BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
PRAIRIE RIVERS NETWORK,	)	
Petitioner,	)	
-vs-	)	PCB 01-112
	)	VOLUME II
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND BLACK BEAUTY COAL COMPANY,	)	
Respondents.	)	

The following is the transcript of a hearing held in the above-entitled matter, taken stenographically by Jennifer E. Johnson, CSR, before John Knittle, Hearing Officer, at 6 North Vermilion Road, 2nd Floor Conference Room, Danville, Illinois, on the 2nd day of May, 2001 A.D., commencing at the hour of approximately 9:18 a.m.

PRESENT:

HEARING TAKEN BEFORE:

ILLINOIS POLLUTION CONTROL BOARD
100 West Randolph Street, Suite 11-500
Chicago, Illinois 60601
(312) 814-6923
BY: MR. JOHN KNITTLE

APPEARANCES:

ENVIRONMENTAL LAW & POLICY CENTER
BY: ALBERT ETTINGER, ESQUIRE
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(312) 795-3707
On Behalf of the Petitioner.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BY: SANJAY K. SOFAT, ESQUIRE
1021 North Grand Avenue East
Springfield, Illinois 62794-9276
(217) 782-5544
On Behalf of the Respondent Environmental Protection Agency.

OPPENHEIMER WOLFF & DONNELLY, LLP
BY: W.C. BLANTON, ESQUIRE
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(612) 607-7450
On Behalf of the Respondent Black Beauty Coal Company.

ALSO PRESENT:

FRED L. HUBBARD, ESQUIRE
415 North Gilbert Street
Danville, Illinois 61834
(217) 446-0144
On Behalf of Vermilion Coal Company.

MEMBERS OF THE PUBLIC WERE ALSO PRESENT

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EXHIBITS

EXHIBITS CONTINUED:

P R O C E E D I N G S

HEARING OFFICER: All right. We are back on the record. Today is May 2nd. It is approximately 9:18 a.m. This is the second day of hearing in Pollution Control Number 2001-112, Prairie Rivers Network versus the IEPA and Black Beauty Coal Company. We have all the parties still present and appearing.

We still have a contingent from the public; and as before, we are going to allow for public comment after the closes of the case in chiefs which we estimate will be in about two to three hours, maybe a little longer, but, but not much past that anyway. If, as before, you need to leave or you have a conflict that you cannot avoid, please let me know by raising your hand or some such signal, and I'll try to fit you in as soon as we can.

We are currently finished with the cases in chief of the petitioner and the respondent the IEPA, and are about to commence the case in chief of Black Beauty Coal Company. And I think we'll just leave it up to Mr. Blanton to call his first witness. Or do we have some preliminary matters?

MR. BLANTON: Some other evidence.

HEARING OFFICER: Why don't we address those?

MR. BLANTON: Thank you, Mr. Knittle. To open

Black Beauty's case in chief, I would first offer the testimony of three witnesses by deposition. These witnesses were deposed on April 11 and 12 pursuant to subpoenas and notices duly issued. The parties stipulated at the depositions that they could be taken for both discovery and evidentiary purposes. On April 30, I served all other parties with copies of Black Beauty Coal Company's designation of deposition testimony in which we set forth the deponents, the dates of the deposition, and the portions of the depositions that we wished to offer.

Before we begin this morning, Mr. Ettinger identified some additional material in one deponent's deposition. We have no objection to that being included as well. We've received very recently the original transcripts. Two of the three deponents have reviewed them, made any changes that they wanted to make, and have signed them. One deponent has not. Because I just got the originals, I have not been able to mark which portions are being offered. I would suggest that those portions that Black Beauty is offering be highlighted in yellow in each of the depositions, and that the portion Mr. Ettinger would like to have be highlighted in light blue. We would assume responsibility of doing that and submitting it to

you as soon as we have all of them, which will probably be

Monday since we're going to be here in Illinois doing depositions for the rest of the week.

With that, I will -- rather than identifying the portions, I'll simply identify the depositions and the associated exhibits. What we did was offer, in addition, the deposition exhibits that are referred to in the offered testimony. I have prepared those original deposition exhibits with further hearing exhibit numbers so each of those exhibits bears two stamps; one is the deposition stamp, and the other is the exhibit stamp for here.

So, with that, first I will -- if I may approach the bench, I'll give you a copy of the designation. I note that we had thought we might offer the deposition of Rosa Ellis. We are not, so I have crossed that out on the first page. It is only the other three depositions that are being offered.

HEARING OFFICER: Okay. Are you marking these as exhibits?

MR. BLANTON: Not the designation. I figured it was more pleading. The depositions I can mark for identification purposes if you want, but they're just original transcripts.

HEARING OFFICER: Okay.

MR. BLANTON: And I think it -- to have the

deposition be an exhibit and then have exhibits to the exhibit might complicate it. I think technically it's just testimony by deposition.

HEARING OFFICER: Okay. Let's --

MR. BLANTON: But I'll do whatever you think will keep it clear.

HEARING OFFICER: Let's see what the other parties have to say first on the record. Mr. Ettinger, do you have any objection to this course of action?

MR. ETTINGER: Not in general. This was on the deposition exhibits? No, I have no objection to that.

HEARING OFFICER: Right. I'm just talking about the depositions that are being offered as evidence.

MR. ETTINGER: I did just want to note that my only designation -- I looked at his Black Beauty's designations yesterday. I gather they're withdrawing the designations of Ellis.

The only testimony that I wanted to designate in addition to what they were designating were certain lines on page 87 of the Glosser deposition, lines 11 through 16, so the designation of testimony now on Glosser is now page 87, line 1 through 16.

And I guess if Mr. Blanton says what he's -- does what he says he was going to do, then I guess he's

going to color those six lines in blue, and the rest of it will be in yellow.

MR. BLANTON: Yes.

HEARING OFFICER: Mr. Sofat, do you want any special color for yourself? Do you have anything you want to add to the depositions?

MR. SOFAT: No, the agency has no objection or comment.

HEARING OFFICER: You have no objection to the way we're going to do this. Mr. Ettinger?

MR. ETTINGER: I just wanted to make sure you're not withdrawing any of the designations you made earlier of Dr. Glosser's deposition.

MR. BLANTON: No.

MR. ETTINGER: Okay.

HEARING OFFICER: Okay. Yeah, I don't have a problem -- I'm trying to figure out the best way to do this for the Board.

MR. BLANTON: We can call the deposition itself a hearing exhibit. I don't have a problem with that if that helps for identification purposes. But I want to make -- it is testimony by deposition. I don't

mind identifying it for the record for identification purposes as an exhibit, but I think it has a different quality of evidence.

HEARING OFFICER: No, I understand that. It's just it's not really a pleading, and it's not -- I don't know where else to categorize it. I know it will be part of the record; I'm accepting it as part of the record. And let's call them -- just for identification and ease of use purposes, let's make each one of the depositions a hearing exhibit. And they don't have to be Black Beauty Coal Company hearing exhibits because Mr. Ettinger is also offering part. I would designate them Hearing Officer Exhibits 1, 2 and 3 if that's --

MR. BLANTON: That would be fine.

MR. ETTINGER: That's fine. In fact, some of the testimony that Mr. Blanton's going to color in yellow I will also refer to, so --

MR. BLANTON: And a lot of it's -- some of it's Mr. Ettinger's questions, so --

HEARING OFFICER: No, I understand. I just don't want them floating out there without any tag attached to them.

MR. BLANTON: All right. Well, then in that case, the first one would be the deposition of Caroline

Taft Grosboll, G-r-o-s-b-o-l-l, and it will be identified as HO 1. In addition, we will be offering Deposition Exhibits 1, 3, 4 --

HEARING OFFICER: You don't have to separately identify -- I want you to identify them, but you don't have to mark them. We'll make them one group exhibit.

MR. BLANTON: They're already marked as individually.

HEARING OFFICER: Right. As deposition exhibits, right?

MR. BLANTON: And as trial exhibits.

HEARING OFFICER: Oh, okay.

MR. BLANTON: So Deposition Exhibit 1 has been marked as BBCC 16. Deposition Exhibit 3 has been marked as BBCC 17. Deposition Exhibit 4 has been marked as BBCC 18. Deposition Exhibit 5 has been marked as BBCC 19. Deposition Exhibit 6 has been marked as BBCC 20. Deposition Exhibit 15 has been marked as BBCC 21. And Deposition Exhibit 17 has been marked as BBCC 22. Deposition Exhibit 37 has been marked as BBCC 23.

At this time, we offer Hearing Officer Exhibit 1 and BBCC Exhibits 16 through 23.

HEARING OFFICER: 1 has already been stated that there's no objection. I'll admit that.

Mr. Ettinger, you didn't have any objection to the various attachments to the deposition, did you?

MR. ETTINGER: No.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No.

HEARING OFFICER: All right. I'm going to admit BBCC Exhibits 16 through 23 as well.

(Whereupon, HO 1 and BBCC Exhibit Numbers 16 through 23 were marked for identification.)

MR. BLANTON: May I provide these to you?

HEARING OFFICER: Yes. I also have all the exhibits from yesterday. You may take them at your leisure.

MR. BLANTON: Second, Black Beauty offers, as Hearing Officer Exhibit 2, HO 2, the deposition of Deanna Glosser for those portions that we had designated and that Mr. Ettinger designated. This is a deposition taken April 11, 2001.

In addition, along with that deposition, we offer Deposition Exhibit Glosser 1 which has been marked as BBCC 24, Glosser Exhibit 3 which has been marked as BBCC 25, Glosser Exhibit 4 which has been marked as BBCC 26, Glosser Exhibit 5 which has been marked as BBCC 27, and Glosser Exhibit 19 which has been marked as BBCC 28.

So, we offer Hearing Officer Exhibit 2 and BBCC 24 through 28.

HEARING OFFICER: Any objection to those, Mr. Ettinger?

MR. ETTINGER: No.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No.

HEARING OFFICER: Those will all be admitted.

(Whereupon, HO 2 and BBCC Exhibit Numbers 24 through 28 were marked for identification.)

MR. BLANTON: Provide those to the Hearing Officer, please?

Third, we offer the deposition of Robert Moore in his capacity as the designee of Prairie Rivers Network, the petitioner. This deposition transcript has been marked as Hearing Officer Exhibit 3. We offer the designated portions that we've already identified plus Exhibit 2 -- Deposition Exhibit 2 which has been marked as BBCC 29, Deposition Exhibit 3 which has been marked as BBCC 30, Deposition Exhibit 4 which has been marked as BBCC 31, Deposition Exhibit 5 which has been marked as BBCC 32, Deposition Exhibit 6 which has been marked as BBCC 33, Deposition Exhibit 7 which has been marked as BBCC 34. We offer all of those.

HEARING OFFICER: Any objection, Mr. Ettinger?

MR. ETTINGER: No.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No.

HEARING OFFICER: Those are all admitted as well.

(Whereupon, BBCC Exhibit Numbers 29 through 34 were marked for identification.)

HEARING OFFICER: Is that it on the depositions?

MR. BLANTON: Yes. I would, to complete the record, note that all -- Mr. Moore's deposition and Ms. Glosser's deposition also were taken pursuant to stipulation that they could be taken both for discovery and evidentiary purposes. And I would further note that the parties stipulated that Mr. Moore's deposition was taken both of him as an individual and in his representative capacity as the designee for Prairie Rivers.

HEARING OFFICER: Okay. That's understood.

MR. BLANTON: Give those to the Hearing Officer.

HEARING OFFICER: Thank you. I do want to

clarify this. I've accepted the pleading entitled Black Beauty Coal Company's Designation of Deposition Testimony. We're not going to have any response to that, Mr. Ettinger, filed?

MR. ETTINGER: No.

HEARING OFFICER: Mr. Sofat, are you going to file a response?

MR. SOFAT: To --

HEARING OFFICER: It's the designation of deposition testimony. I'm accepting this as a pleading. We're going to file it with the Board.

MR. SOFAT: Okay. No, we won't have any.

HEARING OFFICER: Generally, under procedural rules you have fourteen days to respond, but of course we're not going to allow that because we're in hearing now, but give you a chance to orally respond if you wanted to. And I take it both of you do not want to?

MR. SOFAT: That is true.

HEARING OFFICER: That being said, I'll accept that; I'll take it back to the Board. We've got these three deps. I am correct, Mr. Blanton, am I not, that the only parts of the deps being offered into evidence are the parts designated -- the designated portions contained in the pleading here?

MR. BLANTON: That's correct. And those will be highlighted, and the originals have been provided to you.

HEARING OFFICER: With yellow for Black Beauty Coal and blue for Prairie Rivers. And if Mr. Sofat changes his mind, we'll give him greens perhaps.

MR. BLANTON: Right.

MR. SOFAT: Thank you.

MR. BLANTON: At this point, I would ask leave to withdraw the originals of Ms. Grosboll and Mr. Moore from the record so that I can do that marking.

HEARING OFFICER: Yes. There's no objection to that, right, Mr. Ettinger?

MR. ETTINGER: No, there is not.

HEARING OFFICER: And Mr. Sofat?

MR. SOFAT: No.

MR. BLANTON: I will take those at the end of the hearing.

HEARING OFFICER: I will leave them, and you can have them and return them when you get that done.

MR. ETTINGER: Mr. Hearing Examiner, may we stop for like thirty seconds? I would just like to ask Mr. Blanton a question regarding something that he and I talked about on the phone earlier.

HEARING OFFICER: Sure. Let's go off the record.

(A discussion was held off the record.)

HEARING OFFICER: Back on. All right, Mr. Blanton. If that's all the preliminary matters we have to address -- oh, one more.

MR. BLANTON: That's all the depositions. At this point, Black Beauty requests the Board and the Hearing Officer, pursuant to 35 Illinois Administrative Code, Section 101.630, to take official notice of those matters that are stated in Black Beauty Coal Company's request for official notice which I will tender the original for filing with you at this time. Copies of this were served upon the other parties on April 30.

For the record, we are asking the Board to take official notice of the following matters: A proceeding before the Board entitled In the Matter of Proposed Amendments to Title 35, Subtitle D, Mine-Related Water Pollution, Chapter One, Number R 84-29, a proceeding before the Illinois Pollution Control Board.

We ask the Board to take official notice of an earlier proceeding entitled In the Matter of Proposed Amendments to Title 35, Subtitle D, Mine-Related Water Pollution, Chapter One, Parts 405 and 406, Number R 83-6

before the Illinois Pollution Control Board.

We request the Board to take official notice of its earlier proceedings entitled In the Matter of Proposed Amendments to Chapter Four of the Regulations of the Illinois Pollution Control Board, Numbers R 76-20 and 77-10 before the Illinois Pollution Control Board. May I approach the bench for filing this?

HEARING OFFICER: Yes.

MR. BLANTON: I note that this request had an additional item which has been deleted, and we are not requesting notice of that matter, just the three that I identified.

HEARING OFFICER: Mr. Ettinger, are you going to have any response to this official notice? Do you want to see it?

MR. ETTINGER: Well, yeah. Mr. Blanton says it was served April 30, but I was down here April 30 so I suspect he served it on my office in Chicago.

MR. BLANTON: Yeah, we faxed it yesterday.

HEARING OFFICER: Are these all final orders, Mr. Blanton?

MR. BLANTON: We want the Board to take notice of the entire proceedings. I have two matters that I do want to offer as -- or three items that specifically I

want to offer as independent, freestanding exhibits from these proceedings but --

HEARING OFFICER: Yeah, I don't know that the Board can take notice of the entire prior proceeding. That encompasses, in some situations, seven or eight years worth of status calls and motions and rule-makings and public comments, and I don't know that that would be

feasible for the Board to take official notice of. Clearly, they can take official notice of --

MR. BLANTON: Designated portions.

HEARING OFFICER: -- well, designated portions and matters that are in the original Board record.

MR. BLANTON: I would be happy if -- we are requesting them to take notice of the whole proceedings. I would be happy to identify specifically next week, when I'm back and have a chance those specific portions that we wish to actually be taken account of before briefing is done, so people will know at least what it is we're talking about. But I -- we just found out about these things; I have not had a chance to go through the whole proceedings to find out what's, what's in there.

HEARING OFFICER: Right. You understand my reticence.

MR. BLANTON: Sure. Sure.

MR. ETTINGER: Well --

HEARING OFFICER: Mr. Ettinger, my proposal would be that we reserve ruling on this and allow you to respond when we know what you're responding to.

MR. ETTINGER: Right. I guess just to -- as far as the Board opinions go, the final opinions in these matters, I certainly -- I don't believe that the Board needs to take official notice of its own opinions.

As to documents within the record, I'm a little concerned here just as to what they might be being offered for. The fact that they're part of the record I have no -- assuming that they are part of the record in these proceedings, I assume that they can take official notice of things in their own records, assuming they still are in those records, but I --

HEARING OFFICER: They would be microfiched.

MR. ETTINGER: Yes, but I would still wonder -- to take official notice that a public comment was made in 1984 as being in the record is one thing. But then to draw some inference from that would raise another set of issues --

HEARING OFFICER: Right. Well, I do want to state I think the Board can and will take official notice or, you know, I will grant that the Board -- Board views

and that we do take official notice of certain things. And I will tell you that those will -- anything in the Board's record, the original record, is clearly something the Board can take official notice of. You know, and the weight to be given to that, Mr. Ettinger, if it's a public comment from 1976, you know, is something that the Board will have to decide on its own, and I think the Board will indicate the appropriate weight.

But I do think that something -- that we need to know exactly what we're being asked to take official notice of before I take official notice of anything, and then that would give you an opportunity to respond to that as well.

Mr. Sofat, did you have any --

MR. SOFAT: The agency will reserve its comment then until --

HEARING OFFICER: That sounds good. Well, I will accept this pleading. And when we know what certain portions you want the Board to take official notice of, we'll revisit it.

MR. BLANTON: In that light -- well, I'll see what you do. We offer at this time as a separate exhibit marked BBCC 35 the opinion of the -- first notice opinion of a proposed rule in matter R 83-6 dated December 15,

1983, in the proceeding entitled In the Matter of Proposed Amendments to Title 35, Subtitle D, Mine-Related Water Pollution, Chapter One, Parts 405 and 406. I have copies for other counsel. I'll do all three of them because I think we'll have the same issues, if any.

Second, we've marked as a separate Exhibit BBCC 36, which is the opinion -- proposed opinion of the Board dated January 24, 1980, in the matter of proposed amendments to chapter four of the regulations of the

Illinois Pollution Control Board. I have copies for Counsel.

HEARING OFFICER: What was the number on that?

MR. BLANTON: R -- I'm sorry. This was number R 76-20 and 77-10. And if I may characterize what these are and what the context was --

HEARING OFFICER: No, excuse me. You were offering 77-10 as Exhibit 37?

MR. BLANTON: No, it's a single -- it's a -- Exhibit 37 -- excuse me, Exhibit 36 relates to two proceedings --

HEARING OFFICER: Understood.

MR. BLANTON: -- 76-20 and 77-10. What these documents are are opinions of the Board discussing the status of coal mines in Illinois. The 76 and -- 76-20 and

77-10 documents relate to the Board's rule that was officially temporary that, for practical purposes, exempted coal mines from water quality standards generally applicable to sources in Illinois. The proceeding R 83-6 is the proceeding that led to the adoption of the Subtitle D regulations which formalized and made permanent the rule found now at 406.203 by which coal mines might opt out of the water quality standards under Subtitle C and fall instead under technology base standards under Subtitle D,

so that's why they are relevant to this proceeding.

The third item in connection with these is -- we've marked as Exhibit BBCC 37, an excerpt from the proceedings in the R 84-29 case. This is found -- this is the testimony of Allen, A-l-l-e-n, Oertel, O-e-r-t-e-l. Mr. Oertel was, at that time, an environmental protection specialist with the land reclamation division in the Illinois Department of Mines and Minerals, and he was testifying on issues that are directly relevant to this proceeding which is -- I believe this was a sediment basin design proceeding.

And one of the issues was relative contributions of sediment and total suspended solids and settleable solids in sediment basins and otherwise. And he is addressing that issue in this testimony.

Unfortunately, I have only the original. This is available at the Board on microfiches. The copy we were able to get through the Board is barely legible, and so far we have not been able to photocopy it legibly; so when I give it to you, you'll have the only one of them that we have now. We'll have to get more copies, I think, from the Board reading directly from the microfiche reader. But at this point, may I approach the bench? And I have these three exhibits tendered.

HEARING OFFICER: I have some thoughts on

these, but, Mr. Ettinger, do you want to go first here on BBCC 35 which is --

MR. ETTINGER: Is that all of them or --

HEARING OFFICER: No, I'm going to do them one at a time. Or do you have --

MR. ETTINGER: Well, I have separate thoughts on Mr. Oertel's statement or testimony.

HEARING OFFICER: Let's do 35 and 36 then which are court orders.

MR. ETTINGER: These are Board orders. I am a little surprised to see them being offered as exhibits. I see these as in the nature of legal authority or authority of the Board. And I certainly will feel free to cite legal authority in this proceeding without offering it as

an exhibit, so I do thank Mr. Blanton for making copies of these opinions for us so that we can read them and prepare better. And I -- if you wish to admit them as exhibits, I have no objection to them being admitted to exhibits, but I don't think it's necessary.

HEARING OFFICER: Mr. Sofat? Let's hit 35 and 36, which are the Board orders, first.

MR. SOFAT: The agency would not have any objection to the final order or the opinion in the docket numbers that have been identified today.

HEARING OFFICER: Okay. I'll tell you what I'm going to do with these. I'm going to deny them as exhibits, but we will take official notice of both of them. The reason I'm denying them is I've got here photocopies of something printed off from Lexis. I don't know if that's the official Board order which we have at the Board offices in Chicago. I'm not denying them for any other reason aside from the fact that if the Board is going to look at its Board orders, I want them to be looking at the original Board order which they have in their office in Chicago. And I'm not entirely sure, going through this in this minute and a half, that these are the correct ones. I know you printed them off of Lexis, but we would have to lay a foundation and everything like that

as to how that went about. But I am going to have the Board take official notice of these, and we can refer to them as Exhibits 35 and 36.

MR. BLANTON: And with that ruling then, we request leave to tie them into the original if we can demonstrate that these are true and accurate copies of the official opinion.

HEARING OFFICER: Yeah, sure, you definitely have leave to do that. I don't know that you need to because these are -- you know, I am taking official notice of Docket Number R 83-6, docket A, the order promulgated

by the Board on December 15th, 1983. I don't know what other purpose you would need these to serve; but if you have another purpose that you envision, I would be more than welcome to let you do that.

MR. BLANTON: I guess my concern about not having them -- I mean, I'm requesting official notice. Frankly, the exhibit, while it's for identification purposes, essentially like we did for the depositions --

HEARING OFFICER: Correct.

MR. BLANTON: -- I just want to make sure that, contrary to Mr. Ettinger's suggestion, that these are more than legal authority. These are findings of fact and policy decisions that serve as guidance for the agency

in addressing the issues that are in this case. And further, they are foundation. One of them is foundation for another exhibit that we'll be offering to Mr. Fry. So, they are not just legal authority. They are factual findings, and they serve as foundation documents for other evidence. We offer them for all purposes for which official notice may be -- those matters for which judicial notice may be taken and, therefore, official notice can be taken by the Board. We would offer them for all such purposes.

HEARING OFFICER: Right. It's my

understanding that official notice -- when I take official notice of something, it's as -- it's in the record as an exhibit so they have the same standing to my mind. And if I'm incorrect, I would be happy to have someone educate me on that particular point of law.

MR. BLANTON: I just never found it to be unhelpful to be redundant because it's better to find out that you did too much rather than too little, too late.

HEARING OFFICER: I understand. I'm not trying to be facetious. I just want you to know they stand on the same footing as an exhibit, so I don't think there's any reason for you to try to tie these in and make them exhibits by laying the appropriate foundation and

whatnot. But like I say, you definitely have leave to do that.

So, that takes us to BBCC Exhibit Number 37 which is the testimony of Alan Oertel. I'm assuming that this is testimony from R 84-29, the hearing?

MR. BLANTON: Yes.

HEARING OFFICER: But, Mr. Ettinger, comments, objections?

MR. ETTINGER: I really have to reserve making any comment on this since I haven't seen it, and I gather we don't even have a legible copy today. So --

HEARING OFFICER: It's semi legible.

MR. ETTINGER: Okay.

HEARING OFFICER: But I understand.

MR. ETTINGER: I haven't seen it so --

HEARING OFFICER: Are you objecting to it at this point in time?

MR. ETTINGER: I'm just saying I'll have to see it and then decide whether we object or not.

HEARING OFFICER: Here you go because I'm going to rule on it now.

MR. BLANTON: I would recommend that you clean your glasses before you start.

(A pause was had in the record.)

MR. ETTINGER: I guess I am going to object for a variety of reasons. First of all, as I said, I haven't read this. I don't know that the -- this is part of the record, to my knowledge, of the permit. It was not, to my knowledge, relied on as a document by any of the permit writers. I don't know at this point exactly what purposes it's going to be offered for. Perhaps there's something in here in the nature of a learned treatise or something that some expert witness could link up. But at this point, I am looking at a long document that I don't know what it's being offered from -- for in an unrelated proceeding. It doesn't seem to be admissible

under the Illinois statute governing third-party appeals that I can see, and I am unclear what it's being offered for.

MR. BLANTON: I can respond to that.

HEARING OFFICER: Let's let Mr. Sofat see if he has any comments.

MR. SOFAT: I would say that the agency believes that if it was part of the Board proceedings, then they don't have objection to that.

HEARING OFFICER: Mr. Blanton? I'm sorry, Mr. Sofat, I didn't mean to cut you off.

MR. SOFAT: That's it.

HEARING OFFICER: I don't have an objection to its authenticity. If it's part of the Board proceedings, I agree that it's authentic. There's a key word here, and you both have said "if." At this point in time, Mr. Blanton, I don't think that we know it is part of the Board proceedings. I don't think the appropriate foundation has been laid yet, so I will deny it.

MR. BLANTON: I'll deal with the foundation question first. To the extent that we need chain of custody, the way this document was generated, I called Pierre Talbert, who's an attorney at the Dikeman, Gosset (phonetic) firm in Chicago a couple, three days ago when I learned about this document, requested him to have -- make

arrangements for a member of that -- or an employee of that firm to go to the Pollution Control Board, look up this proceeding, go specifically to find the testimony of Alan Oertel taken December 21, 1984, from the microfiche where it is stored, which is information then provided to us by the clerk of the Board or the staff of the Board. I don't have with me the name of the staff attorney who talked to my paralegal, Eli Levenstein, to tell us that's how we could get that, but I can provide that if I need to.

The next day I received a fax copy from

Mr. Talbert of this material. The next day I received by overnight messenger, by FedEx, the document that we are offering. I can give testimony about what I think about Pierre's reliability, but I don't think that's necessary. That's the foundation I have.

The relevance of this is Mr. Oertel, at that time, was an employee of the agency, of the environmental agencies in the state of Illinois. Early in his testimony, he testified under oath in this Board proceeding, which I believe dealt with proposed rules about the size of sediment basins at coal mines, that agriculture was the predominant source of total suspended solids in the waters of Illinois and coal-mining regions.

There is further testimony through the document relating to the soil, the agencies in the state who have responsibility for managing soil, how they classified the erosion potential of agricultural lands compared to undisturbed lands compared to mining lands.

His testimony basically regarding a comparison of the amount of soil that is put in Illinois streams annually from agricultural runoff from storm water compared to those with sediment basins relevant at that time to the issue of whether the sizing, the required sizing of sediment basins could be reduced or whether it

needed to have something else, some different criteria. The testimony is relevant to this proceeding because there is a concern voiced by the petitioner that, among other things, total suspended solids from storm water runoff at this mine will degrade and have -- degrade the quality of water in the unnamed tributary and the Little Vermilion River and that that may have an impact on biota. Mr. Oertel's testimony is directly relevant to that.

There are also issues in this case about the effect of the 3:1 ratio, whether the mine will be contributing cleaner water than the water that will be coming otherwise. It's directly relevant to that.

It's also relevant to Mr. Frevert's testimony. It's relevant to the entire record. Petitioner,

apparently, thinks that every time there's an NPDES permit, the agency must have amnesia for its collective knowledge and experience in these issues and reinvent the wheel on every issue that every citizen raises. And this goes to the heart of that general concept. It's clear that persons like Mr. Frevert, who has been doing this for 30 years and his staff who have been doing it for years with an issue that's been addressed in this state for at least 25 years, are entitled to look at things that are obvious to knowledgeable people in this field and rely on

it rather than generating staff memo that can then be put in an administrative record.

And this goes fairly powerfully to that point which is at the heart of whether or not the agency had an adequate basis to determine that this coal mine will not be causing the problem if it complies with its permit.

HEARING OFFICER: Anything further, Mr. Ettinger?

MR. ETTINGER: I think Mr. Blanton has stated the issue fairly well, and I think he stated it in a way that suggested this should not be admitted because our position, of course, is not that they need to reinvent the wheel every time. Our position is that the -- that the public needs to be able to participate in the process and

see what they're relying on. And if, in fact, that does rely -- need a staff memo or something so that the public can effectively participate in the process.

If this document had been offered as part of the record prior to the public hearing that was held in this case, we could have read it then, the public would have been able to participate, and the public would have been able to see this document for whatever it's worth. And yes, precisely, that is -- that's the legal issue that the Board has to decide which is whether the agency's

allowed to rely on its unstated, unsubstantiated -- in the record, on this permit -- collective memory, but the fact that this document is out there that could have been put into the record below if they had done so really doesn't help us with this proceeding.

HEARING OFFICER: Anything, Mr. Sofat?

MR. SOFAT: I just object to the -- Mr. Ettinger's understanding of agency record that we filed with the Board. We are required to file what was in front of the permit reviewer, not the regulations or the Board opinions. We have never done that before. And other than that, as to this document, I don't think we have any objection.

HEARING OFFICER: I'm going to rule. I know, Mr. Blanton, you want to jump up, but I want to get things

moving here, so I've pretty much heard enough. I'm still denying this. I don't think appropriate foundation's been laid. I understand, Mr. Blanton, you have represented how you obtained this document, but that's still not appropriate foundation. If we let an attorney assert how things were brought into the record or how things -- if we let the attorney provide evidence for exhibits, we'd have to let everything in. We need the foundation; we need the testimony for the people who actually did what you say

they did.

In terms of -- I'm not going to grant an official notice. I don't think it's something that the Board may take official notice of. I would direct you to section 101.306, entitled Incorporation of Documents by Reference, which allows the Board to incorporate materials from the record of any Board docket into the proceeding: "Upon separate written request of any person or its own issue of, the Board or Hearing Officer may incorporate such materials, and the person seeking incorporation must file with the Board four copies of the material to be incorporated, and then the Board or the Hearing Officer may approve or reduce the number of copies if necessary." I think that's what you're looking for here. I think that R 83-6 and R 76-20 and R 77-10, BBCC's Exhibits 35 and 36,

which we did take official notice of, that it's possible that could be included under 101.360 of things we can take official notice of even though that should probably be addressed in section 101.46, Incorporation of Documents by Reference, as well.

I think that can be arguably within the specialized knowledge and experience of the Board. So, I did that, but I'm not willing to extend that to testimony from a prior proceeding which may or may not be relevant.

So, I'm denying that exhibit in total.

And we can move on. Anything further?

MR. BLANTON: No. In view of that ruling, I request leave to have an extension to have a period of time to and including whatever the date of May 9th to ask the Board in writing to incorporate by reference the testimony of Alan Oertel dated December 21, 1984, in the proceeding R 84-29 and have it incorporated into this case.

HEARING OFFICER: Yeah, I would grant you leave to do that. Mr. Ettinger, Mr. Sofat, any objection to that?

MR. SOFAT: No objection.

HEARING OFFICER: We're going to want it before your reply brief or your response -- or actually it's your post hearing brief so we're going to need it

before you do a post hearing brief.

MR. ETTINGER: I would think so. And we haven't talked about a briefing schedule yet. We should probably do that off the record when we do at least initially, but there may have to be some scheduling decisions made.

HEARING OFFICER: Right. My only reticence, now that I have corrected my own internal error about

who's going to file the first brief, is that since Mr. Ettinger has to file the first brief -- I would think you would agree -- he would need to know what's going to be in the record before he files his brief. If we wait till May 9th for you to file your motion for incorporation of documents by reference, we're going to be pushing things pretty far back into the briefing schedule. And, of course, you have the keys to that, Mr. Blanton.

And as I've said before, you can always provide a limited waiver of the statutory decision deadline, and then it's not an issue. However, at this point, it is an issue. So in light of that, I'm going to have to revisit my ruling and deny the motion for leave for extension of time. I just don't think there's time to get it done and still have a proper briefing schedule.

MR. BLANTON: All right. I'll take that up

with Black Beauty, and we'll see whether we --

HEARING OFFICER: You still have the opportunity to file a motion for leave to file and explain why you need it in. And, you know, that would be something the Board or I would consider.

MR. BLANTON: All right.

HEARING OFFICER: At this point in time I can't do it, though.

MR. BLANTON: That's fine.

HEARING OFFICER: Now, any further matters of interest?

MR. BLANTON: Black Beauty calls Dean Vlachos as its first witness.

HEARING OFFICER: Is Dean Vlachos here? Sir, why don't you come up and have a seat in this chair right there?

Let's go off the record.

(A discussion was held off the record, and a recess was taken.)

HEARING OFFICER: All right. We are back on the record after a short recess. It's approximately 10:08 a.m., and we are proceeding with Mr. Blanton and the Black Beauty Coal Company's case in chief.

MR. BLANTON: Thank you, Mr. Knittle. We have a new configuration for witnesses today, and I would ask

whether it's all right for me to be seated to question the witnesses?

HEARING OFFICER: Yeah, that would be fine. Let's swear him in, please.

(Witness sworn.)

DEAN VLACHOS,

called as a witness, after being first duly sworn, was

examined and testified upon his oath as follows:

DIRECT EXAMINATION

BY MR. BLANTON:

Q. State your name.

A. Dean Vlachos.

Q. Where do you live, Mr. Vlachos?

A. I live at 1968 South Vivian Street, Lakewood, Colorado.

Q. What's your occupation or profession?

A. I am an environmental engineer.

Q. Are you affiliated with any professional organization?

A. No, I am not currently affiliated with any professional organization.

Q. I'm sorry, for your employment?

A. For my employment, yes, I am. I am employed by The Advent Group.

Q. What is The Advent Group?
A. The Advent Group is an environmental engineering consultant group.
Q. Where is it based?
A. It is headquartered in Nashville, Tennessee.
Q. And give us some idea of the size of the organization.

A. The company has approximately 35 professionals.
Q. And what's the general nature of The Advent Group's work?
A. Our group -- our work focuses primarily in the areas of industrial wastewater management as well as environmental compliance. We have a staff of engineers and scientists available.
Q. How long have you been an environmental engineer?
A. I have been employed as an environmental engineer since 1989, for about 12 years.
Q. You have in front of you a document that's been marked as Black Beauty Exhibit -- I don't remember the -- 38?
A. Yes, I do.
Q. What is that? What is that?
A. It is a copy of my curriculum vitae.

Q. And does this accurately set forth your educational, professional background and accomplishments?

A. Yes, it does.

MR. BLANTON: We offer BBCC Exhibit 38.

HEARING OFFICER: Mr. Ettinger, any objection to BBCC 38?

MR. ETTINGER: No.

MR. SOFAT: No objection.

HEARING OFFICER: That's admitted.

(Whereupon, BBCC Exhibit Number 38 was marked for identification.)

BY MR. BLANTON:

Q. Mr. Vlachos, as I understand it, you became involved relatively -- not too long ago in the issues of whether an NPDES permit should be issued to Black Beauty Coal Company with respect to its new Vermilion Grove Mine; is that right?

A. That's correct.

Q. How did you get involved?

A. I was contacted by Black Beauty Coal personnel, specifically Mr. Eric Fry, in early October of 2000.

Q. And what did you understand from that initial contact to be the issue that Mr. Fry might be interested

in having you address?

A. Mr. Fry was interested in procuring our company's services to do an analysis for a permitting project that was currently going on for the Vermilion Grove Mine.

Q. And what was the nature of the project?

A. The nature of the project was to essentially establish and assess the water quality impacts pre and post discharge from the new mine.

Q. Did you ultimately do that?

A. Yes, we did.

Q. And what was your role in that project?

A. I was the lead engineer and project manager on that project, responsible for all the analysis and reporting.

Q. Did you prepare a final report of that project?

A. Yes, I did.

Q. I'm going to show you some materials. This is a notice of filing dated -- sorry, don't have the date, but it's the Environmental Protection Agency's motion for leave to amend and amended record. Attached to it are some materials that are marked as pages 981 through 997 in the administrative record in this case. Is that a copy of the report you prepared?

A. Yes, it is.

Q. Could you -- after you had had the initial contact from Mr. Fry, what was the first thing you did after that in connection with this project?

A. One of the first things we wanted to do is to

understand the basis of the project, so at that time we actually had some communications between Mr. Fry and myself as well as Mr. Toby Frevert with the IEPA to understand the goals and objectives of the project before we commenced calculations.

Q. And what did you learn in that regard from those two persons?

A. What we learned was our confirmation that we would be looking at an analysis to understand the water quality impacts -- potential water quality impacts of the discharge from outflow 003 from the mine.

Q. And based upon what you learned from them, did you develop essentially a project concept on how you would go about what you were going to do?

A. That's right. We had a preliminary concept actually established just based on my initial conversations with Mr. Fry, and at that point we also presented those initial concepts to IEPA.

Q. And what were your initial concepts?

A. Our initial concept was that we wanted to take a look at this in a simplified mass balance approach to understand what the water quality instream impacts -- which primarily can be ascertained in terms of instream concentrations -- would be during certain storm events

resulting in the discharge from the mine.

Q. What's a simple mass balance concept?

A. A simple mass balance concept is basically where we're looking at what would be -- what would be the effect or the result of mixing the discharge from outfall 003 that has been caused by a storm event with the unnamed tributary upstream flow. In other words, when those two water bodies combine, they will mix together. Their mass will be conserved, and that's where the term mass balance comes from initially, and we will find out what is the response downstream from that mixture.

Q. What did you understand to be the constituents of the proposed discharge from the mine, and how did you learn that?

A. The constituents of concern, our basis for that was what was proposed in the draft permit that was issued that would be commonly expected to be discharged from a mine of this type.

Q. What information did you have about the watershed that would be involved in the area where the

discharge was proposed?

A. The information that we had for the watershed that we needed to do this analysis primarily consisted of drainage basins within the Little Vermilion watershed,

including the unnamed tributary, in terms of size which would be termed the drainage area.

We also had information on the water quality concentrations instream at various points throughout the drainage areas, as well as we needed to have information available about the amounts of rainfall and their response to the drainage area systems.

Q. Where did you obtain these data?

A. Various sources. Most of the data was obtained in terms of drainage area directly from Black Beauty Coal themselves who had delineated these drainage areas. Rainfall information was available on public knowledge databases from the National Climactic Data Center. Instream water quality concentrations for the basins were obtained again from a monitoring effort conducted by Black Beauty Coal.

Q. I'm going to show you what's been marked as BBCC Exhibit 43 and ask if you can identify that, please?

A. This exhibit is a map of the Little Vermilion River drainage areas that was put into our October 23

report.

MR. BLANTON: We offer Exhibit BBCC 43.

Q. This is, as I understand it, a copy of the map that's part of the report that's in the record?

A. That's correct. It's equivalent to figure one.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: So are you saying this is part of figure one?

THE WITNESS: It is. It is a large reproduction of figure one.

MR. ETTINGER: No objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: That's admitted. Mr. Blanton, did you skip 39, 40, 41 and 42?

MR. BLANTON: Yes.

HEARING OFFICER: I wanted to make sure I didn't space out for five exhibits there.

MR. BLANTON: No, we're not there yet.

HEARING OFFICER: Okay. That's admitted.

(Whereupon, BBCC Exhibit Number 43 was marked for identification.)

MR. BLANTON: It's a compilation anomaly.

BY MR. BLANTON:

Q. I'm going to give you a document and ask if that's a copy of Exhibit 43 that's smaller in scale and possibly more manageable to work with?

A. Yes, it is a copy of the scale; and the map is actually the same, but there is a smaller size.

Q. Put Exhibit 43 over here, and open up the smaller copy, please.

A. Okay.

Q. Can you explain the information found on Exhibit 43 that's relevant to the analysis that you did that's in your report?

A. Yes. The information obtained on Exhibit 43 here includes the size of the drainage areas that we evaluated in terms of acres as well as the location of the water quality monitoring stations that we used for water quality concentrations.

Q. After you gathered the data as you've explained -- you can --

A. Should I --

Q. Yeah.

A. Sorry.

Q. That's all the questions I had on the map at this time.

After you obtained the data that you thought

you would need to get started on the project, then can you just please explain how the project moved along, what was the next thing you did?

A. The next thing we did was, once our data was collected, to analyze that data essentially to make sure that it was -- we could verify the data, it was a quality that we needed to make the analysis. We then proceeded to set up and conduct the actual calculations to find out what those instream concentrations after mixture would be downstream. This was accomplished essentially just using a, a Microsoft Excel spreadsheet that we had composed to accomplish this purpose.

Q. Can you explain in lay terms the engineering concepts that underlie this analysis? Basically, what are you comparing, what are the -- how do you do the calculations? Just explain what you did in lay terms.

A. Sure. What we did essentially was to find out -- is to calculate essentially two things: Number one would be the volumes of the flow -- or volumes of flow that we were looking at.

Q. And the volume of flows of what, where?

A. Those would be a function of rainfall. In other words, we want to estimate the volume of flow that would be coming from the drainage area corresponding to the mine itself, the drainage area of outflow 003. That

total volume flow would be a function of the rainfall. Same thing as the total volume flow from the unnamed

tributary upstream from outfall 003, as well as the Little Vermilion River at various points would also be a function of the rainfall amount that we used.

Q. All right. Then how do you take that information and work with it?

A. Once we have -- we have a critical design storm event that was defined.

Q. What's that?

A. The one that we used in the report -- there are actually two storm events that we looked at in the report. A maximum storm event corresponding to the 100 year, six-hour storm equivalent to 4.65 inches of runoff, as well as a lower level storm and minimum amount storm equal to one inch of precipitation. This number was derived from conversations with Black Beauty Coal as the minimum storm that would cause a discharge to occur from outfall 003.

Q. So then after you knew what the critical storm events were, what did you do?

A. At that point, we have to, in essence, take the rainfall from the sky and put it into the river, and that is done by using the standard hydrology practices.

Our manual that we used was the U.S. Department of Agriculture technical release number 55 -- I believe the

title is Urban Hydrology for Small Watersheds -- which provides the equations to translate rainfall into direct runoff from those drainage areas. It is the direct runoff that will be going into the rivers.

Q. After you determined what -- how much of the rainfall gets into the streams both from the mine area and from the unnamed tributary and, I think, also Little Vermilion watersheds, what do you do with that information then?

A. Okay. Once we have that volume of flow, we need to assign a quality to it. And at that point, we use the water quality stations that were shown on figure one that were representative of those drainage watersheds. We pair those with the volumes of flow to come up with a mass component.

Q. Can you state for the record what the water stations are and where they are located, please? I understand there were four of them, right?

A. That's correct. There are four water stations. Station number 11SW-3 was --

Q. Where is that located?

A. That is located on the unnamed tributary downstream from outfall 003; station 14SW-4, located on

the unnamed tributary upstream from outfall 003; the

third station is 15SW-8, located on the Little Vermilion River upstream from the unnamed tributary; and we also used representative sampling point 10SW-7 which is representative of the Faya (phonetic) drain upstream from the Little Vermilion River.

Q. Did you understand the proposed discharge from outfall 3 to be going into the unnamed tributary or the Little Vermilion River directly?

A. My understanding was the discharge from outflow 003 would be going to the unnamed tributary.

Q. For the unnamed tributary, what was the -- describe the data set of water quality information you had for the actual receiving waters.

A. Yes, I did.

Q. What -- I'm sorry. How much -- you said you looked at water quality data from those stations?

A. Yes.

Q. What was the -- how many data points did you have for the unnamed tributary at stations 11SW-3 and 14SW-4?

A. For station 11SW-3, we had eight data points. For station 14SW-4, we had seven data points.

Q. And over what period of time did you have

data?

A. For 14SW-4, the time period was from 15th December of 1999 to 3rd of August 2000. For data point 11SW-3, the time period was 15 December 1999 to 12 September of 2000.

Q. Did you consider that data set adequate to give you a reasonable basis to determine what water quality in the unnamed tributary was, absent the discharge from the mine?

A. Yes, I did.

Q. Then what -- over what period of time and how many data points did you have for the Little Vermilion River?

A. For the Little Vermilion River at stations 15SW-8, we had two data points. For station 10SW-7, we had also two data points.

Q. Over what period of time did you have those?

A. For both of those stations, they were from 3rd August of 2000 to 12 September of 2000.

Q. Once you had the water quality data for the rivers or for the unnamed tributary and the Little Vermilion, what did you do with that information?

A. I'm sorry, for the water quality?

Q. After you had the water quality for the streams, then what did you do?

A. After we had the water quality data available for the streams, we came up, from those databases, with a single statistic that could be used to represent the water quality at those basins.

Q. How did you do that?

A. We took an arithmetical average.

Q. Is that standard procedure for something like this?

A. Yes, it is.

Q. Okay. Then what did you do?

A. At that point, we have, at each station, a concentration value that we coupled with the volume of flow that we had determined earlier from the rainfall amounts to come up from the mass of those drainage basins at those respective points.

Q. Then what did you do in your analysis?

A. At that point, when you have the concentration and volumes combined, you can basically -- the mass balance, which is equivalent to a conservation mass, can be calculated to have the resulting mass from the two water bodies combined. Once that value is known, you can calculate, knowing the combined volumes, what would be the resulting instream concentration of the mixture.

Q. And did you do that?
A. Yes, we did.
Q. And are your results set forth in the report?
A. Yes, they are.
Q. Where are they found?
A. They are found on tables one and two.
Q. In the course of making this calculation of putting essentially together the water from the discharge that was proposed from outfall 3 and the water in the receiving waters of the unnamed tributary, what engineering assumptions are taken into account in the equation you used in terms of when mixing takes place, how the balancing is done? Can you explain that?
A. Right. What we had assumed, based on the data at hand, was that we would be using a complete mix scenario, often termed an instantaneous mixing approach, to find out what was the total response from mixing those two volumes of water together.
Q. Were any other assumptions of that -- well, what assumptions, if any, did you make about when the discharge would take place from both of these areas as rainfall translates into water into the stream or water into the discharge?
A. We had looked basically over a, a time

period, I guess you might say, averaged over the entire duration of the storm event. The volume reflects the total amount of water that would be discharged during the entire storm event.

Q. Are those assumptions standard within engineering practice that you're familiar with for a project like this?

A. Yes, they are.

Q. Are any of those assumptions and techniques used by any environmental agencies that you're familiar with?

A. Yes, they are. They are used by federal U.S. EPA who has prescribed guidance within their -- outlaid in the technical support document for water quality based toxics control. Those guidances have been actually adopted by several states to be used as part of their NPDES permitting regulations. And my familiarity also with the Illinois regulations, I believe the part is 35 IAC, Subpart C, Part 352, which lays out some NPDES procedures, would also use this type of a complete mixed mass balance approach.

Q. That would include the assumptions of instantaneous mixing and single averaged event for translating the rainfall into the flow in the stream?

A. The regulations address the complete instantaneous mixing.

Q. Did you draw any or make any conclusions based upon your calculations as to what effect, if any, discharge from -- proposed discharge from outfall 3 would have on water quality in the unnamed tributary and/or the Little Vermilion River?

A. Yes, I did.

Q. What were those?

A. Those results are found on table one and two of our report. And what we had found, if I can refer to the document, please --

Q. Sure.

A. -- for the parameters of concern that were analyzed --

Q. Let me back up before I ask you that.

A. Sure.

Q. When you did this original work that's found in your report, what was -- you may have said this already. What was the exact source of data for the water quality that would be coming from outfall 3?

A. The water quality that would be coming from outfall 003 -- of course, since the mine was not discharging at the time that we did the analysis, we used

a surrogate mine. We used DMR data from the Riola mine.

Q. What's a DMR?

A. A DMR is a discharge monitoring report, the monthly reporting requirements as part of an NPDES permit that a discharge will submit.

Q. And where was the -- where's the Riola mine located in relation to the Little Vermilion?

A. It is north of the Vermilion Grove mine on the Faya drain.

Q. Those were data provided to you by Black Beauty?

A. That is correct.

Q. Okay. Using those data and the other things that you've just told us, go ahead and now tell us what your conclusions were.

A. Our conclusions were, for parameters of concern for chloride and sulfate in terms of the response in the unnamed tributary, the instream concentrations of chloride and sulfate did increase due to the discharge from outfall 001 (sic) but were below water quality standards.

For TSS, total suspended solids, the impact in the unnamed tributary was shown to decrease in water quality concentration downstream from the outfall 003

discharge. For total iron --

Q. And how did the resulting TSS number compare to the applicable -- to the water quality standard found in Subtitle 3?

A. There is no water quality standard for TSS.

Q. Okay.

A. The instream iron concentration in the unnamed tributary downstream from the outfall 003 discharge also decreased in concentration.

Q. How did that compare -- if it can be -- to the water quality standard?

A. There is no water quality standard for total iron.

Q. Any other parameters that you analyzed in the original report?

A. No.

Q. Over what period of time did this project last? It was basically done during October?

A. That's correct, right. For essentially, I would estimate, a two-week period in October.

Q. Okay.

A. The final report was submitted October 20th.

Q. May I have that back, please? Following your

original work, have you done any additional analysis of this same basic type as found in your original report?

A. Yes, I have.

Q. Can you describe what sort of additional analysis you've done?

A. The additional analysis that I have done, basically I can term an update of the original work.

Q. How?

A. Based on available data or, excuse me, data that was not available at the time the original analysis was done and also in regards to responses of issues as part of the permitting process.

Q. What are the data that were not available at the time of your original report that are now available that you've now taken into account?

A. There was one other additional data point that was collected by Black Beauty Coal as part of that original monitoring program. That was collected on October 4th of 2000.

Q. If it was done on October 4 of 2000, why wasn't it in your report dated the end of October 2000?

A. The sample was collected on October 4th. Unfortunately, the laboratory analyses were not completed until later.

Q. And there was something else that you said that was an update that I forgot. What else was there other than that extra data point? Oh, you said there were some additional issues?

A. The, the -- we took a look at the analysis again based on the response to some of the issues as part of the permitting process.

Q. What were those?

A. Those were to reevaluate an appropriate concentration to use for the outfall 003 discharge.

Q. And be more specific, please.

A. In essence, instead of using the surrogate Riola mine for outfall 003 concentrations, we used the final NPDES daily maximum permit loads.

Q. Okay. Did you do anything else in terms of your analysis of the data points?

A. Because we had the concentrations for the final daily maximum permit limits for manganese also, that parameter was now included into the analysis.

Q. Why wasn't it included in the first one?

A. It was not included in the first October 20th report because, again, we used surrogate data for the Riola mine, and there was no manganese data available from the Riola mine.

Q. When you added the additional data point from October 4, did that get added to all of the sampling stations?

A. Yes, it did.

Q. And did you again take the arithmetical average of all those available data?

A. No. We did not actually.

Q. What did you do?

A. We reviewed the Illinois regulations and, again, with respect to the part 352 that I had mentioned earlier about NPDES permitting to find if there would be a more appropriate statistic to use for those water quality concentrations. At that point, we -- instead of using the arithmetical average -- used a geometric mean of the background data set as prescribed in the data regulations.

Q. What's the geometric mean compared to the arithmetic average?

A. Mathematically?

Q. Yes.

A. An arithmetic average is the total of your database divided by the number of samples. The geometric mean is the reciprocal of the sum of the reciprocals.

Q. And what's a reciprocal?

A. A reciprocal? A reciprocal is basically if you have a number, the reciprocal would be equal to one over that number; one divided by that number.

Q. Are you familiar with the engineering or statistical or whatever principle used that would cause one to choose geometric mean over arithmetic average in figuring out the best number to use when you have a set of data points like this?

A. I -- yes, I statistically understand the basis why geometric mean would want to be used.

Q. Why?

A. Because, in essence, a geometric mean will, in essence, mute out extreme events or perhaps extreme outlyers of databases.

Q. In addition to adding the data point, adding manganese using permit limits instead of Riola averages for the 100 year, six-hour storm and the -- I'm sorry, for the 4.65 inch rainfall and the one-inch rainfall, did you do any other analysis with these data?

A. Yes, we looked at one other case essentially.

Q. What is that?

A. That involved looking at a flow ratio between the tributary upstream from outfall 003 to outfall 3, that ratio equivalent to 3:1 mixing.

Q. And why did you look at that recently when

you didn't look at it in October?

A. We looked at it recently because it is a, a condition of the final permit that was not a condition in the draft permit.

Q. Show you what's been marked as BBCC Exhibit 39, ask if you can identify that, please.

A. This is the database and the result also of the recent remodeling efforts that we have conducted.

Q. And does this summarize the results of these -- this additional work that you've described in essentially the same format as the exhibits in the original report?

A. Yes.

MR. ETTINGER: Excuse me. Which page are we looking at here?

MR. BLANTON: It's all four pages together.

MR. ETTINGER: So what page are we talking about now? Is it the fourth page?

MR. BLANTON: I'm sorry.

BY MR. BLANTON:

Q. Let me back up. On Exhibit BBCC 39, what is the first page?

A. A first -- the first page is a summary of the

long-term sampling database.

Q. Okay. And that essentially sets forth --

A. This provides the data that was used to calculate the geometric mean from the water quality sampling stations.

Q. So it differs from the original database in the report by adding the fourth data point at each station, adding manganese data and adding -- and doing the calculation by geometric mean rather than arithmetic?

A. Right. I believe when you said the fourth data point, you meant the October 4th data point?

Q. Yes.

A. Right.

Q. What is the next page which, I believe, in the exhibit says Black Beauty Coal, Vermilion Grove Mine, Storm Water Dilution Analysis. Outfall 3 concentration equals the final daily maximum permit limits. Then the next line it says, 4.65 inches.

A. This is the result of our recent analysis that incorporated that database as well as the other changes that we have just discussed.

Q. Then the next page is -- has the same title except it says one inch rather than 4.65. What's that?

A. Correct. It's the same analysis again, a

recent analysis but for a different storm. The first one was for 4.65 inches. That's what's down in the original

report. The second one was 4.1 inches which was also done in the original report.

Q. And there's a page that the title for the first line is the same. The second one is HC 3:1 dilution ratio, et cetera. What's that?

A. This is the new case that was recently analyzed to simulate 3:1 mixing dilution ratio between the unnamed tributary upstream from outfall 003 and outfall 004.

MR. BLANTON: Now we would offer BBCC Exhibit 39.

HEARING OFFICER: Mr. Ettinger, any objection to BBCC 39?

MR. ETTINGER: No.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No.

HEARING OFFICER: That will be admitted.

(Whereupon, BBCC Exhibit Number 39 was marked for identification.)

BY MR. BLANTON:

Q. Mr. Vlachos, what are the conclusions -- well, do these -- can you draw conclusions from Exhibit BBCC

39?

A. Yes.

Q. What are they?

A. The conclusions are, utilizing all of these changes that we have discussed, the addition of the outfall 003 discharge to the unnamed tributary will not result in any instream concentrations downstream from that discharge greater than water quality criteria.

Q. And in terms of whether the absolute numbers would be expected to go up or down, could you go through those again the way you did earlier?

A. Sure. The absolute numbers that you were referring to --

Q. I'm going to say, did they go up or down? I mean when you put the discharge into the unnamed tributary, I'm not asking you at this point to compare what happens under Exhibit 39 compared to your original conclusions.

A. Right. For what I understand that you're asking here, the absolute concentrations did increase because we were using a larger concentration for the initial outfall 003 discharge which was set at its final daily maximum, NPDES daily permit limits.

Q. Were there -- using these data, do they

indicate what will happen with respect to sulfates in relation to water quality standards?

A. Yes. For sulfates, for all three cases that

were examined, being the 4.65 inch storm, the one inch storm and a 3:1 dilution ratio, the response in the tributary downstream from outfall 003 for sulfate resulted in concentrations less than the water quality standard.

Q. What about chlorides?

A. The same is true for chlorides.

Q. Okay. And what about manganese?

A. The same is true for manganese.

Q. Did you do any additional work other than what you just described that was summarized in Exhibit BBCC 39?

A. Yes, I did.

Q. And describe what you did in addition?

A. In addition to these analyses, we conducted, I guess you might say, another set of analysis for those three cases -- the 4.65 inch storm, the one inch storm, and the 3:1 dilution ratio using an even further expanded database based on recent NPDES data that was collected.

Q. And what do you mean by NPDES data that was collected?

A. Under the existing permit, the final permit for Black Beauty Coal mine, they're required to sample the outfall 003 discharge. There were three sampling

events that we had data for from the month of February that we could utilize for the analysis.

Q. Were those data -- there are -- in addition to the outfall, there are instream locations that are to be sampled, right?

A. That is true. That is also part of the permit provisions.

Q. Did you use the sampling from those instream locations to add to the original database?

A. Yes, we did.

Q. And then did you do essentially the same calculation with those additional three data points?

A. That's correct.

Q. I'm going to show you what's been marked as BBCC Exhibit 41 and ask if you can identify that.

A. This exhibit presents the combined sampling database which would include the previous one that we've just examined as well as the three additional points for February for the stations in the drainage areas of the Little Vermilion River and the unnamed tributary.

MR. ETTINGER: Excuse me. This is very well

prepared and that's great, but we're moving very quickly here, and I'm just not able to get the paper and find out where we're talking about in time; so could we just slow down so I can see where we are?

Now, what document should I have in front of me? And a lot of these documents look very similar.

MR. BLANTON: This one says at the top Black Beauty Coal Combined Term Sampling Database.

MR. ETTINGER: And this is exhibit what?

MR. BLANTON: 41.

MR. ETTINGER: 41. And what page are we referring to now?

MR. BLANTON: The first page.

MR. ETTINGER: The first page. Thank you.

MR. BLANTON: Sorry.

Q. If you look at Exhibit 41 on the first page --

A. Yes.

Q. -- that's entitled Black Beauty Coal Combined Term Sampling Database. I notice that for four sampling points, you have added data from February 12th, 14th, and 25th of 2001. Is that right?

A. That is correct.

Q. Were those samples physically taken from the same four locations that you've identified on the map

that's Exhibit 43 and that are the same locations that are identified in your original report and in Exhibit 39?

A. No, they are not.

Q. Where are the -- where physically are located

the sampling points that you have put in the same box as 10SW-7? There's one sampling point for that one, right, for February of 2001?

Let me back up. I'm getting it confused. Where are -- excuse me. How many of the NPDES sampling points were used in this sampling base?

A. Two.

Q. All right. And how are they identified?

A. They are given, I believe, just a designated number such as IEPA 2 and IEPA 3.

Q. And do you know where they are physically located on these streams in relation to the original four sampling points?

A. I would have to refer to a map.

Q. Okay. Can you look at Exhibit 43 or look at the small copy of it and tell us where the NPDES sampling points are located?

MR. ETTINGER: I have a little problem here in that the record's not going to show where he pointed to the map. Unless they're marked on the map, we're going to

have some problem. Are these sampling points marked on this exhibit?

MR. BLANTON: They will be when he takes my pen and I ask him to do it, yes.

MR. ETTINGER: Okay.

BY MR. BLANTON:

Q. Can you find where they are approximately?

A. I would need to confirm that with the -- another map.

Q. Do you have that?

A. I believe I do, yes.

Q. Can you get it so you can confirm it so we can put it onto the 43?

A. Yes.

MR. BLANTON: Can we take just a couple minutes to let him get that?

HEARING OFFICER: Yes. Let's go off for a couple minutes.

(A discussion was held off the record.)

HEARING OFFICER: We are back on the record after a short recess. Sir, let me remind you you're still under oath.

BY MR. BLANTON:

Q. Mr. Vlachos, have you now located your map

that will show you where the NPDES sampling points are?

A. Yes.

Q. What I would like you to do is, using that as a reference, go to Exhibit 43 and place Xs on Exhibit 43 in blue ink and circle them so that they're clear where

you're showing where the sample points are that are incorporated into Exhibit 41.

A. (Witness complies.)

Q. Can you also mark them as A, B, C or 1, 2, 3 or something so we can track them from the map into the chart?

A. Yes.

Q. So, you've now marked the map?

A. Yes, I have.

Q. Okay. Explain just in terms of which stream and whether it's upstream or downstream of something like you have before what the three data points are so we'll know which is which when we look at the map?

A. Okay. IEPA site number two is on the unnamed tributary; it is upstream from outfall 003. IEPA site number three is on the Little Vermilion River; it is upstream from the confluence with the unknown tributary.

Q. Those are the two?

A. Those are the two.

Q. Okay. Be seated, please.

Now look at Exhibit 41. Where are the data from NPDES sampling point two found in the first page of Exhibit 41?

A. IEPA sampling site number two, which is on the unnamed tributary, are found in conjunction with both

sample sites 11SW-3 and 14SW-4 which are also on the unnamed tributary.

Q. Where is NPDES location three found on the first page of Exhibit 41?

A. IEPA site number three, which is on the Little Vermilion River, has been combined with sample sites 10SW-7 as well as 15SW-8 for the Little Vermilion River.

Q. Why did you do that?

A. Both of those, in the case of the Little Vermilion River as well as the unnamed tributary, those sampling sites would be representative of the same water quality conditions as were the original database.

MR. BLANTON: We offer Exhibit BBCC 41.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: I don't object.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: That will be admitted.

(Whereupon, BBCC Exhibit Number 41 was marked for identification.)

BY MR. BLANTON:

Q. Mr. Vlachos, what is the second page of Exhibit 41?

A. The second page of Exhibit 41 presents the results of the analysis for the 4.65 inch storm. This analysis was the same as that was done. The only revisions here included -- include the combination of databases as presented on page one.

Q. What's page three of Exhibit 41?

A. The results for a one inch storm.

Q. And then what's page three?

A. The results for --

Q. Excuse me, page four?

A. The results for the 3:1 dilution ratio.

Q. And can you draw conclusions from these analyses?

A. The -- yes, I can.

Q. What are they?

A. The conclusions are similar to the previous analysis that we had looked at, such that the resulting instream concentrations for chloride, sulfate, TSS, total

iron and manganese, those concentrations instream are below water quality standards in the unnamed tributary downstream from outfall 003.

Q. And water quality standards means the numbers found in the charts at section 302.208 for general use waters under Subtitle C, right?

A. That is correct.

Q. Okay. How does the additional work relate to your original conclusions that were in the report that the agency had before it at the time of the permit?

A. Essentially the conclusions are the same for both our original report as well as this recent work. The concentration response instream in the Little Vermilion River as well as the unnamed tributary results in concentrations below water quality standards.

Q. You can put that exhibit aside, please. There was an issue or topic that came up in my questioning of -- in Mr. Moore's testimony yesterday regarding what is the permit limit for some form of iron and what is the water quality standard for some form of iron and how those compare. Were you here for that testimony?

A. Yes, I was.

Q. What did you understand the issue to be

between the permit limit and the water quality limit?

A. The permit limit and the water quality limit, the issue at hand was to make sure that there is a clear understanding between the form of iron that either those limits or those water quality standards are based on.

Q. Can you explain what the issue is in scientific terms between the concepts of total iron that

can be found in water and dissolved iron that can be found in water?

A. Total iron includes the dissolved and particulate forms of iron, while dissolved iron is just individually dissolved forms, soluble form of iron.

Q. How does particulate iron get into waters like this?

A. It will be adhered to particulates, suspended cells, matter within the water column.

Q. Do you know how, in a water quality lab if they just get a sample of water how -- whether they can measure both total iron and dissolved iron for that sample?

A. Yes, they can measure both total and dissolved iron.

Q. How do they do that?

A. The difference -- as far as my understanding

is of the analytical test, the difference between a total dissolved -- or total iron management and dissolved iron management would be that a dissolved iron management includes a filtration step.

Q. So, basically they take the particles out physically and then resample --

A. That's correct.

Q. -- or reanalyze it?

A. And use the same type of analysis; that's correct.

Q. Do you have any information or knowledge regarding what one might expect to find as a ratio or relative amount of total iron compared to dissolved iron in a given water sample of waters of the sort we're talking about in this case?

A. Yes, there have been measurements taken to compare the total and dissolved components for a water sample of iron.

Q. I'm going to show you what's been marked as BBCC Exhibit 42 and ask you to identify that please.

A. The question again, please?

Q. Is, what is the piece of paper I gave you?

A. This Exhibit Number 42 presents some data of total iron and dissolved iron measurements that my

company, The Advent Group, has been involved in on some of our projects.

Q. And explain essentially, what is the type of information that's presented in the document?

A. The type of information is analytical results for total iron, analytical results for dissolved iron of instream samples, and then a calculation of what's called the total to dissolved ratio which is equivalent to the

iron total concentration divided by the iron dissolved concentration.

Q. At the bottom of the page, there is a reference -- there's a statement that says, "U.S. EPA has not developed a DMT for Fe as no WQC and not a priority pollutant." Can you please translate that?

A. What this is essentially stating is that you -- United States Environmental Protection Agency has not developed a DMT, which stands for dissolved metals translator.

Q. What's that mean?

A. A dissolved metals translator is another term for that ratio of total to dissolved iron. "For Fe" -- Fe is iron, the chemical symbol for iron. "As no WQC" -- WQC stands for water quality criteria. "And not a priority pollutant," the meaning of this statement is

that U.S. EPA essentially has not derived or advised, in guidance, any default metals translator that can be utilized for iron.

Q. What's a default metals translator for iron?

A. There is none. A default metals translator --

Q. What's that mean?

A. EPA, in some of their guidance documents that they provide to states, has done some research, some

measurements on dissolved metals translators for other constituents, other metals. There is no clear documentation on that for iron at this time.

MR. BLANTON: We offer Exhibit BBCC 42.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: No objection.

MR. SOFAT: No objection.

MR. ETTINGER: Well -- no.

HEARING OFFICER: Do you want to retract your, "No objection"?

MR. ETTINGER: I was just wondering what the phone number was on the side here, but I guess it's just where it was faxed to.

HEARING OFFICER: That is admitted. Is there a problem with the photo, Mr. Ettinger? We can cross it

off.

MR. ETTINGER: No, I was just hoping it didn't prove to be important.

(Whereupon, BBCC Exhibit Number 42 was marked for identification.)

MR. BLANTON: I think it's how you locate Mr. Hubbard. I think.

MR. ETTINGER: Also, it's a useful piece of information.

MR. HUBBARD: You've got it in your file somewhere.

BY MR. BLANTON:

Q. On this exhibit, there are four boxes on the right side with numbers in them. What are those, and what do they mean?

A. Those numbers as stated in the heading of the column are the geometric mean of the total to dissolved ratios for those individual databases.

Q. Okay. Essentially what this is telling us is if you have a total iron content in waters that are identified here, which is Lake Michigan, Wabash, the Mississippi and the Ohio, of the total iron number, this is how much of it's dissolved iron, right?

A. That's correct. What that number is telling

you is -- I'll give it as an example here. For the Lake Michigan information, for the geometric mean total/dissolved ratio of 9.18, what that is stating is that the total iron concentration is 9.18 times greater than the dissolved iron concentration.

Q. You can put that one aside, please.

MR. BLANTON: I'm sorry, Mr. Knittle. I didn't have copies for you. I apologize for that. I have copies --

HEARING OFFICER: No problem. Are these the

original?

MR. BLANTON: Okay. These are copies so you can at least -- while we're doing the originals.

HEARING OFFICER: Thank you.

BY MR. BLANTON:

Q. In addition to these data from waters that are sort of in the neighborhood but not directly involved, do you have any information regarding the iron translator, the dissolved metals translator for iron in the waters that we're concerned with in this case?

A. Yes.

Q. I'm going to hand you what's been marked as BBCC Exhibit 40 and ask if you can identify that, please?

A. This exhibit presents information that was

collected by Black Beauty Coal as part of that same NPDES database that we were discussing earlier, giving concentrations of iron as total, concentrations of iron as dissolved, and then a calculated iron dissolved metals translator.

Q. I notice that this report shows IEPA sites two and three and four, and you've already marked two and three on Exhibit 43. Can you do that for site four also so we'll know where these samples came from?

A. (Witness complies.)

Q. You've done that now?
A. Yes, I have.
MR. BLANTON: We offer Exhibit BBCC 40.
HEARING OFFICER: Mr. Ettinger?
MR. ETTINGER: May I just see somebody's copies of BBCC 40? I -- oh, I see.
MR. ETTINGER: I have no objection to 40.
MR. SOFAT: No objection.
MR. ETTINGER: Now that I figured out which one it was.
HEARING OFFICER: That is admitted.
(Whereupon, BBCC Exhibit Number 40 was marked for identification.)
BY MR. BLANTON:

Q. What's Exhibit 40 tell you, Mr. Vlachos?
A. Exhibit 40 presents iron dissolved metals translators for three of the IEPA sites prescribed in the NPDES permit for Black Beauty Coal. As an example, for site number two, which is the unnamed tributary upstream from the Little Vermilion River, the ratio of total iron to dissolved iron is 1.8. For IEPA site number three, two ratios were calculated, being 24.0 and 3.6. For IEPA site four, which is the Little Vermilion River downstream from the unnamed tributary, that ratio was calculated at 4.8.

Q. Why is it on Exhibits 42 and 40 there is no number for DMT by every one of the samples? And specifically on Exhibit 40 there is no DMT number where the iron dissolved number is less than 0.005, and that appears to be the case also on Exhibit 42.

A. No dissolved metals translator was calculated for an individual data point where either the total iron concentration or dissolved iron concentration was reported as a nondetect value or less than a method detection limit.

Q. Even though you cannot calculate a ratio where the denominator would be zero, what do these data tell you if you have a total iron reading and the

dissolved iron is nondetect in terms of what the ratios in these waters would be between total and dissolved iron?

A. You would anticipate and predict essentially that the ratio would be very high as there is not much, if any, dissolved iron within these samples.

Q. As you know, the permit sets a minimum dilution level of 3:1. Have you looked at the issue of what actual -- and you also know, I believe, that there was some suggestion by some people in this case that the unnamed tributary might actually not have much water at

all in it when there was a discharge.

Have you looked at the issue of what the likely scenario is of the actual dilution ratios between the unnamed tributary and this discharge?

A. Yes, I have.

Q. How did you do that?

A. I -- using the precips in the original report, essentially the volume approach for rain storms, an analysis was conducted to understand, for a range of rain storms, precipitation amounts, what would be the anticipated dilution in the unnamed tributary downstream from outfall 003.

Q. Can you describe how you did that analysis?

I mean, basically the same thing. In lay terms, what did you look at?

A. We looked at the volumes for many storms resulting from the runoff from the 003 -- excuse me, outfall 003 drainage area mixed with the volumes of rainfall that has run off from the unnamed tributary upstream from the outfall 003 discharge. Those volumes were combined to understand the dilution downstream.

Q. And once you knew --

A. Calculate it.

Q. Once you knew what the actual data were, how did you analyze that to convert it into dilution ratios?

Or did you already answer that? Basically, you looked at what it really was, then what was coming out of outfall 3?

A. That's correct. We did a volumetric dilution.

Q. Would you look at the relationship between the amount of rainfall and what the resulting dilution ratio would be?

A. Yes. For many storms, we wanted to understand what was that functional relationship of dilution versus storm precipitation.

Q. And in general, what did you find out in that

regard?

A. We found out that -- and I'll preface this by saying the range of rainfall events that we looked at ranged between 1.0 and 4.65 inches which essentially brackets our two scenarios that we have been running for the modeling. For the lower rainfall amounts, 1.0 inches, we calculated the dilution amount in the unnamed tributary downstream from outfall 003. As rainfall increases towards 4.65 inches, we do see a decrease in dilution. But as the rainfall amount increases where it's 4.56 (sic) inches, that dilution reaches a minimum value. In essence, in a graph, that would be stated as

being the response becomes acidotic to a minimum dilution value.

Q. Okay. Have you put the results -- what kind of equations did you use to do that analysis? Since you had rainfall events from 1.65 inches and you had this database, how did you use that information to project it over a larger range of possible precipitation events?

A. Basically I used a range of rainfall events between one and 4.65 inches in increments of, I believe, one tenth of an inch of rainfall to plot the dilution for each progressive increasing rainfall event to come up -- essentially to generate a graph that can show that

functional relationship.

Q. Let me show you what's been marked as BBCC Exhibit -- I have it as 42, but it can't be that.

MR. HUBBARD: 44.

MR. BLANTON: Be 44?

Q. Ask you if you can identify that?

A. This exhibit presents a graphical representation of the results of the analysis which gives dilution of outfall 003 discharge in the unnamed tributary versus precipitation amounts.

Q. And what does your analysis -- excuse me.

MR. BLANTON: We offer Exhibit BBCC 44.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: No objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: No objection. That is admitted.

(Whereupon, BBCC Exhibit Number 44 was marked for identification.)

BY MR. BLANTON:

Q. And what does your work show as indicated in Exhibit 44 as to what are the likely dilution ratios on those occasions when Black Beauty is allowed to discharge

from outfall 3?

A. The results of this analysis shows that for rainfall events between one and 4.65 inches as well as greater than 4.65 inches, as we extrapolated the equations, the minimum dilution that would result will be 8.0 to one.

Q. Were you here yesterday when there was some discussion with Mr. Frevert about how much of the unnamed tributary will mixing occur during discharge events?

A. Yes, I was.

Q. And what did you understand -- have you given some thought to what would be required to do a complete analysis of what the geographical area is for the mixing

zone or a mixing area or dilution area downstream from the discharge point for outfall 3 under all occasions and circumstances under which the discharge is allowed in the permit?

A. Yes, I have given it some thought.

Q. What would it take to do that engineering analysis?

A. To do that type of an engineering analysis, site-specific data of the watershed basin would need to be obtained to calculate, via projections, what would be the size of the mixing zone, what would be the dilution

of that mixing zone, to understand how that dilution could change as a function of distance downstream from the outfall.

Q. Are there -- is there enough information available to you as an experienced environmental engineer who's looked at matters like this to draw some general conclusions about the likely amount of distance downstream from the discharge mixing would still be taking place under a 3:1 dilution ratio?

A. Although --

Q. The first question is, is there enough data for you to have an opinion?

A. Yes, there is.

Q. And what is your opinion as to under a 3:1

dilution ratio, which would be the minimum amount, how far downstream there would still be mixing going on?

A. Although the data does not exist to do the complex models that I had alluded to earlier, there is sufficient information to make a determination, based on characteristics of the receiving water body, the unnamed tributary, as well as characteristics of the discharge to, in essence, understand what that distance would be.

Q. And what would it be, in your judgment?

A. In my judgment, based on experience with

working with mixing zones for this discharge as well as other discharge, I would anticipate the mixing instance to be on the order of around 100 feet or so.

Q. And can you explain a little more why you think that?

A. The basis for that decision primarily rests in the characteristics of the receiving stream as well as the discharge, understanding that in this portion of the unnamed tributary, the approximate width of the stream is around 20 feet or so based on the information that I've been provided by Black Beauty Coal. It's a fairly shallow system, perhaps depths of one or two feet or so.

The discharge itself -- as it has been engineered and designed, the resulting discharge from an

18-inch outfall pipe will have some momentum and velocity coming out of that pipe when it is basically on or when discharge is being released. That energy will cause rapid mixing within a smaller type stream such as the unnamed tributary. That effective mixing happens within a relatively short time frame which translates essentially being to a short distance downstream.

So, that assessment is based on my understanding of the configuration of the receiving stream as well as the outfall characteristics.

Q. And you're not representing that this is a rigorous engineering analysis?

A. Absolutely not.

Q. Are you aware of any work that the Illinois EPA has done that's similar to the sort of analysis that you did in your original report and your follow-up work here recently, basically analyzing the watersheds and what sort of effect there would be, if any, on water quality from the discharge?

A. Yes, I have.

Q. And what's the information you have available to you from IEPA?

A. The information that I have available to me were essentially some very similar type of mass balancing calculations to find resulting instream concentrations

for chloride and sulfate that would result in the unnamed tributary downstream from outfall 003.

Q. Do you have those calculations that you used to describe?

A. I have a copy of those calculations.

Q. Can you get them, please?

(A pause was had in the record.)

MR. BLANTON: Could we stay off the record for just a second? We need to find out whether these are in

the record or not.

HEARING OFFICER: Let's go off the record.

(A discussion was held off the record.)

HEARING OFFICER: We're back on the record. Mr. Blanton?

BY MR. BLANTON:

Q. Mr. Vlachos, I'm going to hand you what's been marked as BBCC Exhibit 45 and ask what you understand that to be, just in nature, not the numbers.

A. I understand this to be a calculation of instream water quality concentrations for sulfate and iron conducted by Illinois's Environmental Protection Agency.

Q. Was that provided to you by my office as part of the discovery materials that were in this case?

A. Yes.
Q. Can I have that?
MR. BLANTON: When we were off the record, it's State of Illinois, Environmental Protection Agency. Subject, BBCC Vermilion data, LVR -- Little Vermilion River -- reviewed by Bob Mosier and Scott Twait dated December 20, 2000. I believe it to be a document provided by the agency in response to Petitioner's interrogatories.

We offer it as BBCC 45. I'm sorry, I don't have any copies.
MR. ETTINGER: Yeah, we saw this. No objection.
HEARING OFFICER: Mr. Sofat?
MR. SOFAT: No objection.
HEARING OFFICER: That is admitted.
(Whereupon, BBCC Exhibit Number 45 was marked for identification.)
BY MR. BLANTON:
Q. How do the agency's calculations compare with the work you've done on this matter?
A. The agency's calculations are similar to the work that we have done in this matter by taking a look at volumes of runoff from drainage areas, combining those with instream concentrations to find resultant

concentrations downstream from outfall 003 and the unnamed tributary.

Q. And how do their conclusions compare to yours?

A. Their conclusions are the same as ours, essentially that water quality concentrations that result from the mixture of outfall 003 and upstream unnamed tributary waters, those concentrations are below water

quality standards for chlorides and sulfates.

Q. Did you have any discussion with anyone from the agency about the method of analysis you thought you might employ on this project before you set out on it?

A. Yes.

Q. Who?

A. I had a conversation with Mr. Toby Frevert from Illinois Environmental Protection Agency in conjunction, during a conference call with Black Beauty Coal personnel.

Q. Do you remember about when that was?

A. I believe the date in reference to my notes is October 10th, 2000.

Q. And at that time, did you discuss with Mr. Frevert the basic approach to analyzing these issues that you intended to take?

A. That approach was presented to him, correct.
Q. And is that the approach you actually took and is demonstrated both in your original report that's in the record beginning at page 983 and these exhibits that you've had here today?
A. Yes.
MR. BLANTON: I have no other questions for this witness at this time.

HEARING OFFICER: Mr. Ettinger?
MR. ETTINGER: I need a break to try and figure out what all these exhibits are and talk to my expert here.
HEARING OFFICER: Let's go off the record for just one second.
(A discussion was held off the record, and a lunch recess was taken.)
HEARING OFFICER: We're back on the record after a short lunch recess. It is approximately 12:47 p.m.
Sir, let me remind you you are still under oath. We're going to start with the cross-examination, starting with Mr. Ettinger.

CROSS-EXAMINATION

BY MR. ETTINGER:
Q. What was the pronunciation of your name

again?

A. Dean Vlachos.

Q. Vlachos?

A. Right.

Q. Are you registered as an engineer in Illinois Mr. Vlachos?

A. No, I am not.

Q. Are you licensed as an engineer in Illinois?

A. I am not licensed as an engineer in Illinois.

Q. When was the first time that you heard of this mining proposal?

A. The first time I had heard about it was in early October of 2000.

Q. So you weren't -- nothing was brought to your attention regarding this proposal prior to the contact from, I think you testified, Mr. Fry after the public hearing?

A. That's correct. I do not know the date that you're referring to of the public hearing.

Q. I believe the public hearing was September 27, 2000.

A. That's correct.

Q. So prior to September 27, 2000, you hadn't been contacted in any way regarding this permit?

A. No, I had not been contacted.

Q. I would like you to turn to documents which are part of the public record numbered 981 to 997 which we previously identified as the Vermilion Grove Mine storm water mixing zone evaluation.

MR. BLANTON: Hold on just a second, Mr. Knittle. I gave the witness my copy. Thanks.

HEARING OFFICER: Proceed, Mr. Ettinger.

BY MR. ETTINGER:

Q. I guess my question is, what is a storm water mixing zone evaluation in your view?

A. My view, it's an analysis of the dilution of storm water between a discharge and receiving water.

Q. Were you asked to do a mixing zone evaluation?

A. I was asked to analyze the impacts and water quality from the outfall 003 discharge to the unnamed tributary and Little Vermilion River.

Q. So, is the title of your making?

A. The title is of my choice, correct.

Q. Turning now to page one of this document which is numbered 984, the third sentence of this first paragraph, it says, "No mine pumpage will be added to the storm water runoff so there will be no dry weather discharge." Do you see that sentence?

A. Yes, I do.
Q. Is that something you were told by the company, or did you make some independent analysis of that?
A. That was information provided by the company.
Q. Okay. So -- okay. Down here to the third

paragraph, the second sentence, it says, "The minimum rainfall event will cause a" -- I'm sorry, strike that -- "The minimum rainfall event that will cause a discharge to occur is represented by one inch of precipitation; otherwise, the ponds will hold smaller precipitation amounts."
Is that something you were told by the company, or did you make an independent study of that?
A. That information was provided to me by the company.
Q. Then in the last paragraph on this page, the second sentence, it says, "This evaluation focused on the resultant instream concentrations of select parameters of concern." How were those parameters of concern chosen?
A. Those parameters of concern reflect the paramaters that were in the draft NPDES permit.
Q. Was there a limit for manganese in the draft NPDES permit?

A. Yes, there was.
Q. Why was that not included?
A. During our analysis, we needed data and information to reflect an actual discharge or a surrogate for an actual discharge for outfall 003. The database that we had was information provided by the Riola mine.

There was no manganese data available from the Riola mine to use for that, so the analysis would have been incomplete.
Q. Going back a little bit more to your qualifications again, are you an expert in mining?
A. I would not consider myself an expert in mining operations or processes.
Q. Have you studied a lot of coal mines?
A. Could you please define "study"?
Q. Well, have you looked at the effluent data for coal on a lot of different coal mines?
A. No, I have not, not for a lot of different coal mines, no.
Q. So, do you -- you don't know whether all coal mines have similar effluent or not?
A. In terms of the select parameters that we're referring to, we're going off the parameters in the NPDES permit which, from my understanding, would be a typical list for coal mines.

Q. What's your understanding based on?
A. The regulations.
Q. Okay. Do you know whether coal mines vary from mine to mine as to how much they actually discharge?
A. In terms of concentration of flow?

Q. In terms of concentrations or flow.
A. I have not looked at a database of actual discharge data value from various mines.
Q. Going back to the table three, the sampling database, this is -- sorry. That's on page 000995. It refers to the Black Beauty Coal long-term sampling database. What do you mean by "long-term" here?
A. That is a term that I had put in, was not provided by the company. Long term basically means something of a duration where some seasonality can be captured, essentially more than just a one-event occurrence.
Q. Okay. So in your -- in this case, long term to you means -- goes back at least to December 1999?
A. That's correct.
Q. Are you aware of any prior data that the company collected as to -- or that anybody collected as to any of these parameters discussed in table three?
A. "Anybody" being defined as whom?

Q. Are you aware of any other data going before December '99 as to any of these parameters?

A. No, I am not.

Q. And you don't know whether the company's collected any data prior to that?

A. I do not know that.

Q. You don't know whether U.S. or IEPA has collected any data from the period prior to that?

A. I do not.

Q. Now, when these various concentrations were measured that are captured in table three, were precipitation events going on?

A. I had no rainfall records that are indicative of what rain was falling on the mine or these drainage areas, per se. I did look at some drain -- some rainfall information that was provided by regional gauges, specifically a National Climactic Data Center gauge in Danville, Illinois, as well as one in Urbana. At that -- correlating those time of rainfall events with -- at those gauges with the dates that these were sampled, there was correlation between rainfall events occurring close to this event in the order of one to three days prior to the majority of these events.

Q. Majority of these events. And the flow here on the table, it says here cubic feet per second. That's

the flow in the stream, I presume?

A. Yes.

Q. Okay. Down here we've got the 3rd of August 2000, .1 flow on this one site, 14SW-4. .1 cubic feet

per second. Do you see that figure?

A. Yes, I do.

Q. Do you believe that it had rained immediately before that data was taken?

A. I would have to consult my notes to see when the exact precipitation was.

Q. Well, do you have any way -- is there any data for -- that you have available to you that will tell us what the level of precipitation was at the time that these -- this data was collected?

A. Yes, I do.

Q. Was that -- is that part of the record?

A. Not to my knowledge.

Q. Okay. Sitting here today, do you know whether any of that data corresponds to a one inch precipitation event?

A. I have seen the numbers. I would have to review them to give you an exact number for that.

Q. Okay. So sitting here today, we really don't know how the precipitation correlates with any of the

concentrations that were found at these sampling stations?

A. I -- excuse me. I do know that rainfall events again did occur. For the exact precipitation

amount that you want from those gauges, I would have to consult my notes to get that information, which is available.

Q. Now, where did this data come from that's in table three?

A. In terms of the water quality concentrations?

Q. Who collected it?

A. I would assume Black Beauty personnel collected that.

Q. You said that long-time data was adequate to predict seasonal fluctuations. Would that hold true as to site number 10SW-7 and 15SW-8?

A. There were no data greater than the two that are shown here at this time that we have access to.

Q. You would agree with me that August and September of the same year doesn't exactly represent data on a seasonal fluctuation?

A. I would say that's a valid assumption, yes.

Q. Right. In fact, we've got one year of data here for two sites?

A. That's correct. We have one year of data for

the sites on the unnamed tributary.

Q. Well, actually it's December to August and December to September on two of the sites that we're

looking at; is that correct?

A. That's correct.

Q. Okay. Do concentrations of sediment loading change based on how much rain is falling?

A. Yes, I would anticipate that sediment concentrations can be affected by the amount of rain which would also impact the amount of runoff.

Q. Right. So, you would want to know how much it had rained prior to a -- if you were measuring what a stream concentration would be or you were trying to predict -- strike that.

If you were trying to predict what a stream concentration would be of runoff, you would want to know what the level of rainfall had been prior to that event, wouldn't you?

A. To calculate the volumes of runoff that we're using for this analysis, yes, we would need to know the rainfall event amount. But I might add to that, too, for this analysis we have that information available and had the select storms, the 4.65 inch storm as well as the 1.0 inch storm that we used for analysis.

Q. I'm sorry. This data, does any of this data on table three represent a 4.6 storm?

A. I would have to check the records to see if

that's the case from those gauges at Danville or Urbana.

Q. I'm sorry. Perhaps I didn't understand your earlier interjection there. Do you have the data as to this or not?

A. What data are you referring to again, please?

Q. I'm sorry. Could you read back the answer -- okay, we won't.

HEARING OFFICER: I wasn't saying you couldn't read it back. I just want you to come through me.

MR. ETTINGER: Okay. Would you please ask the court reporter to --

HEARING OFFICER: Read back what exactly?

MR. ETTINGER: There was -- Mr. Vlachos finished an answer; then he sort of made an additional comment. And I apparently didn't catch the additional comment sufficiently. I just was hoping to hear that back.

HEARING OFFICER: Do you know what he's referring to?

(Whereupon, the requested testimony from Page 340, Line 16 was read back.)

BY MR. ETTINGER:

Q. Having heard that read back, would you just like to clarify that?

A. For the analysis that we conducted that we presented in the October 20th report, we used two storms for the analysis, a 4.65 inch storm that corresponded to a 100 year, six-hour event as well as a 1.0 inch storm which corresponded to the minimum precipitation amount that would be expected to result in a discharge from outfall 003.

Q. Now, I understand that you had a theoretical model that you ran on that. My question is, do you have any con-- instream concentration data that corresponds to storms of those magnitudes?

A. The data that we have available for the analysis is the data presented here. If those correspond to those specific storms of either 4.65 inches or 1.0 inches, I would have to check the database in terms of precipitation amounts to see if that is the case. I do not know that offhand.

Q. Okay. Other than this database which isn't in the record, we have no way of corresponding now, nor did the agency at the time it looked at this study have any way of knowing how these measured concentrations corresponded to rainfall events?

A. That database provided by National Climatic Data Center is available to the public.

Q. Okay. You don't know whether the agency looked at it?

A. I do not know that.

Q. You didn't present it to them?

A. I did not.

Q. Did the concentrations of pollutants change depending on the amount of rainfall?

MR. BLANTON: Object to the form of the question. Concentrations instream, concentrations in discharge? Which concentrations, please?

MR. ETTINGER: That was a good clarification.

BY MR. ETTINGER:

Q. Why don't you answer for all of those?

A. Okay. Which one was the first one?

Q. Streams.

A. As a result of the discharge from the outfall, yes, the concentrations instream in the Little Vermilion River and in the unnamed tributary did change.

Q. So that's, that's based on running your theoretical model?

A. That's correct.

Q. Does water gradually usually become more turbid when you have runoff?

A. It depends what the land use -- where that

runoff is coming from.

Q. What's turbidity caused by?

A. Turbidity, as I understand it, is basically essentially a measurement of clarity of the water; so, those physical characteristics, such as suspended sediments, can cause turbidity to increase as more sediment is added to the water column.

Q. Is total suspended solids higher during rainfall events?

A. I'd have to ask you to specify, instream measurement, at discharge measurement perhaps or --

Q. Well, let's put it this way: For a given stream, would you expect the total suspended solids to go up, as a concentration, following a rainfall event?

A. Depending on the land use and the runoff characteristics, yes, it could go up.

Q. And would it go up more if it was a harder rain or a longer rain?

A. It depends on many conditions, but generally yes, it could go up for a larger volume, more intense rainstorm.

Q. Have you ever heard of a term called first flush?

A. Yes, I have.

Q. What is first flush?

A. My understanding of first flush is essentially a concept to understand the initial concentrations that can result for the initial runoff at the beginning of a storm to perhaps a stream or within a discharge, et cetera.

Q. Is the first flush concentration sometimes higher than the concentration of the pollutants in the effluent after the first flush?

A. It can sometimes be higher than the pollutants that are measured as an average over a storm event.

Q. Do you know whether the data that was taken in table three corresponded to the levels you would expect in the stream following a first flush or after the rainfall had gone on for a while?

A. There's no information to tie the sampling times of these concentrations within the period of the rainfall event, be it the beginning, first flush, middle of the storm, end of the storm.

Q. You said that the -- I'm sorry. Let's look now at the table four data. This is also data that was recorded by Black Beauty Coal Company to U.S. -- I'm sorry, IEPA on its discharge monitoring reports. Is that

your understanding?

A. That is my understanding.

Q. Okay. And what's your understanding of the conditions for when they had to take this data?

A. What conditions perhaps are you referring to, please?

Q. Well, a discharge monitoring report is -- a requirement to file a discharge monitoring report is normally caused by a permit condition; is that true?

A. That's correct.

Q. And my question is, do you know any of the terms of the permit conditions as to how they were to collect this data that appears in table four?

A. I would have to review the Riola permit in terms of if it was a grab sample or a 24-hour composite or what's the nature of the sampling method. I would assume that is specified in the permit or the fact sheet for the Riola mine.

Q. Was that -- did you ever check that fact?

A. The information that I had included the Riola mine permit as well as the DMR report? Yes, I did check that fact. I cannot recall the result of that checking.

Q. Do you know whether these concentrations represent or that the recordings of concentrations in

table four here represent first flush samples?

A. No, I do not.

Q. Do you know if they are averages over a 30-day period?

A. To the best of my memory, they are single daily values and not monthly averages.

Q. Is it your understanding that the Riola mine is limited by a permit condition that it is only to discharge following precipitation events?

A. I do not recall that.

Q. Do you know whether the discharges, the concentrations of which are measured in table four, occurred during storm water events?

A. No, I do not.

Q. Do you know whether these numbers in table four represent the daily max?

A. Under the assumptions that there was just one sample collected that day, that could be equated to the daily max.

Q. Okay. That's your assumption; you really don't know sitting here today whether it was one --

A. I'm sorry. My fault.

Q. I know you know where I'm going before I do, but we still have to let a question finish. You don't

know whether it was a grab sample or not sitting here today?

A. Without checking the DMR reports or the NPDES permit to confirm that, no.

Q. Obviously if it was a grab sample, a single sample taken of that discharge on that day, there's -- it's both a daily max and a daily min; is that correct?

A. If there's only one sample, your maximum and minimum are equal, that's correct.

Q. Okay. It says here Dates, and I notice that the dates are given as whole months?

A. (Witness nods head.)

Q. Is that just because they failed to specify a particular day, or did they only discharge once per month, or what happened there?

MR. BLANTON: I object to the question and any further questions along this line. It's not relevant to the witness's opinions or his work. What he was given was a project to say if the concentrations at the outfall number 3 are a certain number, what will happen in the stream? How you get that number has nothing to do with the work he did.

It's outside the scope of direct. I think we've had enough of just let's see what the witness

remembers about his data set. The question has nothing to do with either the issues in the case or the witness's work. I think we need to move on.

MR. ETTINGER: The whole study that was presented to the EPA that was used as a basis for issuing this permit is based, among other things, on this Riola mine data which uses these data points to determine what the likely effluent concentration will be under this permit. And that's what's being used to determine that this will not violate water quality standards and will not blow out the endangered species below this discharge. And now I'm hearing that I can't probe into what this data set used, which is the foundation for the whole showing that the agency used to show compliance of water quality standards.

MR. BLANTON: That's not so. The permit -- the draft permit said we will have certain effluent limits; the sampling requirement was a grab sample. The task for the witness was, if you have a grab sample in a certain concentration which, in this case, was an average grab sample concentration of 802 milligrams per liter of chloride coming out of outfall 3, what will happen in the water? It is an assumption that it's the permit condition.

There's a complete lack of understanding of what the project was, apparently lack of understanding what the permit is, lack of understanding about what we were talking about. The study assumes that if you have a grab sample from outfall 3 in this set of numbers, what will happen? Where you get these numbers has nothing do with the issue before the agency or this study.

MR. ETTINGER: That's -- that was one of the assignments. It's simply -- let's look at the table. The numbers that were used from this table four are the numbers that are used in table two and table one to predict the concentrations that would occur in the unnamed tributary and the Little Vermilion River.

MR. BLANTON: You can't --

HEARING OFFICER: Final thoughts?

MR. BLANTON: I'm sorry. You can't -- he wants to argue about, is it a reasonable assumption that this is a number that's real. Fine. But I mean, the study -- all this table does is say, if we assume that the discharge is this, then this is what happens. That's all that's going on.

If Mr. Ettinger wants to argue that these are not realistic assumptions, that's a different issue. But the petitioner's position is you shouldn't even look at

averages. You shouldn't make assumptions. You must test it by the permit limits. They're arguing against their own position in the case. This is just an assumption under which the calculations were run. This witness did not purport to say, I think outfall number 3 is going to have this number. All he said was, Look, they gave me a number. They asked me, If the number's this, what will happen? I told them what would happen. Where the number comes from is not this witness's problem and it's not a proper line of questioning for this witness.

HEARING OFFICER: All right. I'm going to rule. Sanjay or -- excuse me, Mr. Sofat, anything to add?

MR. SOFAT: Yeah. We would like to object to the statement that the agency used this to show compliance with the water quality standards or any kind of compliance. The agency had its own studies and own analysis and own professionals. And, therefore, we'll object to that. We would like that to be part of the record.

HEARING OFFICER: That's duly noted for the record. I think the questions Mr. Ettinger asks are relevant to the question at hand; however, if this witness doesn't know the answers to those questions, Mr. Ettinger, then I expect him to say so, and we can move on instead of

spending too much time on it.

But I think the questions underlying the study, in fact, the numbers and how they were arrived at, I think that's a valid line of questioning. So, to that extent, I'm going to overrule the objection and allow you to go on.

However, if he did not pick the numbers, and he doesn't know how to do it, then -- maybe I'm misunderstanding -- but wouldn't seem that there would be much use in questioning him further.

MR. ETTINGER: We're agreed that "I don't know" is always a fair answer.

BY MR. ETTINGER:

Q. Well, let's go back. I can't possibly remember what the last question was anyway.

Do you visualize that your role in this study was basically that of a number cruncher?

A. One role. Another role is the interpretation of the information that we generate.

Q. Okay. So you basically were just given numbers, you ran them through this program, and then you compared them to the water quality standards; is that a fair characterization of the work you did?

A. Some numbers were provided to me by Black

Beauty Coal. Of course, I would make an assessment of that data to see if it's appropriate for the analysis that we have. That, combined with other information that I would have to obtain myself, was combined to do the complete analysis.

Q. Okay. So, did you feel that the data that was provided here, these sort of monthly or daily data points in table four was what was appropriate for your analysis?

A. Yes.

Q. And -- well, what work did you do to determine that those -- that that data was appropriate for your analysis?

A. We looked at the database that was provided, again from the Riola DMRs. Those DMRs, by the way, are monthly submissions. A lot of times the sampling that's reported on those, there's no specific date given on -- for during that month when that actual sample was collected. In other words, you're provided a July DMR, and you know it occurred in July, and you cannot ascribe down what the date might be when that sample was collected.

We looked at that information for Riola to understand the quality of that data in terms of, are we

perhaps looking at an outlyer that's involved? Is there something that might not be typical of representative conditions that we might want to use for the Vermilion Grove Mine? There is an analysis on the numbers to make sure that we have something consistent that we feel would be representative of the Vermilion Grove mine.

Q. I've had the misfortune also of looking at a lot of DMRs in life, and a lot of them are filed monthly, and they generally have a max value for the month and then a 30-day average for the month. Is that the sort of DMR you were looking at for the Riola mine?

A. The DMRs were on forms, I believe, provided by the agency. I can't confirm that. That did have spaces allowed for that type of statistic to be put in there.

Q. And do you know which data from those DMRs you used to get those numbers? Was it the max, the monthly average, or what number did you use?

A. I do not know that. I have not memorized that. I would have to consult the forms, individual ones for the month, to tell you exactly what that statistic was.

Q. I'm sorry. I apparently didn't make myself clear. I'm not asking you to remember what the specific

numbers were. I'm just asking you in terms of type of number you used, did you use a 30-day average from the DMRs, or a -- the max in the DMR; or if there was some other classification in the DMRs that Riola filed, did you use that?

A. To the best of my recollection, there were -- one sample point there would correspond to one value collected during that month.

Q. So, your understanding would be that there was one discharge per month in each of those months?

A. There was one sample collected per month. The number of discharges, I'm not aware.

Q. So we don't know if there were other discharges that, that weren't reported or you didn't look at for this study?

MR. BLANTON: Object to the form of the question. It's pretty obvious what the witness has said. It's argumentative.

MR. ETTINGER: I'll go on.

HEARING OFFICER: I think it was asked and answered.

MR. ETTINGER: I'll go on.

BY MR. ETTINGER:

Q. In page two of this document that we're

looking at, it says, "To simplify the mixing zone

approach" -- I'm in sort of the middle of the big paragraph in the middle of the page that's been marked 000985. It says, "To simplify the mixing zone approach, total runoff volumes from the subwatershed components were mixed together as opposed to mixing peak discharge with time-dependent hydrographs which do not occur simultaneously within the basin."

Could you explain a little bit about that for those of us who aren't quite so familiar with hydrographs and other concepts used there?

A. Okay. To determine the volumes of flow that we were using for a mixing zone analysis, a storm event, rain, snow melt, some type of precipitation event will fall in a watershed area and then run off. We can tell from common sense that the rains did not fall on the watershed and all run off at one time. There is a time component that relates to flow at a point in the watershed that relates to flow to the time of the storm event. This is commonly what's known as a hydrograph. If you want to think about it in terms of a bell-shaped curve of flow in a watershed versus time, that's similar to what the watershed will look like.

How that exact shape is made is dictated by

many things, the storm event itself as well as the land

use. To mix volumes of water together, there's essentially two measured fundamental ways that we can do that for this type of analysis for the data at hand. One, of course, is the approach that we used where we look at the total volume of water that has run off from that storm, from beginning to end essentially, over those watersheds. This would represent somewhat of an average basis of the storm event because we're looking at the total amount of water. There's no time component involved with that.

The other method that's referenced here in terms of using peak discharges from hydrographs, if you again think about that classical bell-shaped curve, at the top there, at maximum, you will see a maximum flow rate that occurs during sometime in the middle of the storm. At that point, we know the maximum volume or -- excuse me, discharge rate of the storm, but that is dependent, again, on the storm itself and the watershed characteristics.

When we're mixing two basins, such as the outfall 003 drainage area, as well as the unnamed tributary drainage area, they will have each have their own unique shape bell curve or their own hydrograph. The

timing of the peak, the top of the curve will not occur at the same time. Therefore, we don't know when those

two will cross and come together at the exact instance in time. So, that data is not available to make that analysis.

So, of course, another method would be to use a total volume approach, which is what we did.

Q. Okay. My degree is in law, so you'll have to correct me if I'm totally confused here. But all things being equal, I would assume that rain that fell on the upper part of the watershed would generally take longer to reach the stream than run -- rain that hit parts of the watershed that were closer to the stream. Is that -- is that a fair assumption?

A. That's a generalization. Of course, there will be factors on, you know, what is the type of land, the permeability of the soils that are involved for percolation, et cetera. But that is a very broad generalization.

Q. And the soil's ability to absorb water may vary depending on how much -- how wet it is already, wouldn't it?

A. You're referring to anasenic (phonetic) moisture conditions. Yes. How much water is in the soil

already will dictate how much can run off.

Q. And if the soil's very dry at the time that

the rain hits, it's -- there's been a six-week drought or something, then the soil will absorb much more water than it would if it's been raining for some time before then?

A. Not necessarily. It's possible, but also because of a dry soil that's so hard, it might actually start acting like a parking lot and become more impermeable and have more runoff.

Q. What soil conditions do the conditions that you -- write it down.

I heard your last answer, under some circumstances the ground can basically get so dry that it can't absorb water anymore?

A. It's possible.

Q. In doing this study, what sort of soil conditions did you assume in doing the simulation?

MR. BLANTON: I'll object to the form of the question and the fact that the -- there is no basis in the record for the question. The study, if you look at it, is based on the resulting flow. How the flow got to be what the flow was is not addressed in the study, is not relevant to the study. The numbers on what the flow actually was on the data points that were used is in table

three, in the record at page 995. Whatever it was is whatever it was. The number is here.

How it got there is beyond the scope of the

study and what the witness knows.

HEARING OFFICER: Response?

MR. ETTINGER: I don't -- either Mr. Blanton or I are very confused about parts of this study. And let me ask a few more questions. I believe the study purports to say more than Mr. Blanton is suggesting. If I'm wrong, then I'll find that out.

BY MR. ETTINGER:

Q. But I believed, reading this study, that one of the things that you attempted to estimate was the runoff volume from the various subbasins in this area; is that correct?

HEARING OFFICER: Let's stop for a second. We're going to hold off on the objection. Are you going to ask some preliminary questions to find out?

MR. ETTINGER: I guess that's what we're doing, yes. Well, is that all right with you, Mr. Hearing Officer?

HEARING OFFICER: Go ahead. I think that was a fair question.

Could you read it back?

(The preceding question was read back by the court reporter.)

A. Yes, it is correct.

Q. And did you use -- did you use numbers from, I think, the Soil Conservation Service to estimate how much the runoff would be from the various tributaries?

A. Yes, they were part of that analysis.

Q. Were those -- and under what conditions were those numbers taken from?

A. We used the guidance, again, prescribed in U.S. Department of Agricultural Technical Release Memoranda Number 55, Urban Hydrology for Small Watersheds for the equation that we used. There is a component to describe land use, and that is the -- what is known as a curve number which is the number that you're referring to here.

Soil Conservation Service publishes the types of land use, the types of information that is necessary to determine what that curve number is. We had utilized that information to put in a curve number for our model, representative of the conditions of the watershed basins. That number is fixed based on land use. It is not a function of the differing type of storm events.

Q. So, what soil conditions are assumed by the

equation you used to predict the runoff?

A. I would have to consult the report to answer that question.

Q. That's that urban hydrology report? I'm

sorry. The -- you mentioned the urban --

A. Urban Hydrology for Small Watersheds. TR 55 is the slang to refer to that.

Q. That's the report you would have to look at to determine what soil conditions were assumed?

A. That's the report that gives you the curve numbers for different types of conditions for the site-specific conditions. Each county will publish their own report that gives additional information. Those two are combined to come up with the curve number.

MR. ETTINGER: Can we stop here? Have I addressed Mr. Blanton's objection as to --

HEARING OFFICER: I don't know. I think you're going to have to ask the question again and --

MR. ETTINGER: Actually, I think I've gotten where I wanted to go a little longer.

HEARING OFFICER: Then we'll not rule on the objection. We'll let it stand.

MR. ETTINGER: Okay.

HEARING OFFICER: Unless you need a ruling,

Mr. Blanton?

MR. BLANTON: No, I'm fine.

HEARING OFFICER: Okay.

BY MR. ETTINGER:

Q. I'm just wondering about the title of the report, "urban." Does it also apply to rural areas?

A. Yes, it does.

Q. The next sentence on page two, it says, "Furthermore, the outfall 003 sediment control pools were conservatively assumed to be at pool conditions (full) during the onset of the storm event." What do you mean by they were conservatively assumed?

A. If the pond is not full, that rainfall will basically be stored and captured by the pond and will not be discharged. By assuming the pond is full, the discharge, in essence, becomes immediate as runoff is routed through that watershed system which would allow more volume or more discharge to be coming from outfall 003.

Q. In page three, getting back to the soil conservation runoff curve numbers, how did you pick the curve number of 78 for outfall 003 drainage?

A. As stated in the report, that number is consistent with the design for the sediment control ponds

for the mine. In essence, that number was provided to me by the Black Beauty Coal Company.

Q. And the number that's used for the unnamed tributary and Little Vermilion River watersheds, that's a curve number of 81, and that came from this report we've

talked about?

A. That came through a combination of reports that we talked about, the TR 55 manual as well as the Vermilion County Soil Conservation Service maps.

Q. During Mr. Blanton's examination, you talked about a U.S. EPA document that I believe you called the technical support document, and that that supported your approach in calculating the zone or rather in -- strike all of that.

Earlier during Mr. Blanton's questioning, you mentioned the technical support document, and this supported your methodology and the summary. What technical support document were you referring to?

A. It's a technical support document for water quality based toxics control.

Q. And is that a document that's used generally by engineers working in this field?

A. Yes, it is.

Q. And you believe it's a reliable document for

calculating this sort of study?

A. Yes, I do.

Q. Is your approach to calculating a mixing zone described in that document?

A. Would you repeat the question, please, one

more time?

Q. Was your approach that you took in this study -- what is it called, Vermilion Storm Water Mixing Zone Evaluation, is that described in the technical document?

A. Components of it are, yes.

Q. Is this the only approach that's discussed in that document?

A. Again, I apologize for not having the document memorized, but to the best of my knowledge, there would be more approaches.

Q. I apologize for not bringing the document from my office. So, do you know if there are other approaches for doing this sort of study?

A. As referenced in the technical support document?

Q. My question now is broader than that. Did you choose from among approaches to doing this work, or is this pretty much the only recognized way to do it?

A. There are always variations on an approach or a guidance that's given. For the data that was at hand, for the type of analysis at hand here also, as well as the objectives to be measured, this approach was chosen.

MR. ETTINGER: Okay. I have spread out so far I can't control myself. Going to have to take a

brief break to find the rest of my papers.

HEARING OFFICER: How long of a brief break, Mr. Ettinger?

MR. ETTINGER: Very brief. In fact, the break could end in a matter of seconds if I find the paper.

HEARING OFFICER: What do you estimate in terms of continued cross-examination for this witness time-wise?

MR. ETTINGER: Twenty minutes. Did I leave them over here is the issue. Oh. I just found them.

BY MR. ETTINGER:

Q. Looking now at what has been marked as BBCC Exhibit 40, this document refers to -- do you have that in front of you, sir?

A. Yes, I do.

Q. It's Black Beauty Coal NPDES sampling database, and it refers to IEPA site, and it gives some numbers. Is that data that was collected by IEPA?

A. No, those are site designations.

Q. Okay. Do you know why this data was collected?

A. To my knowledge, it's part of the NPDES permit provisions.

Q. Okay. Do you know whether it was reported to

IEPA?

A. No, I don't.

Q. Would you look now at -- could you look now at BBCC Exhibit 43?

MR. BLANTON: 43 is the map.

BY MR. ETTINGER:

Q. Actually could be 41. Can I -- let's see what we've got here. Sorry. May I come up and straighten out my paper? Yes.

Looking now at the third page of Exhibit 41 you predict certain -- under L, there is results in which there are predictions from running the model with and without the 003 discharge; is that correct?

A. Yes.

Q. Did you ever compare the predictions of the concentrations in the Little Vermilion River without the 003 discharge with any actual data of concentrations in the Little Vermilion River?

A. If I'm answering your question correctly, yes, that's in column L also, Little Vermilion River downstream tributary without 003 discharge.

Q. Yes. That's what you've projected. My question is, did you ever compare your projections with actual data taken in the river?

MR. BLANTON: I'll object to the form of the

question. It misstates the record, misstates the witness's testimony. He just told you that it's real data. It's not a projection on without discharge, I think is what he said.

HEARING OFFICER: Response, Mr. Ettinger?

MR. BLANTON: I may be wrong. My understanding of what he said --

MR. ETTINGER: I believe Mr. Blanton's wrong. I believe that this is a projection based on the model conditions, and that those are projected numbers.

BY MR. ETTINGER:

Q. Is that correct?

A. That is correct.

MR. BLANTON: I apologize.

BY MR. ETTINGER:

Q. My question then is, did you ever compare those projections with any data on the Little Vermilion

River?

A. Are you inferring data that's downstream from the unnamed tributary?

Q. Yes.

A. No, I did not.

MR. ETTINGER: Now I would like to take a five-minute break.

No, I want to take a break and talk.

HEARING OFFICER: Does this mean that we're close to wrapping up?

MR. BLANTON: Very close. I want to take a five-minute break, talk to my client here and then wrap up.

HEARING OFFICER: Okay. Let's do that.

(A brief recess was taken.)

HEARING OFFICER: Back on. Sir, let me remind you you're still under oath.

THE WITNESS: Thank you.

BY MR. ETTINGER:

Q. In the study you make certain conclusions regarding the storm water mixing zone impact to aquatic organisms. Strike all of that.

Are you a biologist?

A. No.

Q. In your study, you make certain conclusions regarding storm water mixing zone impact to aquatic organisms. Is it fair to characterize your conclusions there as based solely on a comparison of the calculations that you made with the water quality standards and criteria?

A. That is a portion of that. The other portion is consultation with other Advent personnel who are

biologists.

Q. Oh. What biologists did you consult?

A. The name?

Q. Yes. Who did you consult?

A. David Arbeason (phonetic).

Q. And has he done studies regarding the effect of concentrations on any of the endangered species that are present in the water in the Little Vermilion River?

A. He personally has not done any studies, no.

Q. Do you know what studies -- I'm sorry. What did Mr. Arbeason tell you regarding the potential effect of these concentrations on the aquatic organisms in the receiving waters?

A. They would be anticipated not to have any effect on the aquatic organisms in the receiving waters.

Q. Okay. Did Mr. Arbeason's --

MR. ETTINGER: We're done. I have no further questions at this point.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: The agency has no questions.

HEARING OFFICER: Redirect, Mr. Blanton?

MR. BLANTON: Your Honor -- yes, Mr. Knittle, very briefly.

REDIRECT EXAMINATION

BY MR. BLANTON:

Q. Mr. Vlachos, would you look at your report on pages 990 and 991 which is the storm water mixing zone impact to aquatic organisms, that section? Do you see the last paragraph on page 991?

A. Yes.

Q. Does that say, for all practical purposes, exactly what your answer was to Mr. Ettinger's last two questions?

A. Yes.

MR. BLANTON: That's all I have.

HEARING OFFICER: Recross, Mr. Ettinger?

MR. ETTINGER: No. Next witness.

HEARING OFFICER: Recross -- we have to let Mr. Sofat decide if he wants to recross on that issue.

MR. SOFAT: No, we don't have any questions.

HEARING OFFICER: Thank you, Mr. Vlachos. You can step down.

THE WITNESS: Thank you.

HEARING OFFICER: Mr. Blanton?

MR. BLANTON: We call Eric Fry.

HEARING OFFICER: Mr. Fry, if you'll please have a seat.

(Witness sworn.)

ERIC FRY,

called as a witness, after being first duly sworn, was examined and testified upon his oath as follows:

DIRECT EXAMINATION

BY MR. BLANTON:

Q. State your full name, please.

A. Eric Paul Fry.

Q. Where do you live?

A. Address?

Q. Yes.

A. 1509 Glenmore Road, Evansville, Indiana.

Q. What's your occupation or profession?

A. I am a geologist.

Q. Are you employed?

A. Yes.

Q. Who do you work for?

A. Black Beauty Coal Company.

Q. How long have you worked for Black Beauty?

A. A little over nine years.

Q. What's your general area of responsibility for Black Beauty at the present time?

A. I'm an environmental affairs manager. I spend a lot of my time involved with regulatory issues, with new regulations and that sort of thing, but I also work a lot with the NPDES permits and the air permits and

other environmental issues.

Q. How many mines, both active and closed or in reclamation status, does Black Beauty have at the present time?

A. I --

Q. Personally?

A. I couldn't tell you exactly, but I'm going to guess around forty.

Q. What states are those located?

A. Indiana and Illinois.

Q. I want to show you what's been marked as BBCC Exhibit 46 and ask if that's a copy of your current resume?

A. Yes.

MR. BLANTON: We offer BBCC Exhibit 46.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: No objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: It's admitted.

(Whereupon, BBCC Exhibit Number 46 was marked for identification.)

BY MR. BLANTON:

Q. Mr. Fry, up at the top of your resume, Exhibit 46, after your name you have the initials LPG.

What's that mean?

A. Licensed professional geologist.

Q. And your professional certifications are shown there in the second portion of your resume, right?

A. Right.

Q. On -- you have taught at the University of Southern Indiana; is that right?

A. Yes, I taught hydrogeology in '95.

Q. On the second page of your resume, under the Law and Regulatory Experience, you have an item here that says, "Work directly with Indiana Department of Environmental Management, Office of Air Issues." What was involved in that?

HEARING OFFICER: If you folks could try to

speak up a little bit, I'm getting motions from the back of the room.

BY MR. BLANTON:

Q. Second page of your resume, what is this work that you did with the Department of Environmental Management of Air Issues?

A. They were developing -- when Title 5 came in, they didn't want everything to go under the conditions of Title 5, so some of the smaller industries, some of the smaller sources were, were segmented into other operating

agreements. And this source-specific operating agreement is what Indiana uses to regulate coal mines and aggregate mines and other small sources, and you have to -- it supplanted the permit that they had before.

Q. The next item was you indicate that you were the primary author of a 1996 Indiana nonpoint source management plan for active coal mines. Can you tell us what that's about?

A. That was a group that was formed by -- again, to study the -- to come up with a nonpoint source management plan for, for coal mines. And they were doing it for all sorts of industries, and I was on the coal mine group.

Q. And what are nonpoint sources at active coal

mines? What was it that you were dealing with?

A. Well, you're looking at -- of course, an active coal mine does -- it has point sources in the, in the sediment basins. The nonpoint sources mostly are the areas that, that are not controlled by the basins, areas like the roads in some cases or areas that are the outsides of dams or other undisturbed areas that are within the permit.

Q. Back on the first page of your resume under Professional Affiliations, one of the things you've listed is the chairman of the Regulatory Affairs

Committee for the Indiana Coal Council. Are you currently that chairman?

A. Yes.

Q. What are your responsibilities in that role?

A. Well, to chair the meetings of the Regulatory Affairs Committee and bring issues to the -- to the Coal Council and discuss those issues and decide on what we're going to do.

Q. In the course of your work with Black Beauty Coal Company, have you had occasion to become familiar with the environmental laws of the United States and various states regarding regulation of coal mines?

A. Yes, some of them.

Q. And in that regard, if you -- has it been necessary as part of your work for you to learn the origin of some of the laws and the legislative histories and some of the issues that were involved when these rules were developed?

A. Yes.

Q. Do you have any role in the NPDES permit proceedings that we're involved in here, the permit for the Vermilion Grove mine?

A. Yes, I've been involved.

Q. What's been your role in this permit process

from the -- from the first part of it till now?

A. Well, I, I did a lot of the work answering your questions in part three of the application, and that's where you actually apply for the permit. And then as the permit became controversial, I've worked with Illinois EPA to try to get the permit through the process and get it issued.

Q. Now, is there a separate application form for an NPDES permit for coal mines in Illinois?

A. No, it's done through the permit application. There are separate applications, but normally with a coal mine, you do it through the permit application.

Q. When you say the permit application, are you

talking about the operating permit application that's submitted to the Office of Mines and Minerals?

A. I'm sorry, yes.

Q. And that's part three of that application?

A. Right.

Q. And that's where you get started on the NPDES permit track also?

A. Exactly.

Q. Going to show you what's been marked as BBCC Exhibit 47 and ask if that's part three -- that's a copy of part three to the operating permit application that was submitted to the Illinois Department of Natural

Resources, Office of Mines and Minerals, from which this permit proceeding began. I've got copies for everybody.

MR. ETTINGER: Oh that's wonderful.

MR. HUBBARD: Have you got one or more?

MR. BLANTON: No, that's one.

BY MR. BLANTON:

Q. There's been some discussion in this -- well, what kind of information generally is contained in this part three --

MR. BLANTON: I'm sorry. We offer BBCC Exhibit 47.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: I'm sorry. This is exhibit number what?

MR. BLANTON: 47.

MR. ETTINGER: This was the permit application?

MR. BLANTON: Right.

MR. ETTINGER: No objection.

MR. SOFAT: No objection.

HEARING OFFICER: That's admitted.

(Whereupon, BBCC Exhibit Number 47 was marked for identification.)

BY MR. BLANTON:

Q. Would you tell us generally what sort of information is in this document?

A. In the entire document?

Q. Yeah, in all of part three generally.

A. It's hydrogeologic information. It's characterizing the geology and the hydrogeology of the area in which the mine is proposed.

Q. What were the sources of information that was put into this part of the operating permit application?

A. Well, it requires certain baseline monitoring, both of the groundwater and of the surface water. It requires -- I'm not sure that everything is

here. It requires a study of the -- of the geology, of the unconsolidated material and the bedrock material. And that's normally done through boring logs, put in monitoring wells and do slug tests to determine permeability, or there are other methods to determine permeability, some of which we've used where we used soil borings and the soil material to actually do silt analysis and get permeability from that.

Q. Are you familiar with the Illinois regulations called Subtitle D?

A. Yes, somewhat.

Q. Is there a procedure by which, in your understanding, coal mine operators who are applying for

operating permits and NPDES permits can opt into Subtitle D and out of Subtitle C regulations?

A. Yes, that's my understanding.

Q. And is there a place in part three of the application where that can be done?

A. Yes.

Q. Can you tell us where in Exhibit 47 that issue was addressed by Black Beauty in its permit application?

A. In this copy, on page 13 of 20, part H.

Q. And what did Black Beauty choose as its

regulatory option at that point in the application?

A. We chose, yes, to accept the TDS-related conditions.

Q. That would put you in Subtitle D --

A. Yes.

Q. -- and out of Subtitle C?

A. That's my understanding.

MR. ETTINGER: I'm sorry. I'm not seeing where the box is checked here on page 13.

THE WITNESS: It's on page 14 on this copy.

MR. ETTINGER: Oh, page 14; I'm sorry.

THE WITNESS: The question was on 13.

MR. ETTINGER: Okay.

BY MR. BLANTON:

Q. What I want to do -- okay, you can put that aside, please.

What I would like you to do next is generally describe the Vermilion Grove mine. What kind of mine is it?

A. It's an underground coal mine, number six coal about 200, 200 feet to the coal. It will probably produce somewhere between 2 and 3 million tons of coal a year to be loaded by rail. There will be a preparation plant there, there will be a refuse cell there.

Q. What's going to happen to the coal that's mined there?

A. It will be shipped by rail to -- I'm ashamed to say this, but I'm not exactly -- I think it's to PSI.

Q. It's going to a power plant?

A. Yes.

Q. And are there surface facilities associated with this underground mine?

A. Yes.

Q. What are those surface facilities? What structures, if any, will there be there for supplementing the mining and processing process?

A. It will be a slope.

Q. What's that?

A. That's the hole in the ground to enter and leave the mine. There will be an air shaft that enables ventilation of the mine. There will be -- there are currently sediment ponds to control drainage in the disturbed areas. There will be a refuse pile. There will be a preparation plant which more or less just washes the coal. It's a gravity separation process. There's no chemicals used other than some flocculents, the same sort of flocculents that you would see used at the Georgetown water treatment facility. There will be a

railroad out, rail loop.

Q. Okay.

A. There will be an office, maintenance building.

Q. How big an area is encompassed in the surface portion of the mine?

A. I think that what we -- what we permitted was 418 acres, although I could be wrong. That's approximate.

Q. Okay. At the preparation plant, what is getting separated? I think you said that's where separation or something takes place. What's physically going on at the preparation plant?

A. When the coal is mined, you pick up a little

bit of the floor and a little bit of the roof; and it also will have rock seams within the coal. And the washing process is just a density separation process that, that removes the rock from the coal -- that separates the rock from the coal. The rock goes out to the refuse pile; the coal is shipped to the customer.

Q. Is there anything in the refuse pile other than the rock that came out of the ground with the coal?

A. No.

Q. Where do you plan on getting the water to use

in the preparation plant?

A. The -- we have rather large storm water ponds. There may be some water that's pumped from underground, although I don't think that much right there. But it would mainly be the storm water ponds.

Q. I'm going to show you what's been marked as Exhibit 49 and ask you to identify that. May I approach?

HEARING OFFICER: Yes. Is there a marking on this? Or is this the --

MR. BLANTON: There's not a marking on that one.

HEARING OFFICER: Okay.

A. This is a map of the Vermilion Grove area. It's showing the watershed above the mine in yellow and in the Little Vermilion River. And then what's in gray I

believe is the watershed that purports to our spillway.

MR. BLANTON: We offer BB -- Exhibit BBCC 49.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: No objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: It's admitted.

(Whereupon, BBCC Exhibit Number 49 was marked for identification.)

BY MR. BLANTON:

Q. Can you tell us how this map was prepared? How did someone decide that the area in yellow is the total drainage area for the Little Vermilion River?

A. Actually, one of our engineering techs went through and delineated the watershed based on the topographic contours.

Q. Okay. Explain what topographic contours are on the base map from which this outline was prepared.

A. The topographic contours give an indication of the -- of the surface elevation, so it, it shows you what the relief is on the ground.

Q. And who did the topographic map that was used? Who's the -- who decided what the elevations were on this map?

A. These are USGS-based maps. These are -- they're off of rasters that the -- USGS raster that the USGS supplies, but these are a compilation of normal 7-1/2 minute USGS quads.

Q. And those are United States Geological Survey maps?

A. Right. Right.

Q. And they've got a system that they basically map areas all over the United States and include

topography lines?

A. Exactly.

Q. And so that was used by Black Beauty to generate this map so it basically copied and expanded the USGS quad information on topography?

A. We -- the engineering techs put together several quads in order to form this map.

Q. Okay. And how was it determined what the area was that would be part of the mine drainage area down there in gray on the right-hand side?

A. Well, the same way. It's based on the -- on the topography.

Q. For the record, what's the total drainage area for the Little Vermilion River watershed as determined off of these USGS-based topography numbers?

A. Number's 97,208.95 acres.

Q. And how big is the area that will be affected by the mine and be the drainage area for the mine surface area?

A. 413.79.

Q. And of the total drainage area for the Little Vermilion River, how much of it will become part of the mine, what percentage roughly?

A. The -- I believe the mine area is less than

half of a percent.

Q. Okay. Thank you. That's all I have on this one if anybody wants to fold these up.

MR. HUBBARD: Are you going to cross from the map?

MR. BLANTON: I don't think so.

MR. HUBBARD: If you were, why, kind of --

MR. BLANTON: I understand. I understand. But he's far enough along that I guess we'll just let him finish.

THE WITNESS: We can do it again.

MR. ETTINGER: If worse comes to worse. I don't think so. We won't get done today.

HEARING OFFICER: Oh, we will get done today.

MR. ETTINGER: Okay. We will get done today.

BY MR. BLANTON:

Q. Mr. Fry, I've given you a document that's been marked as BBCC 50. What is that?

A. This is a map showing the, the permit area, and it's showing some of the features within the permit. It's showing the drainage, sediment ponds, refuse areas. The areas in green are the areas that are not controlled by drainage ditches and don't report to the pond.

MR. BLANTON: All right. We would offer

Exhibit BBCC 50.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: No objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: Will be admitted.

(Whereupon, BBCC Exhibit Number 50 was marked for identification.)

BY MR. BLANTON:

Q. Okay. Mr. Fry, using Exhibit 50 and otherwise, can you please explain the storm water management system for the surface facilities at the Vermilion Grove mine which, I believe, are depicted on this exhibit?

A. Well, it's fairly simple. For the areas that are not in green or brown -- brown is the backs of the dams. Everything else is, is controlled by ditches and

reports to the -- one of the three ponds. But the, the NPDES outfall 003 is the only -- is the only outlet to state waters. The others are holding ponds, but they do not outflow. They are connected in series to, to 003.

HEARING OFFICER: Is he referring to BBCC 50, Mr. Blanton?

MR. BLANTON: Yes.

Q. There's an area --

MR. BLANTON: May I approach the witness?

HEARING OFFICER: Yes.

BY MR. BLANTON:

Q. There's an area on the lower -- it's marked right underneath -- it's the area of green in which the legend 13MW-1 is located --

A. Uh-huh.

Q. -- sort of in the center of the main part of the surface facilities?

A. Yeah.

Q. What is the current condition of that area?

A. That's undisturbed.

Q. What do you mean by "undisturbed"?

A. It's undisturbed by mining. We haven't had any activities there. We will have eventually. You can see that there is -- well, you can see there's kind of a

squarish shape there. That's where a soil pile will go eventually, and it will be ditched around. But currently I'm showing it as green because, because it's undisturbed.

Q. All right. In the lower right-hand corner of the surface area over here near the number 18 from the base map, I believe, where we have -- what is in that

area to the right? What's going on at the mine there in this area that's not controlled because of -- as shown by the green?

A. That's a road. That's a road into the mine. That's a gravel road. And I believe that eventually it will be paved.

Q. Is there anything that distinguishes that from any other gravel road --

A. No.

Q. -- in that area?

A. Similar to, to the many other gravel roads in that area.

Q. In the north part of the area up near where the Little Vermilion River is and in the southwest corner and the northeast corner, there are areas of green. What physically is the condition of the land there in those green areas?

A. At the north end of the permit?

Q. Right.
A. Those are -- those are undisturbed areas.
Q. And what's on them? Are those rock piles or forests or what right now?
A. I'd say that they're trees and undergrowth.
Q. Between -- is the permit boundary shown by

this sort of long and then two short -- one long, two short broken line all the way around these areas?
A. Yeah, that's the permit boundary.
Q. Okay. Between the permit boundary on the north up there where it says 12MW-2 and it's closest to the Little Vermilion River, is there an area between the mine and the river that is not owned or controlled by Black Beauty?
A. Yes, I believe that there is a corridor that's owned by Georgetown.
Q. And what is there now?
A. It's riverbank.
Q. And has that been disturbed in any way by Black Beauty?
A. No.
Q. How does -- as water falls in this area within the ditch area, how does it move through these ditches and into the sediment basins? Is there any

pumping, or is it all just gravity movement or what?

A. It's gravity flow.

Q. Okay. That's all I have on that map for right now.

Mr. Fry, I'm going to hand you three documents. These are photographs marked as BBCC Exhibit

51, 52, and 53. Can you look at those, please?

(A pause was had in the record.)

Q. Who took these photographs?

A. I did.

Q. When did you take them?

A. Last Thursday, I believe.

Q. Do they fairly and accurately depict certain areas of the mine and adjacent areas?

A. Yes.

MR. BLANTON: We offer Exhibits BBCC 51, 52, and 53.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: I guess no objection. No objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

MR. BLANTON: Can you please --

HEARING OFFICER: Admitted.

(Whereupon, BBCC Exhibit Numbers 51 through 53

were marked for identification.)

MR. BLANTON: I'm sorry. I need the ruling. I cut you off on the ruling.

HEARING OFFICER: I think she got it. "Admitted," right?

COURT REPORTER: Yes.

BY MR. BLANTON:

Q. Can you describe, tell us what Exhibit 51 shows?

A. 51 is a controlled structure on the, would -- we need the map again -- on the large pond in the northeast of the mine. Not the outfall, but the large pond.

Q. What's its designation?

A. I would have to look. 003-A.

Q. And how does this control structure work?

A. The boxes that you can -- that you see in -- on the -- in the middle on the right-hand side and in the middle on the left-hand side contain weirs, and they have removable plates that can be taken out to control the water level on the other -- on the other side within the impoundment. As you take the plates out, you can allow water to, to bypass your dam and come out these large corrugated pipes that you -- well, you can actually only

see one of them.

Q. Okay. And so that's how you control the flow of water and levels in all three of the basins?

A. No. That's, that's just in the -- in the large basin. We actually have a dual control. We have a

control at the large basin which was whatever I said, 003-A, and then we have additional control at the settlement basin where the outfall exists.

Q. Can you look at Exhibit 52, please?

A. Yep.

Q. What does that show?

A. That is the, the actual outfall. And you can see in the middle on the right-hand side the little red-topped box. That's where a similar type weir that I've just described, that's where that is.

Q. What's the function of that again?

A. Again, it's to control the water level within the sediment basin.

Q. Okay. Where is the sediment basin from the area that we can see on Exhibit 52, or is it part of it?

A. It's to the right. This isn't part of the sediment basin, no. This is actually the -- it's -- the outfall is in the bottom of the riprap trench. It's hard to see, but there is a corrugated metal pipe that's sticking out and is within the shadows.

MR. ETTINGER: Going to object at this point. I thought a little of this was useful to give some background on the mine, but at some point we've got to relate this to the permit that we're talking about here,

as we did earlier when I was offering testimony with regard to the mine and the permit conditions.

HEARING OFFICER: A relevancy objection?

MR. ETTINGER: Yeah. I have an objection to relevance. A little bit was useful as background, but it's gone way beyond that.

HEARING OFFICER: Mr. Blanton, can you explain the relevancy?

MR. BLANTON: There's an issue in this case about what is going to happen under precipitation events, how this discharge will be managed, how it will be controlled, how we have some idea that we're matching or complying with the 3:1 dilution ratio, what we have to do and how we can control sediment basin levels at times when rain has stopped but there's still a lot of flow.

This is all pretty necessary information to explain how this system operates and how we can, in fact, be sure that we're complying with the permit, and that it's not just a situation where every time it rains water goes into the unnamed tributary. This is background

information on how this system operates.

MR. ETTINGER: The question, though, before us now -- we don't disagree that you could run this mine perfectly and do -- and run it properly and not have a

discharge that harmed anything. The question is, what does the permit require them to do?

There is some useful information here. It's by way of background in terms of the background of the site. But all of this was -- this is post close of the record, post permit issuance. And while -- you know, how they are going to do this begins to become more and more attenuated in its relevance once we get further and further from what's required by the permit. The question here is what's required by the permit.

HEARING OFFICER: Is this information that was before the agency at the time of their decision?

MR. BLANTON: I believe that the agency understood these things. I believe they can read engineering drawings, and they know what it's going to work like. It's obvious that the petitioner doesn't.

HEARING OFFICER: Regardless of whether they understood it and what they can and cannot do, though, was this before them at the time they made the decision?

MR. BLANTON: Were these photographs before them? No.

HEARING OFFICER: The photographs that -- the structures of --

MR. BLANTON: Our explanation of how --

HEARING OFFICER: And the system was in place.

MR. BLANTON: No, it was.

HEARING OFFICER: There was a proposed system in place at the time of the agency decision?

MR. BLANTON: Yes.

HEARING OFFICER: And this is the realization of the proposed system?

MR. BLANTON: Right.

HEARING OFFICER: I'm going let it go forward for a little bit, Mr. Ettinger.

BY MR. BLANTON:

Q. So, how does water get from the sediment basin into the outfalls that are shown in the left part of the photograph?

A. Again, through this weir structure, the red-topped box that you can see in the photograph, you remove plates within the weir structure to control the amount of water you want to let out.

Q. Can you look at Exhibit 53, please? What does that show?

A. This is actually on the other side of the

road from the previous photograph. You can see in the previous photograph that the water comes out of the base of the hill, and it goes through these three corrugated

metal pipes under the road. And in Exhibit 53, this is where the, the pipes exit on the other side of the road into the unnamed tributary.

MR. ETTINGER: I'm going to object again and ask where in the record before the agency there were diagrams or plans that specified these corrugated pipes or described the control structures and where that was in the record before the agency.

MR. BLANTON: I believe that when an applicant says in their construction application and the agency writes conditions like on, I think, page five of the permit that says that these structures of sediment basins and discharge points is how we will control storm water, the agency understood full well that this was the sort of structure that was going to be built because that's the way you do sediment basins in coal mines in Illinois and have for decades. And no, I don't -- I also believe that the permit application that went in to Mines and Minerals, which consults with EPA, has detailed engineering drawings for these things. I'll ask the witness that.

MR. ETTINGER: Well, if the question is what did the agency understand, Mr. Blanton should have asked

these questions of the agency that wrote the permit yesterday. Now we're hearing speculation from Mr. Blanton

as to what the agency understood based on its reading of documents that are in the -- some of which are in the record, but they certainly didn't see a picture that was taken a couple of weeks ago in ruling on this permit.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: Agency would like to comment that this is relevant because this shows -- this basically translates the permit. This shows what Black Beauty's interpretation of their permit is. So I think it's very relevant to this proceeding and what the permit requires and how that will be achieved.

HEARING OFFICER: Anything further, Mr. Blanton?

MR. BLANTON: I could ask the witness more foundation questions if you like.

HEARING OFFICER: I'm going to overrule the objection and let it go forward for a little bit. But more foundation is always helpful.

MR. BLANTON: Okay.

BY MR. BLANTON:

Q. Mr. Fry, when did Black Beauty submit engineering drawings and specs for these settlement

basins and the control structures at the mine, if you know?

A. They certainly did for the sediment basins. Whether these -- the control structures are shown exactly like this, I'm not positive.

Q. Is there anything unusual or unique about these coal structures as compared to the sorts of structures that are industry practice and standard in this state for sediment basin control structures like this?

A. Yeah, I would say there is. The weir box itself is something that you wouldn't normally see. Normally, you would see just a discharge pipe and an emergency overflow channel so that the sediment basin could discharge itself. And here we have a control on this basin, and we have a control farther back in the system to be able to control the water and let it out at our desire as opposed to it flowing just whenever the water reached a certain level.

Q. And was the fact that that was going to be done part of the permit application information that was submitted to these agencies, that it was going to be controlled?

A. I believe so.

Q. And is -- on Exhibit 53, relating this back

to Exhibit 51, I believe -- excuse me, 50 which was the

drawing of uncontrolled areas at the outfall, is it this material that's around the discharge pipes and the adjacent areas, is that what you're talking about when you say the backs of the dams in part?

A. Yes, in part.

Q. And is there also -- back on Exhibit 52, is the area between the weir and the discharge pipe, is that part of the collection system, or is that part of the what you described as uncontrolled area?

A. That would be uncontrolled area.

Q. Okay. But that's -- the thing we're talking about is riprap and grass and brush and trees?

A. Yes.

Q. And is that true in the other uncontrolled areas that we talked about up on the north and the west and northeast sides?

A. Up on the north end, I don't believe you'll see any riprap up there. We put the riprap in to control erosion from the outlet. But you would see the brush and trees up on the north end, yes.

Q. What is the function of the settlement basins? What control or treatment function do they serve?

A. To reduce suspended, the settleable solids

and total suspended solids.

Q. How does that work?

A. It slows down the water. The sediments are entrained by the movement in the water; and once the water slows down, some of the sediment will drop out.

Q. In the course of your work for Black Beauty and the regulatory affairs within the Indiana Coal Council and so forth, have you learned anything about runoff from agricultural lands and nonmining land as compared to storm water runoff from controlled mining areas like this that have sediment basin control systems?

A. Yes, I have.

Q. What did you learn about that?

A. Well, you can -- you can stand at a sediment basin during a rainstorm and, for the most part or in many instances, see clear water running from the sediment basin into muddy water in the creek that's draining agricultural fields. And it's a reasonable thing when you think about it, that we have sediment basin technology that's built to, to remove suspended sediments, and the agricultural fields do not.

And I have taken samples of runoff from agricultural fields and taken samples simultaneously from the basins and seen -- in different mines in Indiana and

seen large differences, for example, 5,000 TDS from the agricultural runoff as compared to less than 100 from the mine area. And this is -- this is not a secret. This is fairly well known with the professionals in the industry and in the regulatory arena.

Q. In the course of obtaining this permit, how did the size of the basins for the Vermilion Grove mine compare to the industry standard and the normal way of doing sediment basins like this?

A. There, they're very much oversized.

Q. What do you mean by that?

A. I mean they will hold a greater volume of water and detain the water for a longer period of time, detain runoff for a longer period of time than what would have normally been built. The, the basin that was 003-A, I believe, was -- our engineers tell me that it's 150 percent of what it would normally be, and the, the outfall basin is 350 percent of what it normally would be.

Q. And what is the effect on the -- excuse me. How does that affect the ability of the basin to do what it does which is allow the sediments to fall out before they're discharged into the receding waters?

A. It increases its ability to reduce total

suspended solids.

Q. How?

A. By allowing a longer settling time.

Q. Are Black Beauty's operations at this mine, the surface facilities, subject to inspection on a regular basis by any regulatory authorities?

A. Absolutely.

Q. Can you describe the inspection regimen that the mine would be subject to and already is?

A. The Department of Mines and Minerals will normally inspect a mine at least once a month, and I think that they have to do a full inspection on a quarterly basis, and we may see them more than once a month. Illinois EPA, I think that their requirements are quarterly, although I think with this mine, as with some other mines, that they may visit once a month. OSM, I believe, makes quarterly inspections; that's the federal counterpart. And MSHA, I believe, makes quarterly inspections, although they tend to show up more frequently.

Q. What is MSHA?

A. MSHA is Mine Safety and Health Administration. Their -- they inspect underground coal mines. Well, they inspect surface coal mines, too, but

they're -- they show up more frequently for underground.

Q. Do they have responsibility for confirming the integrity of dams and other structures and sediment -- and storm water control systems like this?

A. I believe that they do, but I don't believe that they get involved with dams of this size. I think it has to be a certain size before they actually have to have approval.

Q. There was an issue in this case about how Black Beauty will know whether or not there's a 3:1 ratio of flow in the unnamed tributary and the flow in the discharge from the sediment basins. Have you addressed that issue in any way?

A. Well, it's hard to see, but in Exhibit 53, there is a staff gauge in this picture, although I'm not sure I'm going to have an easy time pointing it out to anybody. Actually, there is two staff gauges, and one of them is not in the picture.

Q. Can you take my pen and show where the one is or draw a circle around it or mark it somehow?

A. (Witness complies.)

Q. Okay. Did you mark where that is?

A. Yeah.

Q. And how does a staff gauge function?

Hold the picture. How does the staff gauge work and enable the people who are responsible for controlling discharges to know whether they have a 3:1 dilution situation that will allow them, under the terms of the permit, to discharge?

A. Well, you can actually calculate the volume of water when it's passing the discharge point through the, the basin characteristics and knowing the basin characteristics. And you, you measure the geometry of the stream and calculate the, the velocity by the basin characteristics. And from that point, just a water level can give you the volume. So, just a visual inspection of that staff gauge can tell you what the volume is in the stream. And you know what the volume is coming from your basin because it's controlled by a discharge pipe that you can calculate the volume of that flow. So, if you know what your discharge pipe is, and once it reaches a certain level on the staff gauge, then you know that you have your 3:1 dilution.

Q. Is there anything, to your knowledge, unusual from an engineering or operational standpoint about this system of knowing whether you have 3:1 dilution or not?

A. No.

Q. You can put the photograph down. I want to

show you what's been marked as BBCC Exhibit Number 48.

MR. BLANTON: I'll note for the record that this is a copy of the memorandum that Mr. Frevert identified yesterday. It's found in the administrative record at 933 to 937. We offer it as an independent exhibit so it's easier to work with in the record.

MR. ETTINGER: No objection.

HEARING OFFICER: What's the number? 54?

MR. BLANTON: No, 48.

HEARING OFFICER: I missed one.

MR. HUBBARD: Fills in the gap.

MR. BLANTON: It fills the gap.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: It's admitted.

(Whereupon, BBCC Exhibit Number 48 was marked for identification.)

BY MR. BLANTON:

Q. One of the issues in this case that's been raised and questions have been raised as to why the main is where it is. Is that addressed in this document anywhere at least in part?

A. Yes.

Q. Where?

A. I believe it's in the -- it's on the first page near the top.

Q. Where it says Facility Location Alternatives?

A. Yes.

Q. Can you please explain why Black Beauty put the mine where it is?

A. Well, somebody -- the engineers decided on that, but I can attempt to, to give their reasonings. The primary issue, I think, for them was rail access. The mine is located near -- close to an active railway, and it would be a short distance to, to tie into it with a loop as opposed to going all the way across to Riola, which it's questionable whether you can get the easements to do that.

Q. If you didn't have close rail access, how would you move coal from the plant to where you could ship it from?

A. Well, you would either have to have an additional rail siting, or you would have to truck it.

Q. So, in effect, is it the fact that it -- having it close to the rail reduces truck traffic at the mine, or likely to?

A. Yes.

Q. Okay.

A. But that's, that's just one of the reasons. The other reasons were that there was -- when Black Beauty took over Riola, there was already a purchase of or at least options on a certain amount of property there at Vermilion Grove, so there was property in place. There was proximity to the power lines. There was a suitability of overburden for slope construction. Certain geologic conditions are much, much more expensive to try to put a slope into than others. There's economics of conveyer lengths. If you try to stretch your conveyers out too long or stretch your mains -- your main tunnels in the mine out too far, you have long travel times for your men, for them to get to the face to where the coal's being mined. If it's an hour from your entryway to the face where the work's being done and an hour back, that's wasted production.

Additionally, when your mains are in for too long of a period of time, you start getting deterioration of roof conditions, and that can be a safety hazard and expense. And there may be other reasons, but these are the ones that the engineers have mentioned to me.

Q. In your memo to Bill Seltzer, you address certain socioeconomic issues also, right?

A. Yes.

Q. At the bottom and the middle of page one?

A. Uh-huh.

Q. Where did you get the information that appears there, the socioeconomic issues?

A. Oh, the, the calculations?

Q. Yes.

A. These were given to me by one of our engineers that, that had used an in-plan economic model.

Q. Is that Carl Consolas (phonetic)?

A. Yes.

Q. And what's his position in the company?

A. He's a mining engineer.

Q. And is his memo to you and others found at pages 936 -- excuse me, 935 through 937, the last three pages of the exhibit?

A. Yes.

Q. Who are the other recipients of this memo dated October 31, 2000?

A. Bruce Dousman (phonetic) is the manager of the engineering department, and Mark Keeling (phonetic) is the director of mining services.

Q. This memorandum is dated October 31, 2000. Is that the date upon which you sent it to Bill Seltzer at EPA; do you remember?

A. Yes, I believe that is the date that I sent it to -- and I was trying to think about that from the earlier testimony, and I'm not sure that I sent it directly to Bill Seltzer. I may have sent it to Toby Frevert or Bob Mosier with the understanding that they would forward it to Bill Seltzer. But I don't remember exactly.

MR. BLANTON: Would this be a good time to take about a five-minute break?

HEARING OFFICER: That depends how much more you have to go.

MR. BLANTON: Quite a bit.

HEARING OFFICER: Quite a bit?

MR. BLANTON: Yeah.

HEARING OFFICER: What do you need to take a break for then?

MR. BLANTON: Okay. I'll keep going.

HEARING OFFICER: I mean, if you have a pressing need, I'll, of course, take a break. But if we've got quite a bit more --

MR. BLANTON: Okay, we'll keep going.

HEARING OFFICER: There's no reason. It's already three.

MR. BLANTON: All right.

BY MR. BLANTON:

Q. In the course of your work doing permitting and regulatory work, can you compare the requirements of this permit to those that are what you're used to seeing for coal mine operations like this?

A. The NPDES permits are, are substantially more than what we're used to seeing, yes.

Q. In what ways?

A. Have you got a copy of the permit?

Q. It's in the record up there.

MR. BLANTON: May I approach? I don't remember the number from yesterday. It's IEPA 1.

MR. HUBBARD: It's Exhibit 6.

MR. BLANTON: No, the final permit's IEPA 1.

MR. HUBBARD: Yeah, but it's your Exhibit 6.

BY MR. BLANTON:

Q. Give you what's been marked as Exhibit IEPA 1, use that for reference.

A. Okay. The sediment basin size, as we discussed earlier, is one example of something that we did that was over what we would usually do. The biologic monitoring requirements, I don't know of any other -- certainly none of our permits in Indiana or Illinois have ever had biologic monitoring requirements.

Special condition twelve that requires the

monitoring for total and dissolved metals is something that's beyond the normal permit. The total mercury is beyond the normal permit.

Q. Are there things to test for or record under -- that are required under special condition twelve that are not the sorts of things that are associated with coal mine operations?

A. Yes. In my opinion, total ammonia. We use no ammonia at the site and don't intend to use any ammonia at the site, yet we have the obligation to test for ammonia.

Q. And others?

A. Yes. Dissolved oxygen wouldn't be a normal parameter for a coal mine, and I really don't think that it can be justified scientifically.

Q. You had mentioned the metals testing. Has there been, in the course of development of federal and state regulations for coal mines, the issue of what types of pollutants and contaminants that result from mining operations are common?

A. Yes. The mine effluent was studied extensively in the middle Seventies and the early Eighties.

Q. By whom?

A. By the federal EPA and OSM, and part of SMRCA.

Q. What is OSM?

A. Office of Surface Mining.

Q. What's SMRCA?

A. Surface Mining and Reclamation Act.

Q. Go ahead. What were the results of those studies, and how did that impact the regulatory regimen?

A. The results of the studies were federal standards for coal mines, and they determined that sediment basins were the best ways -- was the best method to treat coal mine effluent. And they developed a set of, of standards -- effluent standards to go along with the sediment basins.

Q. And what are the effluent standards that are generally developed for that length; what items were found to be the things of concern in coal mines?

A. Iron, manganese, pH, total suspended solids, and settleable solids, to the best of my recollection. They tested large numbers of, of effluent streams from, from many different coal mines, and they tested them for inorganic and organic parameters; and they did get a few hits on other metals, but they found that when the iron

was in -- was within specified limits that they didn't see elevations of these other metals. So iron and

manganese provided a indicator parameter for what little other hits that they did have on metals.

Q. What do you mean by an indicator parameter?

A. It's a parameter that can be used as opposed to doing a whole list of parameters. There may be a chemical that's -- or a parameter that's fairly conservative that, that would show up if the water was being affected.

Q. How does sulfates and chlorides come into the regulatory regime with respect to coal mines and mines like the Vermilion Grove mine specifically?

A. Well, sulfates and chlorides are not part of the federal standards. They're not part of the Indiana standards. They're not part of many -- the standard for many states for coal mines. Sulfates and chlorides were something that Illinois added themselves, along with acidity and alkalinity.

Q. And what is the source of concern or the source of chlorides in association with coal mining in Illinois, if you know?

A. I'm not sure I understand the question.

Q. There's --

A. What's the --

Q. What's the connection between chlorides and

coal mines in Illinois? Why are chlorides associated with coal mining operations in Illinois?

A. Well, chlorides can be associated with shells, especially marine shells.

Q. And what would be the source of sulfates in connection with mining operations?

A. Sulfates are generally the result of the dissolution of pyrite, iron sulfates.

Q. How does that occur?

A. The pyrite's exposed to oxygen and water, and the result is sulfates, iron, and lower pH.

Q. And is there an opportunity at the Vermilion Grove mine for there to be pyrites affected so as to create sulfates?

A. I believe that it's -- it is a fairly low sulfur coal, but yes, there would be pyrites associated with the coal and the -- with the foreign material.

Q. What about any of the material that would be on the surface of the mine or at the surface areas of the mine? Would there be any -- would there be any portions of the surface areas of the mine where the generation of sulfates or creation of sulfates might occur?

A. In the coal yard.

Q. How would that happen?

A. In the coal yard and potentially in the

refuse pile.

Q. How would that happen?

A. By the oxidation of pyrite.

Q. And is it -- to your understanding is that why those parameters are listed in the permit for the discharge from waters that have been in contact with an area?

A. Absolutely.

Q. Were you here when Mr. Moore testified regarding his visits to the unnamed tributary and his description of it?

A. Yes.

Q. Have you visited the unnamed tributary areas --

A. Yes.

Q. -- that he was talking about?

A. Yes.

Q. Are you -- what you believe he's talking about?

A. Yes.

Q. What was your impression of the area?

A. I'm not sure how you mean that.

Q. Does it show -- is there any evidence of it having been disturbed or used or having human impact on

it?

A. Oh, yes.

Q. Before the mine came in?

A. Yes, there was definite human impact.

Q. In what way?

A. There are numerous dumps along the unnamed tributary of refrigerators and other white goods, cars, that sort of thing. There's definite human impact there.

Q. Let me show you what's been marked as Exhibits BBCC 54 and 55 and ask if those are two additional photographs you've taken?

A. Yes.

Q. When did you take them?

A. I believe last Thursday.

Q. And what do they -- where were they taken?

A. These two locations are, are very close upstream from the NPDES outfall.

MR. BLANTON: We offer Exhibits BBCC 54 and 55.

HEARING OFFICER: Mr. Ettinger? Objection?

MR. ETTINGER: I guess not.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: Those will be admitted.

(Whereupon, BBCC Exhibit Numbers 54 and 55

were marked for identification.)

BY MR. BLANTON:

Q. One of the issues in the case that's been raised by the petitioner is whether or not the -- I probably won't get this term right -- the biological survey, biological inventory should have been required before the permit was issued or before mining operations occurred. Are you familiar with that issue generally?

A. Yes.

Q. Has Black Beauty submitted a plan for carrying out the biological inventory?

A. Yes.

Q. I want to show you what's been marked as BBCC Exhibit 56. Please look through the entire document and tell me, are these documents relating to the biological inventory requirements of the permit?

A. I believe they are.

MR. ETTINGER: Is Mr. Blanton now attempting to prove compliance with the permit, or what is the relevance of this?

HEARING OFFICER: Mr. Blanton?

MR. BLANTON: Do you have an objection?

MR. ETTINGER: Yes, objection.

HEARING OFFICER: Leave the specifics to me.

Do you have a response to that statement he made?

MR. BLANTON: I believe it's quite relevant. The petitioner's complaining that the fact that this was done -- was not required before the permit was issued is a flaw in the permit, and there is potential adverse impact on the environment or water quality or whatever it is. And what we're attempting to show is that -- the fact that it wasn't required to be done at the time they want it to be done is of no significance for the issues that they've raised in the case.

HEARING OFFICER: How does this do that?

MR. BLANTON: By showing that it has, in fact, been carried out before there are any activities that would involve contact of water with coal which is the situation that would have any relevance to the biological inventory.

MR. ETTINGER: Well, that's his -- we disagree on an interpretation of the permit, and this is ultimately a legal issue, as to what were the mining activities that the permit required, that the biological inventory be done

before. It's their position that the permit states that they didn't have to do this biological inventory until water came in contact with coal.

It's our position that the site preparation activities which resulted in a large storm water release

of pollutants eroded and destroyed the baseline conditions and, as a result, the study that was done here is not the study that should have been done or that we would have liked to have seen done, had the permit been clearer in requiring the true baseline conditions be taken.

So, this does not really address our dispute which relates to what was supposed to be in the permit, not what was done subsequently.

HEARING OFFICER: Anything further, Mr. Blanton?

MR. BLANTON: It's certainly relevant to our theory of what the permit requires and what it needed to require. What it shows is that the way the permit works is a perfectly fine way of administering the requirements of the act and the permit.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No comment.

MR. BLANTON: I think basically we're entitled to advance the evidence that supports our theory of the

case.

HEARING OFFICER: Well, you're entitled to advance it if it's relevant and applies to the case in point which is what I'm trying to decide right now. I am going to let it go forward for a little bit. The

objection is overruled, noted for the record. But it seems to me to be a bit tenuous, and I don't want to waste too much time on it.

BY MR. BLANTON:

Q. Was the biological inventory plan proposed by Black Beauty approved with some modifications by the agency?

A. I can't tell you that. I would assume that it has been. I haven't been involved in that.

Q. Has the biological inventory -- at least has it begun?

A. Yes.

Q. Show you what's been marked as Exhibits 57 -- BBCC 57 and 58 and ask you if those are photographs that you took --

A. Yes.

Q. -- last Thursday? What do they depict?

A. They depict biological inventory in progress.

MR. BLANTON: We offer BBCC Exhibits 56 and

57.

MR. ETTINGER: I'm sorry, what's the numbers?

HEARING OFFICER: Have you had a chance --

MR. BLANTON: They're 57 and 58.

HEARING OFFICER: -- to look at those, Mr. Ettinger?

MR. ETTINGER: Which are these? Are these then pictures of their people in the water?

MR. BLANTON: Yes.

MR. ETTINGER: Looks like fun. No objection.

MR. SOFAT: No objection.

HEARING OFFICER: They will be admitted.

(Whereupon, BBCC Exhibit Numbers 57 and 58 were marked for identification.)

BY MR. BLANTON:

Q. One of the issues in the case, as I understand it, as raised by Petitioners is that the testing that -- basically condition twelve as required because of a lack of information about the potential impact of certain components or constituents of the outfall 3 discharge on certain species. Do you understand that to be an issue?

A. Yes.

Q. And have you looked at some previous rulemaking and other proceedings before the Pollution

Control Board that you believe address that topic?

A. Yes.

MR. ETTINGER: Objection. We're not going to hear the witness now testify as to his interpretation of the court opinions?

MR. BLANTON: We are laying a foundation.

HEARING OFFICER: Let him finish the question. Was that it, Mr. Ettinger?

MR. ETTINGER: I'm sorry. I hope that we're not going ask the witness now to interpret a Board opinion.

MR. BLANTON: Nope.

MR. ETTINGER: Thank you.

HEARING OFFICER: Proceed.

BY MR. BLANTON:

Q. Can you tell me generally what the materials were that you looked at in that regard?

A. I looked at the proceedings and findings of the Illinois Pollution Control Board. I was looking for the, the reasoning behind the 3500 and 1,000 levels for sulfates and chlorides, and believe that those -- -- it's clear in the proceedings that those numbers were actually based on a biologic study done by the Illinois Water Survey.

MR. ETTINGER: Well, he's testifying as to exactly what I objected to, which is he's now telling us what the Board's numbers were based on. The record in the proceedings that shows those numbers presumably shows what the Board relied on, if the Board's opinion doesn't itself, and we certainly don't need a witness and should not have a witness to interpret either Illinois law or the

Board's opinions.

MR. BLANTON: Was there a -- I'm sorry.

HEARING OFFICER: Go ahead.

MR. BLANTON: Was there --

HEARING OFFICER: Are you responding to Mr. Ettinger?

MR. BLANTON: Can I ask a preliminary question for foundation before I respond?

HEARING OFFICER: Let's hear the question. If Mr. Ettinger has a further objection, we'll move back and address them both.

BY MR. BLANTON:

Q. Did you find a reference to a study conducted in Illinois regarding the possible toxic effect of chlorides and sulfates on some fishes in Illinois referenced in the materials from the Pollution Control Board that you reviewed?

A. Yes.

Q. And are those materials you reviewed the two exhibits for which we asked the Board to take official notice earlier today?

A. Yes.

Q. And have you located the study that is referenced in that -- in one of those documents?

A. Yes.

Q. I'm going to show you what's been marked as Exhibit BBCC 60 and ask if that's a copy of the study that's referenced in the document that we asked the Board to take official notice of?

A. Yes.

MR. BLANTON: We offer Exhibit BBCC 60.

MR. ETTINGER: Can I see -- is this the --

MR. BLANTON: It's the only copy we've got.

MR. ETTINGER: Is this -- can we get a -- is this what we saw this morning?

MR. BLANTON: No.

HEARING OFFICER: I think this is a study that was mentioned in these court opinions, if I'm not mistaken.

MR. ETTINGER: So, we're just saying was this in the -- is this in the -- we've just testified that this

is in the Board's official records of --

HEARING OFFICER: No. Let me clarify. And correct me if I'm wrong, Mr. Blanton, but I think we've testified that this witness saw mention of this study in the Board's records.

MR. BLANTON: That's correct.

HEARING OFFICER: He didn't actually say the study was incorporated into the Board's prior proceeding,

at least that's my understanding.

MR. BLANTON: That's correct.

HEARING OFFICER: How do you feel about this, Mr. Ettinger?

MR. ETTINGER: Well, I -- if it was in the Board's record and is an official document, it can be cited for whatever it's worth. And certainly the Board decision, to the extent it refers in this, can be recited as an authority. It's not been shown that this is part of this permit record, and I don't see its relevance, and I don't to this permit proceeding.

HEARING OFFICER: Can I take a look at it? Mr. Sofat, do you have an objection?

MR. SOFAT: No. In fact, the agency believes that this should be admitted.

MR. BLANTON: Before you rule on it --

HEARING OFFICER: Do we have the authors available or anything from them?

MR. BLANTON: I doubt it.

HEARING OFFICER: All right. Before I rule, do you have something to say?

MR. BLANTON: Yes. I -- since you have the document, I can't tell you what the exact -- the exact depiction of this document is, but it is a publication of

the state water survey, division of the water quality section of the Illinois Department of Energy and Natural Resources. It is a contract report prepared for and funded by the Illinois Environmental Protection Agency, Division of Water Pollution Control, dated September 1981. It is an official document. And a report of a study funded by this state, I believe, on its face it is admissible in this proceeding because it certainly addresses the issue of whether condition twelve is adequate as a means of -- and the other controls in the permit are adequate for reasonable people to decide that what the permit requires is adequate to protect and investigate status of these biota and what our discharge may do to them. I think, on its face, it's admissible on the question of toxicity without regard to whether Mr. Fry found it.

HEARING OFFICER: Well, I -- that's what we're here to decide. Let's see what Mr. Ettinger has to -- final reply, then I'll rule.

MR. ETTINGER: I do not -- I believe in wide-open proceedings, and Prairie Rivers believes that we should have all the evidence -- scientific evidence possible on, on these scientific questions. The problem here is we're now being asked to review an administrative record, and this was not in the administrative record or,

to our knowledge, it was not referred to by the agency in this proceeding. And so if one wishes to cite a published study or -- and we certainly believe that people should use this sort of evidence in writing permits, but it's not in this hearing record.

HEARING OFFICER: I'm going to deny this. I don't think it was before the Illinois Pollution -- excuse me, Illinois Environmental Protection Agency when they made the decision. Not only that, I don't know that proper foundation has been laid, so I'm going to deny it.

MR. BLANTON: May I make one more comment on it?

HEARING OFFICER: You sure may.

MR. BLANTON: I guess it goes back to the general nature of, what does the agency have to do to

issue an individual permit? I mean, I spend most of my professional time in opposition to various regulatory agencies, and all I hear is what they do should be deferred to by the courts and everyone else because of agency expertise and experience in situation after situation after situation in which every bit of experience and expertise that every person in that agency has in their heads after years of working is not part of the record.

I think if we're proceeding in which the petitioner is trying to prove that U.S. EPA, Illinois EPA, Illinois DNR, both the mining people and the endangered species people have no basis for concluding that condition twelve in the 3:1 dilution ratio and all the other conditions in this permit that are beyond anything that's normal, that are beyond the requirements of Illinois rules according to Mr. Frevert, that they can't -- that they have to go write down every bit of information that they know, every discussion they have, every document that they've ever read that gives them knowledge and judgment, I think that is a completely unworkable way to run a government, and I think that's not what the law requires of them.

And when we come in after the fact to show,

look, these people didn't just make this up, it wasn't the first time they ever heard of these issues, look at this wealth of material over decades that's part of their agency expertise and experience, the petitioners don't like it. I don't see -- it cuts both ways. If you're going to have agency expertise, I think we're entitled to show that they, in fact, have -- that that might be justified from time to time.

HEARING OFFICER: I agree, Mr. Blanton. And if the agency people who made the decision are on the

stand, they can testify about what they relied upon. However, nobody's done that to this point in time. What we have here is a report from 1981. It was not in the record, it was not included in the record. And the law is very clear that the Pollution Control Board has to look at the agency record when making this decision. This was not in the record.

Not only that, I don't think it was properly -- I don't think foundation was properly laid for it. We have a report made by Paul Reed and Ralph Evans. We don't have Paul Reed or Ralph Evans here. We don't know what this contains. We don't have any proper foundation laid for this at all except for the fact that this witness saw it in a Illinois Pollution Control Board

rulemaking and obtained the report. We don't know if the Illinois Pollution Control Board made it part of the record of the underlying proceeding that you've asked us to take official notice of. And it -- unless we know some of those things or unless we have someone who can provide how this document was made, what it was made for, the reasons why it was made, what it was used for in the Illinois Pollution Control Board proceeding, I'm not going to allow it in, so it's denied, and that's it.

Let's move on. We can go off the record, if

you want, if you have some point of clarification.

MR. HUBBARD: The only question I have was were 57 and 58 admitted?

HEARING OFFICER: That's a fine question. I don't -- yes, they were. They were both admitted.

MR. HUBBARD: Correct my notes. Thank you.

BY MR. BLANTON:

Q. The record in this case, Mr. Fry, indicates that there are ratings of the Little Vermilion River that were referenced by various witnesses about it being an A stream and a B stream and things of that nature. Are you familiar with that?

A. Yes.

Q. I'm going to show you what's been marked as

BBCC 59 and ask you what that is?

A. This is a EPA study entitled Intensive Survey of Little Vermilion River as Affected by Seasonal Variation, 1992.

MR. BLANTON: I'll note for the record that this is a publication of the Illinois Environmental Protection Agency, Bureau of Water, dated August 1993. It is a document identified as IEPA/WPC/93/139. It was referred to -- I believe this is accurate -- by both Ms. Grosboll and Ms. Glosser in their deposition testimony. It was part of the basis for statements in

their letters that are part of the administrative record, all of which have been identified individual exhibits in this case.

We offer BBCC Exhibit 59.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: Was this in the administrative record?

MR. BLANTON: It is a document that was referred to by those persons who the petitioner rely on and cite in their letters in the administrative record, and those persons have testified it is the basis for their statements that are part of the administrative record.

MR. ETTINGER: In that case, no objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: This will be admitted.

(Whereupon, BBCC Exhibit Number 59 was marked for identification.)

BY MR. BLANTON:

Q. Have you read this document, Mr. Fry?

A. Yes.

Q. Are you familiar with it?

A. Yes.

Q. What does it generally -- what sort of

information is contained in it?

A. Well, it's generally a study, I believe, beginning in '89 of the Little Vermilion River where they looked at the biology and some water chemistry of different sites along the Little Vermilion in the area of the mine and beyond.

MR. ETTINGER: Excuse me. Was Mr. Fry qualified as a biologist?

MR. BLANTON: He's qualified to read -- I'm sorry.

HEARING OFFICER: Go ahead. You can respond. Was that an objection?

MR. ETTINGER: Are you a biologist, Mr. Fry?

HEARING OFFICER: Hold on, hold on.

MR. ETTINGER: Objection.

HEARING OFFICER: If you have an objection, make your objection and allow him to respond.

MR. ETTINGER: I apologize.

HEARING OFFICER: Okay.

MR. ETTINGER: My objection -- I object to Mr. Fry offering his interpretation of this document which is now in the record that we can all read for ourselves unless he has some special qualifications that enables him to read it any better than the rest of us.

HEARING OFFICER: Okay. Mr. Blanton?

MR. BLANTON: I think the witness can read English, and all I'm asking is what's the nature of the information in there. I'm not asking him to interpret it. I'm asking him to provide some -- you know, give us a point in there that I want to draw his attention to and I want the proceedings to be drawn to.

MR. ETTINGER: Well, that's my point exactly. We can all read English, we hope, and if, if Mr. Blanton wants to draw his -- our attention to this subsequent to the hearing, he can put that in his brief, and he can refer to this exhibit which I did not object to its admission.

HEARING OFFICER: I'm going to sustain the objection. If you want to direct his attention to a particular bit of this exhibit to elicit testimony, that would be okay.

MR. BLANTON: All right.

BY MR. BLANTON:

Q. Mr. Fry, when you were taking pictures last Thursday, did you go on the Little Vermilion River below the dam through the Carl Fliermans Nature Preserve?

A. I wasn't able to go through the Carl Fliermans Nature Preserve, but I did go beyond it, yes, on the Little Vermilion River.

Q. I want to show you what's been marked as Exhibit -- BBCC Exhibit 61, ask you if that's a photograph that you took in that area?

A. Yes.

Q. How far away from what you understand to be the boundaries of the Carl Fliermans Nature Preserve is this?

A. I'd have to look at a map.

Q. I'll show you a map in a minute, but it's nearby?

A. It may be a mile or so.

Q. Is it closer than the mine is?

MR. BLANTON: I'll withdraw that. I'll offer the exhibit at this point.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: No objection.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No objection.

HEARING OFFICER: It's admitted.

(Whereupon, BBCC Exhibit Number 61 was marked for identification.)

BY MR. BLANTON:

Q. In Exhibit 61, is there anything depicted in Exhibit 61 that might be related to coal mining?

A. Yes.

Q. What?

A. The, the talus that you see along the banks there is, is mine spoil. This area has been extensively surface-mined. If you were to, to -- in the area of the river, there are large spoil ridges from, from mining. There's a final-cut lake within 50 feet of the Little Vermilion River, and obviously here, this is mine spoil right on the banks of the Little Vermilion River.

Q. I'm going to show you what's been marked as Exhibit BBCC 62 and ask you what that is?

A. This is the topographic map -- this is a

topographic map that shows the area in -- surrounding the mine, and it shows the locations of both strip mines and underground mines in the watershed of the Little Vermilion below the mine.

MR. BLANTON: We'd offer Exhibit BBCC 61 -- excuse me, 62.

HEARING OFFICER: Mr. Ettinger?

MR. ETTINGER: I object. Was this in the -- was this in the agency record?

MR. BLANTON: I believe the fact that these mines exist is known to the agency.

MR. ETTINGER: Well --

MR. BLANTON: This map is not part of the

agency record.

MR. ETTINGER: Is this an illustration of facts that are presented somewhere in the agency record?

MR. BLANTON: Every time anyone in the agency makes a statement in a document that is a matter of judgment and professional opinion, the petitioner says they have no basis for that, it's unreasonable, they must document it. This is part of what people who are making the decision on this permit know. It is part of what -- it's part of what the area is that we're talking about. And if the judgment is, are the conditions in the permit

reasonable under the circumstances or must you try to start basic science from ground zero with respect to these endangered species and the quality of this river, I think we're entitled to show that what is common knowledge and what the actual facts are on the ground is relevant to whether the judgments of the agency in issuing the permit were reasonable in this proceeding.

There are disputed facts about whether the conditions are sufficient and adequate, whether the agencies should have required more information or whether they were entitled to rely on their experience and expertise. This is part of the background information that is known. It's part of what the world is out there.

HEARING OFFICER: Well, I understand, but that

doesn't mean it's admissible yet. Mr. Sofat?

MR. SOFAT: Agency has no objection and believes it should be -- I think it describes the nature of the nature preserve that Petitioner talks about.

HEARING OFFICER: I'm sure it does. However, is this or something similar to this in the record as what the agency relied on at the time they made their decision?

MR. SOFAT: I think it should go in under Mr. Ettinger's philosophy of open hearing.

HEARING OFFICER: As much as I respect

Mr. Ettinger, I'm not too concerned about his philosophy of open hearings. What I want to know is whether this was something that the agency had before it or something similar to what the agency had before it. And I'm not content to rely upon the basic agency knowledge. As much as I respect people who work for the agency, I'm not always that enthused about their knowledge, and I wouldn't want to take it for granted that they have knowledge of the topography of the site.

MR. ETTINGER: And there are specific -- I mean, even if it were the case -- and we don't know what the unnamed agency permit writers might have known other than what they state in the record, that there's all sorts of specific information here as to particular coal mines

and when they were closed at particular times.

HEARING OFFICER: Is that true? I haven't seen the exhibit.

MR. ETTINGER: I understand. And certainly to believe that that's sort of the common base of knowledge of whoever had input into this record is, is making a remarkable leap of, of presumption as to what the agency permit writers knew.

HEARING OFFICER: All right. Since we're all making sweeping statements about the philosophy of the

process, the agency record is what we base our decision on for a reason. We don't want to make it an overreview; we're not allowed to make it an overreview. We have to base -- we, the Illinois Pollution Control Board, have to base our decision on what was before the agency at the time of the decision.

MR. BLANTON: May I tie it?

HEARING OFFICER: If you could.

MR. BLANTON: All right. In Caroline Grosboll's first letter to the agency expressing concern about the mining permit, there are statements about the Fliermans Nature Preserve and the potential effects of coal mining on that kind of -- on that area specifically. In Deanna Glosser's letter, there is extensive -- there is a reference to acid mine drainage from abandoned mines and

how terrible that is and how that will be really bad for the river, and how she's particularly concerned about the effect of that on the Carl Fliermans Nature Preserve.

She's supposed to be an expert who would know the conditions of the -- of the species that she's raising questions about. And if she's using it as a reference point, I think the -- this evidence, which is directly germane to what the conditions of the Carl Fliermans Nature Preserve are, directly relate to the concerns

raised by these two agencies which are specifically relied upon in Petitioner's petition for review of this permit.

One of their key points early in their petition is this permit should be denied, specifically because of these letters written by Caroline Grosboll and Deanna Glosser, both of which were specifically tied to the Fliermans Nature Preserve. The question of whether those concerns have been adequately addressed and what this exhibit shows is that the Fliermans Nature Preserve is smack dab in the middle of unreclaimed coal land. And what is, therefore, reasonable for the agency to respond to those concerns is directly relevant and tied to the record that the agency relied on and the evidence in the record that the petitioners rely on. They want you to be concerned about the preserve, but they don't want you to

know where it is or what it's like.

HEARING OFFICER: Well, and as much as -- let me respond. I don't much care about what they want me to be concerned about either, you know. No offense, Mr. Ettinger, but I am here strictly to let evidence into the record and the Board's record that I think is appropriate. And what either party is concerned about doesn't bother me.

You reference conditions of the site. Correct

me if I'm wrong. Didn't you refer to biological conditions?

MR. BLANTON: No, it was not limited to that. It was referenced generally to this preserve and what a wonderful resource it is and how it should not be contaminated by coal mining or related activities.

HEARING OFFICER: Understood. This map is a topography map, correct?

MR. BLANTON: No, it shows the location --

HEARING OFFICER: Someone show me the map.

MR. BLANTON: I'm sorry. This is the -- may I come up?

HEARING OFFICER: Yeah.

MR. BLANTON: This is the nature preserve. What it shows is mines all up and down this river. That's the area that they say has been unaffected by any of this

before.

HEARING OFFICER: Anything further, Mr. Ettinger?

MR. ETTINGER: I have -- if the agency had created this map in response to the comments that Mr. Blanton refers to and had put this in the record of the permit, then it would be in the record, and we'd have all this information and the public would have had an

opportunity to look at this while the agency record was open. However, the agency didn't choose to put any of this information in the record or respond to the letters that Mr. Blanton refers to. And that is the record that, at this point, we have to judge the permit on.

HEARING OFFICER: Mr. Sofat, anything?

MR. SOFAT: We have no objection to introduction of this map.

MR. BLANTON: May I make one more statement, Mr. Knittle?

HEARING OFFICER: Yes, please.

MR. BLANTON: We had discussion at the very first prehearing conference on this on what the nature of this proceeding would be and whether the record can be supplemented. And at that time, no decisions were made. We had the subject come up again with respect to

depositions. We began this hearing with Mr. Ettinger calling witnesses to talk about things that are related to, supplemental to the record.

I think it's clear the petitioner chose the nature of the hearing by starting to call witnesses, and there is no difference of us putting in facts about the Carl -- the Carl Fliermans Nature Preserve which is relied -- which is related to the testimony and the

documents in the record by other witnesses than there is for the petitioner to call their witnesses to talk about the same things or related things to what they already put in the record. If a witness can say, I sent this letter, and now I'm going to tell you about it and be cross-examined on it, that is no different than them putting a document in the record --

HEARING OFFICER: Well --

MR. BLANTON: -- saying, This is what I think, and me putting a different document in to contradict it. There's no -- there's no difference from an evidentiary or scope of the proceeding.

HEARING OFFICER: Well, the only difference I can see is that what he did was not objected to, and this has been objected to, and I am not estopped from making a ruling just because we let it in earlier if I think it's the proper ruling. And I'm going to deny this. I don't

think it's part of the agency record. I don't think it's sufficiently related to go into the Board record. I don't think it's anything that I've been shown that the agency relied upon in making its final decision.

And as you all know, the agency is required to put anything that they relied upon in making its final decision into their record, and that's what we base our

proceedings upon. So, this exhibit is denied.

MR. BLANTON: Could we have a five-minute break while I figure out what to wrap up with?

HEARING OFFICER: How much longer do you think we have?

MR. BLANTON: That depends on what this is. It's one topic or none.

HEARING OFFICER: Okay. If it's --

MR. BLANTON: I need to talk to my client.

HEARING OFFICER: Understood, but you seem to be reticent in giving us estimates about how long it's going to take. If, in fact, it's going to go forward, about how long do you think?

MR. BLANTON: If it goes forward?

HEARING OFFICER: If your topic goes forward?

MR. BLANTON: Five minutes.

HEARING OFFICER: Yeah, sure. Take five

minutes. Let's go.

(A recess was taken.)

HEARING OFFICER: Back on the record.

Mr. Blanton?

MR. BLANTON: Yes.

BY MR. BLANTON:

Q. The last thing I want to cover with you,

Mr. Fry, there were some questions raised about the sampling machine --

A. Uh-huh.

Q. -- out near the mine?

A. Yes.

Q. First, I would like you to look at a document that's been marked as Exhibit 41 --

A. 41.

Q. -- which shows the sampling points, among other things, that identifies sample points 10SW-7, 11SW-3, 14SW-4, 15SW-8. And using Exhibit 43 to refresh your recollection, if you need to, all I would ask you to do is explain first -- are you the person responsible for selecting these four sampling points?

A. Selecting the sampling points, yes.

Q. Okay. First, with respect to sampling points 11SW-3 and 14SW-4, both of which I believe are on the unnamed tributary, why did you select those sampling

points and start sampling as early as December 15, 1999?

A. In anticipation of, of the mining permit application.

Q. And what did anticipating the mining permit application have to do with sampling the unnamed tributary?

A. It requires baseline data for, for the surface water that, that will be receiving drainage from the mine.

Q. Sampling points 10SW-7 and 15SW-8, I understand, I think, to be on the Little Vermilion River. And sampling began in August of 2000; is that right?

A. Right.

Q. Okay. Why did you start sampling there?

A. Well, normally they wouldn't be required for the permit; but because there seemed to be a little more controversy to this permit, I decided to go ahead and pick some points on the Little Vermilion and take some samples.

Q. Then if you look at Exhibit 40, there's a reference there to IEPA sampling sites two, three, and four. And if you would look at the map 43, some of those are on the Little Vermilion, some are on the unnamed tributary, right?

A. Right.
Q. Who picked those spots?
A. The Illinois EPA and the Illinois DNR.
Q. And when did they do that? Was that in connection with the issuance of the permit?
A. Absolutely.

Q. That was information that you were just told that that's where you would be sampling?
A. Right.
Q. There was a question raised about whether the data gathered on February 12, 14, and 25, 2001, had been reported to IEPA. What can you tell us about that?
A. Information in regards to the permit is turned in as required by the permit.
Q. And do you know what the reporting requirements are? The permit says, but just so we can talk about it, when would you expect that those data have to be turned in? The sample was on February 12th; what's your understanding of when you have to report it?
A. I believe that that one's been reported. My understanding of when it has to be reported is within 60 days of our having received the analysis.
Q. Okay. And you believe that the February 12 one has been reported?
A. I think so.

Q. What about the other two?

A. I'm not positive whether they have been reported or not, but they will be reported as required.

MR. BLANTON: Those are all the questions I have for this witness at this time.

HEARING OFFICER: Mr. Ettinger, do you want to -- we had an off-the-record discussion, and I don't know if Mr. Blanton was available for that. Did you hear us talking about public comments?

MR. BLANTON: (Counsel shakes head.)

HEARING OFFICER: Mr. Ettinger is worried that some of these people have to leave before it gets too late in the day, and we are thinking of taking some public comments now.

Is that correct, People? Anybody need to leave before this witness is finished?

AUDIENCE MEMBER: When will it be finished?

HEARING OFFICER: Hey, if it were up to me, ma'am --

AUDIENCE MEMBER: Five?

HEARING OFFICER: It's up to the attorneys and how long they take to make their case.

MR. ETTINGER: I believe I'm going to be very quick.

HEARING OFFICER: Mr. Sofat, do you have --

MR. SOFAT: No questions.

HEARING OFFICER: You're not going to have any questions? So I would say in about fifteen, twenty minutes, depending on cross and redirect.

(No response from audience members.)

HEARING OFFICER: Okay. We'll proceed then with cross-examination.

CROSS-EXAMINATION

BY MR. ETTINGER:

Q. Mr. Fry, did you attend the public hearing that was held on September 27th of last year?

A. Yes.

Q. Did you speak at that hearing?

A. I think that I was asked several questions --

Q. Is there --

A. -- so that I did speak, yes.

Q. Is there any reason that you couldn't have presented all of this information that you're presenting now at the public hearing?

A. What information are you referring to?

Q. Well, a lot of your information here regarding more the topology of the site and the location of other coal mines and the other facts about the site and the company's plans that you presented at this

hearing. Is there any reason that that couldn't have been presented then?

A. I suppose that some of that could have been presented, yes.

Q. Thank you. Regarding the -- what's been marked, I believe, as Exhibit 47 that I believe we decided was part three of the mining permit application -- yes -- on page -- it's page 7 of 20 on the bottom, there is some water quality data, site-specific regional surface water quality and site-specific surface water quality data. Do you see that?

A. Yes.

Q. Who collected that data?

A. On page 7 of 20, the data that, that -- that is there, I believe it tells that the -- oh, the site-specific data?

Q. Yes. Who collected that? I'm actually having a little trouble reading it because of the copying, but --

A. Okay. I believe that Black Beauty collected that data.

Q. And where was that data collected?

A. The data was collected at the -- at the -- at the points shown on the table.

Q. Okay. And just to be clear on these numbers -- there's various numbers here. Well, let's just look, for instance, total manganese in the middle column. I think it says 12SW-5. Do you see where I'm talking

about?

A. Yes, I do.

Q. It's got a .21, then -4.2. What does that mean?

MR. BLANTON: For the record, it's .29.

BY MR. ETTINGER:

Q. I'm sorry. Well, I'm -- what does it say, .29 - 4.2? Do you see where I'm looking?

A. That, that should be the range of values that were collected over the baseline monitoring period.

Q. Okay. So, over that period, your lowest value was .29, and your highest value was 4.2?

A. Correct.

Q. How many data points does that represent?

A. I'm going to guess and say six.

MR. ETTINGER: Thank you. No further questions.

HEARING OFFICER: Mr. Sofat, did you have any questions?

MR. SOFAT: No.

HEARING OFFICER: Mr. Blanton?

MR. BLANTON: No other questions.

HEARING OFFICER: Sir, you may step down. Thank you for your time.

Mr. Blanton, any other witnesses for you?

MR. BLANTON: No. Black Beauty closes, rests.

HEARING OFFICER: Mr. Ettinger, do you have any case in rebuttal?

MR. ETTINGER: No.

HEARING OFFICER: All right. We are moving right along now. I think the time has come for public comments. If there is anybody out there wishing to provide a public comment to the Board, you would be more than welcome to come up, and you'll be asked to state your name and swear to tell the whole truth and nothing but the truth, or affirm, and we will take your comments back to the Board, they will be made part of the transcript -- yes, ma'am, why don't you come up -- and the Board will consider them.

You should also know that you may be subject to limited cross-examination by the parties.

MS. MARIAGE: I just have a statement I would like to read.

HEARING OFFICER: Yes. You're more than welcome to. First we want you to be sworn in.

(Ms. Mariage sworn.)

HEARING OFFICER: Please proceed, ma'am.

MS. MARIAGE: My name is Gloria Mariage. I'm

a member of the Prairie Rivers Network. And my statement I'd like to read to you is, I enjoy having the Little Vermilion River as a neighbor, living less than a quarter mile from my home. My husband and I and our children and grandchildren canoe, fish and release, go boating, and looking and watching the wildlife on the river. We have tried to teach our grandchildren, as we did our children, to protect and help clean the Little Vermilion River by picking up garbage from the river and its banks and not to destroy nature so others can see and enjoy the river and all the wildlife and beauty that it beholds.

Thank you.

HEARING OFFICER: Thank you very much, ma'am. Don't go anywhere. Does anyone have any questions, starting with Mr. Ettinger?

MR. ETTINGER: Are you a member of Prairie Rivers?

MS. MARIAGE: Yes, I am.

MR. ETTINGER: No further questions.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: Agency has no questions.

HEARING OFFICER: Mr. Blanton?

MR. BLANTON: No questions.

HEARING OFFICER: Sir, would you like to

provide a public comment?

MR. ELLIS: Yes.

HEARING OFFICER: Why don't you come on up and stand next to the flags. You can sit if you're more comfortable.

(Mr. Ellis affirmed.)

HEARING OFFICER: And your name, sir?

MR. ELLIS: Bill Ellis.

HEARING OFFICER: Could you spell that, please? Just the last part.

MR. ELLIS: E-l-l-i-s.

HEARING OFFICER: Thank you.

MR. ELLIS: I'm also a member of Prairie Rivers. A few years ago, I was called for jury duty in the courthouse here in Danville on a trial that I thought was a rather serious case, attempted murder. When the judge addressed the jury, he told us to use our life experiences in judging credibility of witnesses and their testimony.

My life experience tells me that the location and operation of this coal mine will eventually cause pollution of the Little Vermilion River. I would not

expect much pollution to occur the first day of mining, but I believe -- I believe that eventually that river will

be in some -- to some extent polluted.

Now, I have personally observed some discharge that I believe to be more or less continuous from outlet 003 for at least two months, March and April, and I have -- we also observed that large discharge in February.

It is interesting to me that most of us concerned about pollution from this mine do not stand to gain financially in any way, no matter the outcome of this hearing.

One other comment I'd like to make, I heard the Vermilion County Soil and Water Conservation mentioned. At the -- at the hearing, I believe it was on -- in September 27th, they expressed concern about siting of this mine on the Little Vermilion River. That's all the comments I have.

HEARING OFFICER: Thank you sir.

Mr. Ettinger, do you have any questions for this witness?

MR. ETTINGER: No.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No.

HEARING OFFICER: Mr. Blanton?

MR. BLANTON: No questions.

HEARING OFFICER: Thank you, sir. Thank you

for your public comment. Does anyone else wish to provide public comment here today?

MS. ELLIS: I testified. May I make a statement?

HEARING OFFICER: I think you can. Let's see if we have an objection from any of the respondents. Mr. Sofat, Mr. Blanton?

We'll allow you to come and provide your public comment.

MS. ELLIS: Okay.

HEARING OFFICER: Everybody should be aware, too, that we are going to allow a written public comment period as well which will be addressed at the close of the hearing here. We'll set a date by which you have to file anything you want to file with the Board up in Chicago.

(Witness affirmed.)

HEARING OFFICER: Yes. Please proceed. Your name again, even though --

MS. ELLIS: My name is Rosa Ellis; I'm known as Rose. When I started out on this journey fifteen months ago with this coal mine, when we found out it was where it was going to be placed, this land there means a great deal to our families. And the river, as I have told

you, we have used the 50 years that I've lived there. And

it's inconceivable to me to think that people can stand and say that this mine cannot pollute the river. We all pollute in some way every day that we breathe, every time we breathe.

And this is what has concerned me, that we have been told that there will be no pollution, there will be no change in our area. None of you are living there. We've had a great deal of change since January. We have noise that we never had before and traffic that we've never had before. But we are not against progress; we all know that we want electricity, but electricity is not one of the three things that we need to sustain our lives here on this earth. And I believe that there's other ways to get electricity, but I'll not go into that.

But what I am concerned about from this hearing, I have noticed that the Illinois EPA and that Black Beauty Coal have been arm in arm. When this appeal was applied, it was applied to the Illinois EPA, not to Black Beauty. But I've sat here two days and heard most of the comments from Black Beauty, not from Illinois EPA. Now, we pay the Illinois EPA. They are supposed to be there to protect our resources, our way of life, and I just don't believe that they're doing it. I think they're there for heavy industry. That's what I've gotten out of

this hearing.

And also, I've -- as you all know, we farm. My husband farmed over 50 years. And we have always been conservationists. We did not use exorbitant amounts of chemicals of any kind. We used to mole bore them. I heard an argument this morning over allowing research done in 1984 about the pollution being from the mines -- from the farms, excuse me, not the mines. Do any of you take in consideration since 1984 that I will say more than 90 percent of farming now is done as no till or minimum till? The mole bore plow has gone by the wayside. We just don't use it. And that was where most of your runoff from the fields -- the, the farm fields came from was the mole bore (phonetic) plow. And I will not deny that there has been soil erosion from the fields because back when we used the plow, we used it in the spring, not in the fall, because in the early spring's when you get your runoff. And we would plow after the ground had dried. So we did not have that runoff. Farmers want to conserve their topsoil. You only get topsoil in this world once. It doesn't rebuild -- only after generations after generations and generations. It takes a long time to build an inch of topsoil. And so that has been one thing that I've taken offense to here today, about the

agriculture.

I was asked, Mr. Blanton, by you in my deposition if we had used these chemicals, and I told you we had and how we had used it. And you asked me at the time if I knew what was in our water from our field tile where it flows off to the stream. Well, we went out the other evening and got a bottle, and here it is (indicating). This is from our field tile. But we also, Saturday, went to an unnamed mine, and this is what's coming off of a mine that's not been worked (indicating).

And would you rather have this water go in your river, or would you rather have this?

HEARING OFFICER: Let's let the record reflect that Ms. Ellis is holding up a bottle of clear water and a bottle of somewhat murky water and alleging that the murky water has come from the unworked mine.

MS. ELLIS: That's it. Nothing has been put in that water. It settles to the bottom.

HEARING OFFICER: Anything further, Ms. Ellis?

MS. ELLILS: That is it.

HEARING OFFICER: I have a question for you.

MS. ELLIS: Okay.

HEARING OFFICER: What are the three things in this world you need to live?

MS. ELLIS: You need food.

HEARING OFFICER: I got that one.

MS. ELLIS: You need water, and you need shelter.

HEARING OFFICER: Oh, all right. I was curious. I was going with air, but --

MS. ELLIS: Well, you need air. That is God's given to us. God has given us the water, he has given us the air. We take those things for granted. We're never going to get a replenishment of clean water. And eventually, your next big fight in this country is going to be water.

HEARING OFFICER: Well, thank you for your comment. Let's see if anybody else has questions for you starting with Mr. Ettinger?

MR. ETTINGER: No.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No.

HEARING OFFICER: Mr. Blanton?

MR. BLANTON: No.

HEARING OFFICER: Ma'am, thank you very much.

MS. ELLIS: Thank you.

HEARING OFFICER: Anybody else wishing to provide public comment to this point?

Yes, ma'am, come on up.

(Witness sworn.)

HEARING OFFICER: Would you state your name, please, and spell your last name?

MS. CRUM: Karen Crum, C-r-u-m.

HEARING OFFICER: Thank you, ma'am. You can proceed with your statement.

MS. CRUM: All right. It's a hard act to follow after Rose.

HEARING OFFICER: I know.

MS. CRUM: But I just wanted to say I haven't been around here for the last 40 years; I just got back. Been gone, been in a big city, and have really been busy. It hasn't been till I came back that I started becoming more aware of the environment, and I now must say I'm taking time to smell the roses. I'm much more aware. And I'm proud to tell people that I live very close to the Little Vermilion River which is one of the top ten cleanest rivers in Illinois, and that is important for me.

Today's hearing, I came expecting EPA to explain so I could better understand their decision for the permit, and all I basically have heard is Mr. Blanton defending Black Beauty's permit application. And it is very, very confusing to me. I'm really a little at a loss

for words as to why I didn't hear more from the IEPA and less from him. That's all.

HEARING OFFICER: Thank you, ma'am. Don't go anywhere yet, though. We may have questions for you.

Mr. Ettinger?

MR. ETTINGER: Are you a Prairie Rivers member?

MS. CRUM: Yes, I am.

HEARING OFFICER: Mr. Sofat?

MR. SOFAT: No questions.

HEARING OFFICER: Mr. Blanton?

MR. BLANTON: No questions.

HEARING OFFICER: Thank you very much, ma'am.

MS. CRUM: You're welcome.

HEARING OFFICER: Anybody else? Okay. I see nobody raising their hand to provide public comment. This is, I think, the last call on public comment then. Thank you all very much. The Board does appreciate and is always very interested in receiving comments from the members of the public in the county that's affected.

At this point in time, I want to go off the record and talk about briefs and closings, and then we'll go back on, set it up, and deal with it that way. Let's go off.

(A discussion was held off the record, and a recess was taken.)

HEARING OFFICER: We are back on the record after a recess to discuss, among other things, briefing schedules and closing arguments and whatnot. We have set up a schedule, a post hearing schedule that is as follows: We anticipate the transcript will be done by May 8th, correct, Jennifer?

COURT REPORTER: Yes.

HEARING OFFICER: We have public comments will be due on or before May 14th at the Board's offices. I've handed out the address to one of you, I know. If anybody needs it, feel free to call me at the Board's offices and ask for it. My phone number -- if anyone wants to write it down, they would be more than welcome. I'm there from eight to four every day. My number is (312) 814-3473, and that will get you directly to me. If I'm not there, you can leave a message or you can punch zero and you will be transferred out to the receptionist.

Public comments will be due on May 14th. We have the petitioner's brief will be due on May 18th. The respondent's brief as well as the amicus brief will be due on May 25th. And on May 31st, the reply brief will be due. Once again, the mailbox rule does not apply to any

of these post hearing filings. They have to be in the Board's offices and served on the other parties by the date that I -- dates that I've set out.

You guys don't have to serve your public comments on anyone. You just send it in to the Board's offices.

MR. BLANTON: How do we get those?

HEARING OFFICER: The public comments? That's a good question. Generally, the assistant clerk will send copies to the parties. However, in light of this tight time frame, I would -- I'm sure she will do that. And I would call me on May 14th, maybe we'll set up a status conference before we leave here to address that issue around the May 14th time line.

We have closing arguments we can make if we want. Mr. Ettinger, are you going to be doing a closing argument?

MR. ETTINGER: The -- some members of the public have requested that I do so. I guess I will, a brief closing argument. Hopefully that won't keep us here long.

HEARING OFFICER: Take as much time as you feel is necessary.

MR. ETTINGER: No, I just wanted to make a few

points. This is an important proceeding in a number of senses, and one of them is that I believe this is the first third-party appeal of an NPDES permit that's actually gone to hearing, and it will be heard by the Board; so some of the rules and procedures that we're setting up here will be important for a lot of other proceedings that are to come.

And for that reason, I think we need to focus a lot more on maybe procedural issues than we have in the course of this argument. It's been difficult for all of us because the rules simply haven't been established yet on some of these proceedings because there just have not been prior proceedings like this. I think what we've seen, though, is sort of two visions of how the permitting process is supposed to work here. One, we believe, was mandated by the Clean Water Act and, I think, the practical requirements of common sense and what the public can be expected to do in these proceedings in order to participate.

And then there's an alternate vision which has been put forward to some degree by the agency, although I'm not sure they, they believe it -- in it as a matter of policy, although I think they believe it was acceptable in this matter.

And another vision that was advanced by the coal company, or rather, the version that was advanced by the coal company. We believe that the public has to be able to rely on the agency to do its homework here. We have to be able to see the documents collected, the studies done, the evidence in the public hearing and part of the public process. In fact, there's a, a circuit court decision that's cited under the Clean Water Act which refers to the public -- the NPDES writing process as to be like in a fish bowl-like atmosphere, everything is supposed to be out in public. And that's because we have to rely on the agency, as members of the public, because we are not in a position as neighbors, as people who live in this area, to go out and hire an expert. We count on the State to do that. And any of the facts that the agency or, rather, that the permittee wants brought to the attention of the agency, they should do that, but they should do it up-front so that the agency can consider that data as part of the public process. Because while we have to rely on the agency, we don't just have to rely on the agency because the Clean Water Act and the public participation requirements require responses to public comments so that we can see answers in the public record as to our concerns.

So, what we then have is a requirement, we believe, under the Clean Water Act and certainly the way the Board should do this now unless the Board wants to hear many, many appeals of getting all of the evidence in the public record. That seems to be what the Illinois statute requires as well as Clean Water Act. What we have instead and what was done here is the public record and the public hearings were held almost as like a scoping hearing in which we raised concerns which were then worked out in the dark of night between the company in documents that we didn't see until after the records were closed and documents were filed after the close of the public hearing.

In e-mails between U.S. EPA and IEPA that we didn't see until after the close of the public record, and now, of course, today we've seen another extension of that principle in which the company now wants to justify this permit and offer all sorts of information six months after or whatever it is -- five months after the close of the public hearing record. What that does, of course, is totally skew the process. We can't go through -- the public can't participate in a process in which they don't get to see the information up-front. They have to be able to rely on the expertise of the agency in the public

process. And we have a lot of faith in the agency; we

know they have a lot of smart people who are capable of reading the studies and looking at many of the documents that have been referred to or alluded to today. And that's -- because they're so smart and because they are capable, they should be able to discuss those documents in the public responsiveness survey which is designed by the agency to give the agency's answers to the concerns that were raised by the public. And they pretty much have to live or die on the basis of what's on the record, and that's what the statute indicates.

It was argued that we presented evidence outside of the record, and that's really true only in the sense that we attempted to elucidate some of the things that the statute does require that persons having third-party appeals demonstrate. And I think if you look at the evidence that we actually put on, almost all of that falls into what is addressing issues in the third-party appeal statute.

We also, because there was a public hearing, sought to elucidate and explain our objections to the proceeding a little more, but they really basically are in the nature of explaining our arguments and our concerns and specifically go to what the specific problems were and

the issues that were raised by the failure to address

these problems that we raised during the public hearing. In fact, the statute's quite clear that if we don't raise issues, we can't bring them up later; and furthermore, we believe strongly that means also that nobody else can come in with a new rationale as to why this is a great permit after the close of the public hearing.

We have explained what the problems were with the permit as written. The problem with the permit as written is it left all sorts of very key provisions wide open. It simply did not spell out the most critical provision which was how the dilution was going to be monitored here. The whole theory of this permit and how it's going to protect state water quality standards is that we are going to assure that there's always enough flow in the unnamed tributary so that there are not violations of state water quality standards in the unnamed tributary. What the permit says, though, however, is it doesn't spell out how that's going to be monitored or described in the permit. It says, Permittee, you go out and work it out; and in 180 days, you come back and tell us how we're going to do it.

Well, how am I going to enforce that as a member of the public? Can I bring a lawsuit based on what

they told the agency 180 days after the permit was written, under the Clean Water Act? Is any of that

enforceable? Did I have a chance to comment on their compliance plan when it wasn't developed until 180 days after the permit was issued?

So, what we have here is a situation which fundamentally denied the public a right to participate -- I'm not going to go through all the other things. We've heard quite enough today. But what we have here is a whole process which fundamentally cut the public out of the process in favor of letting the public -- it was great. The public was allowed to raise concerns in the public hearing that was held in September 27th and in the prior letters and in the post comment hearing comments; and then deals were cut, patches were made to try and address those concerns. We never got to see them. We never got to comment on them. Some of these things might well have been worked out if they had been presented beforehand and the public had had an opportunity to understand them.

Some of the charts and beautiful maps that we saw today with the circles and arrows and things, we would have really liked to have seen those at the public hearing. Those would have been very good. And if Mr. Fry

or someone else had presented that information, that would have been very interesting, but it wasn't presented at the

time. What we were asked to buy with this permit was a pig in a poke. That was what we were given in the permit in terms of what we were asked to buy with the public hearing.

And then, on a couple of key terms, the permit basically says, you go to -- you come up with a plan after the permit's issued, and then we, IEPA, and the permittee in the dark of night will either approve or disapprove what you came out with. This is the opposite of what the Clean Water Act requires and what state law requires.

Thank you.

HEARING OFFICER: Thank you, Mr. Ettinger. Mr. Sofat, do you have anything --

MR. SOFAT: Yes.

HEARING OFFICER: -- in terms of closing argument? I take it, Mr. Ettinger, you're not waiving the filing of your post hearing brief.

MR. ETTINGER: No. Emphatically not.

MR. SOFAT: The agency would like to thank all the participants in this hearing and especially the Pollution Control Board. The agency believes that Toby Frever's testimony yesterday, the record that the agency

filed with the Board, as well as the record that was developed during this hearing clearly shows that we followed the provisions of the act as well as the

applicable regulations.

We strongly disagree with the petitioner's interpretation of public participation, requirements of the Clean Water Act. They promote a resource-intensive approach, and we believe the purpose of a public hearing is to explore if there is additional information that the agency needs to consider prior to issuing a permit or there is a need to modify the permit. We believe that based on the comments that we received during this public hearing, we considered all that information, and we do believe that we are competent and we are smart enough to make decisions without asking for further input on those issues. And that is how this permit was issued.

The agency will make further, more comprehensive arguments in their post hearing brief, and that's all I have to say. Thank you.

HEARING OFFICER: Thank you, sir. Mr. Blanton, do you have any closing argument?

MR. BLANTON: Yeah, I have a couple brief things. I will defer to the agency about the process and what the regulations provide and what rights the public

have in this permitting process. My understanding of Illinois law on this point is that Mr. Ettinger's wishes and Prairie Rivers' wishes for what rights the public have

in this process are not anything but wishes. That's not the way the regulations are written.

And I believe Mr. Sofat is correct that the agency scrupulously followed all of the requirements of Illinois law in allowing participation. I think there is another principle involved here that's a very serious one that we do intend to raise with the agency, and that is that permittees and applicants in the regulated community also have rights, and among the rights that we have is the right of the state government to take neutral positions with professional judgments that are involved in this case.

We have serious concerns about the process, too, that underlie the attacks on this permit by Prairie Rivers. This is a situation where the petitioner has a member basically taking the -- doing the investigation and writing the position paper and comments of a state agency to a sister state agency. We have people in state agencies who are being asked for advice and consulting with Petitioner and people attacking the permit on issues that we, frankly, believe are turf wars within the agency

that we are victimized by in the final terms of the permit. And there are other things that concern us about the process.

I think the public, if you look at the public

record, yeah, there's -- a huge amount of it is public participation, the public hearing, the public comments. The fact that the public has concerns does not mean that they are right or that they have a scientific basis to attack a reasonable evaluation of what this discharge is. We are not talking in this case about something brand-new under any circumstances whatsoever. What coal mines are, what effects that they have, what regulated discharges after material has been held in sediment basins is long established, well understood technology.

The questions about endangered species are fair questions to ask, but I believe that what the agency did in this case when it consulted with the state agency that had raised the concerns in the first instance, listened to EPA's proposed way of dealing with those concerns, and concurred in what was decided is reasonable, is supportable under the law and the way the process is supposed to work.

At the end of the day, this permit imposes requirements on Black Beauty that are far beyond what we

believe are justified by Illinois law because we believe when we checked the box in section three, our operating permit, we were entitled to have the whole issue of water quality standards under Subtitle C off the table, under

Illinois law. We will deal with U.S. EPA, but if the agency had followed the Illinois regulations, we would have had permit limits established, technology based under Subtitle D. That's what we believe the law allowed the agency to put into our permit. We have accepted conditions, and we have not appealed them. But the fact of the matter is we have requirements that are imposed on us in response to the concerns voiced by the public that more than adequately address concerns about water quality and the impacts of the quality of the water on the biota there. When any reasonable evaluation is made, frankly, I don't think it is possible to satisfy the concerns of many of the people who have commented. That's fine. They're entitled to stay worried and concerned as long as they have. That's their right. But it is not the duty of this agency in dealing fairly with a regulated community under rules and regulations that have been established over many, many years, with all of the procedural safeguards, to say that just because someone is worried and just because someone says, Well, I'm not satisfied, that that

is a lawful basis to deny a permit or to upset a permit term.

The professionals in this field from U.S. EPA who have certainly voiced their concerns loud and clear, the people at the endangered -- who are responsible for

protecting endangered species in this state have expressed their concerns loud and clear, as well as the mining folks, as well as the long-time professionals in this agency have all concurred that their professional judgment is that the data show that the concerns are not warranted. And you can't deny us a permit because the neighbors are just concerned about what might happen. You have to look at the evidence in the record, and it more than adequately sustains this permit.

HEARING OFFICER: Thank you, Mr. Blanton. Mr. Hubbard, do you have something you want to add in terms of closing argument?

MR. HUBBARD: Just a few remarks, please. I'm in a unique situation here in that these objectors, members of Prairie Rivers, at least in the past have been clients, some of them; certainly they're neighbors; they're people that live in the same community that I do, so I don't want to get in a position of stepping on their rights.

On the other hand, I've been retained to represent the rights of Vermilion Coal that owns over 10,000 acres of coal in this location. The essence of my remarks is that I think the system has worked. I think it's probably got some improvements that could occur, but

the people have been heard, the process has been weighed, the balances have taken place, the Environmental Protection Agency has done its job.

Toby has testified as to all of the balancing process and all of the things that they've done to try to comply with the law. The law's been complied with. The permit's been issued. The burden of proof on the third party is to prove that the permit should not have been issued. And all we've heard in these two days, other than evidence proving why the permit should have been issued, are inquiries and questions and suggestions. We have heard nothing as to why the permit should not have been issued.

So, therefore, we feel it has been properly issued, and we would urge the Board to concur in the issuance of that permit and not set it aside. Thank you.

HEARING OFFICER: Thank you, Mr. Hubbard. Mr. Ettinger, do you have any rebuttal argument?

MR. ETTINGER: Only to say that anything I

didn't say in this hearing or offer in this hearing I may still offer based on what's in the public record, and that, in fact, is what our arguments will be; those will be the documents that we will show and meet the burden that Mr. Hubbard referred to.

HEARING OFFICER: Thank you very much. I have

a credibility statement I am required to make by law. Based on my legal judgment and experience, I did not find any credibility issues with the witnesses who testified at this hearing.

That being said, I think we are finally finished with the hearing. Thank you all very much for your participation and especially for those members of the public who had the constitution to sit through two days.

Thank you all very much.

(Proceedings concluded at 4:56 p.m.)

STATE OF ILLINOIS :
: SS
COUNTY OF PEORIA :

I, JENNIFER E. JOHNSON, Certified Shorthand Reporter, Registered Merit Reporter, do hereby certify

that the foregoing transcript of proceedings is true and correct to the best of my knowledge and belief;

That I am not related to any of the parties hereto by blood or marriage, nor shall I benefit by the outcome of this matter financially or otherwise.

_____

JENNIFER E. JOHNSON
Certified Shorthand Reporter
Registered Merit Reporter
(License #084-003039)