,  
22 if it could that'd be great but I don't think that  
23 has been shown today. This group has been  
24 questioned today about the effectiveness of child

1 intake methodology which according to my research  
2 offers greater sensitivity just as the group  
3 stated and I believe the groundwater standard is a  
4 perfectly acceptable standard and that this group  
5 should move forward as quickly as possible with  
6 approving this proposal.

7 HEARING OFFICER HORTON: Thank you so  
8 much. Next is Kayla Jacobs.

9 MS. JACOBS: Hi, good morning, my name  
10 is Kayla Jacobs, I am from Addison, Illinois and I  
11 work for the Catholic Diocese of Joliet. I am the  
12 director of their environmental ministry, I also  
13 am the co-founder of the Coalition for the  
14 Protection against PFAS with my friend Ray. I  
15 also have lived and worked on many farms  
16 throughout my life in which we use groundwater to  
17 drink from and then also to give our animals and  
18 put on our plants and I am a resident here and  
19 have been most of my life unlike some of the other  
20 speakers today so I have high concern for the  
21 quality of my water here in Illinois and again I'm  
22 also a Catholic who has great concern for human  
23 dignity and the health of our communities  
24 especially for the protection of the vulnerable

1 which is why I am really grateful that the  
2 standard is measured for a child who are the most  
3 vulnerable in our communities, so me and our group  
4 here we do believe that these -- this is a good  
5 beginning, good strides in adding the six PFAS  
6 chemicals to the standard at this proposed level  
7 or even a lower level as my friends expressed as  
8 well, thank you.

9 HEARING OFFICER HORTON: Thank you, and  
10 the last on my list here is Chris Stohr.

11 MR. STOHR: Good morning, I'm Chris  
12 Stohr, I represent the Association of  
13 Environmental and Engineering Geologists Chicago  
14 chapter, hooray, hooray and I -- we all appreciate  
15 the work that the Illinois Pollution Control Board  
16 and the Illinois Environmental Protection Agency  
17 in preserving and protecting our remaining  
18 groundwater quality, thank you for that good  
19 work. As you folks have the regulations, I know  
20 that our members will want to -- appreciate and  
21 hope that you -- some of you will come to some of  
22 our professional technical meetings to allow our  
23 members to ask questions and become more better  
24 informed about the regulations of what is

1 expected. With that I thank you.

2 HEARING OFFICER HORTON: Thank you so  
3 much, appreciate it. We will move now to follow  
4 up questions from the board, Mr. Rao.

5 MR. RAO: We had prefiled some of our  
6 questions and wanted to know if you want me to  
7 read those questions in or --

8 MS. TERRANOVA: Probably, I think that  
9 would be easier for who's responding, we didn't  
10 have a lot of time to go over them just so we're  
11 clear. . .

12 MR. RAO: Are you prepared to answer all  
13 the questions here today especially the  
14 groundwater management zone related questions,  
15 they're pretty technical and in detail...

16 MS. TERRANOVA: We can at least speak to  
17 some and some we may need to follow up further in  
18 writing afterwards but we can go for it to start.

19 MR. RAO: We will start with question  
20 No. 1, in response to Board question No. 2, the  
21 Agency stated that most sites that have achieved  
22 cleanup and received no further remediation letter  
23 and then the site remediation program. You had  
24 mentioned 5,103 out of 5,675 utilize some sort of

1 institutional control engineered barrier or both  
2 as part of their corrective action. Could you  
3 please comment on whether the current practice of  
4 groundwater remediation of leaving contamination  
5 in place with institutional controls or engineered  
6 barriers is appropriate for remediating  
7 groundwater contaminant in with PFAS?

8 MR. DUNN: Yes, it is, PFAS is no  
9 different than any other contaminant. Under the  
10 site remediation program we use 35 Illinois  
11 Administrative Code part 742 and in there part 320  
12 allows you to exclude the groundwater exposure  
13 pathway and so we see that no different than the  
14 site remediation program, PFAS would not be  
15 treated different than any other contaminant.

16 MR. RAO: So there is no concern in  
17 terms of the nature of PFAS and in terms of the  
18 persistence and, you know, they're considered as  
19 forever chemicals, should there be any special  
20 consideration for these chemicals or do you think  
21 it can be treated like any other contaminant?

22 MR. DUNN: The way the site remediation  
23 program is set up is they have to identify the  
24 extent of contamination so we go out and define

1 the extent of contamination so we see PFAS as the  
2 same, we will have to look at the modeling of  
3 PFAS, if that can be done or not but we see it as  
4 no different at this point.

5 MR. RAO: Do you think some of these  
6 issues associated with PFAS there will be an  
7 opportunity to address it when you do amend part  
8 742 or 740?

9 MR. DUNN: Yes, yes, once we look at  
10 amending 742 and 740 which we will do, we will  
11 look at the PFAS at that time.

12 MR. RAO: Moving onto question 2, in  
13 responding to the Board's past three follow up  
14 questions to the Board's questions 8qii through  
15 8qv or 5. IEPA provided helpful information about  
16 controls using contaminant concentrations and  
17 minimizing risks but IEPA did not explain whether  
18 the items specified in those follow up questions  
19 would be set forth in IEPAs determination letter.  
20 The follow up questions are therefore repeated  
21 below with emphasis added. If the agency were to  
22 issue a determination letter terminating a  
23 groundwater management zone and making section  
24 620.450 (a) 4 (b) as in boy, concentrations the

1 applicable standards, would that letter specify,  
2 I'll go through the list, A, the requirements to  
3 which the owner or operator will be subject for,  
4 quote, controls and continued management, end  
5 quote and submitting, quote, results in a written  
6 report under section 620.250(c)?

7 MR. DUNAWAY: With regard to any GMZs  
8 adopted under 620.250 a1 and 2 it would be -- it's  
9 not the Agency's intent that we would issue any  
10 sort of termination letter in trying to establish  
11 alternative standards under 620.450. If there  
12 were still -- it would be the holder of the GMZ's  
13 responsibility to make a demonstration that those  
14 are a suitable number and that they meet the  
15 requirements of 620.450, in other words they are  
16 protective of human health and the environment.  
17 The agency would not try to make that  
18 determination, we would proceed with some sort of  
19 enforcement action in order to have the owner  
20 operator of the property do that.

21 MR. RAO: Would your answer apply to the  
22 other two questions we had?

23 MR. DUNAWAY: Yes, yeah, and I know we  
24 offer some language in our response and we could

1 probably clarify that language in post hearing  
2 comments.

3 MR. RAO: That would be helpful because  
4 we had some specific questions here so if you  
5 could take a look at it and see if there is any  
6 additional trying to find the language that you  
7 might want to propose to the Board.

8 MR. DUNN: We can do that.

9 MR. RAO: Moving on to question No. 3 as  
10 relevant for the question note 1 to appendix D  
11 states Parts I and II are to be submitted to IEPA  
12 at the same time that the facility claims the  
13 alternative groundwater standards and part III is  
14 to be submitted at the completion of the site  
15 investigation. With IEPA's newly added language  
16 to its proposed section subsection g of section  
17 620.250, it appears that the owner or operator  
18 will be required to submit all three parts, part  
19 I, II and III of appendix D simultaneously. Is  
20 that IEPA's intent? If so should note -- should  
21 note 1 be amended?

22 MR. DUNAWAY: Yes, it is the IEPA's  
23 intent that they be submitted simultanenously  
24 cause in order to issue a GMZ, we believe that a

1 site owner operator should have an approval  
2 corrective action plan first so therefore it  
3 should all be submitted together and the agency  
4 will propose language to note 1 in post hearing  
5 comments.

6 MR. RAO: Moving onto question 4, IEPA  
7 stated that note 3 to appendix D should be amended  
8 to, quote, include sites using 35 Ill. Adm. Code  
9 Parts 734 and 740, end quote but IEPA proposed  
10 attachment 3 amendments include no changes to note  
11 3. Please propose changes to note 3 that reflect  
12 IEPA's intent regarding part 734 and part 740. Is  
13 that something you'd consider?

14 MR. DUNN: Yes, the agency appreciates  
15 the Board catching this and we will propose  
16 changes.

17 MR. RAO: Thank you. I think you have  
18 answered question 5. Question 6 has also been  
19 answered as you responded to some of the other  
20 person's questions. Moving onto question 7.

21 MS. ESSENCE BROWN: The Agency's  
22 response states that NWRA's question 1 on USEPA  
23 SW-846 method 8327 is addressed in attachment 2.  
24 However attachment 2 is a list of approved GMZs

1 under part 620.250 (a). Please provide the correct  
2 attachment that addresses NWRA's question.

3 MS. TERRANOVA: We will do that,  
4 apologize for the confusion.

5 MS. ESSENCE BROWN: In response to  
6 NWRA's question 4c on GMZs established under the  
7 site remediation program, the Agency states that  
8 GMZs are not tracked in the SRP database. Please  
9 comment on how the Agency would know an approved  
10 GMZ under the SRP is still active or terminated  
11 other than relying on staff memory.

12 MR. DUNN: We can do a file search to  
13 determine what sites have GMZs. At that point we  
14 look at a file to determine if the site still has  
15 a GMZ or if the GMZ has been terminated.

16 MS. ESSENCE BROWN: Please comment on  
17 whether it would be feasible to track the status  
18 of any approved GMZ in the database and the SRP  
19 database going forward.

20 MR. DUNN: No, right now we don't see  
21 any reason to track GMZs in the SRP, however if  
22 that is an issue we can address that in the 740  
23 rulemaking.

24 MS. ESSENCE BROWN: Regarding NWRA's

1 question 34 on USEPA SW-846 method 3512, does the  
2 Agency have guidance for the regulated community  
3 on what compounds may be analyzed using method  
4 3512?

5 MS. HAWBECKER: Method 3512 is a  
6 preparation method associated with method 8327, it  
7 is not a separate analysis so it's associated with  
8 the 8327 and so those would be the analyzed that  
9 is specified in 8327 would be the ones effective  
10 with method 3512. MS. ESSENCE BROWN: Last one,  
11 on page 2 of Exhibit A of the PFAS Regulatory  
12 Coalition's question, the PFAS Regulatory Group  
13 has raised concerns regarding stakeholder  
14 notification. Quote, the PFAS Regulatory  
15 Coalition has general concerns with the State's  
16 decision to notice only a limited number of  
17 affected stakeholders. Please explain how the  
18 Agency's conducts outreach on draft proposals  
19 specifically with respect to notifying interested  
20 parties, organizations or groups.

21 MR. SUMMERS: On page 17 of our  
22 electronic response or recommendations on 12/7/21  
23 we give a detailed listing of all our community  
24 outreaches and the timeline on when they occurred,

1 we feel that is the definition of everything that  
2 we did. We are also open to any suggestions from  
3 the Board on how we could improve community  
4 outreach.

5 MS. ESSENCE BROWN: I think you answered  
6 B, that is it.

7 MR. RAO: Thank you.

8 MS. TERRANOVA: Did you have one more on  
9 11?

10 MR. RAO: I think you have answered that  
11 question.

12 HEARING OFFICER HORTON: Are there any  
13 further follow up questions from participants here  
14 today for Agency witnesses? Ms. Joshi?

15 MS. JOSHI: Good morning, I'm Bina  
16 Joshi, I represent Dynegey in this matter, just a  
17 couple of quick follow up questions on the  
18 questioning that Ms. Cary did earlier relating to  
19 molybdenum. So I believe IEPA acknowledged that  
20 it's aware of the ATSDR information for  
21 molybdenum; is that correct?

22 MS. HAWBECKER: Yes.

23 MS. JOSHI: You also acknowledge that  
24 the IRIS data that the Agency has relied upon for

1 this rulemaking is a bit outdated; is that right?

2 MS. HAWBECKER: Yes.

3 MS. JOSHI: So I was just wondering if  
4 the Agency can provide an explanation of how or  
5 under what circumstances it will take the more  
6 current information into account?

7 MS. HAWBECKER: Yes, we are -- what the  
8 intent is is to align our toxicity data with what  
9 is available in USEPA regional screening level  
10 assessments and so when they, the USEPA elects to  
11 update that toxicity data within that database,  
12 that is when we will make an update.

13 MS. JOSHI: I see. So if that occurs  
14 before this rulemaking is completed, then IEPA  
15 would consider doing it then; is that right?

16 MS. HAWBECKER: We would most likely  
17 propose an updated value.

18 MS. JOSHI: If it were to occur after  
19 this rulemaking is completed, then how would IEPA  
20 proceed?

21 MS. HAWBECKER: Well, the next  
22 rulemaking would address it and when it comes to  
23 section 742, it allows and the Environmental  
24 Protection Act allows too, that you can propose

1 and set remediation objectives higher than class 1  
2 standards, they just simply can't be lower so you  
3 can propose a remediation objective based on that  
4 ATSDR toxicity cause what it will do it will raise  
5 the toxicity level, it will raise the standard I  
6 should say so, that'd be the best way and so  
7 someone could make a proposal with that under part  
8 742.

9 MS. JOSHI: So just real quick, I  
10 understood your point about how a particular  
11 source could propose a standard that's higher  
12 based on the toxicity value under the site  
13 remediation program?

14 MS. HAWBECKER: Yes, it would be on a  
15 site specific basis but yes.

16 MS. JOSHI: When you said that it would  
17 be addressed in the next rulemaking, are you  
18 anticipating just whenever IEPA would next choose  
19 to update the part 620 standard, that there  
20 wouldn't be anything specific to take into account  
21 say if EPA came out with, you know, a bunch of  
22 additional information that you said that IEPA  
23 would consider?

24 MS. HAWBECKER: Could you repeat the

1 question?

2 MS. JOSHI: Sorry, I should make myself  
3 more clear, so when you say the next rulemaking,  
4 to what are you referring, under what  
5 circumstances would you anticipate that next  
6 rulemaking would occur?

7 MS. HAWBECKER: We would probably be  
8 starting it, again toxicity science we score very  
9 quickly as we know the regulation's a much more  
10 glacial practice so we would start proposing or  
11 working on updates really as soon as these become  
12 promulgated.

13 MS. JOSHI: I think that is all I have.

14 HEARING OFFICER HORTON: Any further  
15 follow up questions for the witnesses?

16 MS. MANNING: Claire Manning with NWRA  
17 just as a follow up to IERG's question and the  
18 question from Dynegy, when does the Agency expect  
19 to propose modifications to the landfill  
20 regulations?

21 MR. DUNN: We have no timetable at this  
22 point but we will definitely get with our staff  
23 and start looking at those.

24 MS. MANNING: And in the meantime is the

1 Agency's perspective that the standards you  
2 propose will be the enforceable standards for  
3 corrective action at landfills?

4 MR. DUNN: The numbers will be put in  
5 the permits as we go forward so yes.

6 MS. MANNING: Thank you.

7 HEARING OFFICER HORTON: Any further  
8 follow up questions? Hearing none, we had some  
9 public comments, are there any other members of  
10 the public who would like to give a public comment  
11 here today? All right, seeing none, so I'd like  
12 to thank everybody for participating today, our  
13 next hearing, Hearing 3 will be November 1, 2 and  
14 3 and it will be at 555 West Monroe in Chicago and  
15 we'll have videoconference linked to the Board's  
16 videoconference room here in this building.

17 Mr. Andes?

18 MR. ANDES: Figure I should go up there,  
19 Fred Andes for the PFAS Regulatory Coalition, my  
20 only question about schedule is none of us have  
21 looked at our schedules to determine if those  
22 dates are available. I think I already have a  
23 question in terms of whether those dates will be  
24 available so if we can consult and then perhaps

1 have a status conference and discuss the  
2 schedule.

3 HEARING OFFICER HORTON: Yeah, that  
4 sounds great. How long do you think you would  
5 need, a week or we could have a conference next  
6 week just to discuss -- I'd love to get the dates  
7 and everything and the room, it's a little bit  
8 difficult.

9 MR. ANDES: I think that is fine.

10 HEARING OFFICER HORTON: How about I  
11 will issue a Hearing Officer Order on Thursday and  
12 it will summarize everything we have done here  
13 today and propose another prehearing conference  
14 call for next Tuesday at 10 a.m.?

15 MS. TERRANOVA: I cannot do that, I have  
16 another hearing so I could not attend that.

17 HEARING OFFICER HORTON: How about let's  
18 just say next Thursday, the 30th?

19 MS. MANNING: I can't do the 30th, I am  
20 sorry.

21 HEARING OFFICER HORTON: The 29th?

22 MS. MANNING: 29th works.

23 HEARING OFFICER HORTON: Ms. Terranova?

24 MS. TERRANOVA: I can't, Co-Counsel can

1 attend.

2 MR. ANDES: I would suggest that perhaps  
3 you check with the Agency Counsel and maybe come  
4 back to us and suggest some options. We obviously  
5 want to make sure the Agency's Counsel is  
6 available.

7 HEARING OFFICER HORTON: I will do that,  
8 I will send her out an e-mail before I send out  
9 the Hearing Officer Order suggesting a prehearing  
10 conference call.

11 MS. TERRANOVA: Thank you.

12 HEARING OFFICER HORTON: I think with  
13 that, we will adjourn.

14 MS. SONDR A CARY: I am sorry, may I ask  
15 another question?

16 HEARING OFFICER HORTON: Yes.

17 MS. SONDR A CARY: I wasn't expecting  
18 molybdenum to pop up again, since it has I just  
19 wanted to make sure I had understood, I was  
20 understanding that remediation value could be  
21 proposed under part 742 and I understood that is  
22 on a site specific basis. What I just wanted to  
23 understand better was you mentioned regional level  
24 screening assessment and when that was done then

1 it may be possible to look again at the value so  
2 could you just explain to me how that works and if  
3 there is a regional screening assessment ongoing?  
4 MS. HAWBECKER: Yes and no on the regional  
5 assessment regional screening levels, they update  
6 every six months so it's constantly ongoing and  
7 when they have -- in 2021 when they made the  
8 decision to begin to review some of these IRIS  
9 toxicity values versus some of the more recent  
10 because again they are working on USEPA's  
11 hierarchy as well and have begun updating numbers  
12 based on updated toxicity assessments that are not  
13 IRIS that are more, you know, they are still  
14 ranked again ATSDR, PPRTV but they are not the No.  
15 1 source but again there is a recognition on the  
16 federal level that some of these numbers are  
17 outdated and so they are going through their  
18 contaminants and they are updating. The last  
19 update -- well, the update they did in May was  
20 entirely related to PFAS but the previous update  
21 in November I believe they updated, boy I think it  
22 was maybe 16, 22 there were several chemicals they  
23 updated with new toxicity data based on ATSDR or  
24 PPRTV in relation to the IRIS number due to the

1 updated toxicity.

2 MS. SONDRRA CARY: So final question so  
3 does that mean that for this review that you're  
4 doing now, you will or you won't be able to use  
5 the molytox profile by the ATSDR?

6 MS. HAWBECKER: We would be able to use  
7 it when RSL goes to update it, however under 742  
8 we allow for what is called a tier 3 assessment  
9 where you can have a modification of a parameter  
10 and someone could come in and propose to use that  
11 toxicity data from ATSDR and we would review the  
12 data which has already been done and then we could  
13 determine that yes, this would be more appropriate  
14 and then we would allow that to be a site specific  
15 groundwater remediation objective.

16 MS. SONDRRA CARY: Thank you very much.

17 HEARING OFFICER HORTON: I think with  
18 that, we will adjourn this second hearing. Thank  
19 you all for coming, appreciate it. Please type  
20 up the transcript for Don Brown.

21

22

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