1 BEFORE THE ILLINOIS POLLUTION CONTROL BOARD Volume II 2 3 IN THE MATTER OF:) 4)) R97-25 CONFORMING AMENDMENTS FOR THE 5 GREAT LAKES INITIATIVE: 35 ILL.) (Rulemaking-Water) ADM. CODE 302.101; 302.105;) 302. SUBPART E; 303.443 6) AND 304.222) 7 8 9 10 The following is the transcript of a 11 hearing held in the above-entitled matter, taken 12 stenographically by Kim M. Howells, CSR, a notary 13 public within and for the County of Cook and State 14 of Illinois, before Marie Tipsord, Hearing Officer, 15 at 55 South Harbor Place, Waukegan, Illinois, on the 16 28th day of July 1997, A.D., commencing at the hour 17 of 10:00 a.m. 18 19 20 21 22 23 24

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1 APPEARANCES:
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               HEARING TAKEN BEFORE:
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          BY: MS. MARIE TIPSORD
6
7
   ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT:
8
   Mr. Joseph Yi
9
   Ms. Cynthia I. Ervin
10
   Dr. Tanner Girard
11
   Mr. Anand Rao
12
   Ms. Amy C. Hoogasian
13
14
   ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMBERS
15 PRESENT:
16 Mr. Richard C. Warrington, Jr.
17 Mr. Toby Frevert
18 Mr. Robert G. Mosher
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L.A. REPORTING (312) 419-9292

1 INDEX 2 Page GREETING BY HEARING OFFICER..... 4 3 4 GREETING BY DR. GIRARD..... 7 5 OPENING STATEMENT BY MR. WARRINGTON..... 7 TESTIMONY OF MR. MOSHER..... 10 6 TESTIMONY OF DR. OLSON..... 13 7 QUESTION AND ANSWER SESSION..... 15 8 TESTIMONY OF MR. FREVERT..... 23 9 10 OPENING STATEMENT BY MS. ROSEN..... 40 11 TESTIMONY OF MR. SMITH..... 42 12 13 CLOSING COMMENTS BY HEARING OFFICER..... 102 14 15 CLOSING COMMENTS BY DR. GIRARD..... 103 16 EXHIBITS 17 Marked for Identification 18 Hearing Exhibit Nos. 3 - 5..... 14 19 Hearing Exhibit No. 6..... 15 20 Hearing Exhibit No. 7..... 59 21 2.2 Hearing Exhibit No. 9..... 61 23 24 Hearing Exhibit No. 11..... 101

L.A. REPORTING (312) 419-9292

1 MS. TIPSORD: Good morning. My name is Marie 2 Tipsord, and I've been appointed by the board to 3 serve as the hearing officer in this proceeding 4 entitled in the matter of conforming amendments for 5 the Great Lakes Initiative, amendments to 35 Ill. 6 Adm. Code 302.101; 302.105, 302 Subpart E; 303.443, 7 304.222. This is document No. R97-25.

8 To my right side is Dr. Tanner Girard. 9 He's the lead board member in this proceeding, and 10 on the end of the table is Board Member Joseph Yi 11 who is also an attending board member in this 12 rulemaking.

In addition, we have Cindy Ervin who is 13 14 Chairman Manning's assistant. Chairman Manning is 15 unable to be with us today. She is also an 16 attending board member. To my immediate left is Anand Rao of our technical division and to his left 17 is Amy Hoogasian also Chairman Manning's assistant. 18 19 In addition, we have K.C. Doyle who is Board Member 20 Ted Meyer's assistant.

This is the second hearing in this proceeding which was filed on March 21, 1997, by the Illinois Environmental Protection Agency. Along with the proposal, the agency filed a certification

L.A. REPORTING (312) 419-9292

pursuant to Section 28.2 of the Environmental
 Protection Act that the amendments were federally
 required.

Section 28.2(a) of the act provides that a
required rule means a rule that is needed to meet
the requirements of the Clean Water Act, Safe
Drinking Water Act, Clean Air Act, or Resource
Conservation and Recovery Act other than an
identical and substance rulemaking.

10 Section 28.2(b) requires the board to 11 either accept or reject the certification filed by 12 the agency and to reference that certification in 13 the first notice proposal published in the Illinois 14 Register.

15 On April 3rd, 1997, the board accepted the 16 certification and accepted this proposal. On 17 June 19, 1997, the board adopted a first notice 18 opinion and order in this procedure. The first 19 notice was published in the Illinois Register on 20 July 11, 1997.

I have here sign up sheets for both the notice and service list. If you wish to be on the service list, you would receive all pleadings and prefiled testimony in this proceeding.

I would note, however, at this time we are
 not anticipating a second hearing -- a third
 hearing, I'm sorry, so I would not anticipate there
 will be any additional prefiled testimony, but there
 may be additional pleadings.

6 If you're on the notice list, you will 7 receive copies of the board's opinions and orders 8 and all hearing officer orders. If you have any 9 questions about which list you should appropriately 10 be on, please see me at a break, and I'll try and 11 talk you through it a little.

12 There are also copies of the current 13 service and notice list over to the left along with 14 copies of the board's opinion and order -- the first 15 notice of opinion and order. I understand the 16 Illinois Environmental Regulatory Group has copies 17 of their testimony, and the agency has copies of 18 their testimony as well back there.

19 The board received prefiled testimony from 20 those two groups, the agency and the Illinois 21 Environmental Regulatory Group, and we will begin 22 today with the agency's testimony, and we will then 23 allow for questioning of the agency and follow with 24 testimony by the Illinois Environmental Regulatory

1 Group.

If we have time at the end of the day, we 2 will allow any person who has not prefiled and who 3 4 may wish to testify to testify. At this time, I 5 would like to ask if there is anyone in that category at this time, someone who did not prefile, 6 but who would like to testify today. 7 8 At this time, I don't see anyone, but we 9 will check with that periodically throughout the 10 day. Okay. Before we begin, Dr. Girard or 11 12 Mr. Yi, do you have anything you'd like to add? 13 DR. GIRARD: Well, I'd just like to welcome everyone here this morning and thank all the people 14 who have been working very hard on this rulemaking. 15 16 I look forward to a very good efficient hearing 17 today. 18 Thank you. 19 MS. TIPSORD: Mr. Yi? MR. YI: I echo Mr. Girard. 20 21 MS. TIPSORD: Thank you. 22 All right. Then let's begin with the Illinois Environmental Protection Agency. 23 24 MR. WARRINGTON: Thank you. My name is Rich

Warrington. I'm the associate counsel for the
 Bureau of Water with the Illinois Environmental
 Protection Agency. On behalf of our director, Mary
 Gade, I'd like to welcome you all to our second
 hearing for this important rulemaking.

By way of background, I think someone can 6 refer to our testimony at this first hearing, but in 7 summary, there is a problem with toxic substances in 8 9 the Great Lakes Basin and the United States Environmental Protection Agency and the government 10 11 of Canada have been working for several years to 12 reach a common set of water quality criteria, 13 antidegradation provisions and implementation provisions so that all the Great Lakes states and 14 15 their tributaries can be on the same page.

16 These rules have been promulgated by the United States Environmental Protection Agency and 17 have a deadline for adoption of March 23rd of this 18 19 year. So we are technically a bit late. We have 20 been working with the United States Environmental 21 Protection Agency to adopt these in an expedient manner, and we appreciate the efforts of the board 22 to have a schedule for their adoption and for your 23 interest and your time that you've spent so far in 24

1 reaching a speedy decision.

We have filed prefiled testimony for 2 today. We have brought two witnesses to present 3 4 it. One is Robert Mosher, who will talk about the 5 derivation procedures for lead, and we have Dr. Clark Olson, who will be talking about the 6 existing concentrations of substances in Lake 7 Michigan, and a report on the prior implementation 8 of the board's 35 Illinois Administrative Code, 9 10 Part 302, Subpart E, which were the toxic 11 regulations adopted on a statewide basis by the 12 board just a few years ago. If there aren't any questions, I think we 13 can introduce Mr. Mosher and talk about the 14 15 derivation process for the chemical substance lead. 16 MS. TIPSORD: Could we have Mr. Mosher come up here? I think it will be a little easier for Kim to 17 18 hear him speak. 19 Also, Mr. Warrington, along with your prefiled testimony, there are several attachments? 20 21 MR. WARRINGTON: That's correct. 22 MS. TIPSORD: Will you be moving those as exhibits? 23 24 MR. WARRINGTON: Yes, we will.

1 MS. TIPSORD: Okay. MR. WARRINGTON: We can do it now, or we can do 2 at the close of Mr. Mosher's testimony. 3 4 MS. TIPSORD: Whichever you're most comfortable 5 with. MR. WARRINGTON: We will do it at the close of 6 7 Mr. Mosher's testimony. 8 MS. TIPSORD: Great. Thanks. Could you swear Mr. Mosher? 9 10 (Witness sworn.) WHEREUPON: 11 12 ROBERT G. MOSHER, 13 called as a witness herein, having been first duly 14 sworn, deposeth and saith as follows: MR. MOSHER: We provided some information in 15 16 response to a inquiry by Dr. Rao at the last 17 hearing. 18 MR. RAO: Mr. Rao. 19 MR. MOSHER: Mr. Rao. I'm sorry. MR. RAO: I don't mind. 20 21 MR. MOSHER: And his question concerned the 22 origin of the proposed standard for lead, and I 23 believe we presubmitted some information; is that 24 right, Rich?

MR. WARRINGTON: That's right. We supplied two 1 documents. One is the memo from Mr. Pepin dated --2 well, it's received on November 18th, 1996; and, 3 4 secondly, a document that is a scientific study by 5 Mr. Larry Brooke for a U.S. EPA contract dated March 22, 1995, and that relates to the report of 6 Acute Toxicity of Lead to the Annelid, 7 A-n-n-e-l-i-d, I think it may be -- I'm just trying 8 9 to read the Latin name. It's basically a worm and a 10 froq. Those are the two documents we'll later 11 12 introduce as an exhibit. 13 MR. MOSHER: Okay. Mr. Pepin from the U.S. EPA oversees something called the Great Lakes Water 14 15 Quality Initiative Clearinghouse, and that is a 16 place where data can be accumulated. The various states can go to the Clearinghouse to see what data 17 is available, and really all the states are 18 19 cooperating, and once data is discovered and made known to the Clearinghouse, calculations can be made 20 21 to derive water quality criteria, and that's what's happened with lead. 22 23 This more recent data was acquired by the Clearinghouse. The calculations to derive lead 24

L.A. REPORTING (312) 419-9292

standards in this case were made using that new data
 plus all the existing data on the toxicity of lead
 to aquatic life, and the method used was the
 standard U.S. EPA derivation procedure.

5 And I could summarize as we said here that 6 the more important species are listed that went into 7 this derivation, and that's how we got our composed 8 lead standards. If there's any specific questions, 9 I can try to answer them.

MS. TIPSORD: Why don't we go ahead and do all the agency's testimony, and then that way if there are questions that you can better answer and vice versa, we'll let you and Clark answer them together.

15 Okay?

16 MR. MOSHER: Okay.

MS. TIPSORD: If that's okay with you, Rich? 17 18 MR. WARRINGTON: That's fine with us. 19 So our next witness would be Dr. Clark 20 Olson, and he'll be testifying in support of a 21 report that we made and submitted to the board as part of our prefiled testimony on the existing 22 23 concentrations of substances in Lake Michigan, and that should be in the prefiled testimony of 24

1 July 11th. 2 Dr. Olson? 3 (Witness sworn.) 4 WHEREUPON: 5 CLARK OLSON, called as a witness herein, having been first duly 6 7 sworn, deposeth and saith as follows: 8 DR. OLSON: I don't have any written testimony other than the table, and I think the table speaks 9 10 for itself pretty well. Although I'd like to note that there are a number of substances because of --11 12 mostly because of detection limit problems. 13 We have apparently existing concentrations in the lake which exceed these criteria. Now, that 14 may be strictly a detection limit problem, and the 15 16 actual concentrations may not exceed -- we have 17 other people in the room who probably can speak to this as well as I can, but maybe I can just open it 18 19 up to questions for reading this table. You may have some problems figuring out some of the 20 21 notations of the table. MS. TIPSORD: Okay. Before we open it up to 22 questions, let's go ahead and move these in as 23 24 exhibits.

1 MR. WARRINGTON: Okay. Sure. May we do them all at once? 2 MS. TIPSORD: Yeah. And let me just note that 3 4 that would be the memorandum by Robert Pepin and the 5 attached materials which includes the draft Great Lakes Water Quality Initiative Clearinghouse 6 information, correct? 7 8 MR. WARRINGTON: Correct, No. 1. (Hearing Exhibit Nos. 3 - 5 9 10 marked for identification, 7/28/97.) 11 12 MS. TIPSORD: Exhibit 4 is the report by Larry Brooke, and we'll mark as Exhibit 5 the report on 13 concentrations of substances in Lake Michigan from 14 15 Clark Olson. 16 MR. WARRINGTON: Okay. And we have one more as long as we're marking these up. We have a -- after 17 the report on concentrations, there should be a 18 19 document entitled Review of Application of 35 20 Illinois Administrative Code 302, Subpart F. MS. TIPSORD: Okay. I'll mark that as 21 22 Exhibit 6. 23 24

1 (Hearing Exhibit No. 6 2 marked for identification, 7/28/97.) 3 4 MS. TIPSORD: So again running those Exhibits, 5 No. 3 is the memorandum, Exhibit 4 is the report by Larry Brooke, Exhibit 5 is the table of Mr. Olson, 6 and Exhibit 6 is the review of application of 35 7 Illinois Adm. Code 302, Subpart F. 8 Is there any objection? Seeing none, those 9 10 exhibits will be marked. MR. WARRINGTON: Okay. Would you prefer that 11 12 Dr. Olson read the review of application into the record? 13 MS. TIPSORD: Could we go off the record for 14 15 just a second? 16 (Discussion had off 17 the record.) MR. WARRINGTON: Okay. We'll answer any 18 19 questions that the public may have or the board may have on those exhibits. 20 21 MS. TIPSORD: Okay. Are there any questions for Mr. Olson or Mr. Mosher at this time? 22 DR. GIRARD: I have a question. 23 24 MS. TIPSORD: Okay. Go ahead, Dr. Girard.

1 DR. GIRARD: Dr. Olson, you're talking about concentrations of substances in Lake Michigan, 2 right? 3 4 DR. OLSON: That's right. 5 DR. GIRARD: I just wondered if you could go through that table from top to bottom and just 6 indicate to us the substances where it appears that 7 the reported concentrations are possibly higher than 8 9 the standards that are being proposed and give us your professional opinion on whether or not it may 10 be a detection limit problem or whether we actually 11 have a lake concentration which is higher than the 12 13 proposed standard. DR. OLSON: Well, I'll ask Bob Mosher to help 14 15 out on this --16 DR. GIRARD: Okay. 17 DR. OLSON: -- since he's sitting here. 18 Cadmium --19 MR. MOSHER: And we should note the table indicates that we've never detected cadmium in the 20 21 lake water. The range is given as less than five parts per billion to less than ten parts per 22 23 billion. 24 When you get a result that says less than

ten parts per billion, you may very well have 1 something over the standard. You just don't know. 2 You're kind of blinded by the method. It doesn't 3 4 appear that there's any large problem at least with 5 cadmium because only five out of 206 samples did we -- well, doesn't that mean detection? 6 7 DR. OLSON: Yeah. 8 MR. MOSHER: Well, something must be wrong with 9 the table then. 10 DR. OLSON: Well, these were obtained from the Lake Michigan Water Quality Report some years ago, 11 12 and we weren't involved in the production of that 13 report. So there are some details that mostly relate to laboratory technique and detection and so 14 15 on. 16 MR. MOSHER: Well, in any case, very few samples are detected, and we'll try to track down why all 17 the results are indicated as being a less than 18 19 because that's in contradiction to our report of the number of detections versus the number of samples 20 21 taken, but in any case, it's very low. 22 DR. GIRARD: Let me ask a quick question then.

23 So in other words, if you took an average of -- if 24 you have 206 sampling events, and you average the

L.A. REPORTING (312) 419-9292

five places where there was some detection, the 1 amount of cadmium is still very low. 2 DR. OLSON: It's around the standard level, 3 4 right, roughly, I mean, as well as it can be. 5 DR. GIRARD: Thank you. What's next? 6 7 DR. OLSON: Copper is the next one, and, again, the detection levels are apparently -- where there 8 9 are detection levels, it is around the standard level. So there are -- well, that's about 16 10 percent or 15 to 20 percent detection, and those 11 12 were at about the standard level. 13 Cyanide, there were very few detections. 14 Again, they were at about the standard level. 15 Selenium, we don't really have any results. This 16 was from a paper which is documented at the end of the table, and this was just -- we don't know --17 18 again, we don't know the details of that, but it 19 shows that it was at least sometimes close to the detection level at about the standard level. 20 21 And, finally, the last inorganic substance 22 is zinc. There are over a tenth detection rate, and the detection level can get significantly higher 23 than the standard level. 24

MR. MOSHER: About all you can say on some of 1 these is that we've taken a good number of samples, 2 3 and whenever you send several hundred samples to a 4 laboratory, there's always a chance that a few of 5 those could come out as what we might call a laboratory anomaly where we have kind of a feeling 6 7 that something went wrong at the lab, a sample got contaminated or someone had a transposition error 8 9 because it's a little hard to fathom how we can have 258 micrograms per liter in Lake Michigan when 10 11 normally we always get a nondetect. We usually get 12 a nondetect.

13 So there's no real way of telling that as 14 with all data. I guess our experience is we would 15 doubt some of these. At least for some of these 16 substances we would doubt some of these high values 17 are really valid, but that's what the data says, so 18 we presented it.

19 DR. OLSON: Well, for the organics, you'll 20 notice that most of bioaccumulative substances, the 21 traditional persistent bioaccumulative substances, 22 do apparently appear at levels higher than the 23 standard, but in this case, actually, there are not 24 too many detections that actually have been above

the detection limit. Clordane, they're worth three
 over 84 above detection, and detection limit is
 significantly higher than the human health or
 wildlife standard.

5 And then again also for DDT, and then I 6 don't know whether you want me to enumerate all the 7 list. Seven out of the 14 do apparently show higher 8 than -- well, but don't actually -- they aren't 9 actually above the detection limits, just that the 10 detection limit is so high compared to the standard 11 that we don't know.

12 DR. GIRARD: Well, on DDT, my table shows zero 13 samples had -- you know, found the detection limit. DR. OLSON: Right. But the detection limit is 14 15 so much higher than the standard that we can't say. 16 The standard is in picograms per liter, and the concentration level in the lake, which is the 17 detection level, are micrograms. So that's six 18 19 orders of magnitude difference.

20 MR. MOSHER: One more substance we might want to 21 mention from that chart is mercury. We've had a few 22 detections. I want to point out that as the 23 footnote would indicate mercury is a very difficult 24 substance to work with. There's a good chance that

sample collection vehicles or laboratories could be
 contaminated with mercury, and we've traced problems
 of this sort in the past.

4 So when I see a -- like the high end of the 5 range for mercury samples in lake water of 0.2 micrograms per liter, I generally would think that 6 would be a contaminated sample given that the vast 7 majority of samples from lake water are nondetects. 8 9 Again, in this particular case, we haven't 10 traced a contamination problem anywhere, but it just 11 looks like one.

12 DR. OLSON: So does that answer your question?

13 DR. GIRARD: Yes. Thank you.

14 MS. TIPSORD: Anything else?

15 MR. RAO: I have a follow-up question to what

16 Dr. Girard was asking right now.

Have you made any analysis in terms of the Have you made any analysis in terms of the 18 18 or so distorted that you have mentioned earlier? 19 Now, could they have any problems in complying with 20 these proposed standards?

21 MR. MOSHER: Most of these things aren't 22 regulated in any Lake Michigan dischargers' permit, 23 and that's because we don't have any knowledge that 24 they are present in the effluent.

1 So your question was would any of the Lake 2 Michigan dischargers have difficulty meeting these? There's some here present that might want to chime 3 4 in, but I don't know of any instances where they 5 would have a problem myself. 6 MR. RAO: So you have looked at the existing 7 permits? MR. MOSHER: Right. The existing permits by and 8 9 large don't regulate most of these things. There 10 may be a couple here and there. But from our process of regulation an NPDES permit, we look to 11 12 see what might be in an effluent. We do monitoring 13 of that effluent to see what's in there. If there's nothing going on at that 14 15 facility and we don't find anything in effluent, we 16 usually make the decision not to regulate, and that's the case for most of these. 17 18 MR. FREVERT: If I might add something to what 19 Bob said. MS. TIPSORD: If we could have you sworn again, 20 21 please. 22 (Witness sworn.) 23 24

L.A. REPORTING (312) 419-9292

1 WHEREUPON:

TOBY FREVERT, 2 called as a witness herein, having been first duly 3 4 sworn, deposeth and saith as follows: 5 MR. FREVERT: Just to follow up a little on what Bob said, in addition to these water quality 6 7 criteria the Great Lakes Guidance that U.S. EPA adopted a couple of years ago requires some new 8 9 upgraded committee procedures with a specialized 10 statistical process to go through to assess point source of discharge, quality, chemical makeup 11 12 discharges against their potential to exceed these water qualities, and it does accommodate provisions 13 for dispelling outwire data and some checks on the 14 15 quality of the effluent data we use and then a 16 statistical application on the frequency and the character of those substances occurring on the 17 discharge over time, so you can analyze whether or 18 19 not there appears to be any reasonable potential warranted permit limits, and in those cases where a 20 21 permit limit may not be warranted, there still may 22 be justification for some monitoring to look over time and see that that trend continues. 23 24 We have not applied that specific procedure

L.A. REPORTING (312) 419-9292

to any permits to date. Those permit rules will be 1 agency rules subject to adoption through the 2 Administrative Procedures Act, and that's 3 4 essentially the underlying basis for this whole 5 Great Lakes Initiative; No. 1, set protective water quality criteria for the lake, No. 2, procedures for 6 7 how you assess point sources potential to impact that water quality and then what you do about it in 8 9 terms of permit limits or other factors.

10 Our indication today is we don't see 11 anything that jumps out in front of us as 12 problematic parameters, but I can't guarantee that there wouldn't be some. I would assume over the 13 14 course of time somewhere there should be some; 15 otherwise, why have a program if there isn't some 16 protection that you need to regulate sources. 17 MR. RAO: Yeah. I wanted to get some ideas about the economic impact of the rules. I know you 18 19 had said it would be minimal, but I just wanted to 20 get something specific.

21 MR. FREVERT: I'd say throughout the Great Lakes 22 Basin sent and other states in particular there may 23 be concerns over the parameter market. Mercury is a 24 major problem. There dozens, even hundreds, of fish

L.A. REPORTING (312) 419-9292

consumption advisories through Wisconsin and 1 southern Michigan based on mercury both in Lake 2 Michigan water and in a lot of inland lakes. 3 4 And we know that mercury has been used a 5 lot in our own society, in batteries, in electrical elements, in pharmaceuticals, and things of that 6 nature. So there is concern that over the course of 7 time we may encounter a problem with mercury, and 8 9 then the challenge is to figure out what to do with that because end-of-pipe treatment for mercury is 10 probably not cost effective. 11 12 MS. TIPSORD: Go ahead. MR. SMITH: I just wanted to further address the 13 14 question that you raised. 15 MS. TIPSORD: Or if you want to wait and do it 16 as a part your testimony. 17 MR. SMITH: Yeah, that would be fine. MS. TIPSORD: Because I think we plan on asking 18 the same questions as you guys do. 19 MR. SMITH: No problem. I'll try to remember 20 21 the answer. DR. OLSON: Excuse me. If they're finished with 2.2 all the questions and so on, I have one other 23 concluding remark about the table. 24

L.A. REPORTING (312) 419-9292

1 MS. TIPSORD: Okay. We actually have one more 2 question to make, but it's not about the table, so 3 if you want to conclude on the table.

4 DR. OLSON: Okay. I just wanted to say that I 5 have a collection of papers, and I have database a bibliography and so on, and I've looked through all 6 of this and we've looked around the agency, and I 7 didn't put a formal statement of how deep a 8 9 literature search I did for this table. But really 10 all we came up with was our own Lake Michigan 11 reports.

So if anybody is aware of data, especially 12 for these other substances, which if you'll notice 13 at the end of the table there are some substances 14 15 that weren't in the data, so we just didn't put them 16 in the table. So I will gladly incorporate it. And most of the papers that are available were 17 repetitive. They were redundant. They were on PCBs 18 19 and things for which we already have the information. 20 21 MS. TIPSORD: Go ahead. 22 MR. COHEN: Your Honor, my name is Rob Cohen,

23 C-o-h-e-n. I represent Commonwealth Edison

24 Company. I have a -- as you know, our testimony

1 concerns in some parts -- the IERG testimony 2 concerns in some part BCCs, and since the date is 3 about to conclude I wondered if I could ask a few 4 questions now of Mr. Frevert concerning that topic. 5 MS. TIPSORD: Let's wait. Did you have -- there was a question behind you. Did you have something 6 7 on the table itself? 8 MS. BUCKO: Yes. 9 MS. TIPSORD: Let's go ahead and ask that. 10 MS. BUCKO: My name is Christine Bucko, 11 B-u-c-k-o. I'm the assistant attorney general for 12 the state of Illinois. 13 Mr. Olson, on the table, I was unclear whether the sampling and the data that's accumulated 14 15 here was based on an Illinois EPA study that was 16 done from actual samples taken near the waters near 17 Illinois --18 DR. OLSON: Yes. 19 MS. BUCKO: -- or if it was a federal study? DR. OLSON: I don't know. Maybe Bob Schacht 20 21 could help too. This is just the Illinois Lake Michigan report for -- it's documented at the end of 22 the table. 23 24 MR. SCHACHT: Yeah, it's --

L.A. REPORTING (312) 419-9292

1 MS. TIPSORD: Wait a minute. Could we have you identify yourself, please? 2 MR. SCHACHT: I'm Bob Schacht with the Illinois 3 4 EPA. 5 MS. TIPSORD: And let's go ahead and swear you in too. 6 7 (Witness sworn.) 8 WHEREUPON: 9 ROBERT SCHACHT, called as a witness herein, having been first duly 10 11 sworn, deposeth and saith as follows: MR. SCHACHT: That is state data collected by 12 the state, an Illinois portion of Lake Michigan. 13 MS. TIPSORD: Okay. Mr. Cohen, go ahead. 14 15 MR. COHEN: Thank you, your Honor. 16 Mr. Frevert, if I could just ask you, can you give us a general description of how the process 17 of adopting new bioaccumulative chemicals of concern 18 19 or BCCs would operate under the proposed rule? MR. FREVERT: Under the proposed rule, 20 21 bioaccumulative chemicals of concern are defined by 22 their chemical and behavioral properties, and, if indeed, a substance meets those properties behaves 23 that way, it would be treated as a BCC and subject 24

to the antidegradation and mixing zone provisions 1 within the other portions of the standard. 2 I believe your concern is who and how is 3 4 the decision made, whether a chemical actually 5 exhibits a bioaccumulation factor greater than 1,000 and whether or not it has a persistence of longer 6 than a specified time in the definition. In 7 application, the way we propose the standard at the 8 9 present time, we would review the scientific literature, and if the agency's technical experts 10 11 deem that those two conditions were met, we would 12 treat that substance as a BCC and apply antidegradation and mixing zone restrictions 13 14 accordingly. 15 MR. COHEN: Mr. Frevert, that is correct. That 16 is a part of my concern. 17 As a follow-up question, how would the regulated community know that IEPA had arrived at 18 19 that determination? MR. FREVERT: The regulated entity was asking 20 21 for an increase in loading that would be subject to antidegradation is asking for that increase 22 authority because they need authorization through a 23 24 permit to do that, and in the process of reviewing

L.A. REPORTING (312) 419-9292

that permit application, we would notify that
 individual of our understanding that this is a BCC,
 and, therefore, additional information is necessary
 for us to process the request.

5 Subject to the verification that we've 6 concluded it's a BCC, we would take steps to notify 7 the rest of the world, probably in our quarterly 8 publication, that chemical X is now due to be a BCC 9 in addition to those substances specifically named 10 in the definition.

MR. COHEN: Mr. Frevert, would it be correct to say then that until a certain point of time the BCC determination is site specific only and only as to that permittee who's seeking an increased loading? MR. FREVERT: I don't believe I'd say that, no. MR. COHEN: Well --

MR. FREVERT: A BCC is a chemical that acts a certain way consistent with the definition that that chemical behaves that way. It behaves that way whether it appears in St. Louis or Chicago. MR. COHEN: So then it would be correct to say instead that once the agency has made that determination, the BCC is a BCC for the entire

24 universe of dischargers governed by this rule; is

1 that correct?

2 MR. FREVERT: Once we've determined that an additional chemical was a BCC, we would apply those 3 4 requirements throughout the Lake Michigan Basin. 5 Now, as the incident arises, I don't think we're going to encounter these things more than once 6 in the decade, maybe I'm wrong, but the point is 7 wherever the situation arose, we would treat it that 8 9 way. MR. COHEN: Okay. Let me ask you a hypothetical 10 question if I may based on your experience and 11 12 judgment in these matters. What would be required of a third party, 13 other than the agency, if that third party wished to 14 15 add a BCC to the list either by review of scientific 16 literature or through its own studies perhaps and in turn wished to enforce that definition on some 17 discharger who isn't applying for a permit at that 18 19 particular point in time? MR. FREVERT: I think there would be two 20 21 opportunities for a third party to bring about that 2.2 concern. No. 1 would be to notify the agency that 23 certain literature and information is available that 24

substantiates the bioaccumulation factor and the
 persistency of this chemical, and, therefore, the
 agency should recognize that as a BCC and treat it
 that way.

5 Under such circumstances, of course, we 6 would have to make our independent review in either 7 corroboration or disagreement with that individual. 8 If we agreed with them, then we would be obligated 9 to apply antidegradation and mixing zone 10 restrictions on that chemical the same as we would 11 any BCC.

12 The other perhaps more -- well, I don't 13 know that it would be more direct or not, but the other route that's certainly possible in our state 14 15 regulatory structure is to petition the Pollution 16 Control Board in a regulatory proceeding to add that chemical to the list included and the definition. 17 18 MR. COHEN: So, Mr. Frevert, is it your understanding that my hypothetical third party would 19 20 require either your acquiescence or board adoption 21 in order to proceed on the grounds that this new chemical is a BCC in whatever manner that third 2.2 party chose to proceed? 23

24 MR. FREVERT: Well, certainly those two

options. I suppose if we disagreed with that 1 individual and said no, this does not meet the 2 definition, it is not a BCC and does not deserve to 3 4 be treated that way through a third party permitted 5 appeal or some other litigating fashion, they may be able to have a third bite at the apple. 6 7 MR. COHEN: Mr. Frevert, is it fair to say that nothing in the rule, other than the definition 8 9 itself, addresses the manner in which the BAF and half-life determinations are made for new 10 chemicals? 11 12 That everything you have said to me, to phrase my question a different way, is essentially 13 based on your current interpretation of how the 14 15 process would work? 16 MR. FREVERT: I'm not sure I understand your question. 17 18 MR. COHEN: Let me rephrase it. It wasn't well 19 phrased. Is there anything in the rule that sets 20 21 forth the procedure for determining whether a new chemical is or is it not a BCC? 22 MR. FREVERT: I believe there are standardized 23 24 protocols for doing bioaccumulation factor

1 measurements and things of that nature. We would 2 have to adhere to scientific procedures in reviewing and deciding whether to accept or reject data, if 3 4 that's your question? 5 MR. COHEN: Actually, the question is, is there anything in the rule that sets forth who will review 6 7 any such studies to determine they were, in fact, 8 valid? You've indicated earlier that the agency 9 10 would do that. My question is, is there anything in the rule that says the agency will make that 11 12 ruling? MR. FREVERT: No. The rules says --13 MR. MOSHER: Could we call a time out? I'm 14 15 sorry, Toby. 16 Could we have a time out to huddle a little 17 bit? 18 MR. FREVERT: Maybe they're going to enlighten 19 me. MS. TIPSORD: Let's go off the record for a 20 21 second. (Discussion had off 2.2 23 the record.) MS. TIPSORD: Let's go back on the record. 24

1 MR. COHEN: I didn't have a chance to say let 2 the record reflect I had no objection whatsoever to taking a break. 3 4 I'm not sure that -- we were almost at the 5 answer. I'm not sure we got quite to it. Do you remember that, Mr. Frevert? 6 7 MR. FREVERT: Could we ask the reporter to read 8 it back? 9 MR. COHEN: Let me just ask it again as simply as it's possible for an attorney to phrase it. 10 Does anything in the rule say that the 11 12 agency shall make the final determination based on studies or otherwise that a chemical is or is not a 13 14 BCC? 15 MR. FREVERT: The complication I have in 16 answering your question is the way the regulations are drafted today. BCC is by definition not by 17 18 determination. 19 I suppose a simple analogy, everything over 2,000 pounds weighs a ton. If we're asked if 20 21 something weighs a ton or not, we're going to say is 22 it over 2,000 pounds? MR. COHEN: One last question, I think, can you 23 envision a situation where a permittee might 24

L.A. REPORTING (312) 419-9292

1 increase its loading of anything, but let's assume
2 it's a BCC, without having to apply for a permit
3 modification?

4 MR. FREVERT: Well, within the context of the 5 permit, certainly permittees may have some nonregulated, nonpoint source flows or some storm 6 water flows that are not subject to the permitting 7 provisions for the Great Lakes Initiative. But 8 9 within Great Lakes Initiative water quality standards and the parallel permitting procedures 10 required in the Great Lakes Guidance, any increased 11 loading of the BCC requires up-front approval and 12 13 that would trigger antidegradation and mixing zone 14 considerations. 15 MR. COHEN: So the answer to the question though

16 is yes, it is possible that a person could increase 17 loading as we understand it in the context of this 18 rule without being required to apply for permit 19 modification?

20 MR. FREVERT: It's possible, but not for a 21 regulated point source discharge. That point source 22 discharge would need prior approval for that 23 increased level, unless, you know, they were already 24 limited, and their discharge is below their limit.
They could increase up to the permitted limit, but
 no increase above what was previously authorized in
 a permit.

4 MR. COHEN: I wanted to just return for a moment 5 to your analogy of the ton. I actually have two 6 questions regarding that.

7 First, is it based on your experience not 8 the case that a BAF calculation can result in 9 variable, variable results?

10 MR. FREVERT: This is an area where there is 11 certainly variation -- major opportunity for 12 variation in the data, and in that regard, there may 13 be some verification of the data and legitimacy of 14 whatever studies are relied upon, whether they be 15 published or otherwise.

And, yes, it's not that unusual for two And, yes, it's not that unusual for two studies to yield somewhat different results, and in that regard -- I know what you're getting at. I'll get right to the point.

There is some potential for our technical people to make a decision that is not agreed with perhaps even, you know, some potential that we would make the wrong decision. Under such circumstances, I think permit appeals would give the affected party

the right to bring that to a higher body and get it 1 2 reviewed. MR. COHEN: The other point I had concerning 3 4 that analogy is, to carry it further, is it not 5 typically the case when something that is regulated as measured in tons that there is also a provision 6 for determining what shall be the official scale 7 that weighs it. 8 9 MR. FREVERT: I supposed so. I don't know. 10 Somebody might regulate scales. MR. COHEN: I have nothing further at this time, 11 12 your Honor. 13 MS. TIPSORD: Are there any other questions for 14 the agency? 15 MR. RAO: I just have two clarification 16 questions. This is to anybody on the agency's 17 panel. 18 When the board offered the agency's 19 proposal, we made some changes in certain sections that dealt with data requirements. One of them was 20 21 in Section 02545. We deleted a reference to ASTM 22 standards, and the reason we did that was the 23 agency's proposal cited ASTM standards incorporated 24 by reference, and we didn't find any standards

incorporated by reference. So we deleted, you know, 1 2 the site. I just wanted to make sure that we didn't 3 4 delete something that was supposed to be in the 5 rule. MS. TIPSORD: If you'd like to double check that 6 and get back to us in final comments on it. If we 7 need to add something, let us know in final 8 9 comments. 10 MR. WARRINGTON: If we have a loose end or something that needs to be incorporated that isn't, 11 12 we will advise it during the final comment period. MR. RAO: Yes, that will be fine. 13 And we had asked a question of the agency 14 15 in the first hearing about U.S. EPA's current Manual 16 of Practice, and if you could give us the name of the report so that we could incorporate that by 17 reference. It's under Section 302.550. 18 19 MR. WARRINGTON: We've asked -- Rich Warrington 20 from the agency. 21 We've asked various people if they're 22 familiar with it and the closest thing we've come is references in other documents that discussed the 23 24 various test protocols in 40 CFR 136, and in there

they make reference to certain EPA methods for 1 analysis of, I believe, there's like a 900 series or 2 1200 series, and 1100 series, but we haven't found 3 4 the actual documents. 5 They seem to be cumulative with other test protocols that are set out in 40 CFR 136, but we 6 haven't found a particular publication that's called 7 the Manual of Practice. 8 9 MS. TIPSORD: Anything else? 10 MR. RAO: No. MS. TIPSORD: Okay. Thank you very much, and I 11 think we can move along to the Illinois 12 Environmental Regulatory Group's presentation. 13 MS. ROSEN: Could we take one moment off the 14 15 record? 16 MS. TIPSORD: Sure. Let's go off the record. 17 (Discussion had off 18 the record.) 19 MS. TIPSORD: Let's go back on the record. At this time, we're ready to begin with the 20 21 Environmental Regulatory Group, and Ms. Rosen? 22 MS. ROSEN: Good morning. My name is Whitney 23 Rosen. I am legal counsel for the Illinois Environmental Regulatory Group. Our membership is 24

L.A. REPORTING (312) 419-9292

1 made up of 59 companies which are impacted by

2 today's proceeding.

With me today are a number of those members
but also specifically Mr. Jeffrey Smith from
Commonwealth Edison and Mr. Rob Cohen who's counsel
for Commonwealth Edison. Jeff will be providing our
testimony.

8 Prior to him beginning though, I would like 9 to just make an oral motion, which I will follow up 10 with a written document to the board requesting that 11 the board move the procedures in Section 302.530 12 regarding supplemental mixing provisions for 13 bioaccumulative chemicals of concern.

If they could move these provision into a 14 15 subdocket for further proceedings. These are 16 provisions that Jeff will explain in the testimony were the subject of a federal lawsuit and the 17 federal courts have found that they should be struck 18 19 from the GLI provisions. Jeff will testify further on this matter, 20 21 but we believe that they could be effectively

22 resolved in a subdocket, and I believe that the

23 agency would concur in this request.

24 Thank you.

1 MS. TIPSORD: Thank you. Could we have Mr. Smith sworn? 2 (Witness sworn.) 3 4 WHEREUPON: 5 JEFFREY P. SMITH, called as a witness herein, having been first duly 6 7 sworn, deposeth and saith as follows: 8 MS. TIPSORD: Go ahead. 9 MR. SMITH: Good morning. My name is Jeffrey P. 10 Smith, and I'm the general supervisor of water quality in Commonwealth Edison's environmental 11 12 services department. 13 My testimony this morning is provided on behalf of the Illinois Environmental Regulatory 14 15 Group, or IERG, and carries Commonwealth Edison's 16 full support. 17 I've been employed with Commonwealth Edison for the past 21 years. I've held my current 18 position since 1989. I hold a bachelor's degree in 19 civil engineering and a master's degree in sanitary 20 21 engineering both from Georgia Tech and an MBA from 22 the University of Chicago. 23 In my position as supervisor of water 24 guality, I oversee corporate environmental

compliance activities involving water quality issues
 for Commonwealth Edison's 16 generating stations and
 for other company facilities throughout our service
 territory.

5 One of my key responsibilities is following 6 and participating in regulatory initiatives like the 7 Great Lakes Initiative, or GLI, to advocate for the 8 adoption of regulations that are technically sound, 9 economically reasonably and environmentally cost 10 effective --

MS. TIPSORD: Excuse me, Mr. Smith. Can you hear in the back?

Okay. If you have a problem let me know.
 Sorry. Go ahead.

15 MR. SMITH: Sure.

I am the chairman of the IERG Work Group that focuses its attention on the state of Illinois' water regulations. As part of its efforts, the IERG Work Group has participated in numerous discussions with the Illinois Environmental Protection Agency, or agency, regarding the state of Illinois' efforts to implement federal GLI regulations. IERG's interest in this proceeding is two-fold.

24 First, IERG members are among the

dischargers to Lake Michigan who will be immediately
 impacted by the adoption of the proposed
 regulations.

Second, IERG's involvement in development
of the regulations is important given the potential
precedent which may be set by the regulations after
adoption.

8 Before getting to the substantive points of 9 my testimony, I want to commend the agency for its 10 openness and cooperation in considering comments 11 from the regulated community as it drafted the 12 proposal now before the Pollution Control Board, or 13 board.

Agency personnel spent considerable time meeting with us, responding to our comments, and revising working drafts to create GLI regulation that we believe, except to the extent discussed below, are consistent with the federal GLI guidance and developed to fit into the board's existing regulatory framework.

As I'm sure the board already realizes, federal law requires each of the eight Great Lake states to incorporate the federal GLI guidance into their own regulatory programs within two years from

the United States Environmental Protection Agency's, 1 or U.S. EPA's, promulgation of the GLI guidance. 2 This two-year deadline passed March 23rd, 3 4 1997. Accordingly, Illinois along with several 5 other Great Lake states that also missed this deadline currently are at risk of having U.S. EPA 6 assume federal control over the implementation of 7 their GLI programs unless the state moves promptly 8 9 to complete adoption of the regulations.

10 Indeed, on this past July 1st, the National 11 Wildlife Federation filed suite against U.S. EPA to 12 achieve precisely this outcome. IERG believes the 13 agency has come a long way in developing workable 14 GLI regulations for Illinois. We do not want to see 15 that effort wasted.

16 Therefore, we urge the board to move
17 forward with this rulemaking as expeditiously as
18 possible so that Illinois will have GLI regulations
19 in place before the end of this year.

Issues of concern, the IERG Work Group and the agency were able to achieve consensus regarding many of the issues which surfaced in the development of the Illinois GLI regulations. To that end, IERG supports the agency's proposal.

1 The primary purpose of my testimony will be 2 to identify issues of concern which warrant 3 additional consideration by the board and where IERG 4 believes that improvements to the proposal rule are 5 still needed.

Changes to the proposed regulations to 6 7 comply with the federal court GLI decision, the federal GLI regulation upon which the Illinois GLI 8 9 proposal is based was challenged in Federal Court in 10 Washington, D.C. On June 6, 1997, the D.C. Circuit 11 Court of Appeals issued its opinion in the case, 12 American Iron and Steel Institute vs. EPA, No. 95-1348 and consolidated cases. 13

14 In that decision, the court vacated several 15 provisions of the federal rule. In order to be 16 consistent with the court's ruling, there are 17 several changes that this board should make to the 18 proposed Illinois GLI regulations.

19 Mixing zones, which are discussed in 20 proposed Section 302.530, the first change which the 21 board should make in response to the court decision 22 relates to mixing zones. The court vacated the ban 23 on mixing zones for bioaccumulative chemicals of 24 concern, or BCCs, because U.S. EPA had not properly

L.A. REPORTING (312) 419-9292

considered the enormous cost that would be imposed 1 on discharges because of the ban. 2 As a result, U.S. EPA will have to 3 4 reconsider whether to impose the ban after 5 determining that the ban is cost justified. While U.S. EPA is going through the rulemaking process to 6 make that decision, the board should remove the 7 invalidated mixing zone ban from its proposed rule, 8 9 and Ms. Rosen pointed out, we will be filing a motion with the board asking that this aspect of the 10 proposed rule be separated -- put into a separate 11 12 docket for further rulemaking. 13 This may be accomplished by striking proposed Section 302.530 in its entirety and any 14 15 other references to Section 302.530 throughout the 16 proposed regulations. 17 Once the federal rulemaking process has been completed, U.S. EPA will have to decide among 18 19 the following choices; No. 1, reinstate the ban, mixing zone ban; No. 2, leave the mixing zone ban 20 21 out of the federal rule; No. 3, adopt a modified 22 version of the mixing zone ban; or, four, adopt a 23 different restriction on mixing zones instead of the 24 ban.

After U.S. EPA has made that choice, the
 date can then implement the U.S. EPA determination
 in a new board rule.

4 The next issue, polychlorinated biphenyls, 5 or PCBs, which are discussed in proposed Section 302.504(d), the second change in the board rule that 6 is needed due to the court's decision relates to the 7 water quality criteria for PCBs. U.S. EPA has 8 9 admitted that it made errors in calculating the criteria for PCBs and has announced its intention to 10 revise the criteria. 11

As a result, the court vacated both the human health and the wildlife criteria and sent them back to U.S. EPA to reconsider in a new rulemaking. Based on the court's ruling, the board should remove the PCB standards from the Illinois regulations.

17 This may be accomplished by striking the 18 PCB standards proposed at Section 302.504(d). When 19 U.S. EPA has included its new rulemaking as to those 20 criteria, the state can implement the final U.S. EPA 21 criteria in a new board regulation.

I want to point out that the IERG WorkGroup has been meeting quite recently with theagency on this particular issue, and further

1 discussions are planned, and it is conceivable that 2 some agreement may come out of those discussions, 3 and we would be providing comments to the board to 4 incorporate some mutually agreeable resolution of 5 this issue.

6 The next issue is mercury criteria which is7 proposed in Section 302.504(d).

8 The final change to the proposed GLI 9 regulations based on the court's decision concerns 10 the water quality standard for mercury. In the 11 federal litigation, the position has raised several challenges to U.S. EPA's mercury criteria. One of 12 those challenges related to U.S. EPA's use of an 13 outdated reference dose, or referred to as the 14 15 acronym RfD, in calculating the human health 16 criterion.

17 In developing the criterion, which is 1.8 nanograms per liter, U.S. EPA had used a reference 18 19 dose of 0/6 micrograms per kilogram per day. 20 However, shortly after issuing the rule, U.S. EPA 21 had determined that the proper RfD was actually not 22 0.6 but 1.0 micrograms per kilogram per day. 23 That would change the criterion from 1.8 to 3.1 nanograms per liter. Based on claimed time 24

constraints, U.S. EPA used the old RfD in issuing 1 the GLI rule, but U.S. EPA later issued guidance 2 stating that a state could choose to use the new RfD 3 4 in developing the state GLI program.

5 The court upheld U.S. EPA's decision to use the old RfD since the administrative process cannot 6 stop whenever new evidence is gathered, but the 7 court also held that U.S. EPA does have an 8 9 obligation to deal with the newly acquired evidence in some reasonable fashion. By allowing the states 10 11 to base their criteria on the new RfD, U.S. EPA had 12 met the procedural requirement.

Since the court's decision, U.S. EPA has 13 reaffirmed that the states are free to use the new 14 15 RfD to adopt a mercury human health criterion of 3.1 16 nanograms per liter. U.S. EPA's reaffirmation was made in the draft Mercury Permitting Strategy 17 document that was issued on June 6, 1997. 18 19 Since U.S. EPA has acknowledged that the 20 new RfD is more appropriate than the old RfD, 21 Illinois should base its human health criterion for mercury on the new RfD and adopt a criterion of 3.1 22 nanograms per liter. Any other course of action 23 would result in issuance of a criterion that is

L.A. REPORTING (312) 419-9292

1 based on data that U.S. EPA has conceded is

2 outdated.

3 IERG has additional general concerns
4 regarding the proposed mercury criteria for both
5 human health and wildlife which I will discuss at
6 this time.

7 The extremely stringent mercury criteria 8 for the protection of human health and wildlife, 9 which Illinois has proposed at 1.8 nanograms per 10 liter and 1.3 nanograms per liter, respectively, are 11 some of the most controversial provisions of the 12 federal GLI guidance.

I just wish to point out that one nanogram 13 per liter is equivalent to one part per trillion. 14 15 Since mercury is ubiquitous in the 16 environment, many water bodies in the Great Lakes Basin already exceed the GLI's human health and 17 wildlife mercury criteria. It is unlikely that even 18 19 rain water will comply with either criterion. These situations are expected to result in 20 21 many discharges being required to meet the mercury standards at the end-of-pipe, and the treatment cost 22 for mercury can be substantial. For example, a 23

24 recent study conducted for the Ohio EPA by the

Foster and Wheeler Environmental Services Company 1 estimated that the annualized cost, including 2 capital costs and operations and maintain expenses 3 4 for an electric utility power plant to comply with 5 the GLI mercury limits, would range up to \$157 million per year. That would equate to an annual 6 cost of up to \$132 million to remove one pound of 7 8 mercury.

9 Realization of mercury as a significant GLI cost driver has prompted some Great Lake states to 10 11 consider various options to the mercury dilemma. 12 Ohio, for example, has incorporated into its proposed GLI regulations a statewide mercury 13 variance provision that would be granted to 14 15 dischargers provided certain minimum discharged 16 performance standards are achieved.

17 Beyond the above discussion, ERG is not prepared to challenge the agency's proposed mercury 18 19 wildlife and human health numeric standards at this 20 time, rather we urge that the board base its human 21 health criterion for mercury on the new RfD and 22 adopt a criterion of 3.1 nanograms per liter. 23 We further urge the board to take note of the heavy compliance cost burdens that the proposed 24

mercury criteria may impose on the regulated
 community and the various strategies other Great
 Lake states are devising to deal with this
 situation.

5 We would hope that the board is sensitive 6 to this matter in the event sometime in the future 7 an Illinois discharger finds itself before the board 8 in need of regulatory relief because of a mercury 9 compliance problem.

10 IERG urges the board to consider the above
11 discussion and incorporate the noted revisions in
12 the adopted rule.

13 We had recent discussions with the agency, and I wish to point out to the board that it's our 14 15 understanding that the agency does agree that the 16 human health criterion should be revised to the 3.1 nanograms per liter level that we're proposing. 17 18 Appropriate compliance determination for 19 GLI human health standards which are proposed in Section 302.504(c). IERG has concerns regarding the 20 21 manner in which the agency has incorporated GLI 22 human health standards into the proposed regulations 23 and the manner in which compliance with the 24 standards will be determined.

1 Subsection C of Section 302.504 of the proposed rule contains numeric water quality 2 standards that apply to the open waters of Lake 3 4 Michigan. These standards are an assemblage of 5 standards currently contained in Subparts C and E of the board's existing water pollution regulations as 6 well as human health standards appearing in Table 3 7 of the federal GLI guidance. 8 9 As proposed, compliance with all the 10 standards in Subsection C must be met in each 11 individual sample taken at any time. For the GLI 12 human health standards, this individual sample 13 approach is inconsistent with the basis on which the standards were developed. 14 15 The purpose of the GLI human health 16 standards is to protect individuals against unsafe exposure to chemicals in drinking water supplies and 17 throughout fish consumption over long-term or 18 19 chronic exposure periods. Therefore -- excuse me. This purpose is 20 21 why Section 302.540(d) specifies that the human 22 health threshold criterion or values are developed 23 as an arithmetic average of four samples collected 24 over four different days.

L.A. REPORTING (312) 419-9292

1 With respect to the chemicals listed in Subsection 302.504(c), the GLI human health 2 standards are the last nine chemicals listed 3 4 beginning with benzene, b-e-n-z-e-n-e. IERG urges 5 the board to list these standards in a separate subsection with a heading stating that these are 6 7 human health standards that apply to the open waters of Lake Michigan and shall not be exceeded by the 8 9 arithmetic average of at least four consecutive 10 samples collected over a period of at least four 11 days.

12 In Mr. Mosher's written testimony, he 13 acknowledges that under the GLI, compliance with the 14 human health standards is intended on an average 15 basis, such as if water samples are averaged over a 16 period of four days. But because these standards are intended to protect drinking water supplies, he 17 further states the agency's belief that such 18 19 standard should be applied as never to be exceeded 20 values.

21 In fact, however, the GLI's human health 22 criteria methodology already takes into account 23 chronic chemical exposures in protecting drinking 24 water supplies. Applying the GLI human health

L.A. REPORTING (312) 419-9292

standards as instantaneous values therefore seems
 extreme and unnecessary, and it surpasses the level
 of protection planned by all of the other Great Lake
 states.

5 Moreover, a sample found to be exceeding 6 the GLI's human health standards perhaps due to a 7 localized spill or an erroneous laboratory result 8 could render all of the Illinois portion of Lake 9 Michigan as a nonattainment water for any of these 10 nine chemicals.

This could create havoc in the NPDES 11 12 permitting process by triggering overly stringent 13 water quality base permit limits. Averaging samplings over a four-day period greatly minimizes 14 15 chances of this happening. IERG believes the 16 marginal convenience of determining compliance with single samples are far outweighed by the importance 17 of applying the GLI's human health standards as 18 19 intended in the federal GLI guidance.

For this reason, we urge the board to list these standards in a separate subsection under Section 302.504 and specify that the standard should not be exceeded by the arithmetic average of at least four consecutive samples collected over a

1 period of at least four days.

2 Application of GLI wildlife criteria 3 derivation procedure to non-BCCs, and this is 4 proposed in Section 302.575, throughout the 5 regulatory development process, IERG questioned the 6 agency's proposed application of the GLI Wildlife 7 Criteria Derivation Procedures to non-BCCs which are 8 proposed in Section 302.575.

9 Following discussion, IERG and the agency
10 had tentatively reached an agreement on the matter
11 in which the derivation procedures should be
12 modified for appropriate application to non-BCCs.

13 And I'll depart from the prefiled testimony to indicate that earlier this morning the agency's 14 15 counsel spoke with our counsel and whereas we 16 thought we had reached agreement on the rewording of this Section 575, it appears that the agency wants 17 to further amend that language, and we plan on 18 19 having further discussions with the agency to come 20 to -- hopefully, come to an agreement on how that 21 language should be further modified to address our 22 concerns as to how the GLI's wildlife criteria derivation methodology should be applied to non-BCC 23 24 chemicals.

1 Nonetheless, I will go ahead and read the suggested -- the language that we had agreed upon 2 that now will be subject to revision. It again 3 4 pertains to Section 302.575 and it read as follows, 5 this method shall also be used for non-BCCs as appropriately modified based upon consideration of 6 the following factors, colon, selection of 7 scientifically justified target species, semicolon, 8 9 fate and relevant routes of chemical exposure, 10 semicolon, and pertinent toxicity endpoints. 11 Designation of bioaccumulative chemicals of 12 concern, IERG questions whether the manner in which the agency is proposing to address the designation 13 of BCCs and the application of BCC provisions 14 15 comports with Illinois law. 16 The objectional provisions include the definition of BCCs proposed at Section 302.501 and 17 proposed Sections 302.520, 302.530, and 302.595. 18 19 MS. ROSEN: I'd just like to note for the record 20 that Mr. Smith will -- is going to present some 21 testimony on bioaccumulative chemicals of concern. Copies of that language are available in the piles 22 of the language over there for people in the 23 audience. The board and the hearing officer, 24

L.A. REPORTING (312) 419-9292

attorneys present have been given copies of them, 1 and following Mr. Smith's presentation, we'll move 2 them into the record. 3 4 MS. TIPSORD: Thank you. 5 MR. COHEN: Your Honor, would you like Mr. Smith to record this verbatim into the record, or would 6 7 you prefer just a summary of the high points? 8 MS. TIPSORD: You know, why don't we go ahead and give it an exhibit number, and let's also do the 9 10 same with the previous language. 11 The previous language that Mr. Smith read 12 of what the agency and IERG is still talking regarding Section 302.575 will also be entered as an 13 exhibit, if there's no objection. 14 15 MR. WARRINGTON: No objection. 16 MS. TIPSORD: Seeing none, we'll mark that as Exhibit 7, and the title on the top of that document 17 is the Illinois Environmental Regulatory Group 18 19 suggested revisions to proposed Section 302.575. (Hearing Exhibit No. 7 20 21 marked for identification, 22 7/28/97.) MS. TIPSORD: And then the language that is 23 marked the Illinois Environmental Regulatory Group's 24

Proposed Procedures for BAF Verification and BCC 1 Designation, we'll mark as Exhibit 8, if there's no 2 objection. 3 4 MR. WARRINGTON: No objection. 5 THE COURT: Seeing none, we'll mark that as Exhibit 8. 6 (Hearing Exhibit No. 8 7 8 marked for identification, 7/28/97.) 9 MS. ROSEN: Marie, at this time -- Madam Hearing 10 Officer, at this time, did you wish us to also admit 11 12 for the record this copy of the American Iron and Steel Institute decision? 13 MS. TIPSORD: Yes. Let's go ahead and take care 14 15 of that. That's the circuit court case also cited 16 in Mr. Smith's testimony, American Iron and Steel 17 Institute vs. Environmental Protection Agency, 18 et al. 19 The circuit court case number is 20 Nos. 95-1348, et cetera. I won't list all of them, 21 and we'll mark that as Exhibit No. 9, if there's no 22 objection. Seeing none -- I'm sorry, district court 23 opinion. 24 (Hearing Exhibit No. 9

L.A. REPORTING (312) 419-9292

1 marked for identification, 7/28/97.) 2 MS. ROSEN: Just one more brief explanation of 3 4 Mr. Smith's testimony here, he is going to provide 5 some background on a proposal that we have reached conceptual agreement with the agency on, and we hope 6 that our discussions will continue, and we will 7 8 reach total sign-off. 9 In the event that that does not occur, ERG 10 does intent to proceed with motioning the board for an opportunity to provide legal briefs on this 11 12 issue. 13 Thank you. THE COURT: Mr. Smith, continue, thank you for 14 15 your patience. 16 MR. SMITH: Thank you. 17 This past Friday, the IERG Work Group met with the agency to discuss this proposed section on 18 19 the procedures for verification of bioaccumulation factors and for designating a chemical as a BCC. 20 21 And just in summarizing, the concept of what we 22 discussed that I think I can represent consensually 23 the agency agrees to although the actual details of language we're still discussing with the agency. 24

L.A. REPORTING (312) 419-9292

1 It basically involves a process whereby the agency will publish in the Illinois Register the 2 3 name of any chemical or chemicals that it believes 4 should be treated as a -- as a BCC because it may 5 have a bioaccumulation factor greater than 1,000. Once it does that, the agency also can 6 7 elect to propose to the board that the board consider designating that chemical as a BCC based on 8 9 a showing that the bioaccumulation factor, in fact, is greater than 1,000. What that first step does is 10 11 it allows members of the public and the regulated 12 community to come in and meet with the agency to 13 review the data to perhaps determine that maybe the data does not suggest that a chemical should be 14 15 treated as a BCC or, in fact, verify that it, in 16 fact, does qualify as a BCC. But it does give the public an opportunity to get involved in that BCC 17 18 determination process.

However, once the agency decides to go forward with a petition to the board that the board make the determination that the chemical should be treated as a BCC based on having a bioaccumulation factor greater than 1,000, the implications of that in terms of the permitting that may take place in

L.A. REPORTING (312) 419-9292

that intervening period are such that the chemical
 for all practical purposes will be treated as if it
 is a BCC.

4 Therefore, there will not be any allowed 5 increase in the discharge of that chemical in a 6 facilities permit unless, in fact, it is a BCC. A 7 showing is made that increase is necessary based on 8 economic benefits to the area.

9 In addition, a facility could, in fact, go ahead and increase the loading of the particular 10 chemical that's subject to this verification process 11 12 if, in fact, it agrees to comply with all of the normal regulations that would apply if, in fact, 13 that chemical was a BCC. And, therefore, it 14 15 basically allows a process whereby the board will 16 determine whether or not a chemical should be a BCC, but at the same time during this intervening process 17 for all practical purposes that chemical will be 18 19 treated as a BCC until that determination is made. And, therefore, we believe that it fully 20 21 satisfies the federal GLI requirement in terms of how a potential chemical that appears to be a BCC 22 should be restricted for discharge purposes. 23 24 Two further points, one is that at the

L.A. REPORTING (312) 419-9292

agency's suggestion, there also is a provision added 1 that would basically kick in this process even if 2 the agency does not formally petition the board for 3 4 verification as a BCC for a period of 60 days, and 5 this allows a hold on the process of increasing loadings of potential BCCs while the agency has time 6 to put together a petition to the board for this 7 determination to be made. So that's also a 8 9 provision in this exhibit that we will be submitting 10 as an exhibit.

The other aspect of this addresses those 11 12 situations that we feel could result in a loading -in an increase in loading a BCC that would otherwise 13 not be covered under the normal permitting process, 14 15 and this basically includes a provision that would 16 also hold a facility or a discharge that would perhaps be able to increase the loading, the 17 discharge loading, of this candid BCC and treat that 18 19 discharged as a BCC as long as the facility agrees to abide by all of the BCC restrictions that would 20 21 normally apply until the board makes a determination 22 as to whether or not it's a BCC.

23 MR. COHEN: Yes, and that nonpermit holder also24 is prohibited from engaging in any activity that

1 might not require a permit in the same way that a
2 permit applicant would be, by that being triggered
3 by either a letter from the agency or a petition to
4 the board. So it covers permitted and nonpermitted
5 activities.

6 MR. SMITH: I wish to put out that we learned 7 this morning that the National Wildlife Federation 8 had submitted recently some comments to the board on 9 this rulemaking, and it had addressed this BCC issue 10 that I've just discussed.

11 We haven't really had an opportunity to 12 thoroughly review National Wildlife Federation's 13 comments, but based on a brief review that we've 14 done, we feel that the approach that I've just 15 outlined is consistent with what National Wildlife 16 Federation has stated in their comments.

MS. ROSEN: And thank you very much. I believethat's all Mr. Smith has today.

19 MR. SMITH: No, I'm not done yet.

20 MS. ROSEN: I'm sorry.

21 MR. SMITH: There's more.

22 MS. ROSEN: He's right.

23 MR. SMITH: Just a few minor points that I wish24 to alert the board to pertaining to the first notice

that appeared, IERG has gone through the proposed 1 rule and has identified a few minor issues that we 2 3 plan to discuss with the agency to maybe have some 4 language changes that are relatively minor, but I 5 thought I would bring it to the board's attention at this point. 6 7 The first appears on Page 26 --8 MS. TIPSORD: Let the record reflect that 9 Mr. Smith is referring to Page 26 of the board's 10 first notice opinion and order. MR. SMITH: Thank you. 11 12 And it just pertains to the title heading for that section, which is 302.507, existing sources 13 on January 1, 1971. We would be suggesting that 14 15 some connection to the fact that this is a thermal 16 standard be included in the title for Section 507, and the same type of change be made to Section 17 302.508, which appears on Page 27. 18 19 And let me just read a change that would 20 satisfy the comment that we have. For 21 Section 302.507, it could be stated thermal standards/existing sources on January 1, 1971, 22 Section 302.508 could be entitled thermal 23 standards/sources under construction but not in 24

1 operation on January 1, 1971.

2 Okay. The next comment that we would be submitting pertains to Page 29, and that's 3 4 Section 302.520, Subsection A, and in reviewing the 5 rule, proposed rule, we identified a situation where if a -- if the ambient concentration of the BCC 6 exceeds the standard, then no increase in loading of 7 that BCC is allowed. That's under Subsection 1. 8 9 And then in No. 2, there's a situation where the ambient concentration is below the water 10 11 quality standard, and so as a result, there's kind 12 of an area that's not addressed if it's at the standard. And we've had discussions just this 13 14 morning with the agency in terms of maybe modifying 15 the language in Subsection 2 to reword it to be 16 where ambient concentrations of a BCC are at or below the applicable water quality criteria. 17 18 That would address that hole that now 19 exists in how that language is stated. And as I 20 mentioned, we're still discussing that point with 21 the agency, and we will be submitting comments as to how we would propose that. 22 23 And then the last point pertains to -- this is on Page 57. This pertains to Section 303.443, 24

which is the definition of waters of Lake Michigan 1 Basin, and we would want to propose that word 2 switching be done to Subsection B which is the 3 4 definition of waters that are not considered open 5 waters of Lake Michigan, and these changes would be along the lines of getting that definition closer to 6 7 the definition in Subsection A in terms of it pertaining to the Illinois jurisdiction of these 8 9 waters and so on and so forth, and we will be discussing this issue with the agency and would be, 10 11 hopefully, proposing some mutually agreeable 12 language to the board shortly on that definition 13 change. That concludes my testimony. 14 15 MS. TIPSORD: Thank you, Mr. Smith. 16 Did you have any other? 17 MS. ROSEN: No, I don't, although Mr. Smith is available for any questions at this time. 18 MS. TIPSORD: Okay. Are there any questions for 19 Mr. Smith? 20 21 DR. GIRARD: I have some questions. 2.2 The first question concerns something on Pages 6 and 7 of your testimony under the mercury 23 subheading. On Page 6, you've discussed a U.S. EPA 24

draft Mercury Permitting Strategy that was issued on 1 June 6, 1997. Have you entered that into the 2 record? 3 4 MS. ROSEN: No, we have not. We can make that 5 available. 6 DR. GIRARD: Would that be possible to do so? 7 Thank you. 8 And the second is a very similar question. 9 On Page 7, you discussed a study conducted for the 10 Iowa EPA, I think you said by Foster and Wheeling --MR. SMITH: Wheeler. 11 12 DR. GIRARD: Wheeler. (Continuing.) -- on the costs of mercury control. 13 Would it be possible to introduce a copy of 14 15 that study into the record? 16 MR. COHEN: The only thing I wish to point out, I don't know if you want to be off the record on 17 this, but that study is about yea thick 18 19 (indicating). So, you know, if you want all that, I guess 20 21 we could do that, but the pertinent sections are relatively brief and we can perhaps --22 DR. GIRARD: Well, if you could certainly 23 introduce the pertinent sections, that would be very 24

1 helpful. Thank you.

MR. COHEN: Your Honor, do you want me to 2 introduce this permitting strategy now? 3 4 MS. TIPSORD: If you have a copy, that would be 5 fine. MR. COHEN: Your Honor, I move to introduce this 6 7 exhibit next in order June 9, 1997, document from 8 the United States Environmental Protection Agency addressed to Dear Great Lakes Stakeholder, the title 9 10 of the document or the cover of that letter is Water Quality Guidance for the Great Lakes System Draft 11 12 Mercury Permitting strategy, June 19, 1997. I submit a true and correct copy to you. 13 MS. TIPSORD: Is there any objection to this 14 being marked as Exhibit No. 10? 15 16 MR. WARRINGTON: No objection. 17 MS. TIPSORD: Seeing none, we will mark this as 18 Exhibit No. 10. 19 (Hearing Exhibit No. 10 marked for identification, 20 21 7/28/97.) DR. GIRARD: Thank you. 22 MR. COHEN: I do not have the Foster and 23 24 Wheeling study with me.

L.A. REPORTING (312) 419-9292

1 MR. SMITH: Wheeler. 2 MR. COHEN: Wheeler, or that. MS. TIPSORD: If you could present that in your 3 4 final comments, we'd appreciate that. 5 MR. COHEN: Yes, your Honor. 6 DR. GIRARD: Could I ask another question? MS. TIPSORD: Sure. 7 8 DR. GIRARD: I have a question about this 9 verification process that you're proposing for new 10 chemicals added to the BCC list. 11 Presently in the proposal, we have a 12 definition of BCC at 302.501 which includes both an operational definition which you can apply to a 13 chemical to see if it should be added to the list, 14 15 and then we have also had a list of chemicals which 16 have been determined at this point in time to be 17 BCCs. 18 And it seems to me that what you're asking 19 for in this verification process is a board rulemaking, and I'd just like to find out if that's 20 21 exactly what you're looking for because you're asking for public notice, you're asking for possibly 22 a public hearing with a chance to present public 23 comments and testimony. So you're really looking at 24

L.A. REPORTING (312) 419-9292

1 a board rulemaking process. 2 Now, why do we need a new name for a process instead of just calling it a rulemaking 3 4 process to add a new chemical to the list of BCCs? 5 MR. COHEN: Madam Hearing Officer, can we go off 6 the record for a minute? MS. TIPSORD: Sure. 7 8 (Discussion had off 9 the record.) 10 MS. TIPSORD: Let's have Mr. Cohen sworn now. 11 (Witness sworn.) 12 WHEREUPON: ROBERT A. COHEN, 13 14 called as a witness herein, having been first duly 15 sworn, deposeth and saith as follows: 16 MR. COHEN: Dr. Tanner, I'm going to attempt to answer your question at least from a legal point of 17 18 view as best I can. 19 First, let me make certain I fully 20 understood it. The first question is why do we need 21 a new procedure at all if what ERG is proposing is essentially rulemaking, and -- is that the entirety 22 of your question, sir? 23 24 DR. GIRARD: That's the general framework, yes.

L.A. REPORTING (312) 419-9292
1 MR. COHEN: We looked at this issue long and 2 hard from a legal point of view. We were driven 3 initially by the fact that the U.S. EPA guidance 4 asks for a self-implementing definition as we all 5 know.

6 And I would say there's one thing I think 7 we neglected to read into the record. We are also 8 proposing in our revision to strike the words "but 9 are not limited to" from the definition that appears 10 on BCCs for the reasons I will now explain.

We believe that in the state of Illinois 11 12 only the board has the power to determine standards of general applicability. In fact, I don't think 13 there's any real dispute about that. The Great 14 15 Lakes case, the Illinois Supreme Court Great Lakes 16 case makes that -- I'm sorry, Granite City Steel case makes that point very clearly, and, frankly, we 17 expended a lot of effort to try to find a way we 18 19 could create a new procedure that would allow the agency to honor what we felt U.S. EPA wanted and not 20 21 intrude on that statutory or constitutional division 22 of authority. We could not we are convinced, and our legal briefs will elaborate in more detail. 23 24 That simply cannot be done. The Illinois

L.A. REPORTING (312) 419-9292

Environmental Protection Agency cannot adopt the 1 standard of general applicability under Illinois 2 law. Therefore, we could easily have simply stated 3 4 that all new BCCs will be subject to board 5 rulemaking and, indeed, there would be no reason from new language, but we were also driven in the 6 process, and when I say "we," I mean both the agency 7 and ERG, to find a way to accommodate IEPA's 8 9 concerns, which they can address better than I, and 10 also U.S. EPA's concerns.

11 And that's why we created a new procedure 12 which the endpoint of which is a rulemaking consistent with Illinois law, but the intermediate 13 points of which address the concerns that have been 14 15 raised by U.S. EPA, by the National Wildlife 16 Federation, and by IEPA. And it is for that reason, the reason to be consistent with Illinois law and 17 also to be consistent with the federal GLI that 18 19 we've created this new procedure. 20 And I would like also to point out, 21 commissioner, that you are correct. The process we 22 envisioned would be the same as any board rulemaking except for the desire to have it moved as 23 expeditiously as possible. And I'll intrude 24

L.A. REPORTING (312) 419-9292

generally on to the technical area for a moment. 1

We believe it may be the case often that 2 designation of new BCCs may well be uncontested and 3 4 noncontroversial matters. That won't always be the 5 case, and no one knows what the future will bring, but, indeed, it may often be the case if the data 6 7 are equivocal.

8 My I ask the commission, if there was 9 anything that was unclear or cryptic about what I 10 said concerning standards of general applicability? Is it clear why we feel there is a need for all 11 12 dischargers who would be affected to have the opportunity to participate in a BCC determination? 13 DR. GIRARD: Well, I think that was clear. 14 15 I'm trying to -- I'm trying to understand 16 why you don't feel a standard rulemaking process would work. Is it a time factor? Do you think that 17 a rulemaking takes too long? 18 19 MR. COHEN: I do not, your Honor. Speaking for the regulated community, we would, I think, be 20 generally amenable to that were it not for what

22 appeared to be some conflicting concerns of the federal GLI guidance. 23

24 (Brief pause.)

21

MR. COHEN: Ms. Rosen has correctly pointed out 1 to me that our proposal does not in any way affect 2 rulemaking, nor is it intended as an implied or 3 4 direct indictment of the rulemaking process. It 5 really addresses what happens before a rulemaking process occurs. 6 7 MS. TIPSORD: Can I -- excuse me, Dr. Girard. 8 Can I ask a question to see if I 9 understand, and maybe this might help some of us. 10 Does this language envision that the agency 11 would first publish something in the Illinois 12 Register and then petition the board for a 13 rulemaking, they may then petition the board for a full-blown rulemaking, and you would expect the two 14 15 hearings, the 45-day subject comment period, and all 16 of that under Title VII? 17 MR. COHEN: Your Honor, actually it may well be yes, except that it may be the case that it would be 18 19 in one location given the --MS. TIPSORD: That you're going to need to check 20 21 on legal authority for. 2.2 MR. COHEN: Yes. I think we would have to. 23 That comment was based on the assumption that only one location would be affected, but that's not the 24

L.A. REPORTING (312) 419-9292

case. Then, yes, that is what we envisioned, and
 the direct answer is yes.

MR. SMITH: But what this process attempts to do 3 4 is to during that intervening period while that 5 board rulemaking is going on for that particular candid BCC chemical, from the standpoint of 6 increased dischargers or loadings of that candid 7 chemical, it would still treat that as if it were a 8 9 BCC, so that there wouldn't be this lag period that would set in until the board makes that 10 determination, and we gather that that's a very 11 12 critical issue that U.S. EPA has in terms of whether or not it will even approve the Illinois program for 13 the treatment in listing new BCC chemicals. 14 15 So that's why that process is in there in 16 terms of having the chemical still treated as if it

17 were a BCC while the board rulemaking process goes
18 forward.

19 DR. GIRARD: So you see the major difference 20 between this and what we would consider one of our 21 more normal rulemakings is that from the time the 22 agency publishes in the Illinois Register the name 23 of this chemical, that chemical will be treated like 24 a BCC as the board rulemaking process goes forward

1 added to the definition?

2 MR. SMITH: No, that's not exactly right. It 3 would be -- there's actually a two-step process.

4 The first step is where the agency would 5 publish in the Illinois Register its intent perhaps to go forward with that second step, which would be 6 the rulemaking, but the agency may decide not to do 7 that. For example, if in that intervening period 8 9 third parties or affected may meet with the agency 10 and discuss the data that the agency has available 11 and they mutually agree that maybe the data is not relevant or not genuine to warrant going forward 12 13 with a proposal to the board to add that as a BCC 14 chemical.

So -- well, let me just stop right there.
MS. ROSEN: I might be able to ask Mr. Smith a
question to clarify that first component.

18 Is it the intent of Subsection A(1) that 19 references the agency's receipt of information which 20 may -- that some person has determined may have a 21 bioaccumulation factor of over 1,000 that they would 22 then publish that information to put the regulated 23 community on notice that this is in the pipe works 24 so that they could start looking for their effluence

and seeing if this might be something that a 1 chemical of concern for their facility would put 2 them on notice to start thinking that this -- that 3 4 down the road a petition before the board might be 5 forwarded in this issue? Is that part of the intent of that 6 7 provision? 8 MR. SMITH: That's exactly correct. 9 MS. ROSEN: And, in fact, that the agency publishing the notice that it had received that 10 11 information was not -- does not trigger the 12 components of Subsection B, that the agency would have to formally make a petition to the board to 13 verify the BAF before a discharger would either have 14 15 to treat its discharge like a BCC or not take action 16 to increase loading of a BCC? 17 MR. SMITH: That's correct. However, there is that additional provision that would achieve that 18 19 same outcome if the agency indicates its intention to go forward with that petition for verification 20 21 within a 60-day period. 22 MR. ROSEN: Okay. Thank you. DR. GIRARD: So you want a chance to interact 23

L.A. REPORTING (312) 419-9292

with the agency before they file a formal rulemaking

24

with the board for a particular claim adding them to
 the list of BCCs?

3 MR. COHEN: That's correct.

In answering your question, commissioner,
that's correct. It basically gives a regulated
community and other interested persons an
opportunity to review the data that the agency has
available and various studies.

9 It's interesting to point out that in 10 proposed GLI regulation, the U.S. EPA had intended 11 to include additional chemicals as BCCs, and in 12 reviewing the studies that they had relied upon to 13 make that initial determination, they decided that 14 some candid of BCCs, in fact, should not be treated 15 as BCCs.

16 So it's not a perfect science, and this 17 would give interested parties a chance to meet with 18 the agency to review whether or not they agree with 19 the agency's determination perhaps to change the 20 agency's intention to proceed with the rulemaking, 21 and that's what this process provides for. 22 DR. GIRARD: Thank you.

23 MR. RAO: You know, just a follow up, you talked24 about this, you know, allowing time for the agency

and other affected entities to review the data and,
 you know, maybe discuss and decide whether the
 agency needs to go forward with this verification
 process, but in the proposed language, you don't
 have any time frame for that.

Under Subsection A(2), you say the agency 6 7 may have any time after the publication to petition the board to verify. So do you need to have certain 8 9 time frames for you to, you know, go through this review process, or can the agency just go ahead and 10 do -- you know, petition the board on its own 11 12 without giving the affected entities any time 13 frame?

MR. SMITH: If I understand your question, basically the agency's intention to treat a new chemical as a BCC does not have any regulatory implications until it goes with the petition to the board to verify it as a BCC or submits a notice of its intent to petition the board for inclusion of that chemical as a BCC.

Does that answer your question? MR. RAO: No. What I wanted to know was where is the time frame built in for this review process to take place?

MR. SMITH: It's totally at the agency's 1 2 discretion. There's no limitation on that time 3 period. 4 MR. RAO: Okay. 5 MR. COHEN: Mr. Rao, the only limitation is where they have sent what we call a 60-day letter to 6 a permittee. They have to make the call within 60 7 days at that time, but, otherwise, it can sit for as 8 9 long as the agency allows it to sit. 10 It could never go a verification petition, or it could go in a year. 11 12 MR. RAO: That, I understand. But should there 13 be a minimum time frame for the review process to 14 take place? 15 MR. COHEN: Oh, a minimum time frame? 16 MR. RAO: Yeah. Because the way it's proposed now, the agency at any time can petition the board 17 after the publication. 18 19 MR. SMITH: We didn't envision a need for that 20 time period because we can participate during the 21 board rulemaking process. 22 MS. TIPSORD: You had a question (indicating). MS. BUCKO: Yes. Christine Bucko again. 23 24 I'm wondering -- I know that my office gets

L.A. REPORTING (312) 419-9292

formal notice when there's a rulemaking. However, 1 the procedure that you are envisioning really has no 2 3 provisions for that, and I'm sure that some of the 4 technical people in my office would be very 5 interested in having some input. So I'm not sure how best to deal with that 6 situation since we wouldn't be discharged or 7 anything, but I'm sure we'd like to get some type of 8 9 notice. 10 MS. ROSEN: Could I address that because it 11 really relates to a drafting issue? 12 MS. TIPSORD: Sure. MS. ROSEN: I believe your office would -- one, 13 14 you'd get the Illinois Register, and they would be 15 able to see that the agency had received this 16 information, but our reference in Subsection A(2) of the provision references Title VII of the act, and 17 that, as the board has obviously realized, is the 18 19 rulemaking provisions of the act, and those 20 rulemaking provisions are those very same rulemaking 21 provisions which allow you guys to get notice -- the attorney general's office to receive notice. 22 So the same sort of notice -- it was 23 intended that some notice would come forth through 24

1 this process.

2 MS. TIPSORD: Anything else? DR. GIRARD: Could I ask, does the agency have 3 4 any comments to make at this time on this process? 5 MR. WARRINGTON: We have some comments, Rich Warrington. We might defer to Toby or we might 6 7 defer to after lunch depending on your pleasure. 8 A general summary is that it's a complex 9 definition. You're right that it has an operable feature and a list feature. That's not all that 10 unusual given that it is written by the United 11 12 States Environmental Protection Agency, and they do intend to do that in other rules that the board has 13 14 adopted on a past-due basis, rules such as the 15 hazardous waste -- being a hazardous waste by a list 16 or by definition or by characteristics or by 17 criteria.

18 There are also complex definitions in the 19 air toxic program, but we generally believe that the 20 board does have the authority to adopt a definition 21 such as this that has enough standards and criteria 22 and is clear enough, although complex, for the 23 agency to imply it in a particular situation. 24 The scenario of the IERG proposal is that

L.A. REPORTING (312) 419-9292

we would still get the benefit of an immediate
 application once upon publication, and we would then
 have the benefit of more publicity of that
 determination by publishing it in the Illinois
 Register and bringing it to the board as a
 rulemaking.

7 We haven't, you know, completely signed off 8 on the proposal. It's intriguing, and it provides a 9 positive benefit in that publicity and increased 10 opportunities for participation. The downside, of 11 course, is that it's another hoop for both of us to 12 go through, but if Toby would like to supplement 13 that any.

14 MR. FREVERT: Yeah, I'd be happy to.

MS. TIPSORD: Toby, before you begin, I do have a couple of questions I would like to also ask to be considered as you're looking at the language here and also to be addressed to us, and it can wait until final comments for that.

20 One of those issues is you provide for 21 publication in the Illinois Register. My concern is 22 that the Illinois Register sometimes has very 23 limited space. It also has very limited things that 24 it may publish, and I would like to know if you have

checked to be sure that this would be something the 1 2 Illinois Register would be willing to publish. Also, I would suggest that perhaps you 3 4 consider not only the Illinois Register but perhaps 5 the Environmental Register similar to what is done with the restricted status lists and those types of 6 things appear in both places that sometimes gives 7 more attention to people in the environmental 8 9 community. 10 And then as a general question, the references to Section 301.XXX, are those to the 11 12 agency's rules that are imposed? 13 MS. ROSEN: No. The board ruling, your Honor. 14 MR. COHEN: 15 MS. ROSEN: We can clarify. We did not know 16 where within the rule this language should take place, and we just meant 35 Illinois Administrative 17 Code somewhere in the 300s here that we are dealing 18 19 with. MS. TIPSORD: Okay. 20 21 MS. ROSEN: Thank you. 22 MR. COHEN: And to respond to your first 23 question no, and to your suggestion, we will certainly take a look at that as soon as. . . 24

L.A. REPORTING (312) 419-9292

MS. TIPSORD: Okay. Then let's go off the 1 record. 2 (Discussion had off 3 4 the record.) 5 MS. TIPSORD: And before Mr. Frevert starts, I believe there's one more question. 6 7 MS. ERVIN: I have a question. Maybe you can 8 answer this in your comments. 9 If the board were to strike the "but are 10 not limited to" words in the definition for the BCC as IERG proposes, what is the agency's position on 11 12 whether the board will be adopting regulations that are, quote, unquote, consistent with the guidance? 13 MR. FREVERT: That's a good question. That's 14 15 where I was going to start. 16 If you look at the Great Lakes Guidance which was published in the Federal Register on 17 18 March 23rd of '95, on Page 15388 amongst the 19 definitions, there's bioaccumulative chemical of concern, and at the top, oh, about four inches down 20 21 in the first column clearly has the "but are not 22 limited to" language. I've been assured in no uncertain terms by 23

L.A. REPORTING (312) 419-9292

24 region five staff that state the program would not

be acceptable if it does not have that operational
 component to the definition.

That being said, this is the most 3 4 challenging issue we've dealt with here in Illinois, 5 and I think we have reached a conceptual agreement with ERG and the business community of a way to make 6 our regulations consistent with the Great Lakes 7 Guidance and at the same time accommodate my 8 9 operational needs with the agency for the permit program and the business community's needs and 10 11 desires to have proper notice and the opportunity to 12 entertain some discussion if they think a chemical is being considered for inclusion in that definition 13 14 on suspect data.

15 This is a relatively new area. I think we all agree that there is opportunity to challenge the 16 data, and there may be the opportunity to make wrong 17 decisions. And in that regard, we're working on, 18 19 and I think we've reached a conceptual agreement on 20 how we would like to deal with it, but at the same 21 time won't accomplish federal approval. 2.2 This thing is triggered primarily by

23 requests for increased loading, a permit decision, a
24 mixing zone decision, and a antidegradation

decision. So we're really not ever going to
 encounter until and unless some applicant, some
 regulated entity, requests one of those authorities
 to do something or take advantage of one of those
 opportunities.

In such case, the agency has to have the 6 ability to deal with it now. We can't go to 7 rulemaking. The conceptual agreement we have 8 9 reached is if that circumstance comes up, the first 10 thing we're going to do is notify the applicants 11 that we have reason to believe this thing may be a 12 BCC, and we feel strongly enough about it. We're 13 going to take the impetus upon ourselves to elevate 14 this matter to the board to verify that.

15 And under those circumstances, you have 16 either the option of waiting until that verification is complete, or if you don't want to wait for that 17 rulemaking or whatever the process is, you can treat 18 19 the chemical as it is a BCC. You can go through the 20 antidegradation demonstration. You can go through 21 the mixing zone demonstration. You can do whatever administrative options are available to you to let 22 your program go forward. 23

24 If you don't want to do that, then we will

agree to Pollution Control Board verification of our 1 opinion that this really is a BCC, and it's subject 2 to that. Rather than put the onus on you through a 3 4 permit denial, we're going to put the onus on 5 ourselves saying we're willing to proceed with the petition to the board to verify that this substance 6 meets the definition and add it to the list 7 accomplishing that broadened discussion of the 8 9 technical substances and accomplishing their other objective of allowing the entire world to 10 participate in that decision, not just the permit 11 12 applicant. I think that's the concept we have 13 agreed to.

14 With that said, I appreciate the discussion 15 this morning, but I'm not sure I have an opinion to 16 entertain the specific language that was presented to you in an exhibit. I saw it myself just this 17 morning, and there were some numbers and things in 18 19 there. The language is a little confusing. So I kind of turned it off, and we'll work with the 20 21 regulated community to try to find language that 22 accomplishes that.

23 Bear in mind what we're trying to do is
24 just bring the whole thing out in public and say

this is a suspect chemical. These things have 1 incredibly negative impacts particular in the Great 2 3 Lakes system. They don't go away. They come back 4 at you. They don't flush out of the system. They 5 bioaccumulate. So pollution isn't the problem, but things like mercury and PCBs, the kind of things 6 that create our existing problem, we don't want to 7 8 make mistakes in the future.

9 So we don't want to grant -- we don't want 10 to be in a position to have to grant increased 11 loading or allow these things to go up until we're 12 certain that they're safe. That's what the whole 13 concept is about.

14 That's basically what the Great Lakes 15 Initiative intends to accomplish and will require 16 from the various states, but I think we have found a way -- hopefully through not too much more time --17 to work out language that will accomplish that, 18 19 satisfy both my administrative needs, the regulated 20 environmental community's needs to make sure we make 21 the right decision, and at the same time, I think 22 we'll accomplish what the environmental activist rule as well as honor the Great Lakes Initiative. 23 24 I thought I'd also respond to the other

comments in Jeff's testimony just to try to wrap 1 things up and keep things going. 2 3 MR. RAO: Can I ask a follow up, or do you want 4 to do it? 5 MS. ERVIN: I can do it. 6 Do you know how other states are dealing 7 with this issue? 8 MR. FREVERT: Wisconsin has an operational 9 definition. It's my understanding that Michigan had an operational definition, then at the last minute 10 11 they modified it somewhat. My discussions with 12 region five suggests they have not seen that, but if it was changed the way it's explained to me, it's 13 been changed. They're liable to go back to 14 15 rulemaking. It's what they thought Michigan had 16 done by going only to a list with nonapprovable. 17 The state of Minnesota, who is probably the slowest of the eight states and probably the most in 18 19 danger of having the federal program invoked upon 20 them, at this point is looking towards a list. I 21 believe Indiana has an operational definition, and I can't remember what Ohio, New York, and Pennsylvania 22 are doing at this point. 23 24 But it's a bit of a mix. It doesn't

L.A. REPORTING (312) 419-9292

surprise me that it's a big issue not just in
 Illinois but in other states as well. It's one of
 the more challenging issues in the whole package, I
 think. Nevertheless, I feel like we're on the verge
 of having a solution.

6 MS. TIPSORD: I have an additional question 7 along with that. We've heard a lot of discussion 8 how the agency and IERG are involved in discussions 9 on coming up with a definition.

10 The board does have before it a public 11 comment from the National Wildlife Federation that 12 indicates they're very interested in the subject as 13 well.

14 Are they included in these discussions?15 Have they been? Does the agency intend to include16 them, other environmental groups?

MR. FREVERT: I had discussions with them. I've been working with National Wildlife Federation, and they were aware of this issue. I suspect that's the impetus for the comment from the National Wildlife. They're grilling me on what the issues are in Illinois. I've got a pretty good back and forth with them as well.

24 I haven't seen their comments yet, but I

1 feel comfortable that I can find a way to
2 accommodate everybody. I think we can honor the
3 intent of the Great Lakes Initiative and satisfy
4 ERG's concern that we may be making a bad decision
5 and we should elevate it to you and the science as
6 early as it is in this case.

7 MS. TIPSORD: Thank you.

8 MR. FREVERT: Mixing zones, Jeff recommended 9 that the mixing zone issue for BCCs be pulled out of 10 this proceeding and put in a second docket held in 11 advance for some period of time.

12 I concur with that. That was an area that 13 was vacated or remanded in the federal court order 14 that backed EPA. Based on some economic data that 15 EPA believes was a misinterpretation of the material 16 presented to the court, and they intend to proceed 17 with rectifying the matter one way or another.

18 It's my understanding the issue was alive 19 and well, and I would hate to drop it entirely and 20 have to open a whole new document. I think in the 21 short-term, EPA will act and will have enough 22 direction to pick that thing up and keep the 23 rulemaking going and honor the schedule of Great 24 Lakes Initiative as best we can.

So I agree that can be put on a back
 burner, but let's put it in a docket. Let's don't
 just throw it out.

4 PCBs, it's our understanding that the PCB 5 values that we proposed in this rulemaking with current proposal are consistent with what will 6 ultimately be acceptable to EPA, and it does fit 7 current correct science and correct mathematical 8 9 calculations, and there's probably no need, in my opinion, to put that on the back burner or delay 10 11 it.

12 EPA is publicly stating what their intent 13 is, what's acceptable, what's approvable. It's them getting through their administrative adoption 14 15 process. Based on Jeff's comments, we'll be happy 16 to go back one more time and reverify that with the board and let you know, but that's our position. 17 18 Mercury criteria, we agree with raising the 19 1.8 to 3.1 on the human health criteria, and I believe that will be reflected in our written 20 21 comments. 22 MR. RAO: Regarding mercury, do you have any comments on Mr. Smith's statement about some other 23

24 states having a built-in process for granting

variances and things like that, or do you think what
 we have in existence is adequate?

3 MR. FREVERT: My understanding of what Mr. Smith 4 is referring to were some allowance for cooling 5 water that has some small -- very small minute 6 quantity of mercury, and I think it's present in the 7 intake water, and it's not at all attributable to 8 the operations of the cooling units themselves.

9 That being the case, I believe throughout, 10 the permitting procedures we're developing and the 11 existing authority for intake pollutants and board 12 regulations that that's accommodating, and I don't 13 anticipate we're going to be in a situation where 14 we're pursuing absurd costly treatment programs for 15 mercury reduction.

16 Some parts of the Great Lakes area where particularly municipal discharges have mercury 17 problems even exceeding the criteria. They're 18 19 focusing on different approaches. They're trying to 20 go with pollution prevention programs within the 21 community. They're gearing up their pretreatment programs to find the stuff and keep it out of the 22 23 collection system, rather than end-of-pipe treatment which is what makes those cost numbers look so 24

1 high.

I think the benefit of it is mercury is a 2 real problem, and if we have a tight mercury 3 4 standard, it's going to hold everybody accountable, 5 including my agency, to go beyond merely operating the permit program and attack other sources. Maybe 6 we don't do it as simply as writing a permit, but 7 we're going to have to find ways to address nonpoint 8 9 sources. 10 Based on water quality needs and the 11 protective level, the mercury standard is 12 appropriate. The issue is how do we get to it? 13 Were there two other comments you had that 14 I have to respond to? MR. COHEN: Just wildlife and BCC, I think. 15 16 MR. FREVERT: I'm not familiar with whatever discussions took place, but I believe we have a 17 conceptual agreement on what we want to do with 18 19 regard to applying wildlife criteria and non-BCCs. 20 Maybe it's a matter of sitting down and 21 making sure everybody is comfortable with the 22 language, but that's another area where we can reach agreement, and anybody else that -- you know, even 23 24 though it's not a hearing environment, anybody else

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that wants to interact in the process, I'm always 1 willing to accommodate. 2 If National Wildlife has an issue, I'll 3 4 make sure they know what's going on. 5 The three editorial or errata comments Jeff mentioned at the end of his testimony, we concur 6 with all three of those. It seems to be no big 7 deal. It's just good rule writing or a little bit 8 9 of cleanup. 10 That's all I can think of. 11 MS. TIPSORD: Any more questions? 12 Okay. Thank you, Mr. Frevert. 13 MR. FREVERT: Okay. 14 MS. TIPSORD: Mr. Warrington, you had some additional --15 16 MR. WARRINGTON: As we indicated in our prefiled testimony, we did anticipate talking a little bit 17 about these amendments to the water quality 18 19 standards as proposed and as raised by Mr. Smith. 20 One other question that was raised by 21 Mr. Rao was the source of the definitions for, I 22 believe, particulate organic carbon or POC, and I 23 believe dissolved organic carbon or DOC, and we'd 24 like to introduce Dr. Olson for a very short

1 explanation of the source of those definitions.

2 DR. OLSON: I'll just go ahead and read this 3 brief statement that I have here, and they show two 4 references.

5 The U.S. EPA and the Federal Register and 6 in the bioaccumulation factor of technical support 7 document, which is EPA 820-B- 95-005, March 19, 8 1995, does not provide a formal definition of 9 dissolved organic carbon, DOC, or particulate 10 organic carbon, POC.

11 The Technical Support Document or TSD12 refers to papers by ED, et al. of the Noah Great13 Lake Research Laboratory, Ann Arbor.

14 ED, et al., 1992, Great Lakes Research, 15 Volume 18, Page 91, and I don't have the last page 16 on that reference, refers to the use of a Gelman, g-e-l-m-a-n -- capital, g-e-l-m-a-n, AE, quote, 17 unquote, filter from the 1993, 1994 Fischer 18 19 Scientific Catalog Page 732, the Gelman AE filter 20 contains one micrometer of particles. 21 And the copies of the first page -- the first two pages of the ED paper, including the 22 methods section, which is just a very brief 23

24 preference to what kind of filter they use without

any explanation, and the catalog page from Fischer 1 catalog are included, and I don't think we have that 2 prepared as an exhibit exactly. I only have this 3 4 one copy with me. 5 MR. WARRINGTON: If the board wants a copy of the actual technical article and the copy out of the 6 scientific catalog, we can provide them. 7 8 MS. TIPSORD: That probably would be best. 9 MR. WARRINGTON: Okay. 10 DR. OLSON: Do you want me to enter into the record what Fischer Scientific Company is? 11 12 MS. TIPSORD: No. I think if you provide the articles, that will be fine. Any questions? 13 14 Thank you, Dr. Olson. 15 MR. WARRINGTON: And for the final issue, as 16 Mr. Smith indicated in his testimony, the threat of a citizen suit lawsuit, particularly the National 17 18 Wildlife Federation has reached fruition on July 1st 19 of this year by their filing a citizen suit to compel the United States Environmental Protection 20 21 Agency to promulgate the Great Lakes regulations for 22 the Great Lake states.

23 It's a little bit less than 30 days since
24 it's been filed. So there's no particular answer

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that has been filed by the United States 1 Environmental Protection Agency, but for the board's 2 information, we have five copies -- four copies to 3 4 enter as an exhibit. 5 MS. TIPSORD: Okay. Is there any objection to entering this as an exhibit? 6 7 Seeing none, we'll mark that as Exhibit 8 No. 11. 9 (Hearing Exhibit No. 11 10 marked for identification, 7/28/97.) 11 12 MR. WARRINGTON: And that concludes the agency's direct testimony today. As always, we're always 13 willing to respond to questions or comments. 14 15 MS. TIPSORD: Are there any more questions for 16 the agency? 17 Okay. Seeing none, was there anyone else here today who wanted to provide testimony who did 18 19 not prefile the testimony? Okay. Was there anyone from U.S. EPA here 20 21 today that might want to comment on any of this? We had someone testify at the first hearing. I don't 22 see them. 23 Could we go off the record for just a 24

1 moment?

2	(Discussion had off
3	the record.)
4	MS. TIPSORD: Seeing that there's no one else to
5	testify, and it seems that we've answered all the
6	questions that have been proposed today, I'd like to
7	set a schedule for final comments to be submitted.
8	I will also do a hearing officer order echoing this,
9	but I want to put it on the record.
10	First of all, I would like to ask and
11	direct that any language changes that may be
12	suggested to the board be provided to the board no
13	later than August 28th and be served on the service
14	list by that date as well. We will then allow all
15	final comments to be due by September 4th, and all
16	final comments should also be served on the service
17	list.
18	I would also note that there's been a
19	motion made by Ms. Rosen on behalf of IERG.
20	Obviously, that is a motion to the board. She's
21	indicated she will submit that in writing and,
22	obviously, that everyone will have an opportunity to
23	respond to that.
24	Ms. Rosen, I would not anticipate the board

1 would rule on that prior to the final opinion and order -- I'm sorry, the second notice opinion and 2 3 order. 4 MS. ROSEN: Thank you. 5 MS. TIPSORD: I'm moving too fast, the second 6 notice opinion and order. 7 And I would also like to thank the Waukegan 8 Port District for letting us use the space. It was very nice of them to do so, and they were kind 9 enough to provide coffee. 10 Is there anything else? 11 12 Did you have anything final you'd like to 13 say, Dr. Girard? 14 DR. GIRARD: No, just thank you for all the hard work, and the board will work on this as 15 16 expeditiously as possible, and we will try to meet 17 the very short time frame we've set before us. 18 Thank you. MS. TIPSORD: Thank you very. We're adjourned. 19 (Whereupon, the hearing was 20 21 adjourned at 2:00 p.m.) 2.2 23 24

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