Τ	BEFORE THE ILLINOIS POLLUTION CONTROL BOARD		
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4	GLADYS L. KNOX and		
5	DAVID A. KNOX,		
6	Complainants,		
7	vs. PCB No.: 00-140		
8	TURRIS COAL COMPANY and		
9	AEI RESOURCES, INC.,		
10	Respondent.		
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12			
13			
14	Proceedings held on June 11, 2002 at 10:00 a.m., at the		
15	Illinois Pollution Control Board, 600 South Second Street, Suite		
16	403, Springfield, Illinois, before Hearing Officer Bradley		
17	Halloran.		
18			
19			
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10	on behalf of the Respondent.
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1 PROCEEDINGS 2 (June 11, 2002; 10:00 a.m.) 3 HEARING OFFICER HALLORAN: Good morning. My name is Bradley Halloran. I am a Hearing Officer with the Illinois 5 Pollution Control Board. I am also assigned to this matter, entitled Gladys Knox and David Knox versus Turris Coal Company 7 and AEI Resources, Inc., PCB 00-140. 8 Today's date is June the 11th in the year 2002. This matter has been noticed pursuant to the Board regulations and 9 10 will be conducted in accordance with Sections 103.212 and Section 11 101, Subpart F of the Board's procedural rules. This matter involves a citizen enforcement, alleging 12 violations of Section 24 of the Act and Sections 900.102 and 13 Sections 901.102 of the Illinois Administrative Code. 14 15 Are these witnesses here, or are they members of the public 16 or --MR. NORTHRUP: No, this is David and Gladys Knox and Greg 17 18 Zak. 19 HEARING OFFICER HALLORAN: Okay. So there are no members of the public here. But if there were, they would be allowed to 20 testify, subject to cross-examination. 21 22 I also want to note for the record that I will not be

making the ultimate decision in the case. That decision will be

made by the seven members of the Illinois Pollution Control

23

- 1 Board. My job is to ensure an orderly transcript and a clear
- 2 record and rule on any evidentiary matters that may arise.
- 3 With that said, Complainant, would you like to introduce
- 4 yourself?
- 5 MR. NORTHRUP: Yes. Charles Northrup, for the
- 6 Complainants.
- 7 HEARING OFFICER HALLORAN: Thank you.
- 8 MR. COX: Randy Cox for the Respondent, Turris Coal
- 9 Company.
- 10 HEARING OFFICER HALLORAN: Thank you. There was some
- 11 indication prior to the hearing that there may be some
- 12 preliminary motions. Mr. Cox?
- 13 MR. COX: That is correct. The first one may actually not
- 14 be a motion, but just a point of information and maybe making
- 15 some motions later in terms of some of the discovery responses
- 16 we did not get. We did not ever get any discovery update from
- 17 the Knoxs. I know the rules require them to update their
- 18 discovery. But maybe they don't have anything to update. That's
- 19 why I said that is kind of a point of information.
- 20 But not only do the rules require it, but I made a specific
- 21 request for them to formally update their discovery responses.
- 22 So to the extent something may come up that is in there, I want
- 23 to let you know that I will be making a motion at that point.

- 1 that time.
- 2 MR. COX: Okay. Along those lines, Mr. Zak's report was
- 3 tendered to us less than ten days prior to the hearing. I think,
- 4 under the rules, it should have been tendered to us before then.
- 5 As you are aware, he was going to go out months earlier in the
- 6 year and either didn't or did and didn't do a report.
- 7 We were -- I had indicated continually that I did not have
- 8 a problem with that as long as we had a chance to talk to him.
- 9 Mr. Northrup indicated that we could talk to him informally or
- 10 take his deposition. We did not have the opportunity to do that.
- 11 I think, you know, I would like to make a motion that his
- 12 testimony be barred for that reason.
- HEARING OFFICER HALLORAN: I will let Mr. Northrup answer.
- 14 But with all due respect, I think we had a prehearing conference
- 15 on June 3rd. At that point it was known by everyone, including
- 16 myself, that I guess Mr. Zak's supplemental report was coming in
- 17 and that Mr. Northrup was going to get it to you, Mr. Cox, by no
- 18 later than June 4th. And there didn't seem to be any objection
- 19 at that time.
- 20 MR. COX: There was no objection as long as we had the
- 21 opportunity to talk to Mr. Zak and/or to take his deposition, and
- 22 we did not have that opportunity. I placed a call to Mr.
- 23 Northrup last week and had not heard from him in this regard. I

24 sent an e-mail on another issue also and did not hear from him.

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HEARING OFFICER HALLORAN: Mr. Northrup? MR. NORTHRUP: My response to that, first of all, I did get 3 a call and an e-mail from Mr. Cox. I don't believe it contained any specific request to speak, be it deposition or otherwise, to 5 Mr. Zak. We had always held out the possibility, either formally through deposition or informally, that Mr. Cox could speak to Mr. 7 Zak anytime he wanted. Also, I would point or direct the Board's attention to the 8 McDonough versus Robke case, PCB 00-163, decided March 7th of 9 10 2002, where a similar type of issue came up, and the Board decided that basically, no, the party who is making the motion 11 12 knew this information was out there, and there was no undue 13 surprise, that type of thing. So they allowed Mr. Zak, as a 14 matter of fact, to testify. I think that case is controlling in 15 this case. HEARING OFFICER HALLORAN: What kind of information was 16 17 "out there," as you say? 18 MR. NORTHRUP: Out there? 19 HEARING OFFICER HALLORAN: Was it public access? MR. NORTHRUP: In terms of -- I don't understand your --20 21 HEARING OFFICER HALLORAN: The case you are referring to,

you said the Board said the information was out there.

- 23 MR. NORTHRUP: No. Specifically in this case Mr. Zak, if I
- 24 remember, had gone to the property the morning of the hearing.

- 1 That was one of the things which the Board had to address. I
- 2 believe there was also a report, but the Board indicated -- let's
- 3 see. It will be guided by the principles of preventing injustice
- 4 to the parties as a result of unfair surprise. It talks about
- 5 conversations between the parties on what Mr. Zak would testify
- 6 to.
- 7 The occurrence of this conversation would preclude any
- 8 argument that the Respondent would be surprised by these opinions
- 9 and did not have a chance to evaluate Zak's suggestions prior to
- 10 hearing. These were all suggestions with respect to
- 11 recommendations and how to fix the noise problem.
- 12 HEARING OFFICER HALLORAN: Right.
- 13 MR. NORTHRUP: Mr. Cox had the report for about a week or
- 14 so before today's date. So there is certainly no undue surprise.
- 15 In fact, in that case, they were oral representations of Mr. --
- 16 opinions of Mr. Zak, not even written, like they are in this
- 17 case. That would certainly lead to a better evaluation by Mr.
- 18 Cox in this case than the Respondent had in the Robke case. So
- 19 based on that case, I think it is clear that the Board will allow
- 20 this information to come in.
- 21 HEARING OFFICER HALLORAN: All right. Mr. Cox, anything
- 22 further?

- 23 MR. COX: Just briefly. You know, I did not hear back from
- 24 Mr. Northrup on either one of the messages. I did not, in fact,

- 1 indicate that I was calling because I wanted to talk to Zak or
- 2 take his deposition, although I did -- clearly, the e-mail
- 3 referenced this case and certainly my phone message would have
- 4 referenced this case probably as to various issues.
- 5 But, you know, again, I did not -- no, I did not
- 6 specifically e-mail him and say I want to talk to Zak, and I want
- 7 to talk to him now or leave a phone message to that effect.
- 8 HEARING OFFICER HALLORAN: Well, I think, based on my
- 9 conversations with both parties on June 3rd, it has been -- I
- 10 assume the supplemental information was provided to Mr. Cox by
- 11 June 4th?
- MR. NORTHRUP: (Nodded head up and down.)
- 13 HEARING OFFICER HALLORAN: I didn't get a phone call from
- 14 you, Mr. Cox, or -- I mean, here we are at the 11th hour, 10:00
- 15 a.m. And I am going to overrule your objection and allow Mr.
- 16 Zak's testimony.
- 17 Of course, you can appeal my ruling in a posthearing brief.
- 18 Well, actually, I think you have, what, 14 days. I will -- I
- 19 think it is 14 days. But I will take a look at that and get back
- 20 with you on that.
- 21 MR. COX: Okay. One more thing. Since his report will be

- 22 coming in, there is some hearsay statements in there that the
- 23 Knoxs have made. Actually, that was the subject of my e-mail to
- 24 Mr. Northrup, that we would like to have some of those redacted

1 out of it before the Board sees it. There is also a reference to

- 2 the odor of the mine or something like that. That is not an
- 3 issue here. I think that is not necessary. It relates to I knew
- 4 the wind was coming from the fan, because I could smell it. That
- 5 is not an issue here.
- 6 We won't dispute -- we would stipulate that he says the
- 7 wind was blowing that direction. We would stipulate that. I
- 8 would just like to have that redacted out of the report. I don't
- 9 want one of the Board Members to say, oh, maybe there is another
- 10 issue here and have that potentially have some affect on the
- 11 outcome here.
- 12 HEARING OFFICER HALLORAN: Mr. Northrup?
- 13 MR. NORTHRUP: I do object to taking out those hearsay
- 14 statements and primarily because the report, as written, is going
- 15 to come in as a business record under -- I am looking for the
- 16 rule. It is 101.626(e) of the Board's procedural regulations.
- 17 So the document, as a whole, should be admissable as is.
- 18 Furthermore, and to the extent that those statements made
- 19 by the Knoxs influence certain actions by Mr. Zak, they are
- 20 relevant. Also, the Knoxs are here. They can be cross-examined
- 21 on those questions, if need be, if Mr. Cox wants to.

- 22 With respect to the odor issue, again, I mean, that is a
- 23 factual observation of Mr. Zak. So I do not think it should be
- 24 excluded. Now, I will stipulate, too, that this is not an odor

- 1 case. We are not making any allegations about odor. But, again,
- 2 it was an observation of Mr. Zak, and I think he is entitled
- 3 to -- it is entitled to be in the report.
- 4 HEARING OFFICER HALLORAN: Okay. With that, I am kind of
- 5 at a disadvantage. I don't have it in front of me. I guess we
- 6 could address it briefly again when the time arises, if that is
- 7 fine with you.
- 8 MR. COX: That's fine with me.
- 9 HEARING OFFICER HALLORAN: Okay.
- 10 MR. COX: It is just an issue of getting to it before it
- 11 goes to the Board. Yes, that is fine with me.
- 12 HEARING OFFICER HALLORAN: Okay. Thank you. Anything
- 13 further?
- MR. COX: No.
- 15 HEARING OFFICER HALLORAN: All right. Mr. Northrup, do you
- 16 have an opening to give?
- MR. NORTHRUP: No, Your Honor. I am going to reserve my
- 18 opening and closing arguments, reserving for the briefs.
- 19 HEARING OFFICER HALLORAN: You can call me Mr. Halloran or
- 20 Hearing Officer. That is fine. I will get a big head if you

- 21 keep calling me Your Honor.
- MR. NORTHRUP: Okay.
- 23 HEARING OFFICER HALLORAN: Okay. Mr. Cox, do you have an
- 24 opening?

1 MR. COX: No, I don't.

- 2 HEARING OFFICER HALLORAN: Okay. Very well.
- 3 Mr. Northrup, do you want to call your first witness?
- 4 MR. NORTHRUP: Yes. I would like to call David Knox to the
- 5 stand.
- 6 HEARING OFFICER HALLORAN: Please raise your right hand and
- 7 the court reporter will swear you in.
- 8 (Whereupon the witness was sworn by the Notary Public.)
- 9 DAVIDA. KNOX,
- 10 having been first duly sworn by the Notary Public, saith as
- 11 follows:
- 12 DIRECT EXAMINATION
- 13 BY MR. NORTHRUP:
- Q. Can you please state your name for the record.
- 15 A. David A. Knox.
- 16 Q. How old are you, Mr. Knox?
- 17 A. I am 62.
- 18 Q. What do you do for a living?
- 19 A. I farm, self-employed as a farmer, retired from Turris
- 20 Coal Company.

- 21 Q. Okay. Did you grow up here in Sangamon County?
- 22 A. I was born and raised in Northern Illinois, just outside
- 23 of Waukegan, lived in Southern Wisconsin for a period of time,
- for about ten years, and moved here in 1967.

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- 1 Q. Okay. Are you married?
- 2 A. Yes, I am.
- 3 Q. Is your wife here today?
- 4 A. She is present, yes.
- 5 Q. Do you have any children?
- 6 A. We have four children.
- 7 Q. What are their ages?
- 8 A. We have two boys that are 36. A daughter who is 35, or
- 9 34. Excuse me. And a son who is 31.
- 10 Q. Okay. Now, do any of those children live with you
- 11 currently?
- 12 A. No.
- 13 Q. How about grandchildren?
- 14 A. We have a total of four grandchildren.
- 15 Q. Did you ever have any foster children?
- 16 A. We had 20 foster children over a period of approximately
- 17 seven years.
- 18 Q. What seven-year period was that?
- 19 A. It would have been the late 1980s, the mid to late

- 20 1980s, in that general time.
- 21 Q. Okay. And did those children reside with you?
- 22 A. They did. Anywhere from -- a few of them were there
- 23 just short periods of time. We had one that was with us for
- 24 almost two years.

- 1 Q. Okay. Where do you reside?
- 2 A. At 8214 East Main Street in Williamsville.
- 3 Q. Okay. Is that in the City of Williamsville?
- 4 A. No, it is approximately two miles east of Williamsville
- 5 in a rural area.
- 6 Q. Okay. You said it was two miles outside?
- 7 A. Approximately two miles east of the Village, yes.
- 8 Q. How big is the town of Williamsville?
- 9 A. I believe around, what, 1,200 or 1,300, I think, is the
- 10 population the last I saw.
- 11 Q. How long have you lived out on Main Street?
- 12 A. I have been at that address -- bought the property in
- 13 November of 1975, built the house the following summer, and moved
- 14 into the house in September of 1976.
- 15 Q. So your children grew up there?
- 16 A. Yes.
- Q. And that's when you had your foster kids, they were
- 18 there at that location?
- 19 A. Uh-huh, yes.

- Q. You do own that property; is that correct?
- 21 A. Yes, I do.
- 22 Q. In terms of size or acreage, how big is the property
- 23 that you own there?
- 24 A. We originally purchased four acres in the corner where

- the residence and the buildings are, and have added to it since
- 2 that time and we now have approximately 94 acres there.
- 3 Q. That's 94 total?

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- 4 A. Total acres, yes.
- 5 Q. Other than the four original acres that you purchased,
- 6 what do you do with the other 90?
- 7 A. Basically the rest of the ground -- most of the rest of
- 8 the ground is in agricultural, raising crops.
- Q. Describe the four acre parcel for me, please?
- 10 A. The four acre parcel is 330 foot in width, and 528 feet
- 11 in depth, on which is located our residence, two machine sheds
- 12 and two grain bins for storage of crops.
- 13 (Whereupon a document was duly marked for purposes of
- 14 identification as Complainant's Exhibit 2 as of this date.)
- 15 Q. Let me just show you what I have marked as Plaintiff's
- 16 Exhibit 2. I just want you to turn to page 11 of 15. Can you
- 17 tell me what that is?
- 18 A. That's a drawing of the property, as such, and when I

- 19 spoke -- when you asked about the four acres, the four acre line,
- 20 the original purchase line comes across that property just to the
- 21 north of where the pond is. We purchased another piece of
- 22 ground, a ten acre parcel, behind that a couple years after we
- 23 bought the original, and the pond is located on the north edge of
- 24 that section of ground.

- 1 Q. Now, did you draw this map?
- 2 A. I did not, no.
- 3 Q. Okay. Is the map accurate, as far as you can tell?
- 4 A. It is accurate fairly well, other than he has small
- 5 trees listed there with garden. There is also a garden -- our
- 6 actual vegetable garden is located to the north of the grain
- 7 bins. Other than that, it is accurate, yes.
- 8 Q. Okay. You can put that aside. Describe for me your
- 9 residence, your actual house?
- 10 A. Our residence is a ranch style, brick exterior home,
- 11 approximately 1,800 square feet on the ground level. There is
- 12 approximately 1,400 square feet in the basement that is finished,
- 13 and about another close to 400 feet in the basement that is not
- 14 finished. It has a two car garage attached to it.
- 15 Q. Take a look at page 7 of 15 of that document that I have
- 16 just given you. Photograph four, is that a picture of your
- 17 house?
- 18 A. Yes, it is.

- 19 Q. How many bedrooms does the house have?
- 20 A. The house has three bedrooms upstairs. When the kids
- 21 were home they also had one bedroom in the basement for part of
- 22 the time, and part of the time we had two boys that stayed down
- 23 there. So there were actually two that could be used in the
- 24 basement.

- 1 Q. What direction does your front door face?
- 2 A. The front door faces north.
- 3 Q. How about your bedrooms, where are the bedrooms located
- 4 in the house?
- 5 A. The bedrooms are located on the west end of the house,
- 6 one on the northwest corner, and one on the actual north, and
- 7 then our master bedroom is on the southwest corner of the house.
- 8 Q. Okay. Do you have windows in those bedrooms?
- 9 A. Windows on all of them, yes.
- 10 Q. All right. Just one window or sets of windows?
- 11 A. The smallest bedroom has one window on the north. The
- 12 next larger bedroom has a window on the north and the west. Our
- 13 bedroom has windows on the south and on the east.
- 14 Q. Do you have a patio or a deck at the house?
- 15 A. We have wood decks which stretched across approximately
- 16 60 feet of the south side of that house along the garage and then
- 17 across the sun room area.

- 18 Q. Is that deck still there?
- 19 A. That deck was taken out in January of this year.
- Q. Why was that?
- 21 A. Part of it from the lack of use down through the last
- 22 few years. We had found that we were using it less and less, and
- 23 it had come to the point where the flooring was needing to be
- 24 replaced. And because of the fact that we were not using it, as

- 1 we had in the past, we chose to take that deck out. We are
- 2 currently building one on the east end of the house, which is
- 3 shielded more so from the south and the west then.
- 4 Q. Why weren't you using the deck as much?
- 5 A. Part of it because of the noise level, in the fact that
- 6 when you were there, it was not as enjoyable as it had been in
- 7 the past. There was a constant background noise out there.
- 8 Q. Okay. What do you attribute that noise to?
- 9 A. The noise was coming from the exhaust fan at Turris
- 10 Coal, which is immediately adjacent to us to the west.
- 11 Q. Now, you said you have some sheds on the property. What
- 12 do you use those for?
- 13 A. Storage of machinery, repair of machinery.
- 14 Q. I guess I should have asked, how many sheds do you have?
- 15 A. There are two of them currently there.
- Q. What are their sizes?
- 17 A. The largest immediately to the south of the house is a

- 18 66 by 120. Another one lying to the south of it is a 48 by 72.
- 19 Q. What are they made out of?
- 20 A. They are pole construction, steel skin.
- 21 Q. I am sorry. Did you tell me what you use them for?
- 22 A. For storage and repair of machinery, yes.
- 23 Q. What kind of machinery repair do you do?
- 24 A. General maintenance of farm equipment, welding,

- 1 fabrication. I build -- I have built a lot of my own trailers
- 2 and some of my own machinery.
- 3 Q. Is this a commercial enterprise at all?
- 4 A. Not in that way. We do -- I do some repair work,
- 5 neighbors and so on at times that are in need of help or repair,
- 6 and because I have got the welder there and so on I will do that
- 7 type of work, yes.
- 8 Q. But you don't advertise in the local paper or the yellow
- 9 pages?
- 10 A. No.
- 11 Q. What other improvements do you have on the property?
- 12 A. Again, in the backyard we have a gazebo out there, which
- 13 is strictly -- I shouldn't say strictly, but it is there as
- 14 decoration and aesthetic value. It was used for our daughter's
- 15 wedding. It was built for that purpose, for a backyard wedding.
- 16 Other than the garden, you know, the...

- 17 Q. Okay. What types of gardens do you have?
- 18 A. We have our vegetable garden in the front. In the back
- 19 I have an area where I raise trees. I start with seedlings and
- 20 have raised them up. The majority of those trees have gone to
- 21 build a windbreak area along the west side of my property, which
- 22 extends for a full half mile north and south. A lot of those
- 23 trees have been donated to the local school for landscaping
- 24 purposes.

- 1 Q. So you don't sell those trees?
- 2 A. Have not been, no. Some of them have been donated to
- 3 Turris. Part of the trees that are on their property come out of
- 4 that area where I raised them also.
- 5 Q. The vegetable garden, what is the size of that?
- 6 A. Approximately 48 in width and it would be, I would say,
- 7 maybe 70 feet in length.
- 8 Q. Okay. The vegetables that you grow there, is that for
- 9 your own consumption?
- 10 A. That is for our own use, yes.
- 11 Q. Now, I note on this -- back on the diagram, page 11 of
- 12 15, there is a pond.
- 13 A. Yes.
- 14 Q. Is that natural or man-made?
- 15 A. That was man-made. We built that probably two or three
- 16 years after we built the house, somewhere in that general time.

- 17 Q. Why did you build it?
- 18 A. It was built for recreational purposes for ourselves and
- 19 our kids. I have enjoyed fishing through the years. The kids, I
- 20 wanted to be able to introduce them to it. As they grew, they
- 21 spent a lot of time there, and had friends in. They used it for
- 22 ice skating parties, sledding parties during the winter, and
- 23 fishing anytime the water was thawed.
- Q. Now, other than the kids, do you use the pond as well?

- 1 A. Use it -- have used it extensively, yes.
- 2 Q. How have you used it extensively?
- 3 A. It has always been somewhat of my getaway place, a place
- 4 to go and relax evenings. We have fish there which I feed daily.
- 5 We have ducks and geese out on the pond. It is a place to fish.
- 6 I don't know of a time that we have really eaten any fish out of
- 7 the pond. What we catch we put back in so that they are there
- 8 for a chance to catch again for ourselves and for the kids.
- 9 Q. Has your use of the pond changed over the years?
- 10 A. It has diminished in the last couple of years. The
- 11 solitude that was there has diminished tremendously.
- 12 Q. Why don't you use it anymore or why has your use
- 13 diminished?
- 14 A. It is diminished more than anything else just simply
- 15 from the fact that I could go out there and relax and enjoy

- 16 listening to the birds and the ducks and the geese and that that
- 17 were around the pond, and with the noise that is being emitted,
- 18 coming across from the fans, since the pond is our closest point
- 19 to that as far as structures that we use, with that increase in
- 20 noise, it is just not as enjoyable to be out there.
- 21 Q. Before the noise came on site, how often would you use
- 22 the pond area?
- 23 A. I would probably average three to four evenings a week,
- 24 and usually it was at a time when you would come close to the end

- 1 of the day's work and I would spend close to an hour there,
- 2 usually 6:00 to 7:00 in the evening or so before going on in the
- 3 house, during normal weather.
- 4 Q. How much time do you spend at the pond now?
- 5 A. I don't know if I would average one evening a week.
- 6 Probably would not average that.
- 7 Q. Again, what do you attribute the noise to?
- 8 A. From the exhaust fan, and I am not sure from what
- 9 portion, whether it is from the actual air movement or from
- 10 vibration and so on. I can't say.
- 11 Q. When you moved to the property in 1975 or 1976, can you
- 12 describe what the surrounding area was like?
- 13 A. The closest residence was a quarter mile. What I bought
- 14 was an area that had been a corn field that year. There was one
- 15 tree directly across the road, an old cottonwood tree. That was

- 16 the only -- that was the closest living thing, other than planted
- 17 crops and grass on the road.
- 18 Q. That's essentially true for all directions around your
- 19 property?
- 20 A. Yes, it was. The closest residence was a quarter mile
- 21 to the east.
- 22 Q. Now, the -- has the area changed now?
- 23 A. Yes, it has.
- Q. In what way?

- 1 A. The -- for one, what we have built, the amount of trees
- 2 that we have put in, there are a lot of trees out down through
- 3 that area now. And then Turris bought the 30 acres immediately
- 4 to the west of our residence and established a change house for
- 5 the workers to come and go to work and shower and so on, and
- 6 established parking lots, and put in an intake shaft to allow
- fresh air into the mine and to allow workers to go in, and the
- 8 exhaust shaft to withdraw the air from the mine.
- 9 Q. When did Turris move in, as far as you know? When did
- 10 they purchase the property?
- 11 A. They purchased the property, and I can't give you an
- 12 exact date. I would have to guess it was roughly 1997, maybe
- 13 into early 1998. I am not positive exactly.
- 14 Q. Was that also generally the time when they started to

- 15 make improvements on the property?
- 16 A. Shortly after they purchased it is when they started,
- 17 yes. They had to do some excavating work to start with. They
- 18 had to drill the shafts down into the mine.
- 19 Q. Backtracking a little bit, Main Street, the one that
- 20 runs out in front of your house --
- 21 A. Uh-huh.
- 22 Q. -- can you describe what type of road or street that is?
- 23 A. It is a two-lane oil and chip surface highway. It
- 24 carries a fair amount of traffic. Most of it is -- had been

- 1 rural traffic relating to the farms in the area. There was some
- 2 traffic which came from Elkhart, which would come out to this
- 3 blacktop and then go into Williamsville. Not a great deal.
- 4 Q. When you refer to it as a highway, it is certainly not
- 5 an interstate?
- 6 A. No, it is a county maintained -- a Sangamon County
- 7 maintained highway.
- 8 Q. Okay. I believe you indicated that you used to work for
- 9 Turris Coal?
- 10 A. Yes, sir, I did.
- 11 Q. Are you generally familiar with coal mining operations?
- 12 A. Yes, sir.
- 13 Q. What actually did you do for Turris?
- 14 A. I worked under ground in various capacities. I worked

- 15 production part of the time I was there. I worked construction
- 16 part of the time. So I worked in -- most of the phases of work
- 17 that goes on under ground I, at one time or another, was a part
- 18 of. So I am fairly familiar with all phases of under ground
- 19 operation.
- Q. When did you leave Turris?
- 21 A. I retired January 1 of 1998.
- 22 Q. Okay. Obviously, in the year 2000 you filed a complaint
- 23 with the Pollution Control Board against Turris?
- 24 A. Uh-huh.

- 1 Q. Is that correct?
- 2 A. That's correct.
- 3 Q. What was the basis of the noise complaint?
- 4 A. The basis of the -- was the fact that noise was there
- 5 that was not there prior to the time Turris arrived. It was --
- 6 the noise level when the fans and that originally started were
- 7 considerably higher than where they are now. Whether you had
- 8 windows open or whether they were closed you could hear those
- 9 fans or that fan. That was the basis, you know, the reason that
- 10 we filed, trying to -- simply wanting to reduce this noise level.
- 11 Q. Okay. You talked about the windows. Can you hear the
- 12 fan noise inside your house today?
- 13 A. Currently today if the windows are closed, in most --

- 14 unless the wind is just right or otherwise you do not hear it.
- 15 If the windows are open, you do hear it.
- 16 Q. How often do you have your windows open?
- 17 A. We prefer -- whenever the weather is favorable, the
- 18 windows are open. We prefer fresh air to air-conditioning, if at
- 19 all possible.
- 20 Q. Has the noise from the fan affected the frequency that
- 21 you have your windows open?
- 22 A. It certainly makes a difference as to when you do, when
- 23 you don't. You know, if company is there, a stranger, someone
- 24 who is not familiar with what the noise and that is, and we are

- 1 visiting, especially in the sun room area, we will tend to close
- 2 them sometimes to cut that background noise.
- 3 Q. Do you have an air conditioner at your house?
- 4 A. Yes, we do.
- 5 Q. I assume you use that periodically?
- 6 A. Yes.
- 7 Q. Do you use that any more or less because of the noise?
- 8 A. It probably runs slightly more. You know, the majority
- 9 of the time the weather is probably the greatest determinant of
- 10 that. But, again, if company is there and so on, whereas we
- 11 might leave windows open, with company there we will tend to
- 12 close them. Therefore, if it is warm weather you do turn the air
- on to accommodate that problem.

- 14 Q. That problem is both weather and noise?
- 15 A. Uh-huh.
- 16 Q. Is that correct?
- 17 A. (Nodded head up and down.)
- 18 Q. Or is it primarily noise and not weather? I mean --
- 19 A. It is -- when the noise requires or dictates that we
- 20 close the windows, if the temperatures are up sufficiently where
- 21 the house will heat up, then we end up running the
- 22 air-conditioning to take care of it. Whereas, if we had the
- 23 windows open, you know, if you had circulation enough you
- 24 wouldn't need it.

- 27
- 1 Q. Now, we have talked about it is your perception that
- 2 this noise problem is associated with the mine ventilation fan?
- 3 A. Yes.
- 4 Q. Do you know what the purpose of that fan is?
- 5 A. It is a necessary function of any coal mine for that fan
- 6 to be in operation 24 hours a day, seven days a week, to provide
- 7 fresh air to the individuals working under ground to remove gases
- 8 of any type, to help control dust under ground, something that
- 9 they have to have.
- 10 Q. Okay. Is the noise constant?
- 11 A. It is there 24 hours a day, seven days a week. The only
- 12 time it would abate is when I believe it is once a month they

- 13 have to shut that fan off for a short period of time and restart
- 14 it just to make sure the switching gear is operable.
- 15 Q. Have you been present on your property when they have
- 16 shut it off?
- 17 A. I have.
- 18 Q. Okay. Do you know how long they need to shut it off
- 19 for, that they have shut it off for?
- 20 A. Normally in most cases they shut it off until it comes
- 21 to a complete stop and then restart, so it is --
- Q. About how long does that take?
- 23 A. Not over two to three minutes, because law requires that
- 24 if it is shut off 15 minutes the men have to be extracted from

- 1 the mine.
- 2 Q. Can you just describe the noise for me?
- 3 A. It is a -- I would have to class it as a somewhat lower
- 4 pitch, constant background. And you can't really class it as
- 5 roar. It is an underlying background noise that is very
- 6 noticeable.
- 7 Q. Has this noise affected you emotionally in any way?
- 8 A. There is aggravation in the fact that when you wake up
- 9 during the night and you have got windows open, you hear it. It
- 10 is especially so that if you walk back in our yard once you walk
- 11 past that first shed, it is a constant noise back there. It
- 12 comes to that point that you really just wonder, you think, gosh,

- 13 there it is again or yet, you know. It does become an
- 14 aggravation.
- 15 Q. Does it keep you up at night?
- 16 A. Since they have changed the pitch, which they did
- 17 shortly after they started that fan, it does not normally prevent
- 18 you from going to sleep. But if you awake in the middle of the
- 19 night and the windows are open, you have a time going -- I have a
- 20 time going back to sleep. Simply -- and, again, part of that
- 21 goes back to the aggravation. You wake up and you hear it and it
- 22 is on your mind and so you don't relax and go back to sleep as
- 23 you would like to.
- 24 Q. About how long -- I mean, do you eventually go back to

- 1 sleep?
- 2 A. Eventually you do, and it could be ten minutes. There
- 3 has been times where it has been a couple of hours. I am sure it
- 4 depends on your emotional state at the time.
- 5 Q. You can hear the noise outside your house, of course?
- 6 A. Uh-huh.
- 7 Q. Is there any place on your property where you can't hear
- 8 the noise?
- 9 A. Depending on wind direction, moisture in the air and so
- 10 on, on the residential part of that property, I would say no, you
- 11 can hear it at any place. Now, certainly, if you go to the far

- 12 side of the farm, which is over a quarter of a mile away, there
- 13 is times that I am sure you would not hear it there.
- 14 Q. You talked a little bit before about your activities at
- 15 your pond. Would you from time to time observe wildlife at the
- 16 pond area?
- 17 A. We have had -- in the early years especially, we had a
- 18 lot of pheasant, quail in there. A great deal of -- or a large
- 19 number of all types of birds and so on.
- 20 Q. Since the noise has started, have you observed any
- 21 difference in the number or nature of the wildlife there?
- 22 A. I have seen a marked decrease, especially in the
- 23 pheasant and quail coming in there. Song birds, I would say it
- 24 would be somewhat iffy. I don't think we see quite as many, but

- 1 I couldn't definitely say there is that much difference as there
- 2 was between like on the pheasant and quail area.
- 3 Q. Mr. Knox, do you feel that the noise from the
- 4 ventilation fan has interfered with your use and enjoyment of
- 5 your property?
- 6 MR. COX: Objection. Leading. I think that's the ultimate
- 7 question also.
- 8 HEARING OFFICER HALLORAN: Mr. Northrup?
- 9 MR. NORTHRUP: Well, I mean, it does go to the issues
- 10 before the Board. He is the fact witness. He is the one that is
- 11 going to assist the Board in making that determination.

- 12 HEARING OFFICER HALLORAN: I will overrule your objection.
- 13 You may answer.
- 14 THE WITNESS: I definitely think it has an affect. And one
- 15 of the concerns that we have right now, especially, we have one
- 16 of our foster children who is going to be married there next
- 17 summer. And we have a concern as to whether that noise is going
- 18 to interfere with that one occasion, for one thing, definitely
- 19 there in the backyard, that noise is a factor.
- 20 And it definitely does affect some of the things we have
- 21 done and some of the things we do. Again, it is part of the
- 22 reason that we are moving our deck area and that around to the
- 23 other end of the house to try to shield that noise.
- Q. (By Mr. Northrup) Other than some of the things that we

- 1 have talked about before and what you just talked about, any
- 2 other specific item that you can point to to say that, yes, I am
- 3 doing things different now than I was before the noise started?
- 4 A. Other than the items we have talked about, I don't know
- 5 of any others. Mainly it is just the general overall enjoyment
- 6 that we get from the property and the interference, you know,
- 7 that the noise does cause.
- 8 Q. Have you talked to anyone at Turris about the noise
- 9 problem?
- 10 A. Yes, sir. I have talked with Mr. Schultz and Mr.

- 11 Dennison, on numerous occasions, and they have done some things
- 12 since that fan went in. They have tried several different
- 13 scenarios to control the noise, and have made improvement in it,
- 14 especially in the area to the south, away from our buildings,
- 15 with the installation of a silencer, which basically stopped the
- 16 noise problem for the neighbors who lived off to the south.
- 17 Q. Have you observed any relief from the noise once the
- 18 silencer was put in?
- 19 A. The silencer really did not affect the noise problem to
- 20 our side, no, sir.
- 21 (Whereupon a document was duly marked for purposes of
- 22 identification as Complainant's Exhibit 3 as of this date.)
- 23 Q. Let me show you, Mr. Knox, what I have marked as
- 24 Plaintiff's Exhibit 3. Can you just tell me what that is?

- 1 A. It is a letter which I wrote and was sent to Mr.
- 2 Dennison and AEI Resources concerning the noise level at the
- 3 property, and there was also a question there concerning some
- 4 lighting, which Turris did address on their driveways.
- 5 Q. You prepared this letter?
- 6 A. Yes, I prepared that, yes, in December of 1999.
- 7 Q. On or about the date that it bears?
- 8 A. Uh-huh.
- Q. I note the copy that I gave you is not a signed copy,
- 10 but did you, in fact, sign this and mail it off?

- 11 A. Yes, I did.
- 12 (Whereupon a document was duly marked for purposes of
- identification as Complainant's Exhibit 4 as of this date.)
- Q. Okay. Let me show you what has been marked as
- 15 Plaintiff's Exhibit Number 4. Can you just tell me what that is?
- 16 A. It is a letter addressed to myself from Roger Dennison,
- 17 and it is an update letter concerning the fact that they were
- 18 retaining the service of Dr. Paul Schomer to check the noise
- 19 levels and so on there at the mine.
- Q. Is that letter from Mr. Dennison, dated January 18th, is
- 21 that in response to your December 29th letter?
- 22 A. Yes, it was.
- Q. Did you, in fact, receive this letter?
- 24 A. Yes.

- 1 MR. NORTHRUP: Mr. Hearing Officer, I would ask that
- 2 Plaintiff's 3 and 4 be admitted.
- 3 HEARING OFFICER HALLORAN: Any objection, Mr. Cox?
- 4 MR. COX: No, no objection.
- 5 HEARING OFFICER HALLORAN: Plaintiff's Exhibits -- excuse
- 6 me. Complainant's Exhibits 3 and 4 are admitted.
- 7 (Whereupon said documents were admitted into evidence as
- 8 Complainant's Exhibits 3 and 4 as of this date.)
- 9 MR. NORTHRUP: Just a note for the record, too, I did mark

- 10 these things -- my exhibits as Plaintiffs because I didn't have
- 11 Complainant stickers.
- 12 HEARING OFFICER HALLORAN: That's fine. The Board will
- 13 take notice. Thank you.
- 14 MR. NORTHRUP: Those are all of the questions I have, Mr.
- 15 Knox.
- 16 HEARING OFFICER HALLORAN: All right. Thank you, Mr.
- 17 Northrup.
- 18 Mr. Cox, do you have any cross?
- 19 MR. COX: Yes.
- 20 CROSS EXAMINATION
- 21 BY MR. COX:
- 22 Q. Mr. Knox, it is my understanding, from your testimony,
- 23 that you agree that the fan is an essential part of the
- 24 operation?

- 1 A. There is no way they could operate without it.
- Q. Right. It is an issue for the safety of the miners?
- 3 A. Correct.
- 4 Q. It is also a regulatory issue, in part, for that reason,
- 5 correct?
- 6 A. Yes.
- 7 Q. Okay. Do you have enough understanding of the mining
- B process that the exhaust fan has got to be on a return side of
- 9 the main?

- 10 A. Yes, sir.
- 11 Q. And that that, in turn, limits, to some extent, where
- 12 they could put it in this case?
- 13 A. On that individual piece of property, yes.
- 14 Q. And you also agree that they have remediated the noise
- 15 some, they have reduced it?
- 16 A. They have worked, yes. They have cooperated.
- 17 Q. Did you indicate, though, that the silencer did not help
- 18 at your property?
- 19 A. It did not, no, sir.
- 20 Q. And some of the other steps that they took, correct?
- 21 A. I really -- the step that helped the most was when
- 22 they -- I was told they changed the pitch of the blades on the
- 23 fan and slowed the fan. That was the greatest aid and really the
- 24 only aid. The other steps that they have taken have really had

- 1 no affect on our end of the property.
- Q. Okay. That would include putting mine belting around
- 3 the evase, I think they call it?
- 4 A. Uh-huh.
- 5 Q. Putting the panels on the one building over there?
- 6 A. Yes.
- 7 Q. Is it your understanding that those things were things
- 8 that were recommended by Mr. Zak?

- 9 A. I was there at the time when those discussions were held
- 10 in general, and I know that they were suggestions. And he gave
- 11 them a series of suggestions, which included putting a building
- 12 over it, possibly doing these things, trying several different
- 13 things, yes.
- 14 Q. Okay. You think he recommended at that time putting a
- 15 building over it?
- 16 A. It was my understanding at that time that he said the --
- 17 I am not going to try to put words in his mouth. I am just going
- 18 to have to paraphrase. In the fact that the true solution would
- 19 be a building, a heavily insulated building over it. These
- 20 others might have an affect on it. They were things that might
- 21 be tried prior to that, yes.
- 22 Q. Let me get back to what I really want to know. Do you
- 23 understand that Greg Zak recommended the mine belting and/or the
- 24 silencer? Or do you know? I mean, you may not know. That may

- 1 be what you are telling me.
- 2 A. I can't say that this was his true recommendation. I
- 3 know there was discussion of which all of these things were
- 4 thrown out.
- 5 Q. Okay. All right. I think it should be indicated that
- 6 the sound is not constant on your property. It depends on,
- 7 apparently, wind direction, humidity, maybe some other
- atmospheric factors, I guess?

- 9 A. There is constant sound there, but the degree of it
- 10 varies with what you just said.
- 11 Q. Okay. Based on the fact, then, that the degree of the
- 12 noise varies, whether or not you are being disturbed, as you have
- 13 testified to, varies also?
- 14 A. The degree of that disturbance does, yes.
- 15 Q. Okay. Would you agree that you can stand next to the
- 16 fan, say, 50 feet or so from it, and have a normal conversation
- 17 with somebody?
- 18 A. Depending on what area around that fan you are, it
- 19 varies tremendously. If you stand at the actual exhaust end of
- 20 it where the air is coming out with the silencer there, it is
- 21 actually quieter there than it is back around in the area where
- 22 the fan building is, where the fan and the motor and so on are
- 23 actually located. It is much more difficult to have a normal
- 24 conversation back around the machinery end than it is out where

- 1 the air is actually exhausting.
- 2 Q. And that area is really the area -- if you are standing
- there, you are kind of in between that area and your house?
- 4 A. Yes, correct, because the air exhausts away from our
- 5 house.
- 6 Q. But you can -- I am trying to recall on occasions when
- 7 we were out there when you can stand out there and have a normal

- 8 conversation?
- 9 A. You can understand each other. But I would say that you
- 10 would have to speak in somewhat of an elevated level. And one
- 11 thing that I have observed at times that the sound level is
- 12 probably somewhat less fairly close than it is at a distance.
- 13 Whether that sound level travels up over and comes back down, I
- 14 have no idea why. But it seems to be somewhat more magnified as
- 15 you get out to a certain distance away from that fan housing.
- 16 Q. What about at your pond, can you have a normal
- 17 conversation with someone at your pond?
- 18 A. You can sit there and talk but, again, you have got a
- 19 background noise that is -- does somewhat affect that
- 20 conversation. I mean, you don't have to scream at each other,
- 21 no.
- 22 Q. Would the same be true for next to your shed or, I
- 23 guess, let me ask you about inside your shed?
- 24 A. You can visit inside the shed without any great

- 1 difficulty. But, again, the noise even inside the shed would be
- 2 much the same as if you were living in a home that was close to
- 3 an interstate highway or a railroad track in which you hear that
- 4 traffic going by. I mean, that's the degree of background, that
- 5 you are always cognizant of a noise in the background.
- 6 Q. Now, sometimes it sounds like in your shed -- I mean,
- 7 you are doing the welding, which can be somewhat noisy?

- 8 A. (Nodded head up and down.)
- 9 Q. I would imagine you have got an air compressor, from
- 10 what you have described?
- 11 A. Sure do.
- 12 Q. It is noisy, particularly when it is on?
- 13 A. Uh-huh.
- 14 Q. There is probably some of the tools that the compressor
- 15 runs, the grinder and various --
- 16 A. Uh-huh.
- 17 Q. -- pneumatic tools, correct? And those all make noise?
- 18 A. Yes.
- 19 Q. Do you wear any hearing protection when you are using
- 20 any of those?
- 21 A. Depending on what we are doing. If I am using such as
- 22 an air chisel or that, I may, yes.
- Q. Okay. Then, again, in your backyard, the same answer,
- 24 you can have a normal conversation, but you have what you

- 1 describe as a background?
- 2 A. Yes.
- 3 Q. Has Wally Schultz been over ever to listen to the noise
- 4 at your property?
- 5 A. He has been, yes.
- 6 Q. On more than one occasion?

- 7 A. I believe on a couple of occasions. He was there, I
- 8 believe, with Dr. Schomer, I think, a couple of times.
- 9 Q. Okay. Do you recall an occasion where you took him in
- 10 to one of your sheds and you turned the fluorescent lights out so
- 11 their humming went away so that you could hear the sound better?
- 12 A. Not offhand. I may have, but I couldn't swear to the
- 13 fact, no, sir.
- 14 Q. The fluorescent lights do make a little bit of humming?
- 15 A. They tend to, yes, depending on what type you have.
- Q. You need the lights on in there to work, I assume?
- 17 A. In most cases, unless it is good weather and we have the
- 18 doors up, yes.
- 19 Q. Do you have doors on more than one side of the sheds?
- 20 A. Not on the actual work shop. There are doors on various
- 21 sides of the shed, but not on the actual workshop area, no.
- 22 There is only one --
- Q. Is the workshop the small one or the large one?
- A. The workshop is in the large one, on the east end of the

- large building, furthest away from Turris.
- 2 Q. Okay. You said you store farm machinery in there?
- 3 A. Uh-huh.
- 4 Q. You work on your farm machinery?
- 5 A. That's correct.
- Q. You store other farm implements, I guess?

- 7 A. Farm implements, supplies.
- 8 Q. Some seed, chemicals?
- 9 A. Uh-huh.
- 10 Q. All used in the course of your agricultural operation?
- 11 A. That's correct.
- 12 Q. You started to talk about repairing tractors. Do you --
- 13 had you mentioned at one point that you repair and sell tractors,
- 14 you buy them and fix them up and sell them?
- 15 A. I do a little. I have started collecting some antique
- 16 tractors, of which I repair. I overhauled one completely this
- 17 winter. I do some of that type of work, just as a hobby.
- 18 Q. Okay. Some of them you keep and some of them you sell?
- 19 A. I have sold several, yes.
- 20 Q. Okay. What is -- is there a business K & K, has there
- 21 ever been or is there?
- 22 A. That's the welding that -- I work with Mr. Kirby in
- 23 Williamsville.
- Q. Okay. Is that a corporation?

- 1 A. No, sir.
- 2 Q. Just an assumed name?
- 3 A. Yes, just an assumed name. That's all.
- 4 Q. You do some welding?
- 5 A. He has had a welding business for years. He has a small

- 6 shop and sometimes some of the larger pieces of equipment he is
- 7 not able to get them to his shop, and he brings them into mine
- 8 simply because there is room there to do it.
- 9 Q. So you guys have some sort of arrangement that allows
- 10 him to do that?
- 11 A. We will -- he has the jobs and so on. He will pay me
- 12 for my time.
- Q. Okay. So you actually do help him when he has something
- 14 big like that?
- 15 A. At times, sometimes, yes, if he needs an individual to
- 16 help.
- 17 Q. Okay. You have your grain bins there?
- 18 A. Uh-huh.
- 19 Q. Those are, of course, also used in your agricultural
- 20 operation?
- 21 A. That's correct.
- Q. Do either one of them have a dryer on it?
- 23 A. They have aeration fans. There is no heat supplied for
- 24 drying, it is strictly aeration fans.

- 1 Q. Are those aeration fans quieter than grain dryers?
- 2 A. Yes, they are.
- 3 Q. Grain dryers can be quite loud?
- 4 A. They can be very loud, depending on the type of fan that
- 5 is on them.

- 6 Q. Do you have any of those close to you?
- 7 A. Grain dryers, not right close, no.
- 8 Q. Did you raise geese and ducks at one time?
- 9 A. We still have geese and ducks at our pond, yes.
- 10 Q. For sale or just for recreation?
- 11 A. They are there for decoration, basically.
- 12 Q. Okay.
- 13 A. Some of them there are 15, 18 years old. They have been
- 14 there a long time.
- 15 Q. The orchard, again, your orchard is like your garden,
- 16 you do that yourself?
- 17 A. Uh-huh.
- 18 Q. Your -- you have your property listed with the tax
- 19 authorities as agricultural, correct?
- 20 A. Correct.
- Q. Does your pond have any lighting at it or in it?
- 22 A. There is a security light, which is located between the
- 23 pond and my machine sheds. It provides light to the driveway
- 24 areas, the entrance ways into the storage part of the machinery

- 1 sheds and it also does provide some light to the pond. It sits
- 2 directly in between them.
- 3 Q. Does it allow you to use the pond at night?
- 4 A. Yes, sir, it does.

- 5 Q. Do you have an aerator at the pond?
- 6 A. That's correct.
- 7 Q. How often does that run?
- 8 A. That aerator runs 24 hours a day, seven days a week.
- 9 Q. Does it make some noise also?
- 10 A. If you are within ten feet of it you probably can hear
- 11 it.
- 12 Q. What kind of noise does it make?
- 13 A. It is strictly a small air compressor, is what it
- 14 amounts to. It is very small. It is a six horse motor, I think,
- 15 on it.
- 16 Q. Electric?
- 17 A. Electric, yes.
- 18 Q. The traffic on East Main Street that you live on there,
- 19 you said it is a County highway, right?
- 20 A. Yes, it is.
- Q. It is the main road into and out of Williamsville on
- 22 that side of Williamsville?
- 23 A. From the east, yes, correct.
- Q. Do -- is there any good access from that? If somebody,

- 1 you know, gets off at the interstate and they -- do people
- 2 regularly get off there to go somewhere else than if they live
- 3 back there, any other little communities?
- 4 A. About the only thing you see is now and then a semi

- 5 coming through that is trying to avoid the scales on I-55. They
- 6 will get out there and get lost trying to find their way around.
- 7 Q. Okay. Fair enough. How far is your home from the road,
- 8 is that --
- 9 A. Off of the blacktop itself?
- 10 Q. Yeah. It looks like Mr. Zak's map says 50 yards. Is
- 11 that about right?
- 12 A. That would be very close probably.
- 13 Q. Okay. From the fan itself, do you have any idea how far
- 14 you are away from the fan?
- 15 A. The house itself?
- 16 Q. Yeah.
- 17 A. It would have to be 500, 600 feet, maybe 600 feet or so,
- 18 maybe a little over that.
- 19 Q. Would it be 800, 850, does that sound --
- 20 A. I have never measured it, to be very honest.
- 21 Q. Okay.
- 22 A. It could well be, because the property depth is 528, and
- 23 it is behind that. So it could be.
- Q. Are there other sounds that ever wake you up at night,

- 1 or keep you up at night, I guess?
- 2 A. If you get a group of coyotes out there they can, which
- 3 now and then you have that occasion.

- 4 Q. Yes. Mr. Northrup had asked you about running your
- 5 air-conditioning. I assume you also have a furnace which you run
- 6 in the wintertime?
- A. Correct.
- 8 Q. And you are probably closing your windows when you run
- 9 the furnace?
- 10 A. That's correct.
- 11 Q. When you have the furnace on with the windows shut can
- 12 you hear the fan?
- 13 A. Not in most cases no, sir, not unless the wind is just
- 14 direct.
- 15 Q. Okay.
- 16 A. Or if it is an extremely still day it is actually louder
- in that than when there is a wind blowing.
- 18 Q. Do you ever run fans in your home in the summertime, I
- 19 presume, in between that period where you don't --
- 20 A. We have some ceiling fans, yes, which are silent,
- 21 basically.
- Q. Do those mask the sound of the mine fan?
- 23 A. No, because there is no noise from them.
- 24 Q. In the course of this whole project with Turris buying

- 1 the land, and setting up their site next to you, they have pretty
- 2 much kept you advised or at least responded to your inquiries
- 3 when you inquired about what was going on; is that right?

- 4 A. Yes, they have been cooperative in that way. Certainly,
- 5 the communication has gone back and forth.
- 6 Q. Okay. We are talking letters, and sometimes phone
- 7 calls?
- 8 A. Uh-huh.
- 9 Q. And sometimes meetings?
- 10 A. (Nodded head up and down.)
- 11 Q. You go to either their Williamsville location or did you
- 12 ever go up to their Elkhart Portal?
- 13 A. I don't think concerning this matter I have been, no,
- 14 sir.
- 15 Q. Okay. When they were laying out the site plan for the
- 16 area next door to you, you -- some of the people you met with
- 17 were a couple of engineers there, John Schmidt and Guy Hunt?
- 18 A. I worked with them for years, yes, I know them well.
- 19 Q. Okay. You worked with them not for Turris, but you
- 20 provided some input with them in setting up the site; is that
- 21 right?
- 22 A. I don't have a recollection of doing that. I might have
- 23 discussed with them. I don't know.
- Q. Did you ever sit down with any site plans with them?

- 1 A. I think they showed me proposed site plans, yes.
- 2 Q. Okay. Both for next door to you and also a property

- 3 kind of across Main Street?
- 4 A. They had talked about the possibility of one across the
- 5 road, yes.
- 6 Q. Okay. Did they indicate to you that, you know, look, if
- 7 we are next door we are going to be physically closer to you than
- 8 we would if we were across the street? Do you recall that?
- 9 A. I am sure that point probably was made.
- 10 Q. Did you ever indicate to them that you wanted it next
- 11 door to you instead of across the street?
- 12 A. I indicated to them that I didn't really want to look
- 13 out my kitchen window and look at it all of the time.
- Q. Which would have been, again, your --
- 15 A. That would have been across the road to the north.
- 16 Q. Across the road to the north. Do you recall that they
- 17 had -- let's see. Was it Bock, B-O-C-K, is that the owner of --
- 18 A. That is the owner --
- 19 Q. -- the land -- the former owner of the land?
- 20 A. -- of the ground across the road, yes.
- Q. Okay. Next door from Schemmer?
- 22 A. Schemmer.
- 23 Q. Schemmer. Do you recall a time when Turris had entered
- 24 into negotiations with Bock to actually purchase the property

- 1 across the road?
- 2 A. I have no idea. I knew they talked with him, but I have

- 3 no idea whether they ever actually entered into negotiations on
- 4 price or otherwise.
- 5 Q. Did you ever go to Schemmer, the guy next door to you,
- 6 and, for lack of a better word, broker a deal or say, hey, would
- 7 you maybe talk to Turris about selling some land to them so that
- 8 they could do this next door?
- 9 A. No, sir. I told him that they were -- at one time in
- 10 visiting we discussed the fact that they were looking for ground
- 11 and they were trying to buy in that area.
- 12 Q. Okay.
- 13 A. Certainly, I didn't -- would not go the other direction.
- 14 Q. Okay. Do you sleep as well as you do when you were
- 15 younger?
- 16 A. Depending on the day and the time --
- 17 Q. How about at night?
- 18 A. I think I can sleep pretty well, just about as well,
- 19 yes.
- Q. Okay. When did you start to work for Turris?
- 21 A. I started there in October of 1984.
- 22 Q. Okay. Prior to that time, had you had any farm
- 23 accidents?
- A. Prior to that time? No major accident prior to that

- Q. What about after that time?
- 3 A. Yes, sir, after that time I did.
- 4 Q. What was the injury?
- 5 A. I was caught on -- with a grain auger up on the drive
- 6 line shaft. I broke an arm and dislocated a foot.
- 7 Q. Okay. Did you ever have anything that resulted in any
- 8 back surgeries?
- 9 A. I had back surgery prior to the time that I worked for
- 10 Turris. On two different occasions I had back surgery prior to
- 11 that time.
- 12 O. Were those from accidents?
- 13 A. No, sir.
- Q. Was there any pain associated with either of the
- 15 injuries from the grain auger or from the back surgeries?
- 16 A. The grain auger, no. Not from the back surgery. The
- 17 back surgery actually alleviated it. The back is not as strong
- 18 as it was when I was 20 years old, no.
- 19 Q. Do you have any residual pain from any of those
- 20 occasions?
- 21 A. Again, not from the surgery. There still is a weakness.
- 22 I mean, in the back. Surgery does not correct everything, no,
- 23 sir.
- Q. What about any pain from the two grain auger accidents?

- 2 Q. While you were working at Turris -- I think they talk
- 3 about neck jams?
- 4 A. Uh-huh.
- 5 Q. Did you ever get those when you were there?
- 6 A. Numerous times.
- 7 Q. Numerous times. Do those ever affect your sleep?
- 8 A. They do.
- 9 Q. Do they at this time?
- 10 A. Not to any extent, no, sir, because of the aggravation
- 11 of the type of work that you were needed to do underground in
- 12 driving machinery and so on, you had to extend your head one
- 13 direction and then the other most of the time in driving the
- 14 equipment, and that aggravated those injuries. Since I am not
- 15 doing that type of work, I do not have that aggravation to it and
- 16 that is not a problem, no, sir.
- 17 Q. Okay. You had some workers' comp claims when you worked
- 18 for Turris?
- 19 A. Yes, that's correct.
- 20 Q. Your last injury was an injury to your shoulders, back
- 21 and neck; is that right?
- 22 A. Uh-huh, again, from jamming.
- 23 Q. Okay. Part of what that caused, and you regularly
- 24 complained about, was that that affected your ability to sleep,

- 1 correct?
- 2 A. At that time it certainly did.
- 3 Q. You went on short-term disability and then long-term
- 4 disability?
- 5 A. That's correct.
- 6 Q. And ultimately retired from Turris and reached some sort
- 7 of settlement based on --
- 8 A. Correct.
- 9 Q. -- the long-term disability as a result of that; is that
- 10 right?
- 11 A. That's correct.
- 12 Q. Were there ever any occasions where you fell asleep
- 13 under ground?
- 14 A. Yes, sir, there were.
- 15 Q. More than one?
- 16 A. I am certain there were.
- 17 Q. Okay. It is loud under ground, correct?
- 18 A. Depending on where you are. Some areas it is loud and
- 19 some areas it is dead quiet, there is not a sound of any kind.
- 20 Q. The places that you fell asleep, you were on some sort
- 21 of mine equipment, a piece of mine equipment?
- 22 A. Yes, sir.
- Q. Okay. That was running?
- 24 A. That's correct. It was parked.

- 1 Q. It was loud?
- 2 A. It was at an idle.
- 3 Q. It was a point where you were required to wear hearing
- 4 protection; is that right?
- 5 A. Yes, sir.
- 6 Q. Do you have any understanding of at what point OSHA
- 7 requires hearing protection to be worn?
- 8 A. Depending on the job that you are doing, the noise
- 9 levels and so on.
- 10 Q. Are you -- do you have any knowledge that there is an 85
- 11 decibel threshold? Have you ever heard that?
- 12 A. I am sure I have probably been told that some time. I
- 13 couldn't have quoted it, no, sir.
- 14 Q. When you wear hearing protection, it generally only
- 15 reduces the sound somewhere around 10 decibels, depending on what
- 16 it is you are wearing?
- 17 A. It could be, depending on the quality of the equipment,
- 18 I am sure.
- 19 Q. Okay. Was there ever an occasion where there was an
- 20 issue with you falsifying time records at Turris?
- 21 A. That was --
- MR. NORTHRUP: Objection, Your Honor. It has no relevance.
- 23 HEARING OFFICER HALLORAN: Mr. Cox?
- 24 MR. COX: It goes to credibility, I believe.

- 1 HEARING OFFICER HALLORAN: I will allow him to answer it.
- 2 THE WITNESS: There was a question of it concerning the
- 3 time when I was obtaining my hoisting papers.
- 4 Q. (By Mr. Cox) What are hoisting papers?
- 5 A. It is the State certification to allow you, as an
- 6 individual, to have a license or the State papers to act as a
- 7 hoistman, something which is required by the State. At any time
- 8 that someone is under ground in a coal mine you have to have
- 9 someone there who is licensed or has the papers that are able to
- 10 operate the hoisting equipment and so on.
- 11 Q. Is hoisting equipment the equipment that takes coal out
- 12 of the ground or --
- 13 A. It is the elevators and so on which the men travel on.
- 14 Q. Okay. That's what runs -- there is an elevator at the
- 15 site next to you?
- 16 A. Yes, there are on both sides, yes.
- 17 Q. And, actually, someone has to be licensed to run that
- 18 elevator?
- 19 A. You have to be certified and that any time there are
- 20 individuals under ground you have to have that certified
- 21 individual there in case there is a malfunction or otherwise.
- 22 Q. Okay.
- 23 A. So that they can manually operate it to get those
- 24 individuals out.

- 1 Q. Okay. Was that on one occasion, the time record issue,
- 2 or do you remember if it was more than one?
- 3 A. It was concerning the job I was doing to -- in order to
- 4 get this certification, you are required to accrue a certain
- 5 number of hours of actual time at that job. And then there was a
- 6 question as to whether I was providing the function that was
- 7 required by the State, and the State, in the end, said yes, I
- 8 was.
- 9 Q. Were you disciplined at all by Turris or by anybody as a
- 10 result of that?
- 11 A. I received my certification papers from the State and
- 12 Turris, I believe, asked for a reimbursement for some of those
- 13 hours in the fact that they questioned whether that function
- 14 needed to be required, although by law they are required to have
- one somewhere doing that. So there was a question of that.
- 16 Q. Okay. You had mentioned in this letter -- actually, it
- 17 would have been a different letter. Early on when they started
- 18 their site next door, in addition to the fan you had also
- 19 complained about dust from the parking lot and where the security
- 20 light out front was positioned?
- 21 A. Uh-huh.
- Q. Turris took steps to address both of those; is that
- 23 right?
- 24 A. They changed the lighting or redirected the lighting,

- 1 and the parking lot, a lot of it was an issue from the fact it
- 2 was white rock and so on and was oil and chipped, and eventually
- 3 with the rains and so on it took and handled most of the dust.
- 4 Yes, those issues were handled.
- 5 Q. Was there also an issue about water flow drainage from
- 6 Turris' property on to yours?
- 7 A. Yes, there was.
- 8 Q. And Turris and the County reached some sort of agreement
- 9 whereby they remedied that; is that right?
- 10 A. They helped it tremendously, yes.
- 11 Q. They, Turris and the County, or --
- 12 A. The County cut culverts across the road.
- 13 Q. Okay.
- 14 A. But prior to the time they did that they deepened our
- 15 ditches and so on trying to handle the flow. It leaves us with
- 16 ditches that are extremely difficult to mow and so on because of
- 17 it, whereas --
- 18 Q. Was it your understanding that Turris was to pay for the
- 19 materials when they put the culverts in across the road?
- 20 A. I have no idea what the negotiations were.
- 21 MR. COX: Okay. I don't have anything further.
- 22 HEARING OFFICER HALLORAN: All right. Thanks, Mr. Cox.
- 23 Mr. Northrup, any redirect?
- MR. NORTHRUP: Yes, a couple of follow-ups.

- 1 REDIRECT EXAMINATION
- 2 BY MR. NORTHRUP:
- 3 Q. Going back to -- you had indicated Turris changed the
- 4 pitch of the fans --
- 5 A. Uh-huh.
- 6 Q. -- and that gave some improvement --
- 7 A. Yes, it did.
- 8 Q. -- to the noise?
- 9 A. (Nodded head up and down.)
- 10 Q. When did they change the pitch?
- 11 A. Oh, to try and pick out a time, it was a fairly short
- 12 period of time after those fans started. Now, whether it was
- 13 just a few weeks or a month, I couldn't tell you exactly. It was
- 14 a fairly quick period of time.
- 15 They found that they could reduce the pitch and I think
- 16 they said slow the fan down to where they actually were pulling
- 17 less air out. Because they did not need the air flow that they
- 18 were creating to start with. That did help tremendously.
- 19 Q. What relief did that create back when they did that?
- 20 A. It created the fact that prior to that time with windows
- 21 closed, air-conditioning or fans or otherwise going you still
- 22 heard the noise in the house all of the time. When they made
- 23 that correction it did get it to the point that if windows were
- 24 closed and air and so on going, you didn't hear it at that time.

- 1 Q. So the problems that you identified earlier or I should
- 2 say the affects that you testified to with respect to your pond
- 3 and the deck, or the patio, I mean, those things are still --
- 4 those are post pitch change?
- 5 A. Yes, they are still there.
- 6 Q. Okay. Now, if you are in your shed and you are
- 7 operating a welding machine or an air chisel or a noise
- 8 compressor, you can turn those off any time that you want, right?
- 9 A. They can be shut down any time that you want to, yes.
- 10 Q. With respect to the air compressor, the aerator you have
- 11 at your pond, what is that? Is that an under water, is it above
- 12 water?
- 13 A. It is a small compressor that sets in a contained unit
- 14 on the bank close to the pond. A line runs down into the water
- 15 itself, and there is an air stone, they call it, which is just a
- 16 porous stone down in the bottom of the pond of which the air
- 17 comes out through and bubbles up through the pond to provide
- 18 oxygen and aeration to the pond.
- 19 Q. Have you ever not gone out to the pond because you did
- 20 not want to hear the air compressor?
- 21 A. No, because, like I said, unless you are within 10 feet,
- 22 10 to 15 feet of it, you don't hear it.
- 23 Q. Did anyone from Turris ever talk to you about the
- 24 construction or the specifications of the ventilation fan prior

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- 1 to them building it?
- 2 A. I don't remember anyone speaking directly to it. I knew
- 3 basically what would have to be there because of the fan that was
- 4 at the prior location. I mean, I knew it had to be a big
- 5 aeration fan there to handle what needed to be handled.
- 6 Q. Turris never came to you and said, boy, this is going to
- 7 be loud, you might want to do something about it?
- 8 A. No.
- 9 Q. On the last topic we were kind of talking about the time
- 10 record issue. Now, I get the impression that you personally were
- 11 accused of something, correct?
- 12 A. Uh-huh.
- 13 Q. Falsifying time records?
- 14 A. (Nodded head up and down.)
- Q. Who investigated that, if anybody?
- 16 A. I am trying to think of who was in charge. I believe it
- 17 was Mr. Messini (spelled phonetically) I believe, was the
- 18 gentleman who was in charge of mine superintendent at that time,
- 19 I believe, was the gentleman's name. He was a Turris employee.
- Q. Oh, okay. Did the State of Illinois come in and accuse
- 21 you of anything?
- 22 A. No, no. They went to the State of Illinois, questioned
- 23 one of the inspectors, one of the gentlemen there, and he said
- 24 what was done was legal, and I should get my papers. Turris was

- 1 questioning whether I should actually get my hoisting papers or
- 2 not.
- 3 Q. There was no formal adjudication or hearing, like we are
- 4 having today, on this issue?
- 5 A. No. I went in and discussed it with Mr. Messini, and I
- 6 think there were a couple of others present at the time. I am
- 7 not sure who they were.
- 8 Q. Okay. When you retired -- I can't remember. When did
- 9 you retire?
- 10 A. January 1 of 1998.
- 11 Q. 1998. Okay. That was not a forced retirement in any
- 12 way?
- 13 A. No, sir, it was earlier than what I was planning on, and
- 14 what the agreement was that -- I had an agreement with the
- 15 employee relation department that they would carry me on
- 16 long-term disability until April of 1998. But they came to me in
- 17 December of 1997, and told me that the company was going to be
- 18 sold, and retirement requirements were going to be changed the
- 19 beginning of January when the new company took over, took
- 20 control. And they suggested that maybe I would want to retire
- 21 prior to that time.
- 22 At the time -- at that time if I was 55 years of age and
- 23 ten years experience I could retire and keep my medical benefits.
- 24 With the new company coming in, I was going to have to be 62 and

- 1 still have 10 years. So I was 58 -- 57 years old at the time and
- 2 I would have had to work another five years or stay another five
- 3 years before I could do that.
- 4 Q. Other than this fan issue, I mean, do you harbor any ill
- 5 will towards Turris Coal?
- 6 A. No. I worked with most of these gentlemen for close to
- 7 13 years. I have a lot of good friends that still work over
- 8 there. I have known Mr. Dennison ever since I started there, and
- 9 Mr. Schultz. I really have no ill will at all. I would just
- 10 like to have this handled.
- 11 And part of the reason being of the fact that knowing down
- 12 the road if this mine continues in business and expands to where
- 13 they are mining further away from the areas they are now, they
- 14 will have to have increased air flow again. And to do so, that
- 15 fan -- either the pitch is going to have to be changed or is
- 16 going to have to be sped up so that that noise level may well
- 17 increase down the road.
- 18 MR. NORTHRUP: I don't have any further questions.
- 19 HEARING OFFICER HALLORAN: All right. Thank you, Mr.
- 20 Northrup.
- 21 Any re-cross, Mr. Cox?
- 22 MR. COX: Nothing further.
- 23 HEARING OFFICER HALLORAN: Thank you. Mr. Knox, you may
- 24 step down. Thank you.

- 1 (The witness left the stand.)
- 2 HEARING OFFICER HALLORAN: Okay. Off the record for a

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- 3 minute.
- (Discussion off the record.)
- 5 HEARING OFFICER HALLORAN: Okay. We are back on the
- record.
- 7 Mrs. Knox, please raise your right hand and the court
- 8 reporter will swear you in.
- 9 (Whereupon the witness was sworn by the Notary Public.)
- GLADYS L. KNOX, 10
- 11 having been first duly sworn by the Notary Public, saith as
- 12 follows:
- 13 DIRECT EXAMINATION
- BY MR. NORTHRUP: 14
- 15 Mrs. Knox, how are you today? Q.
- 16 Α. Fine. Thank you.
- 17 Was that your husband who just testified? Q.
- 18 Α. Yes.
- 19 Okay. How long have you been married to him? Q.
- 20 Α. For 25 years.
- 21 And I take it, then, you also reside at the East Main Q.
- 22 Street?
- 23 Α. I do.
- Q. Now, I am not going to go through all of the background 24

- 1 type information that I went through with him. Let me just ask,
- 2 do you hear a noise from the mine ventilation fan?
- 3 A. Absolutely.
- 4 Q. Can you describe that for me?
- 5 A. Well, it is -- it is hard to describe. But it is like a
- 6 whir, a whirring noise.
- 7 Q. Okay.
- 8 A. It is always there.
- 9 Q. Okay. It is constant?
- 10 A. (Nodded head up and down.)
- 11 Q. Is it there 24 hours a day, seven days a week?
- 12 A. Yes, it is.
- Q. How has the noise affected your daily routine --
- 14 A. Well --
- 15 Q. -- if at all?
- 16 A. I spend a lot of -- in the summer months, of course, I
- 17 spend all of my time outside in gardens and the lawn. It is just
- 18 an aggravation. It is always there. You can't go anywhere on
- 19 the property that you don't hear that racket. And in the house,
- 20 until they did lower that, I couldn't go to sleep at night
- 21 because my bedroom is right on that corner. If you were in the
- 22 sun room or in the bedroom, it was terrible. You could hear it
- 23 all over the house, but those are the two places that it was the

- 1 Q. We didn't talk much about the sun room. Where is that
- 2 located on the house?
- 3 A. It is on the south side of our house.
- 4 Q. Now, would you agree also that there has been a change
- 5 in the level of noise?
- 6 A. Yes.
- 7 Q. Okay. And is that associated with the change in
- 8 pitch --
- 9 A. Yes.
- 10 Q. -- that your husband talked about?
- 11 A. Uh-huh.
- 12 Q. Okay. Now, after they did change the pitch, do you
- 13 still have a problem with the noise?
- 14 A. You still hear it.
- 15 Q. Okay.
- 16 A. It is more tolerable than it was before. I like to have
- 17 my windows open, and if you have your windows open you are going
- 18 to hear the racket.
- 19 Q. What do you do? Do you shut the windows or do you
- 20 just --
- 21 A. Sometimes I do, because I just don't want to hear it.
- Q. Has the noise ever impacted any social gatherings that
- 23 you have had at your property?

24 A. Oh, I don't -- we don't really entertain all that much.

- 1 We did, as my husband told you, have the decks out there. We
- 2 finally just gave up using them, because it just was not very
- 3 pleasant anymore.
- 4 Q. Do you have trouble falling to sleep at night because of
- 5 the noise?
- 6 A. Not as bad now. I did have a lot of trouble.
- 7 Q. If you ever wake up in the middle of the night, do you
- 8 have a hard time going back to sleep?
- 9 A. Yes, I do have trouble going back.
- 10 Q. How frequently would you say that you have got that
- 11 problem?
- 12 A. Oh, maybe a couple of times a week, something like that.
- 13 Q. Now, did you also -- or do you also enjoy the pond, like
- 14 your husband?
- 15 A. Yes, I do.
- 16 Q. Have you noticed any change in the wildlife in the area?
- 17 A. Well, you don't hear -- you don't hear the pheasants and
- 18 some of those quail that we used to hear so much of.
- 19 Q. Do you use the pond area as much as you used to?
- 20 A. Not as much, no.
- 21 Q. Can you quantify that for me at all pre-noise how often
- 22 would you go out there?

- 23 A. Well, I didn't -- I didn't go as often as my husband
- 24 did, but I might go a couple of times a week.

- 1 Q. Okay.
- 2 A. I don't -- maybe once a month I go out there.
- 3 Q. Today, once a month?
- 4 A. Yeah.
- 5 Q. Let me ask you the general question. Has the noise from
- 6 the Turris mine ventilation fan interfered with your use and
- 7 enjoyment of your property, other than how we have already
- 8 discussed?
- 9 A. Well, it is an aggravation to us, to me. I enjoy the
- 10 peace and the quiet. I no longer have that.
- 11 Q. Do you work outside the home?
- 12 A. No, I am retired.
- Q. So you spend a great amount of time at your property?
- 14 A. I am a homebody.
- MR. NORTHRUP: Okay. That's all I have.
- 16 HEARING OFFICER HALLORAN: All right. Thank you, Mr.
- 17 Northrup.
- 18 Mr. Cox, cross?
- 19 MR. COX: I don't have any questions. Thank you.
- 20 HEARING OFFICER HALLORAN: Mrs. Cox -- excuse me -- Mrs.
- 21 Knox, you may step down. Before the end of the hearing I will
- 22 get this right, with Cox and Knox. Anyway, you may step down.

- 23 Thank you very much.
- 24 (The witness left the stand.)

- 1 HEARING OFFICER HALLORAN: Okay. We will go off the
- 2 record.
- 3 (Discussion off the record.)
- 4 HEARING OFFICER HALLORAN: All right. We will take a short
- 5 break.
- 6 (Whereupon a short recess was taken.)
- 7 HEARING OFFICER HALLORAN: Okay. We are back on the
- 8 record. We took approximately an eight minute break. It is
- 9 11:40.
- 10 Mr. Northrup has Mr. Zak on the stand.
- 11 Mr. Zak, would you please raise your right hand and the
- 12 court reporter will swear you in.
- 13 (Whereupon the witness was sworn by the Notary Public.)
- 14 GREG ZAK,
- 15 having been first duly sworn by the Notary Public, saith as
- 16 follows:
- 17 DIRECT EXAMINATION
- 18 BY MR. NORTHRUP:
- 19 Q. Could you please state your name for the record.
- 20 A. My name is Greg Zak, and that is spelled G-R-E-G, Z-A-K.
- Q. What do you do for a living, Mr. Zak?

- 22 A. I am a noise control engineer.
- 23 Q. Okay. Do you have a business, you do this for yourself

24 or --

1

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Yes, I established my own business as Noise Solutions by

- 2 Greg Zak, subsequent to retiring from the Illinois EPA.
- 3 Q. Okay. Where is your business located?
- 4 A. It is located at 36 Birch Drive, Chatham, Illinois,
- 5 62629, which also is my residence.
- 6 Q. Do you know the Complainants in this case, the Knoxs?
- 7 A. Yes, I do.
- 8 Q. Okay. How do you know them?
- 9 A. They contacted me in late 1999, regarding noise concerns
- 10 about a mine ventilation fan located close to their property.
- 11 Q. Okay. You indicated that you had formerly worked at the
- 12 EPA; is that correct?
- 13 A. That's correct.
- Q. What did you do there?
- 15 A. I was largely involved, again, in noise control
- 16 engineering and handling public complaints relative to noise.
- 17 And also serving as the Agency's expert in the noise pollution
- 18 area.
- 19 Q. Okay. Over the years at the EPA, can you give me a
- 20 ballpark figure as to how many noise matters you would have
- 21 worked on?

- 22 A. In regard to complaints, it would have been several tens
- 23 of thousands of complaints. The typical complaint load was in
- 24 the neighborhood of 2,000 complaints per year, and that would be,

- 1 $\,$ say, from 1995 to 2001, when I retired.
- 2 Q. Okay. What types of things did these complaints cover?
- 3 A. The majority of the complaints would cover what I would
- 4 call fan noise. That comes in a large variety of forms, because
- 5 we use fans and ventilation so much in our culture. In some
- 6 cases it would be ventilation fans used in industry. It could be
- 7 grain aeration fans, used at larger complexes for keeping grain
- 8 aerated. Air-conditioning complaints. We had a lot of
- 9 air-conditioning complaints, which largely would get back to the
- 10 air fan coming from the air conditioner. There really was quite
- 11 a variety of noise complaints, running from barking dogs to oil
- 12 refineries.
- 13 Q. Okay. These complaints, did they come in from all over
- 14 the state?
- 15 A. Yes, they did.
- 16 Q. Did you ever work on matters involving coal mine
- 17 ventilation fans?
- 18 A. Yes, I have.
- 19 Q. Okay. About how many, do you think?
- 20 A. I would say this particular case here is about the

- 21 fourth one I have worked on.
- Q. Where were some of the other fans located?
- 23 A. The first one was located in Coffeen, Illinois. That is
- 24 C-O-F-F-E-E-N. This particular mine ventilation fan was owned by

- 1 a company called Consolidation Coal. The Agency received a
- 2 complaint on this, to the best of my recollection, in late 1972.
- 3 I personally visited the site over 100 times over a period of
- 4 about a year and a half, maybe two years.
- 5 Q. Why so many visits?
- 6 A. A number of reasons. One reason for the large number of
- 7 visits was attempting to obtain an ambient noise measurement.
- 8 And in order to do that at that time, due to the configuration of
- 9 the area, it was best that the mine ventilation fan was shut
- 10 down. It turns out that it took quite a long time to finally
- 11 catch it where it shut down.
- 12 I was able to get a background sound measurement. But,
- 13 again, the number of trips involved was just -- we really spent
- 14 too many resources in trying to get that ambient. I learned a
- 15 lesson from that. And that is to try to find other ways to get
- 16 an ambient of a continuous source rather than trying to catch it
- 17 on that rare time that it is going to be down for a short period
- 18 of time.
- 19 Q. When you talk about a continuous source, what do you
- 20 mean by that?

- 21 A. A continuous source, in my opinion, is one that operates
- 22 24 hours a day, seven days a week, virtually all year long. It
- 23 just never shuts down.
- 24 Q. Other than Coffeen, have there been other mine

- 1 ventilation fans that you have worked on in your capacity at the
- 2 EPA?
- 3 A. Yes, to a lesser extent, Peabody Coal had a mine
- 4 ventilation fan south of Springfield. I believe it was located
- 5 in Christian County. This is quite a few years ago. I am
- 6 thinking back about 20 years. We got complaints on it. I
- 7 advised the coal company of the complaints, and they hired a
- 8 consultant and they fixed the problem.
- 9 There was one also down in Southern Illinois, quite far
- 10 down in Southern Illinois, I would say in the general vicinity of
- 11 probably Marion, Illinois, but not in Marion. And, again, the
- 12 situation there was people were complaining -- several neighbors
- 13 were complaining about the fan noise. I contacted the coal
- 14 company, and at the moment right now I can't remember which coal
- 15 company it was. Again, they hired a consultant and they solved
- 16 the problem themselves.
- 17 Q. Okay. In your experience, from time to time have you
- 18 written articles on noise issues?
- 19 A. Yes, I have.

- 20 Q. Okay. Are you a member of any professional
- 21 organizations with respect to noise?
- 22 A. Yes. I am a member of the Institute of Noise Control
- 23 Engineering, or INCE.
- 24 (Whereupon a document was duly marked for purposes of

- identification as Complainant's Exhibit 1 as of this date.)
- Q. Okay. Let me show you what I have marked as Plaintiff's
- 3 Exhibit Number 1. Can you tell me what that is?
- A. Yes, this is a copy of my current resume.
- 5 Q. You prepared that?
- 6 A. Yes, I did.
- 7 Q. Is it accurate?
- 8 A. Yes, it is.
- 9 Q. Okay. Is it fair to say that this resume reflects items
- 10 such as your professional memberships and the articles that you
- 11 have written and the cases that you have worked on, that type of
- 12 thing?
- 13 A. Yes, it does.
- MR. NORTHRUP: Okay. Your Honor, at this point I would
- offer Plaintiff's Exhibit Number 1 into evidence.
- 16 HEARING OFFICER HALLORAN: Mr. Cox?
- MR. COX: No objection.
- 18 HEARING OFFICER HALLORAN: Thank you. Complainant's
- 19 Exhibit Number 1 is admitted.

- 20 (Whereupon said document was admitted into evidence as
- 21 Complainant's Exhibit 1 as of this date.)
- 22 Q. (By Mr. Northrup) Have you ever testified before, Mr.
- 23 Zak, in either a Board proceeding or before a Circuit Court?
- A. Yes, many, many times.

- 1 Q. Okay. Any rough estimate on how many times?
- 2 A. Actual days of testimony would probably run somewhere
- 3 around 100.
- 4 Q. Okay. And in those cases, in what capacity were you
- 5 testifying as?
- 6 A. I was testifying as an expert in noise.
- 7 Q. Okay. You stated previously that you know the Knoxs --
- 8 A. That's correct.
- 9 Q. -- who are the Complainants in this case? Have you been
- 10 to their property?
- 11 A. Yes, I have.
- 12 Q. Okay. How many times, do you think?
- 13 A. At least five times.
- 14 Q. Okay. How would you characterize their property?
- 15 A. The property is what I would call a residential type
- 16 nature. It is approximately four acres. It is extremely
- 17 well-maintained and well-groomed and carefully landscaped. So I
- 18 would characterize really the entire four acres as being the

- 19 equivalent of a much smaller lot in a typical subdivision where
- 20 the people maintain their yard, their lawn, and their shrubbery
- 21 and things like that and use the property. There was a lot of
- 22 evidence there also of use by the Knoxs as far as the areas on
- 23 the property were concerned.
- Q. Okay. Generally for what purposes did you go to their

- 1 property?
- 2 A. Initially, in follow-up to touring the Turris facility,
- 3 specifically the mine ventilation fan, over at the Turris mine,
- 4 at their invitation. And once the tour of the company was
- 5 completed, I would then, at the invitation of the Knoxs, go over
- 6 to the Knoxs, and observe for myself the noise impact from the
- 7 fan on their property.
- 8 Q. Okay. When you talk about this visit and kind of the
- 9 tour of the Turris facility, do you recall when that was, just
- 10 generally?
- 11 A. General, I believe it was either the first or second
- 12 tour was around May 10th of 2001. And then there was a
- 13 subsequent tour of around December the 3rd of 2001.
- 14 Q. I am sorry. December?
- 15 A. December the 3rd of 2001.
- 16 Q. Okay. On the first visit to the Turris property what
- 17 was the purpose of that visit?
- 18 A. The company invited me to come over there, I believe, to

- 19 look at the situation, and make suggestions as to what I thought
- 20 might reduce the noise.
- 21 Q. Okay. Who did you meet with at the Turris property?
- 22 A. I don't remember any specific names. It was a
- 23 relatively short visit, and I really made no attempt to document
- 24 the visit as far as writing down names and keeping track of

- 1 exactly -- keeping track on paper of exactly what was said. I
- 2 have to go strictly by memory. I am not very good at remembering
- 3 names if I don't write them down.
- 4 Q. What did you do? Well, strike that. Was Mr. Knox
- 5 there?
- 6 A. Yes, he was.
- 7 Q. Okay. Was I there?
- 8 A. Yes, you were there.
- 9 Q. Was Mr. Cox there?
- 10 A. Yes.
- 11 Q. What did you do when you got to the property?
- 12 A. Upon arriving, I went into the building, found out where
- 13 the meeting was going to be, and met with everyone. We discussed
- 14 the situation in general. At that point it was suggested that we
- 15 go out and look the fan itself over. And at that point a number
- 16 of us, yourself, myself, Mr. Knox, and a number of the Turris
- 17 Coal gentlemen went out to the fan and inspected it.

- I asked a number of questions about it. I walked around
- 19 it, looked over the details of what was there, the fan housing,
- 20 the motor, the evase, the silencer, just in general a fairly
- 21 detailed tour of that particular installation.
- 22 Q. Could you hear the noise coming from the ventilation
- 23 fan?
- 24 A. Yes, definitely.

- 1 Q. Okay. Describe that for me?
- 2 A. I would like to put it in common everyday terms. So
- 3 what will happen when I describe it, it is going to not be
- 4 exactly the way a noise control engineer would describe it. But
- 5 the characteristic of it is similar to what you would hear from a
- 6 household vacuum cleaner. It has a hum to it, and a little bit
- 7 of a warble to it, and a very noticeable tone mixed in there
- 8 which, again, to use an analogy that everybody is familiar with,
- 9 would be somewhat similar, probably the closest example I could
- 10 think of would be a household vacuum cleaner.
- 11 Q. Now, are you saying that the noise you heard from the
- 12 fan was the same level as you would hear when you are vacuuming
- 13 your carpet at your house, or was it louder?
- 14 A. Well, close to the actual fan itself, depending upon
- 15 where one is located around the structure, in some areas it would
- 16 not be quite as loud as operating a household vacuum cleaner. I
- 17 am thinking of more the old-fashioned noisy type. But in some

- 18 areas around the structure it was considerably louder than a home
- 19 type vacuum cleaner.
- 20 Q. How big is the fan or the structure associated with the
- 21 fan?
- 22 A. I have never seen any dimensions on it, and I didn't
- 23 attempt to measure it when I observed it. So I will just have to
- 24 give you very, very rough estimates there. It would appear to be

- 1 perhaps 100 to 200 feet long, approximately 15 feet high, and the
- 2 width would be on the order of -- at the widest point, perhaps 30
- 3 or 40 feet. It is not a simple structure, because you have got
- 4 the silencer, and then in back of the silencer is the evase, and
- 5 then the evase goes into the building where the actual fan and
- 6 the motor driving are located.
- 7 And there are some other buildings, I call them equipment
- 8 type buildings also attached to that structure. So that the
- 9 shape of the structure is not uniform at all, but rather -- it
- 10 jogs off at different directions.
- 11 Q. Do you know what the purpose of the fan is?
- 12 A. Yes, the fan is required for the mining operation to
- 13 ensure that the -- that any gases that accumulate in the mine,
- 14 some of the dust, and also to provide fresh air to the miners
- 15 that are working in the mine. It is my understanding that the
- 16 safety issue is more one of keeping down mainly the gases and to

- 17 some extent the dust.
- 18 Q. What produces the noise from this fan?
- 19 A. The noise is produced by the actual fan itself. We have
- 20 an electric motor of approximately 1,000 horsepower driving a
- 21 vane axial fan. To put it in more laymen's terms, we think of
- 22 the fan in very simple terms as being like the propeller on an
- 23 airplane. That type of fan is structurally different than what
- 24 we would call a -- what we may call a squirrel cage fan. A

- 1 squirrel cage fan is where you have a large wheel that rotates
- 2 and there are blades on there, but it looks very similar to the
- 3 old-fashioned water wheel used for power 200 or 300 years ago.
- 4 Then the type of fan that we are dealing with here is a
- 5 vane axial, which looks like a propeller. Now, if we actually
- 6 look at what this fan looks like, and I have not seen the
- 7 specific fan, because it has always been in operation. But I
- 8 have seen a number of them when they have been turned off and
- 9 have pictures of them. We have a large number of blades on a
- 10 hub, and on the more modern ones they are able to adjust the
- 11 pitch of those blades.
- 12 Now, I believe your question there is what causes the
- 13 noise?
- 14 Q. Correct.
- 15 A. I needed to describe very briefly what the fan looks
- 16 like and how it operates. As the blades turn, they slice through

- 17 the air and they push the air in whatever direction you want
- 18 the -- the designer wants the air to be pushed.
- 19 The very physical act of that blade cutting through the air
- 20 creates air turbulence. It is the air turbulence of that blade
- 21 passing through the air, and in this case multiple blades passing
- 22 through the air, that actually create the noise.
- 23 Q. Did you take any noise readings when you were there on
- 24 this first visit?

- 1 A. I don't believe I did. I know that on one of the visits
- 2 I did take some measurements around the fan. Again, since I
- 3 didn't really take notes on it, I just have to go strictly by
- 4 memory. I may have taken measurements and I may have not. But
- 5 the function of the measurements would be simply to be able to
- 6 document what the sound levels -- how the sound levels compared
- 7 at various points around the fan. I was not really interested in
- 8 a maximum level at all. I was looking for variation to see if
- 9 there were points along the structure where the noise was coming
- 10 out to a much greater extent than at other points around the
- 11 structure.
- 12 Q. On that visit did you make any recommendations to the
- 13 group as to how noise from the fan could be reduced?
- 14 A. Early on, on touring the fan, I explained to the folks
- 15 at Turris that I had worked on a similar problem approximately 25

- 16 years before this, and I was thinking specifically of the mine
- 17 ventilation fan owned by Consolidation Coal.
- 18 Part of the solution to that problem was to put used mine
- 19 conveyor belt material over the entire structure, basically just
- 20 take these rubber belts and drape them over the structure in
- 21 order to, number one, dampen out any ring in the metal structure.
- 22 Number two, to provide a dense material that the noise would have
- 23 difficulty penetrating, with the understanding that there is
- 24 going to be gaps, and any place you have a gap, you will have a

- 1 lot of noise escaping at the gaps.
- 2 In the situation with Consolidation Coal, the belting
- 3 considerably helped the problem in their case. It probably
- 4 dropped the noise level about ten decibels. So we did see a
- 5 pretty significant drop in sound level 25 years ago. But that
- 6 particular kind of technique, sometimes it works and sometimes it
- 7 doesn't.
- 8 I believe I advised the folks at Turris that this was a
- 9 suggestion and probably the least expensive suggestion I could
- 10 come up with. And that if that didn't work then ultimately they
- 11 would be looking at probably putting a building structure over
- 12 the existing structure, kind of have a very large building with
- 13 insulation in there and have all of the exhaust directed to the
- 14 south as it is now.
- 15 Q. Okay. That was the first visit. When was the second

- 16 time you went out to either the Knox property or the Turris
- 17 property?
- 18 A. The second time would have been December 3rd, 2001. And
- 19 at that point I was no longer with the Illinois EPA. I was owner
- 20 of my own business.
- 21 Q. What did you do out at the property at this time, at
- 22 this visit?
- 23 A. Again, what I did is I met with the Turris folks, and
- 24 you were present, Mr. Knox was present. We, again, walked around

- 1 the fan structure and, again, I noted that when we walked in
- 2 front of the silencer into the exhaust air that the noise was not
- 3 as loud as it was at some points along the structure itself. So,
- 4 again, as I had noted earlier at other visits, the structure
- 5 itself was more the problem than any sound coming out through the
- 6 silencer.
- 7 They had done some more work on it, and there was less
- 8 leakage on that particular visit than there had been the visit
- 9 before. And, again, on that particular visit I made no attempt
- 10 to try and establish a maximum level of sound coming from the fan
- 11 but, again, just to walk around the structure and look for sound
- 12 leaking out.
- 13 Q. Did you, during that visit, make any recommendations to
- 14 the Turris people with respect to reducing the amount of noise?

- 15 A. At that point we had reached -- were getting very close
- 16 to the point of putting a building over the entire structure.
- 17 And I know at one point that the Turris officials brought up,
- 18 well, the explosion doors on the shaft, and those doors have to
- 19 be free to open.
- 20 So from that it appeared that the structure would have to
- 21 be large enough and have a large enough opening to the south that
- 22 should the explosion doors be triggered by an explosion in the
- 23 mine that there would be adequate relief of pressure. That there
- 24 would be, in essence, no back pressure on the explosion doors

- 1 opening up due to that structure being there.
- Q. At this visit, had the mine put on the conveyor belts,
- 3 as you had previously recommended?
- 4 A. Yes, they had.
- 5 Q. And what did you observe with respect to those belts?
- 6 A. I observed that there was two affects. One affect, the
- 7 sound levels did seem to me to be a little bit lower than the
- 8 previous visit. I made no attempt on either visit to really
- 9 quantify any change. It was just an impression that I got that
- 10 it was a little bit quieter.
- 11 But what the belts tended to do was to exacerbate those
- 12 points where there were gaps in the belts and leaks of sound
- 13 coming out. Again, I explained that if they couldn't get the
- 14 belts all completely sealed that the only other alternative would

- 15 be to put a large structure over the existing structure.
- 16 Q. When was the next time you went out to the property,
- 17 either to the Knoxs or the Turris property?
- 18 A. Well, I went out to the Knoxs on May 22nd of 2002, and
- 19 May 23rd of 2002, and May 25th of 2002.
- 20 Q. What was the purpose of your visits to the Knoxs on
- 21 these dates?
- 22 A. My purpose was to obtain sound level measurements for
- 23 the Knoxs of the exact amount of sound or noise coming from the
- 24 fan.

- 1 Q. Did you do that?
- 2 A. Yes, I did.
- 3 Q. Did you prepare any kind of written report as a result
- 4 of your measurement taking?
- 5 A. Yes, I did.
- 6 Q. Okay. Let me show you what has been previously marked
- 7 as Plaintiff's Exhibit Number 2. Can you just tell me what that
- 8 is?
- 9 A. Yes. It is a copy of my report. It is dated June the
- 10 2nd of 2002. It is titled, noise emissions from the Turris Coal
- 11 Company mine vent fan to an abutting residential area.
- 12 Q. You prepared this report?
- 13 A. Yes, I did.

- Q. Okay. Do you prepare such reports as a regular part of
- 15 your business?
- 16 A. Yes.
- 17 Q. Was this report prepared by you in the regular course of
- 18 your business?
- 19 A. Yes, it was.
- 20 Q. Was this report prepared by you at the time of your
- 21 observations or within a reasonable time thereafter?
- 22 A. Yes.
- 23 MR. NORTHRUP: Your Honor, at this point I would ask that
- 24 Plaintiff's Exhibit Number 2 be admitted.

- 1 HEARING OFFICER HALLORAN: Mr. Cox?
- MR. COX: Well, I don't think it is a business record, but
- 3 I don't -- I don't object to it coming in. I mean, if he proves
- 4 it up with the rest of the foundation, which I am sure he will.
- 5 Other than some of the hearsay objections that I previously
- 6 raised.
- 7 HEARING OFFICER HALLORAN: You know, I looked through here
- 8 and I didn't see any reference to odor or --
- 9 MR. COX: Let me direct you to what we are talking about.
- 10 If you look at page four, the last paragraph. Let's see. It
- 11 talks about Mr. Knox stated that the pond area was one of the
- 12 family's favorite relaxation spots, and one where they were most
- 13 disturbed by the fan noise. That would be the first hearsay

- 14 statement.
- 15 And then page six, which is a photograph of the pond, a
- 16 comment, where Knox family spends many hours enjoying the pond.
- 17 Next, if you look at page 13, paragraph -- it is the third
- 18 paragraph, not the numbered paragraph, the next to the last full
- 19 paragraph.
- 20 HEARING OFFICER HALLORAN: What page, I am sorry, Mr. Cox?
- 21 MR. COX: Thirteen.
- 22 HEARING OFFICER HALLORAN: Okay. Thank you.
- 23 MR. COX: It talks about the Knoxs complain about a
- 24 humming, beating noise in their bedroom that has disturbed their

- 1 sleep.
- Then, finally, back on page nine is the reference to the
- 3 odor. And I believe that's in the first paragraph,
- 4 three-quarters of the way down. The wind was blowing directly
- 5 from the fan to site one to the extent that the distinctive odor
- 6 of mine vent fan exhaust air was very evident.
- 7 HEARING OFFICER HALLORAN: Mr. Northrup?
- 8 MR. NORTHRUP: Again, Your Honor, just based on the Board's
- 9 regs, Section 101.626, this is a business record. There is kind
- 10 of a definition of what a business record is. You know, writing
- 11 a record, whether in the form of an entry in a book or otherwise
- 12 made as a memorandum or record of any act, transaction,

- 13 occurrence, or event may be admissable as evidence of the act,
- 14 occurrence, or event.
- 15 That is what this is. This is a report of the occurrence,
- 16 the event of Mr. Zak taking those readings. Further on in that
- 17 regulation, which is specifically 626, Subpart E, you know, the
- 18 term business as used in this section includes businesses,
- 19 professions, occupations, callings of every kind. It is clearly
- 20 a business record under the Board's regulations and should come
- 21 in as is under that basis.
- 22 If you want to go beyond that, with respect to some of
- 23 these statements, they have been proved up by the Knoxs. In
- 24 terms of how they use the pond, it was a family area where they

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- 1 would go out. You know, again, with respect to the odor, that
- was Mr. Zak's observation. Again, this is not an odor case, and
- 3 we are not going to make any allegations with respect to the
- 4 odor. But it should come in anyway just as one of Mr. Zak's
- 5 observations.
- 6 HEARING OFFICER HALLORAN: I am going to overrule your
- 7 objection, Mr. Cox. I think it may be admitted to -- it affects
- 8 the weight of evidence, not the admissibility. I will allow it
- 9 and overrule your objection.
- 10 Complainant's Exhibit Number 2 is admitted.
- 11 (Whereupon said document was admitted into evidence as
- 12 Complainant's Exhibit 2 as of this date.)

- MR. NORTHRUP: Thank you, Your Honor.
- 14 Q. (By Mr. Northrup) Okay. Mr. Zak, this report, it
- 15 reflects that you took readings at the Knox property, correct?
- 16 A. That's correct.
- 17 Q. Where did you take readings at, what location on the
- 18 property?
- 19 A. I took readings at three locations and I labeled those
- 20 on a map as site one, site two, and site three.
- 21 Q. Okay. That map appears at page 11, I believe, of your
- 22 report?
- 23 A. That's correct.
- 24 Q. Okay. What kind of readings did you take? Strike that.

- 1 Why did you take readings at site number one?
- 2 A. Site number one was relatively clear of any reflective
- 3 objects. That being a poor aspect of taking noise measurements,
- 4 it is very important to try to avoid reflection as much as
- 5 possible. Additionally, the Knoxs had indicated to me that they
- 6 used that area extensively, or at least they had. And that it
- 7 was -- they described it as very much a part of their residential
- 8 area. And since they were using it to the extent -- I was told
- 9 they were using it to the extent they were using it, I took the
- 10 measurements there to document what the fan noise levels were at
- 11 that particular point.

- 12 Q. Site number two, why did you take -- did you take
- 13 measurements at site two?
- 14 A. Yes, I did.
- 15 Q. Okay. Why did you select site two?
- 16 A. Site number two is where I obtained my ambient
- 17 measurement. According to the Board's rules under Section
- 18 900.103(b), the Board requires that the measurement be ambient
- 19 corrected. Site number two was the only point or maybe I should
- 20 say the most convenient point that I found in order to get a
- 21 measurement of the background sound, and also at the same time
- 22 try and put an artificial barrier between my measurement and the
- 23 fan to, you might say, subtract out the affect of the fan.
- I was not totally successful in that, because the

- 1 predominant noise on the other side of the shed was the fan. But
- 2 at least I was able to demonstrate that by putting that shed
- 3 barrier there in front of the microphone that the sound levels
- 4 measured at the frequencies of interest dropped at least ten
- 5 decibels, which would then indicate that there was no ambient
- 6 noise in the area that would impact the measurements. The
- 7 measurements required no correction for background noise.
- 8 Like, for example, if I took measurements in a city where
- 9 there is a lot of traffic, airplanes, various other noise
- 10 sources, all of those things would have to be corrected for in
- 11 order to obtain a set of numbers that represent just the noise

- 12 source of interest.
- 13 In this case here, since the only significant noise source
- 14 in the area was the fan, there was no ambient corrections needed.
- 15 But that had to be actually proven. That was proven at site
- 16 number two by taking the measurements behind the shed and using
- 17 the shed as a barrier.
- 18 Q. Just generally, could you hear the fan at site two?
- 19 A. Very clearly. It was the only -- the only thing I could
- 20 hear the whole time I was there, as far as noise was concerned,
- 21 was the fan.
- 22 Q. Okay. Then, certainly, I assume at site one at the pond
- 23 you could hear the fan?
- 24 A. Yes.

- 2 the sound was like when you took the measurements out here at the

Q. Can you describe, just kind of in layman's terms, what

- 3 pond?
- 4 A. The sound was, again, in layman's terms, very much like
- 5 listening to a vacuum cleaner. It -- the one characteristic it
- 6 did have when I took the measurements, it had a bit of a warble
- 7 to it, and enough of a warble that I got curious about it. So I
- 8 set the analyzer to also take a minimum and maximum measurement
- 9 to see if I was correct in my assessment of this warbling sound.
- 10 It did document that there was over a ten decibel

- 11 difference or a fluctuation in the sound itself and in a very,
- 12 very brief period of time, under a second in time, which added to
- 13 the warble affect. And personally I found that warbling affect
- 14 and, again, based on my experience, that that would significantly
- 15 add a nuisance characteristic to the sound, because it adds a
- 16 characteristic to it that is very irritating.
- 17 Q. Are you generally familiar with regulations found at 35
- 18 Illinois Administrative Code 951.104?
- 19 A. Yes.
- Q. In general, what do those regulations pertain to?
- 21 A. In simple terms, what we are looking at there are the
- 22 Illinois EPA's measurement procedures for obtaining sound level
- 23 measurements.
- Q. Okay. Let me just run down some of these. Before

- 1 beginning to take your measurements -- of course, this is all at
- 2 the Knox property, at the locations that you indicated. Did you
- 3 measure and record the wind speed and direction?
- 4 A. Yes.
- 5 Q. Okay. Did you measure and record the ambient
- 6 temperature?
- 7 A. Yes.
- 8 Q. Did you measure and record the relative humidity?
- 9 A. Yes.
- 10 Q. Did you measure and record the barometric pressure?

- 11 A. Yes.
- 12 Q. Before taking the readings, did you allow the measuring
- 13 device to stabilize?
- 14 A. Yes.
- 15 Q. Before taking the readings, did you monitor and record
- 16 the battery condition of the calibrator and all measuring
- 17 devices?
- 18 A. Yes.
- 19 Q. Before taking the readings, did you allow the calibrator
- 20 to stabilize and then calibrate the measuring devices according
- 21 to the manufacturer's specifications?
- 22 A. Yes.
- 23 Q. Did you measure the sound pressure level data according
- 24 to the manufacturer's recommended procedures?

- 1 A. Yes.
- 2 Q. While you were taking the measurements, did you take
- 3 note of any visual or oral sound sources and varying wind
- 4 conditions?
- 5 A. Yes.
- 6 Q. Did you notice anything unusual in that regard?
- 7 A. Yes.
- 8 Q. What was that?
- 9 A. The wind direction from the fan was so straight line,

- 10 that I was able to detect an odor. To me it was not at all a
- 11 disturbing odor. It was just simply -- I could definitely
- 12 recognize the odor of the mine exhaust. I noted it largely
- 13 because when taking sound level measurements, especially when
- 14 reviewing a report later on by another expert, if you can
- 15 determine the degree of directionality of the wind, that will
- 16 then explain, to a large extent, what the measurement levels
- 17 were. Because I had such a high degree of directionality there,
- 18 I noted the fact that I could smell the exhaust air.
- 19 Q. Okay. I believe you indicated before that you took
- 20 readings at an ambient site?
- 21 A. That is correct.
- Q. Again, where was that site?
- 23 A. That would be site number two.
- 24 Q. Okay. We have discussed why you did not take the

- 1 measurements at the pond for the ambient measurement?
- 2 A. That's correct.
- 3 Q. Did you recalibrate the noise measuring devices after
- 4 you had measured the sound pressure level?
- 5 A. Yes.
- 6 Q. At the conclusion of the measuring, did you monitor and
- 7 record the battery condition of the calibrator and the measuring
- 8 devices?
- 9 A. Yes.

- 10 Q. At the conclusion of the measuring, did you measure and
- 11 record the wind speed and direction?
- 12 A. Yes.
- 13 Q. The ambient temperature?
- 14 A. Yes.
- 15 Q. The relative humidity?
- 16 A. Yes.
- 17 Q. And the barometric pressure?
- 18 A. Yes.
- 19 Q. Did you also record such things as the physical
- 20 description of the property that you were at?
- 21 A. Yes.
- Q. Did you make a diagram of the area?
- 23 A. Yes.
- 24 Q. Okay. On the diagram did you identify the location of

- 1 reflective surfaces?
- A. I drew in the various structures. As far as reflective
- 3 surfaces were concerned, there really are -- there were none at
- 4 site one where the measurements were specifically taken. So I
- 5 would say that I satisfied that requirement largely because at
- 6 the measurement site itself there were no reflective objects.
- 7 Q. Okay. Why don't you take your report, Plaintiff's
- 8 Exhibit Number 2, and I want you to turn to page 12 of 15. There

- 9 is a table down at the bottom of the page. Do you see that?
- 10 A. Yes.
- 11 Q. Essentially, I just want you to identify for the Board
- 12 what these categories are and what these numbers mean?
- 13 A. Looking at the table, we will call it table three,
- 14 specifically looking at the nighttime measurement, which would be
- 15 the second row of data, and the description is span, and then we
- 16 have a break down or a listing of numbers representing nine
- 17 octave bands, starting at 31.5 hertz and going up to 8 kilohertz.
- The first two octave bands are indicated as 56 and then 55.
- 19 Then the next octave band, which is 125 hertz, has a 66 in there.
- 20 The 66 is in bold and it is underlined, and as is explained in
- 21 the table, the reason for that is that if it exceeds the Board's
- 22 standard for noise it is so designated with bold and underlining.
- 23 And then at the next higher frequency of 250 hertz, again, it is
- 24 also bold and underlined.

- 1 The next octave band was not exceeding the Board's
- 2 standard, and that is not emphasized at all. Then the next three
- 3 are also bold and underlined. And then, finally, the last one,
- 4 the 8,000 hertz, again, is not, because it did not exceed the
- 5 Board regulation.
- 6 And then as we go down to the -- a little further down, the
- 7 second row from the bottom, we notice that there is the
- 8 901.102(b), which is the Board's nighttime limit. This would be

- 9 for C to A property. We start out with a level of 69 decibels
- 10 allowable at 31 and a half hertz, down to 32 decibels allowable
- 11 at 8,000 hertz.
- 12 The last row is labeled exceedance, and then the
- 13 description is 901.102(b). And what we see are some zeros, and
- 14 then we see at 125 hertz we see a four. At 250 hertz we see a
- 15 one. And then at 1,000 hertz a two. At 2,000 hertz, a five. At
- 16 4,000 hertz, a four. And then in duration, the duration was
- 17 3,603.8 seconds, which is 3.8 seconds over an hour. That was
- 18 done in order to meet the Board's requirement to take a one hour
- 19 LEQ measurement. The start time for the measurement was 10:29
- 20 and 32 seconds p.m.
- 21 The point that is to me important, based upon my
- 22 experience, was mainly the level measured at 125 hertz. Even
- 23 though the 2,000 hertz level exceeds the regulation by more than
- 24 the 125 hertz does, my experience tells me that if the 125 hertz

- 1 problem is corrected, that should also take care of the problems
- 2 at the higher frequencies.
- 3 Typically in noise control engineering work the most
- 4 difficult thing to attack and solve is a low frequency problem.
- 5 The measures normally used for that also take care of the high
- 6 frequency problem. And my idea of a solution here, again, is a
- 7 large structure. And that structure, if it takes care of a

- 8 problem at the 125 hertz, it is going to also take care of the
- 9 high frequency problem at the same time.
- 10 Q. What I note in that column, the 125 hertz, you have got
- 11 the 66 that is bold and underlined, and if you follow that down
- 12 on the exceedance category, you have got a four. Is an increase
- in four decibels, is that significant at all?
- 14 A. It is extremely significant. The reason being, that a
- 15 rule of thumb is that any time we have a three decibel increase
- 16 in sound, we double the amount of sound energy. Here we have a
- 17 situation where it has gone up by four decibels, so we have more
- 18 than a doubling of the sound energy. So that it is a very
- 19 significant increase and it also significantly exceeds the
- 20 regulatory limit.
- 21 Q. Why don't you turn to page 14 of 15. You will see
- 22 another table there. Can you just walk the Board through that
- 23 table, as well?
- 24 A. Yes. That is table four. What I attempted to do was to

- 1 take a very complicated regulation and lay it out in such a way
- 2 as to hopefully simplify it to some extent. We are talking
- 3 about prominent discrete tones in this table, and the definition
- 4 is a rather involved and complex definition regarding what a
- 5 prominent discrete tone is and also how do you determine if there
- 6 is a violation or not.
- My table here at the upper left-hand corner starts out with

- 8 octave band center of frequency and hertz. You have to look
- 9 down, and underneath that we can see a listing of rows and also a
- 10 designation of 125 hertz, and then several decibel levels
- 11 underneath that. I will just kind of stick with the top portion
- 12 of the whole chart for the time being.
- 13 The second box, we are indicating one-third octave band
- 14 center of frequencies in hertz, making up the octave band level
- 15 in the left-hand column. If you look down there underneath that
- 16 box we will see 100 hertz, 125 hertz and 160 hertz. The idea
- 17 being to show that the 125 hertz octave band is made up of
- 18 actually three one-third octave bands. Again, I have listed
- 19 those as 100, 125 and 160.
- Now, another criterion that has to be met in order for
- 21 there to be a violation of Section 901.106 is the average amount
- 22 the one-third octave band must exceed its adjacent bands by to
- 23 cause a violation is, and you will -- I listed here 15 dB as the
- 24 amount the average has to be either at or above for there to be a

- 1 violation.
- 2 Then, finally, going to the extreme right-hand side, upper
- 3 part of the table, we have got dB level of one-third octave band
- 4 for it to meet the allowable limit from Class C land. In this
- 5 case here, if the one-third octave band prominent discrete tone
- 6 met all the criteria, but we actually looked at the level of that

- 7 third octave band and if it was 59 or less it would be in
- 8 compliance. It would not be a violation. So the 59 represents
- 9 the level that must be met for compliance to be achieved.
- 10 Then if I could, looking at the -- we are down in the lower
- 11 part of the table, looking at row one, at 125 hertz, octave band,
- 12 66 decibels was measured. And then at 100 hertz, the analyzer
- 13 measured 51, 66 at 125 hertz, and 46 dB at 160 hertz. If we do
- 14 the arithmetic and compare the 51 and the 66, we will see a
- 15 difference there of approximately 15 decibels.
- 16 Then if we look from 66 down to 46, we have a difference
- 17 there of 20. If we add the 15 and the 20 together, we get 35,
- 18 divide by two to get an average, and you come up with an average
- 19 of 17.5 decibels for the average amount of difference between the
- 20 adjacent bands and the one of interest. So it meets the criteria
- 21 of being 15 decibels or more difference between the one of
- 22 interest and the side bands.
- Then going to the right, there is a plus seven dB. That
- 24 represents the numbers of decibels over the allowable limit of

- 1 this particular measurement indicated. In other words, we read
- 2 66. The maximum allowed is 59. If we take the arithmetic
- 3 difference, it is seven decibels. So in order to bring it into
- 4 compliance, it would have to come down by at least seven
- 5 decibels.
- 6 Then underneath, the next row down, row two, I have got 47

- 7 dB at 125 hertz, 37 dB at 100 hertz, 46 dB at 125 hertz, and 32
- 8 dB at 160 hertz. The next column indicates that is ambient. I
- 9 have listed that for the Board, so that the Board can see that
- 10 the ambient is at least ten decibels or more below what was
- 11 measured, indicating that no correction is needed. That is
- 12 indicated in row three where the ambient correction for all four
- 13 measurements was zero.
- 14 On row four, I have got the measurement indicating what I
- 15 would call the warble affect. What I obtained there is a level
- 16 of 51 at 100 hertz. 60 at 125 hertz. 46 at 160 hertz. And
- 17 directly underneath that, at 100 hertz I had 37 dB. And at 125
- 18 hertz I had 47 dB. And at 160 hertz I have 29 dB, and I
- 19 indicated that as being the low measurement.
- 20 Remember, the analyzer is taking both the high and the low
- 21 and then will provide for a comparison the difference or what
- 22 would, in effect, cause the warble is 14 decibels at 100 hertz,
- 23 13 decibels at 125 hertz, and 17 decibels at 160 hertz, which is
- 24 basically saying that the sound is going up and down at a rate

- $1\,$ $\,$ much faster than one time per second or one cycle per second.
- 2 And that the level of change is considerably more than ten
- 3 decibels.
- 4 So to the ear that would sound like a fluctuation of twice
- 5 as loud, going back to loud, then twice as loud, loud, twice as

- 6 loud, loud, that sort of fluctuation back and forth. That is
- 7 happening very, very rapidly, which would produce a warble type
- 8 sound.
- 9 Q. In the fourth column over, where you talk about the
- 10 third octave band, you have got 59 decibels, and then in row one
- 11 a plus seven decibels?
- 12 A. Yes.
- 13 Q. Is that number significant, plus seven?
- 14 A. Yes. The plus seven is the exceedance. In other words,
- 15 under the Board regulations, 59 decibels, for that prominent
- 16 discrete tone would be allowable. Anything over that would not
- 17 be allowable. And I measured 66. If I take the arithmetic
- 18 difference between the 59, which is the allowable limit, and what
- 19 I measured, the difference is plus seven decibels.
- 20 Q. Okay. Now, is what you said before about the three
- 21 decibels being a doubling of the amount of sound energy, does
- 22 that hold true for this number, as well, the plus seven?
- 23 A. Yes. Because we have had -- we can break it down and
- 24 say we have plus three, which would double it, another plus three

- 1 which would double it again, or create four times the sound
- 2 energy, and then we have got an additional decibel besides that.
- 3 So we have got a situation here where it is more than four times
- 4 the sound energy which is allowable.
- 5 Q. Okay. Go back to page 12. I want to ask you a

- 6 question. It is in numerical paragraph two. Do you see that?
- 7 It is page 12, numerical paragraph two, the second sentence says
- 8 the physical laws of transmission loss.
- 9 A. Yes, I see that.
- 10 Q. What are the physical laws of transmission loss? What
- 11 does that mean?
- 12 A. What we see in a situation at the Knox residence with
- 13 the 125 hertz sound versus the higher frequency sounds, when they
- 14 had their -- even when they had their window open, only a very
- 15 small amount of the high frequency sound can get in. The house
- 16 acts as a filter. This is true for houses in general. They will
- 17 past the extremely low frequency sounds very easily, but they
- 18 will filter out the higher frequency sounds very effectively.
- 19 What happens inside is that the high frequency sounds are
- 20 being filtered out and what you tend to hear inside are the low
- 21 frequency sounds. That gets into, again, the physical laws of
- 22 transmission loss. Simply because the high frequency sounds are
- 23 very poor penetrating say brick or even wood and metal siding and
- 24 the materials that are used for normal house construction. But

- 1 the low frequency sounds, they can pass through that much, much
- 2 more easily than the high frequencies can. Again, it gets into
- 3 the mass law and into the physics of sound transmission.
- 4 And my statement here was basically to state that what the

- 5 Knoxs were describing to me before I took the measurements and
- 6 then after I took the measurements, was that their sleep is being
- 7 disturbed by being able to hear the sound. And all of the
- 8 information I have tabulated here indicates that, yes, there was
- 9 a definite problem in the 125 hertz, and 125 hertz is the type of
- 10 frequency of sound that is low frequency sound and it is going to
- 11 be very penetrating of a residential structure.
- 12 Q. Okay. Based upon your training, knowledge, experience,
- 13 and experience in the noise field, and your measurements in this
- 14 case, do you have an opinion, to a reasonable degree of
- 15 scientific certainty, with respect to whether the noise from the
- 16 mine ventilation fan exceeds the applicable regulatory standards?
- 17 A. Yes, I believe it does.
- 18 Q. Based upon your training, knowledge, and experience in
- 19 the noise field, and your measurements in this case, do you have
- 20 an opinion, to a reasonable degree of scientific certainty, with
- 21 respect to whether the noise from the mine ventilation fan
- 22 unreasonably interferes with the Knoxs' enjoyment of their
- 23 property?
- 24 A. In my opinion, it does.

- 1 Q. Okay. Based upon your experience in the field, do you
- 2 have an opinion with respect to how to reduce these noise
- 3 emissions?
- 4 A. Yes, I do.

- 5 Q. Okay. What is that opinion?
- 6 A. My opinion would be that at this point I would recommend
- 7 a structure, something along the lines of a very large shed or a
- 8 barn type structure to be built over the existing housing of both
- 9 the silencer, the evase, the fan, and the attached buildings.
- 10 And that the structure be open to the south and the same
- 11 direction the fan is currently pointing, but the rest of the
- 12 structure be closed, be air tight, have a surface density of
- 13 approximately five pounds per square foot. And in addition, the
- 14 inside be lined with at least -- fiberglass, at least three and a
- 15 half inches thick in order to absorb much of the sound that is
- 16 being emitted from the current fan structure.
- 17 That type of structure would direct any additional sound to
- 18 the south, where currently there is no problem with the noise.
- 19 The fiberglass in there would absorb a lot of the sound that is
- 20 being emitted from the fan and housing so that the amount of
- 21 sound being emitted to the south from the structure would be at a
- 22 fairly low level.
- 23 If we didn't line the inside of the structure, the amount
- 24 of sound coming out to the south would be considerably higher.

- 1 For the slight investment in the fiberglass, I would recommend
- 2 going with the fiberglass to ensure that the structure meets the
- 3 desired reduction in sound.

- And, again, I would like to stress again the importance of
- 5 the structure itself being air tight. All the cracks would have
- 6 to be caulked, no gaps left anywhere. Again, a density of about
- 7 five pounds per square foot for both walls and roof, especially
- 8 the roof. A lot of times roofs are not built with the sufficient
- 9 density that they should have for this type of sound control.
- 10 Q. How do you spell evase?
- 11 A. E-V-A-S-E.
- 12 Q. What is that?
- 13 A. To put it in layman's terms, it is the cone that goes
- 14 from the fan outward, much like the -- if we look at a musical
- 15 instrument, like a trumpet, and we see at the end of the trumpet
- 16 there is flared, it is somewhat similar to that. It provides for
- 17 a smoother, more laminar airflow coming out of the fan and it
- 18 makes the fan much more efficient.
- 19 If the fan were to be designed where the air just simply
- 20 left the fan and there was no extension of metal, a metal tube of
- 21 any type on the fan, the amount of turbulence from the blades
- 22 would create a significant amount of back pressure. Whereas, if
- 23 we can use, in this case, what is actually called an evase, that
- 24 reduces back pressure and makes the fan much more efficient.

- 1 Q. One of the points I forgot to ask you in the beginning,
- 2 you are appearing today as an expert for the Knoxs?
- 3 A. That's correct.

- 4 Q. And you are being paid for your testimony today?
- 5 A. Yes, I am.
- 6 Q. And you have been paid for your work out at their
- 7 property?
- 8 A. Yes, I have.
- 9 MR. NORTHRUP: All right. I have no further questions.
- 10 HEARING OFFICER HALLORAN: All right. Thank you, Mr.
- 11 Northrup.
- 12 I think at this time we will take probably about a 45
- 13 minute lunch break.
- 14 Mr. Zak, you can step down and you will come back for Mr.
- 15 Cox's cross and you will still be under oath.
- 16 However, before we do, I do want to expound on Mr. Cox's
- 17 motion.
- 18 You can step down, Mr. Zak.
- 19 THE WITNESS: Okay.
- 20 (The witness left the stand.)
- 21 HEARING OFFICER HALLORAN: The motion to exclude Mr. Zak's
- 22 testimony. I am looking through the docket sheet, and it is a
- 23 little upsetting, not to -- not affecting the admissibility. But
- 24 I am looking on February the 4th on the Complainant's data that

- 1 the noise expert will visit the site in the next 30 days.
- 2 We get to the March 20th status conference, and evidently

3	the noise expert had not been out there. The Complainant stated
4	that he is supposed to be out there in the next 14 days. And
5	instead I guess we did not get the report until June 3rd.
6	But with that said, you know, I do find that Mr. Cox did
7	have six days to review it. And, again, the Respondent didn't
8	mention anything at the June 3rd prehearing. So I am going to
9	uphold my ruling.
10	Thank you. We will be back here at 1:30. Think we can
11	make it? Okay. Thank you.
12	(Whereupon a lunch recess was taken from 12:45 p.m. to 1:38
13	p.m.)
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- 3 HEARING OFFICER HALLORAN: All right. We are back on the
- 4 record. We took a short lunch break. It is approximately 1:38.
- 5 A preliminary matter, Mr. Northrup has substituted, without
- 6 objection, Plaintiff's Exhibit Number 2. It is Mr. Zak's June
- 7 2nd of 2002 report. For the reason being, I guess it has colored
- 8 photographs. Yes, it does have colored photographs included. So
- 9 that will be accepted, Plaintiff's Exhibit Number 2.
- 10 With that said, I think we left off with the direct
- 11 examination of Mr. Zak was completed.
- 12 Mr. Zak can come up here. He is still under oath. I
- 13 believe Mr. Cox will do a cross.
- MR. COX: Thank you.
- 15 CROSS EXAMINATION
- 16 BY MR. COX:
- 17 Q. Mr. Zak, let me clear up a couple of things from your
- 18 testimony, first of all. You indicated that when you set up at
- 19 site one at the pond that there were not any reflective items
- 20 around, correct?
- 21 A. That's correct.
- Q. Normally water is thought of as reflective of sound.
- 23 Does that not play into this?
- A. Not in the definition of a reflective object.

- 2 to them; walls, buildings, even some vegetation, if it is
- 3 sufficiently large vegetation, like large trees.
- 4 Q. Sure.
- 5 A. But water itself is no different really than, say,
- 6 taking the measurements at an area that has been asphalted over.
- 7 The asphalt would have about the same reflective qualities that
- 8 the water would.
- 9 Q. Okay. I didn't know. My concern, of course, was that
- 10 it somehow amplified the sound like a parabolic microphone or
- 11 something like that --
- 12 A. No, it does not.
- 13 Q. -- and the answer is it does not? Okay. You also
- 14 indicated that in May when you went out there that all you could
- 15 hear was the fan. Wasn't there a tractor also that was mentioned
- in your report that you could also hear?
- 17 A. Yes. The measurements there that were taken, the
- 18 daytime measurements for informational purposes, and with the
- 19 tractor in the background it was difficult to separate out which
- 20 was fan and which was tractor. To be absolutely certain, I then
- 21 decided the best thing to do would be to go ahead and come back
- 22 later that night and do it when the tractor was not operating.
- Q. You had said, I think very clearly, that it was not a
- 24 disturbing odor that you were talking about, it was just

- 2 is that right?
- 3 A. It is a little hard to describe if you have never
- 4 smelled it. But I would liken it to almost -- this is not an
- 5 accurate description, but I think it will give the essence of
- 6 what we are talking about here, is, say, fresh earth. It has a
- 7 distinctive odor to it. It is not necessarily a bad odor, but
- 8 just you can recognize it.
- 9 Q. Okay. You were talking about the four decibel increase
- 10 being a significant increase. Do you recall that?
- 11 A. Yes.
- 12 Q. Okay. And you said that if it increases three decibels,
- 13 there is essentially a doubling of the sound energy, correct?
- 14 A. That's correct.
- 15 Q. Does the same math hold true for a reduction? If there
- 16 is a reduction in three decibels, is the sound energy halved?
- 17 A. Exactly.
- 18 Q. Okay. You initially had, I believe, in 1999, some
- 19 communication from people at the Turris mine; is that right? Or
- 20 do you even recall?
- 21 A. In 1999 I remember the communications with the Knoxs.
- 22 Q. Okay.
- 23 A. I may have gotten a call from some folks at the Turris
- 24 Mine in 1999. Typically I would have fielded somewhere around

- 1 3,000 phone calls that year. I get a lot of calls from industry
- 2 asking if something is a problem, and if it is a problem, do I
- 3 have any suggestions as to how they might solve it. So it is
- 4 kind of lost in the clutter back there of all of those phone
- 5 calls.
- 6 Q. Let me show you something which may refresh your
- 7 recollection. I am not going to mark it as an exhibit.
- 8 (Mr. Cox passing document to Mr. Northrup.)
- 9 MR. NORTHRUP: Okay.
- 10 Q. (By Mr. Cox) Can you take a look at that and identify
- 11 it?
- 12 A. (The witness reviewing document.) This was a fax sent by
- 13 me, or a facsimile sent by me, dated October the 26th of 1999, to
- 14 a person named Kayla Primm at --
- 15 Q. Do you have any independent recollection if that is
- 16 someone with the mine or not?
- 17 A. No, I don't.
- 18 Q. Okay. Is that typically a fax that you might have sent
- 19 out to one of these industries that you were mentioning, that you
- 20 got an inquiry?
- 21 A. Yes. I would typically send well over 100 per year.
- 22 Q. Okay. I will just take that back. So that does not
- 23 refresh your recollection at all about whether or not you talked
- 24 to the people at the mine or had any communications with them?

- 1 A. If Kayla Primm is with the mine, then I think it is safe
- 2 to say that I did have communication with them then. The name
- 3 does not ring a bell.
- 4 Q. That's, again, based on the fact that you field
- 5 thousands of complaints each year?
- 6 A. Yes.
- 7 Q. Inquiries, I guess. Do you have any recollection early
- 8 on in the process of ever talking to Wally Schultz?
- 9 A. How early is early?
- 10 Q. I would say prior to the first time you visited the mine
- 11 site, any time before that?
- 12 A. I have kind of a dim recollection. Again, as far as --
- 13 the name Wally Schultz sounds vaguely familiar.
- 14 Q. Okay.
- 15 A. Again, I seek a little indulgence here because of the
- 16 fact that I did deal with so many people, that unless I actually
- 17 sat down and wrote correspondence and had correspondence back and
- 18 forth to a fairly significant extent, I don't usually remember a
- 19 person's name for very long.
- 20 Q. It is possible, I suppose, that you had contact with
- 21 him?
- 22 A. Oh, very much so, yes.
- Q. I am not trying to be redundant, but there is several
- 24 things I want to find out. Would you ever have indicated to

- 1 Wally or somebody else there at the mine that where you are
- 2 talking about defining a residential area, you know, how far that
- 3 is around a home that generally they are given a 100 foot buffer
- 4 that would include around their home?
- 5 A. I may have indicated something along those lines. I
- 6 think I made -- the standard example I used for a situation
- 7 involving a farm, because that question comes up all of the time,
- 8 and people ask me, well, if there is 1,000 acres there where do
- 9 you take the measurement. And I would typically say, well, you
- 10 want to take it usually within about 100 feet of the residence.
- 11 And the example I gave is one from many, many years ago,
- 12 where a farmer was complaining about a power plant, and he wanted
- 13 the measurements taken at his mailbox, which was about a half
- 14 mile from his house, because that was still on his land. And he,
- 15 obviously, spent very little time at the mailbox. And it was a
- 16 little unreasonable for him to want the measurement at the
- 17 mailbox, close to the power plant, when he was really being
- 18 disturbed in the area around his residence.
- 19 Now, there have been a number of cases where the distance
- 20 may be considerably more than 100 feet. I can think of another
- 21 case where a fella had -- he didn't really have a farm, but he
- 22 had, say, four or five acres. And he had a garden area there
- 23 that was his hobby. It was closer to the noise source than his
- 24 home was. In that particular case, the measurements were taken

- 1 at the garden, because he was able to establish that he spent a
- 2 significant amount of time per week at the garden.
- Q. Okay. Again, early on in this process do you have any
- 4 recollection of recommending that Turris contact Dr. Schomer?
- 5 A. Yes, I think I do seem -- I do remember -- actually, I
- 6 have recommended Dr. Schomer many, many times. But I do remember
- 7 talking to somebody at the Turris mine, and I think being asked,
- 8 well, do you know who can do a good job with this type of
- 9 situation. I said, well, if you are going to get into a private
- 10 consultant, you really can't go wrong with Dr. Schomer.
- 11 Q. He is -- as I understand it, he is a Ph.D. based out of
- 12 Champaign-Urbana?
- 13 A. Yes. He has got about 35 years of experience in noise.
- 14 He has a Ph.D. in electrical engineering.
- 15 Q. Okay.
- 16 A. He is currently, I believe, the Executive Director of
- 17 the Institute of Noise Control Engineering.
- 18 Q. That's the professional association or whatever that he
- 19 belongs to?
- 20 A. Yes. And he also is recognized both nationally and
- 21 internationally as a noise expert.
- 22 Q. Okay. The bottom line is that it is somebody you trust
- 23 and believe is knowledgeable in those areas?
- 24 A. Yes.

- 1 Q. Okay. Do you know if Turris did contact him in this
- 2 case?
- 3 A. Yes, I do. They did.
- 4 Q. Okay. Have you ever seen any of the reports? And I use
- 5 that very loosely. But any of the correspondence, any of the
- 6 written correspondence that he has had with Turris?
- 7 A. No, I have not.
- 8 Q. Okay. You don't know what any of his opinions are,
- 9 then?
- 10 A. We talked about the case when I was with the EPA.
- 11 Q. Okay.
- 12 A. I can remember him basically saying that it was, in his
- 13 opinion, somewhat borderline. That in some ways of looking at
- 14 it, it would probably be considered a violation. Yet, in other
- 15 ways of looking at it, it may not be considered a violation.
- 16 Q. Okay.
- 17 A. And so my general impression, from talking to him, from
- 18 the measurements he had taken, and the way I understood it at the
- 19 time that he had not taken really a lot of measurements,
- 20 especially as far as taking measurements on the Knox property,
- 21 that he was of the opinion that it could be a violation, or if it
- 22 is not a violation, it is just barely not a violation.
- 23 Q. Okay. Do you recall that he -- one of his opinions was
- 24 that the only residential area here was the home and the area

- 1 immediately surrounding, and that the sheds and the pond and
- 2 those other areas were all classified as agricultural?
- 3 MR. NORTHRUP: Objection. No foundation.
- 4 HEARING OFFICER HALLORAN: Mr. Cox?
- 5 MR. COX: I think he has indicated that he did talk to Dr.
- 6 Schomer about it, and apparently they did have some discussions.
- 7 And it is not really going to the truth of the matter asserted
- 8 here. So I don't think it is hearsay.
- 9 HEARING OFFICER HALLORAN: Mr. Northrup, I am going to
- 10 overrule your objection.
- 11 You may answer if you are able.
- 12 THE WITNESS: When I talked to him about it, we really
- 13 didn't get into the configuration of the Knox property very much.
- 14 It was more dealing with the fan.
- 15 Q. (By Mr. Cox) Okay. But the bottom line is you don't
- 16 remember if he said that or not? And that's fine if you don't
- 17 remember.
- 18 A. I don't remember, no.
- 19 Q. Okay. Is that -- you are talking about -- your
- 20 recollection is he said it may have been a violation and it may
- 21 not have been a violation. Do you -- does that have to do with
- 22 the way it was classified? Do you recall?
- 23 A. Well, as far as classification there, are we referring
- 24 to land classification?

- 1 Q. Yes, for the noise regulations?
- 2 A. Right. I think his assumption -- and we discussed the
- 3 classification of the land. And I gave him my opinion that the
- 4 coal company would definitely be considered Class C, or
- 5 industrial property. We both agreed on that. That particular
- 6 classification allows the most amount of noise emission of any
- 7 possible noise source.
- 8 So based upon -- I think we were both at the same point.
- 9 Thinking about it, well, we have got a situation here where the
- 10 coal company is a Class C property, and it is impacting Class A
- 11 property, and so, therefore, what we call the C to A regulation
- 12 would apply, which would allow the maximum amount of noise.
- 13 Q. Okay.
- 14 A. And he still basically said, well, you know, it may be
- 15 over and it may not be.
- 16 Q. Is it -- so you don't recall specifically if he said,
- 17 okay, 100 feet from the house or the backyard or where the sheds
- 18 start or whatever, as you recall, he didn't draw a line and say,
- 19 okay, residential ends here and the rest is agricultural? You
- 20 just don't recall?
- 21 A. I don't recall that at all.
- 22 Q. Okay. Is it a reasonable interpretation of the rules
- 23 if, in fact, he said only the home is residential and the rest is
- 24 agricultural?

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- 1 A. I would have argued with him over that, based upon what
- 2 Mr. Knox said and based upon my own observations of the area,
- 3 that it is cared for in such a way and utilized in such a way as
- 4 to be considered a residential nature as opposed to any type of
- 5 commercial or industrial operation.
- 6 Q. Is there room for difference of opinion on it, on how
- 7 you classify the Knoxs' land behind their house?
- 8 A. I suppose there is always room for disagreement there.
- 9 But, in my opinion, there is no question in my mind that that
- 10 area would be considered a residential type area.
- 11 Q. Okay. The entire -- like you said, all the way back to
- 12 the pond?
- 13 A. Yes.
- 14 Q. Okay. And --
- 15 A. Even possibly a little bit further than that. There is
- 16 an orchard area there. But I had no evidence that either of the
- 17 Knoxs spend a lot of time in the orchard. So I decided, then, to
- 18 take the measurements at the pond, due to a lack of reflective
- 19 objects, and the fact that they basically said that they spent --
- 20 in the past they spent so much time there, and found the noise to
- 21 be most disturbing in that general area.
- Q. Okay. Would it have surprised you if Dr. Schomer would
- 23 have recommended to Turris the installation of a silencer?
- A. No, because he asked me what I thought, and I

- 1 recommended a silencer. He said, yes, that's what he thought,
- 2 too. So we collaborated on that. I had the advantage over him
- 3 in having dealt with three mine vent fans before this. And this
- 4 was his first mine vent fan.
- 5 Q. Okay. You indicated, I believe, that your first visit
- 6 to Turris' Williamsville Portal next to the Knoxs' property was
- 7 in May of 2001?
- 8 A. To the best of my recollection, my records that I can
- 9 find, it is. I would not be terribly surprised if there had been
- 10 a visit a little before that. The reason I say that is it seems
- 11 to me that there was -- on my first visit, the belting was not
- 12 present.
- 13 The second visit, the belting was present. And I said,
- 14 well, you need to tighten it up a little bit. They tightened it
- 15 up. And then I went on a third visit and it was somewhat better,
- 16 as far as the leaks were concerned. But I still felt that it
- 17 needed a little bit more work. And I was beginning to lean much
- 18 more toward the building structure at that time.
- 19 Q. Okay. In May of 2001, or sometime, I guess, in the
- 20 spring of 2001, I guess we can narrow it down to that, you had
- 21 made some recommendations to Turris, correct?
- 22 A. That's correct.
- 23 Q. You made the belting that you have already talked about,
- 24 that is wrapping the evase with the mine belting?

- 1 A. Actually, the entire structure. The evase is simply
- 2 the cone part.
- 3 Q. Okay.
- 4 A. But I actually recommended wrapping the entire structure
- 5 with the belting.
- 6 Q. That would have included all of the buildings out there,
- 7 too?
- 8 A. Let's see.
- 9 Q. The buildings associated with the fan, not anything
- 10 else?
- 11 A. If the building was -- if the building portion was of
- 12 such a construction that the belting would have helped, I would
- 13 have recommended it. There may be some fairly heavy concrete
- 14 structure there that I didn't feel it necessary to cover with
- 15 belting.
- 16 Q. Do you remember if the building was sort of -- had
- 17 tongues, if you will, sticking out of it and then low areas that
- 18 would go over to another tongue, and would come over? Do you
- 19 have any recollection of that?
- 20 A. Yes, I do seem to recommend -- I mean, I do seem to
- 21 remember that the construction was similar to that.
- 22 Q. Okay. Do you remember any discussion that we had about
- 23 how the belting really was not the way to go on that because of
- 24 the way it was set up, but instead have some steel panels

- 1 fabricated and bolted on to the building?
- 2 A. Yes, I remember that now.
- Q. Okay. So that was a recommendation that you made, to
- 4 the best of your recollection?
- 5 A. Well, it was not so much my recommendation. When I
- 6 mentioned the belting, and as you correctly pointed out, that the
- 7 configuration of the metal paneling was such that -- the paneling
- 8 on the side of the building, the belts would not work very well.
- 9 And someone with the mine said, well, could we put metal panels
- 10 over it in lieu of belting. And I agreed, yes, that you could do
- 11 that.
- 12 Q. Do you know, now that you think about that, did they
- 13 actually put on the panels? From your later visits, do you
- 14 recall?
- 15 A. I believe they did.
- 16 Q. After the spring of 2001, your next visit was early
- 17 December of 2001, correct?
- 18 A. That's correct.
- 19 Q. Okay. Do you remember if it was at that point that you
- 20 noticed that they had implemented the belting, as you
- 21 recommended, and they had put the panels on?
- 22 A. I believe that was the first time that I had noted that
- 23 the suggestions that I made before were -- as far as the belting
- 24 was concerned and as far as the suggestion of putting the metal

- 1 paneling on there, that it was completed, yes.
- 2 Q. Do you -- you took some noise measurements at that visit
- 3 when we were on the mine property. Do you remember that?
- 4 A. Yes.
- 5 Q. Approximately at 50 feet you had made an A-Weighted
- 6 measurement of between 70 and 72 decibels. Does that sound
- 7 right?
- 8 A. That could be, yes.
- 9 Q. You had also indicated that, I believe, for every 50
- 10 feet you go out there is the reduction? You know, you are
- 11 talking about the further you get away the sound decreases,
- 12 correct?
- 13 A. That's correct.
- 14 Q. Was there -- was it every 50 feet it decreased by six
- 15 decibels?
- 16 A. No. I need to clarify that.
- 17 Q. Okay.
- 18 A. The one fact that we have to look at here is we have got
- 19 the fan and its housing and the sound is radiating out from that.
- 20 We have got a structure that would not be considered a point
- 21 source. We have got sound coming out from a large structure.
- 22 The doubling of distance rule is applied to a point source where
- 23 we have a very small discrete point source of noise. And every

- 1 drop approximately six decibels. It is called the inverse square
- 2 law.
- Q. Okay.
- 4 A. The situation there was let's say if I was 50 feet away
- 5 from the structure, it would really be necessary to have an
- 6 aerial photograph and make a point right in the middle of the
- 7 structure. And then from that point if we went out, let's say, I
- 8 would prefer a distance of like 200 feet, and we took a
- 9 measurement, say, 200 feet away from that measuring point we draw
- 10 on the structure. And then we would go from 200 feet to 400 feet
- 11 we should see about a six decibel drop in sound level. Once we
- 12 get as close as 50 feet, then we are running into the problem of
- 13 where if we have got a large structure, that it is no longer a
- 14 point source. Until we get some distance away, we are not going
- 15 to see a true inverse square law taking place.
- 16 Q. Okay. But, I mean, in general, the sound does decrease
- 17 as the distance increases?
- 18 A. Yes.
- 19 Q. Okay. And in this case it was not really 50 feet, it
- 20 was more, as you said, going out 100 feet or something, and at
- 21 some point the rule you are talking about --
- 22 A. To demonstrate what you are describing there, I would
- 23 say my initial reaction would be, well, let's take a measurement

- 1 located in the building and measure out, say, 200 feet, take a
- 2 measurement, and then go out another 200 feet, and double the
- 3 distance, take a second measurement, and we should see about a
- 4 six decibel difference or a drop as we move further out.
- 5 Q. That is something that you did not do that day?
- 6 A. No, I didn't.
- 7 Q. Okay. Also on that day you went next door to the Knoxs
- 8 and took some measurements out there; is that correct?
- 9 A. That's correct.
- 10 Q. You, I believe, took a measurement 25 feet southwest of
- 11 the southwest corner of their home?
- 12 A. That could be.
- 13 (Whereupon a document was duly marked for purposes of
- identification as Respondent's Exhibit 1 as of this date.)
- 15 Q. Okay. I am showing you what I have marked as
- 16 Respondent's Exhibit Number 1. Can you take a look at that and
- 17 see if you can identify it?
- 18 HEARING OFFICER HALLORAN: Mr. Cox, do you have -- are
- 19 these marked?
- 20 MR. COX: The one he has and the one Mr. Northrup has is
- 21 marked. Yours may not be. I think I only had stickers on --
- MR. NORTHRUP: Do you want to switch?

- 23 HEARING OFFICER HALLORAN: Yes, we can switch. Thank you
- 24 very much. I am sorry. Go ahead.

- 1 THE WITNESS: Yes.
- Q. (By Mr. Dox) What is that?
- 3 A. It is a letter to Mr. Knox from myself, dated January
- 4 23rd of 2002, describing a visit I made to the Turris facility
- 5 and to the Knox property on December the 3rd of 2000 -- it
- 6 actually should -- I am sorry. It would be 2001.
- 7 Q. Okay. You indicated that you took a set of measurements
- 8 25 feet southwest of the southwest corner?
- 9 A. That's correct.
- 10 Q. Of their home?
- 11 A. That's correct.
- 12 Q. You indicated that you apparently took some measurements
- 13 and then you returned shortly thereafter because you say you
- 14 realize the importance of establishing an accurate measurement;
- 15 is that correct?
- 16 A. Well, what I had done is I had taken --
- 17 Q. Just --
- 18 A. I am sorry.
- 19 Q. Is that what -- your letter states that? I mean, that
- 20 is what -- you said you wanted -- a little bit above that, I
- 21 realize the importance of establishing an accurate measurement?
- 22 A. Yes.

- 23 Q. Okay. You say that the result of that indicates
- 24 compliance at all noise octave bands with the exception of the

- 1 one kilohertz band?
- 2 A. That's true.
- 3 Q. Okay. The analyzer read a level of 42 decibels, which
- 4 is one decibel above the allowable nighttime limit of 41
- 5 decibels, correct?
- 6 A. That's true.
- 7 Q. Numerically they were in compliance for the daytime
- 8 standards?
- 9 A. No. The reason I say no is to fairly state compliance
- 10 or noncompliance it would have to be done with doing a one hour
- 11 LEQ and all of the various parameters that the Board sets up for
- 12 taking a measurement would have to be followed.
- 13 Q. Well --
- 14 A. What I had done there was simply take a real quick --
- 15 let's see how long the analyzer ran for. It was a very quick
- 16 measurement that lasted two minutes.
- 17 Q. Well, now, wait a minute. You say in your letter,
- 18 thought, that it says you realize the importance of establishing
- 19 an accurate measurement. That's why you returned to measure,
- 20 right?
- 21 A. My phraseology there --

- 22 Q. Did you intend to take an accurate measurement or did
- 23 you not?
- 24 A. It is relative.

- 1 Q. Okay. You measured --
- 2 A. If I could explain why it is relative --
- 3 O. You measured 25 feet from the southwest corner of the
- 4 home because that was the important point to measure from at that
- 5 time, you thought, correct?
- 6 A. Yes.
- 7 Q. You, at that visit, in December of 2001, you indicated
- 8 that you thought Turris had done a good job in addressing the
- 9 sound, correct?
- 10 A. Yes.
- 11 Q. You indicated that the Turris mine was putting out less
- 12 noise than usual, in your experience, for this type of operation?
- 13 A. To the extent of taking the measurements very close to
- 14 the fan and comparing that to my experience with other fans, that
- 15 was a good job. However, the problem --
- 16 Q. You indicated that to them at the time? I mean, that's
- 17 all I am asking you.
- 18 A. Yes.
- 19 Q. You told them at the time that you guys have done a good
- job, this is less noise than I usually see?
- 21 A. I don't think I phrased it quite that way.

- 22 Q. Okay.
- 23 A. But I think that generally -- it could be said that I
- 24 said something similar to that, yes.

- 1 Q. You indicated that there was a noticeable difference
- 2 than when you had been out there before; is that right?
- 3 A. Yes.
- 4 Q. You said that you really didn't have anything else to
- 5 recommend at that point in terms of addressing the --
- 6 A. Other than the building structure.
- 7 Q. Okay. You indicated you believed at that point that
- 8 they should put a building up?
- 9 A. I held that out as a possibility from the very
- 10 beginning.
- 11 Q. When did you first communicate that to the people at
- 12 Turris?
- 13 A. It was either on the first or the second visit there.
- 14 Q. Okay. You say you had a visit in May of 2002?
- 15 A. Yes.
- 16 Q. That's when you produced your report, right?
- 17 A. That's correct.
- 18 Q. Do you still have that in front of you? It is -- did
- 19 you say you have that in front of you?
- 20 A. What is the date on that?

- 21 Q. That's your report.
- 22 A. Oh, okay. Yes, I do.
- 23 Q. Okay. Now, the results of this report, in general,
- 24 appear to be significantly different than what you found in

- 1 December of 2001, correct?
- 2 A. Yes.
- 3 Q. Okay. In your report here, this is the first time you
- 4 say that there is this pure tone, or discrete tone?
- 5 A. Prominent discrete tone.
- 6 Q. Prominent discrete tone. That's the first time you had
- 7 mentioned a prominent discrete tone violation; is that correct?
- 8 A. That's correct.
- 9 Q. Your recommendations in your report are significantly
- 10 different than you had recommended before, correct?
- 11 A. I don't think so.
- 12 Q. Okay.
- 13 A. I think what I had recommended before several times on
- 14 visits to the mine was the possibility of having to build a very
- 15 large building type structure covering the existing fan
- 16 structure.
- 17 Q. This is the first time that you indicated that we were
- 18 significantly out of compliance, right?
- 19 A. Also, this is the first time I had an accurate
- 20 measurement of emissions from the fan.

- 21 Q. The first time you mentioned there was a humming and
- 22 beating noise?
- 23 A. That's correct.
- 24 Q. And as I understand your proposal for the building, this

- 1 is to enclose the entire fan house, which is where the fan itself
- 2 is, the building where the motor is, the evase and the silencer
- 3 and that whole area, the whole structure?
- 4 A. Yes.
- 5 Q. You, I think, indicated you know there is a regulatory,
- 6 a mine regulatory aspect of that, correct?
- 7 A. Yes, the explosion doors.
- 8 Q. And just in general, because it is a mine you recognize
- 9 that it has got to be approved by the regulators, either before
- 10 or after, somehow?
- 11 A. Right.
- 12 Q. They can't just put a building up, correct?
- 13 A. That's correct.
- Q. You don't know, I am assuming, if it would be approved
- 15 by the regulators?
- 16 A. No, I don't.
- 17 Q. Okay. Your results from your testing in May of 2002, as
- 18 I read it, Turris is in compliance during the day all of the
- 19 time?

- 20 A. No.
- 21 Q. Why -- where does it say that they are not in compliance
- 22 during the day?
- 23 A. If we look at the prominent discrete tone alleged
- 24 violation, there is no daytime and nighttime for prominent

- 1 discrete tone.
- Q. Okay.
- 3 A. It is a 24 hour -- the level is the same 24 hours a day
- 4 for prominent discrete tone. So when we have the -- what I would
- 5 call a Section 901.106 violation, or exceedance, that would apply
- 6 24 hours a day, seven days a week.
- 7 Q. Do you know if there is a 901.106 allegation here? Do
- 8 you know if the Knoxs have alleged that type of violation?
- 9 A. No, I don't.
- 10 Q. Okay. So Turris complies during the day on the octave
- 11 band measurements, and that is table three, I believe. Table
- 12 three. That is page 12, I think. As I read that, Turris is in
- 13 compliance with what you are talking about there during the
- 14 daytime?
- 15 A. Not entirely. If we look on table three, daytime at 250
- 16 hertz -- let's see. Oh, I am sorry. Okay.
- 17 Q. Your little key here --
- 18 A. We looked at, yes, the nighttime limit, and I really
- 19 made no attempt to look at the daytime limit. We could do that.

- 20 We have it in the report here.
- 21 Q. Well, you say the decibel levels exceeding the nighttime
- 22 limits are shown in bold and underlined?
- 23 A. Yes.
- Q. There is no violation there noted during the daytime,

- 1 right?
- 2 A. And that's correct. There is none. I just checked.
- 3 Q. There is not one noted and there is not a violation
- 4 during the day?
- 5 A. That is correct.
- 6 Q. Okay.
- 7 A. For the octave band.
- 8 Q. Right, for the octave band.
- 9 A. Not for the prominent discrete tone.
- 10 Q. For the prominent discrete tone, you said there is no
- 11 day, night so there is a violation, according to your report?
- 12 A. Yes.
- 13 Q. Is the prominent discrete tone violation based on this C
- 14 to A classification that you are talking about, this prominent
- 15 discrete tone?
- 16 A. Yes.
- 17 Q. Okay. The measurements you took, upon which you base
- 18 your opinion that there is an octave band violation and there is

- 19 prominent discrete tone violations, were taken at site one, which
- 20 is the pond; is that correct?
- 21 A. That's correct.
- 22 Q. That's the location that is closest to the fan, closer
- 23 to the fan than sites two and three?
- 24 A. That's correct.

- 1 Q. Okay. It is beyond the sheds, the machine sheds, and
- 2 beyond the grain bins and, of course, beyond the house, correct?
- 3 Coming south from the road?
- 4 A. Yes.
- 5 Q. From the pond can you tell from your map, or do you know
- 6 independently, how far it is from the pond to the house?
- 7 A. I have listed the distances. It would be a case of
- 8 simply adding up the distances that we have got involved there.
- 9 It would be approximately 125 yards.
- 10 Q. Okay. It looks like you can do it, and you can just
- 11 calculate it by looking at your distance on your map, right?
- 12 A. It is simply arithmetically adding up the distances,
- 13 yes.
- 14 Q. Okay. The classification of the pond as residential you
- 15 said is based on what the Knoxs reported to you was their use of
- 16 it; is that correct?
- 17 A. That's correct.
- 18 Q. What about the fact that you have got these machine

- 19 sheds and grain bins that are used entirely for agriculture
- 20 purposes, there is no residential or personal, if you will,
- 21 purposes that they use those for? They store their equipment
- 22 there that they use, they work on their equipment, they store
- 23 their raw materials, they store other things there that they use
- 24 in their operation, right?

- 1 A. That's true. But I think what we are looking at here is
- 2 the majority use of the property. And the vast majority of the
- 3 use of the property, from my observations and discussions with
- 4 the Knoxs, is overwhelmingly residential, while we do have a
- 5 couple of sheds and a couple of bins that would apply to
- 6 agricultural use as opposed to residential use.
- 7 Q. Are the sheds in those areas agricultural use and then
- 8 you are going back to residential use, or is that entire strip
- 9 their residential?
- 10 A. I would classify it, in essence, as residential. Just
- 11 like if a person -- I have seen this quite often where a person
- 12 will have a very large garage on their property and their hobby
- 13 may be repairing old cars or something. And the argument can be,
- 14 well, there is this large garage there that is off from the main
- 15 garage. It is not strictly a residential type usage, but the
- 16 overall character of the area is residential. And I would
- 17 characterize this area here, from the way it is maintained so

- 18 meticulously, as being one that is, in essence, residential.
- 19 Q. Your opinions that Turris violates the octave band at
- 20 night and the prominent discrete tone all of the time is based on
- 21 that classification of the whole thing is residential, correct?
- 22 A. That's correct.
- 23 Q. So if it is not classified as residential, it is
- 24 classified as agricultural behind their house, Turris is in

- 1 compliance?
- 2 A. Should the Board so classify it, then it would be in
- 3 compliance with the numerical limits. But I still think there
- 4 would be the question of a nuisance violation.
- 5 Q. Okay. When you talk about -- you are talking about
- 6 octave band and prominent discrete tone when you talk about
- 7 numeric there?
- 8 A. That's correct.
- 9 Q. What is -- while we are on that subject, is there some
- 10 point that the prominent discrete tone does not come into play in
- 11 terms of sound levels? Or is that -- is there just no standard
- 12 where you have got C to C? Is there no C to C prominent discrete
- 13 tone regulation?
- 14 A. There are no numerical regulations for C to C.
- 15 Q. Okay. You were here for Mr. Knox's testimony this
- 16 morning?
- 17 A. That's correct.

- 18 Q. Certainly the sound comes and goes? Is there any
- 19 dispute about that, in terms of the ability to perceive it on
- 20 their property?
- 21 A. No.
- 22 MR. NORTHRUP: Objection. I think that mischaracterizes
- 23 what Mr. Knox said.
- 24 HEARING OFFICER HALLORAN: Mr. Cox?

- 1 MR. COX: That was my understanding of what he said.
- 2 That's my recollection of it.
- 3 HEARING OFFICER HALLORAN: Darlene, can you read that
- 4 question back that Mr. Cox just asked Mr. Zak, please.
- 5 (Whereupon the requested portion of the record was read back
- 6 by the Reporter.)
- 7 MR. NORTHRUP: My recollection was that both the Knoxs
- 8 testified that the sound is constant, it is always there. It may
- 9 vary in degree, but the sound is always there. That was my
- 10 understanding.
- 11 HEARING OFFICER HALLORAN: Would you like to rephrase that,
- 12 Mr. Cox?
- MR. COX: I will leave it. I think the Knoxs' testimony is
- 14 clear about that. Thanks.
- 15 HEARING OFFICER HALLORAN: All right. Thank you. The
- 16 objection is sustained.

- 17 Q. (By Mr. Cox) The measurements you took were only at the
- 18 site one that you based the violations on, correct?
- 19 A. That's correct.
- 20 Q. You did take some measurements at sites two and three,
- 21 which are basically between the shed and the home, correct?
- 22 A. That's correct.
- 23 Q. Those were, as you explained, supplementary, to back up
- 24 the other measurements that you were taking?

- 1 A. No. The site two measurement was establishing what the
- 2 ambient was. And the Board requires an ambient measurement be
- 3 taken and ambient corrections be applied to any alleged
- 4 violation, and that's the purpose of the measurements at site
- 5 two.
- Q. You don't describe those as supplementary in your
- 7 report?
- 8 A. I believe site three was supplementary.
- 9 Q. It does not say it is supplementary data for site two?
- 10 Okay, was taken at site three. So the ambient -- the background
- 11 ambient noise is site two?
- 12 A. Correct.
- 13 Q. Supplementary data for site two is at site three?
- 14 A. Correct.
- 15 Q. Okay. You did not take at either site two or site three
- 16 the measurements that you took at site one, correct, where you

- 17 have got -- I notice you attached to your report some of the
- 18 measurements that you took. They appear to be identified, say,
- 19 on attachment A as the LEQ spectra. You didn't take LEQ spectra
- 20 measurements -- or if you did, they are not in your report -- for
- 21 sites two and three?
- 22 A. No, you are incorrect there. If you will look at the
- 23 data for site two --
- 24 Q. Where are those contained within your report?

- 1 A. Okay. If you turn to attachment E.
- 2 Q. Okay.
- 3 A. In attachment E a ten minute measurement was taken of
- 4 the ambient, excluding the fan noise as much as possible. And if
- 5 we look at the --
- 6 Q. Well, you took hour measurements, though, at site one,
- 7 right?
- 8 A. That's correct.
- 9 Q. So you took a ten minute measurement here?
- 10 A. Yes. That's standard procedure and that is outlined in
- 11 ANSI standard S12.9, 1993, Part 3.
- 12 Q. The bottom line is, though, what I am trying to get at,
- 13 you didn't take the same measurements at two and three that you
- 14 did at one?
- 15 A. No, I took exactly the same kind of measurements at all

- 16 three sites.
- 17 Q. You just told me that you took an hour measurement at
- 18 site one, but you didn't at site two and three, that you took a
- 19 ten minute one. You didn't follow the same procedures at two and
- 20 three that you did at site one?
- 21 A. Well, in obtaining an ambient measurement, one does
- 22 exactly the same thing, but for a shorter --
- 23 Q. Did you --
- 24 A. -- period of time.

- 1 Q. -- take and report the same measurements at sites two
- 2 and three that you did at site one? I believe the answer to that
- 3 is --
- A. Well, they are different measurements, so they would not
- 5 be -- I really can't say that I report the same thing.
- 6 Q. You don't have that information attached to your report,
- 7 correct? You don't have the same information that you reported
- 8 at site one at sites two and three?
- 9 A. I am failing to -- I am having a problem with the
- 10 question. I don't quite follow the question.
- 11 Q. Well, let's look at your report, then. Your report,
- 12 where you base -- where you have got the violations, you look at
- 13 table three, table three you have got site one daytime, site one
- 14 nighttime, site two nighttime. There is nothing -- there is no
- 15 chart, and there is no data that I can see in here where you have

- 16 got site two, daytime, nighttime or site three daytime,
- 17 nighttime, correct?
- 18 A. Correct.
- 19 Q. Okay. Now, the measurements you took at night in May of
- 20 2002, were done around shift change time at the mine, correct?
- 21 A. I have no idea. There was traffic in and out of the
- 22 mine, but whether it was shift change or not, I wouldn't know
- 23 that.
- Q. All right. They were taken from 10:30 to 11:30 at

- 1 night; is that correct?
- 2 A. That's correct.
- 3 Q. Did you make any adjustments for any of the traffic
- 4 coming in and out of the mine?
- 5 A. The analyzer did not pick up any sound at all from the
- 6 traffic.
- 7 Q. Okay. How do you know that?
- 8 A. I was watching it.
- 9 Q. How would you know if it is picking up traffic as
- 10 opposed to whatever else it is picking up?
- 11 A. Because the measurement, in essence, settled down after
- 12 about one or two minutes. By settled down, I mean it didn't
- 13 increase or decrease. It kept continuously averaging. If there
- 14 is any extraneous sound that is affecting the measurement, the

- 15 level will go up. I can ascertain that down to a tenth of a
- 16 decibel. Looking at the linear output from the analyzer, when
- 17 there was a slight amount of traffic audible, it did not -- there
- 18 was not even a tenth of a decibel increase from the linear output
- 19 from the analyzer.
- 20 Q. So you don't think it had any affect on your
- 21 measurements?
- 22 A. I know it didn't.
- 23 Q. You agree you can stand next to the fan, around the fan,
- 24 and have normal conversation?

- 1 A. No, I don't.
- 2 Q. Why not?
- 3 A. You have to raise your voice.
- 4 Q. Didn't we all stand out there and have lengthy
- 5 conversations 50 feet away from it?
- A. Yes, we did, and we all raised our voices too.
- 7 Q. That's your recollection, huh?
- 8 A. Yes, it is.
- 9 Q. The use that Turris is putting the land next door to the
- 10 Knoxs to is appropriate for the area, correct, as far as you
- 11 know?
- 12 A. Well, that's somewhat of a zoning matter. But, in my
- 13 opinion, since the -- we are looking at --
- Q. Do you know?

- 15 A. -- the priority of occupancy of the area there --
- Q. Do you know if it is appropriate, if it is appropriately
- 17 zoned?
- 18 A. I don't know.
- 19 Q. The pond, you don't think, is an agricultural area?
- 20 A. No, I do not.
- 21 Q. You think that the line here should be drawn, you said,
- 22 even beyond the pond?
- 23 A. At least as far as the pond, and I didn't pursue it with
- 24 the Knoxs as far as how much they used the orchard area that is

- 1 south of the pond.
- 2 Q. The building you have now recommended, what sort of
- 3 benefit, in terms of sound reduction, do you think that is going
- 4 to provide?
- 5 A. It should provide at least a ten decibel reduction
- 6 across the -- at 125 hertz, and even better than that at the
- 7 higher frequencies.
- 8 Q. Now, you had mentioned that it has got to be air tight
- 9 basically to contain the sound, correct?
- 10 A. That's correct.
- 11 Q. But it has got to be open towards the south end for the
- 12 exhaust, right?
- 13 A. That's correct.

- Q. And there have got to be some provision for the
- 15 explosion doors on the roof?
- 16 A. Depending upon the MSHA requirements, if a normal roof
- 17 can be put on top and a sufficient amount of head space allowed
- 18 in there between the top of the explosion doors and the added
- 19 roof and, again, that distance there, I am not aware of exactly
- 20 what it is, or if there even exists a distance for that. But
- 21 that particular -- with that one thing in mind, the rest of the
- 22 building would, again, provide at least a ten decibel reduction
- 23 in sound .
- Q. You recognize in the case of an explosion, when the

- 1 explosion doors open inside they have got to go up the roof of
- the building you are proposing? They have to get out of the
- 3 building somehow?
- 4 A. Yes, and that's why I suggested a large enough building
- 5 that the front of the building -- we are really talking about a
- 6 three-sided building with one side missing.
- 7 Q. Okay.
- 8 A. And by having a sufficient amount of square footage in
- 9 the front for pressure relief, if the explosion doors were to
- 10 blow open, again, the pressure would be relieved through the
- 11 front -- the missing portion of the building in the front and,
- 12 again, that would take an engineering design to figure out
- 13 exactly how much square footage of open area is needed in the

- 14 front to not only handle the fan exhaust but also in the event of
- 15 an explosion to not create back pressure on the explosion doors.
- 16 Q. Well, if it is going to come out the front, I mean, that
- 17 is going to go towards the rest of the buildings, then, right?
- 18 Is that what you are suggesting, that there is somehow -- where
- 19 do the explosive gases go once they open the explosion doors, if
- 20 they are inside a building? I just don't understand how that is
- 21 in your plan, how you deal with that.
- 22 A. My understanding of the explosion doors is that that is
- 23 to provide pressure relief for an explosion in the mine itself.
- 24 It is not to open up and release any kind of uncombusted gases

- 1 that would combust later on inside the building.
- 2 Q. Okay. Had you ever recommended any sort of barrier wall
- 3 or anything for Turris?
- 4 A. It could have been discussed, but I don't remember
- 5 recommending it.
- 6 Q. Okay. Based on what you are telling me about the size,
- 7 I think you had testified that you thought that at a minimum it
- 8 would have to be 40 by 200 feet?
- 9 A. I characterized that as a very, very rough guess because
- 10 I don't have the dimensions of the structure.
- 11 Q. Right. It would have to contain the structure. What
- 12 you just said was there is obviously some engineering that has

- 13 got to go into it to address some of the other explosion issues,
- 14 among other things?
- 15 A. Exactly.
- 16 Q. And the back pressure on the fan --
- 17 A. Exactly.
- 18 Q. -- and things like that? You had, I think, also talked
- 19 about in your report in the very last paragraph or the next to
- 20 the last paragraph, about the barrier wall. You said a noise
- 21 barrier wall of any practical height will not contain the noise
- 22 in the 125 hertz octave band sufficiently to achieve compliance.
- 23 When you talk about the practical height, what are you talking
- 24 about?

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- 1 A. At that low a frequency, the sound does not travel in a
- 2 straight line. It refracts to a very large extent. We would
- 3 probably be looking at something on the order of over 50 feet
- 4 high.
- 5 MR. COX: Okay. That's tall. All right. I don't have any
- 6 further questions.
- 7 HEARING OFFICER HALLORAN: Okay. Thank you, Mr. Cox.
- 8 Redirect, Mr. Northrup?
- 9 MR. NORTHRUP: Yes, a couple of follow-ups.
- 10 REDIRECT EXAMINATION
- 11 BY MR. NORTHRUP:
- 12 Q. You had discussed earlier that there was, apparently, a

- 13 conversation between you and Dr. Schomer where there was a
- 14 discussion that it might have been a violation and it might not
- 15 have been a violation. Do you remember talking about that --
- 16 A. Yes.
- 17 Q. -- here today? When did you have that conversation with
- 18 Dr. Schomer?
- 19 A. Shortly after Dr. Schomer was on site and had taken his
- 20 measurements, within probably -- it might have been the same day
- 21 he took his measurements or within a few days of his taking the
- 22 measurements. He called me and basically we discussed his
- 23 findings. And that's not at all uncommon for noise control
- 24 engineers to call each other and go over what their findings are

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- 1 and bounce ideas around. You know, it was kind of an idea
- 2 bouncing session.
- 3 Q. Do you recall, kind of generally, the time frame?
- 4 A. Again, the time frame would have been whatever date he
- 5 actually performed his noise survey on location, very close to
- 6 that date.
- 7 Q. Okay. There was a bit of discussion about you taking
- 8 measurements at the site at the pond. Are there any regulations
- 9 that say it is improper to take readings at such a location?
- 10 A. No.
- 11 Q. In fact, doesn't the regulation 951.104 say that

- 12 measurement instruments shall be set up in an area where the
- 13 emitted sound may unreasonably interfere with the enjoyment of
- 14 life or with any lawful business or activity?
- 15 A. That's correct.
- 16 Q. Why did you select the pond as a point to set up your
- 17 measuring devices?
- 18 A. Only because the Knoxs, especially Mr. Knox, told me
- 19 that that was one of their main areas of recreation, and also the
- 20 area that they were probably most disturbed by noise emissions
- 21 from the fan.
- 22 Q. Do you have an opinion, based upon your knowledge and
- 23 experience in the noise field, as to whether or not it is more
- 24 reasonable that the Knoxs' property is classed A as opposed to

- 1 any other type of classification?
- 2 A. Yes, and I would kind of characterize it this way. If
- 3 we look at some of the areas where you have an estate that is
- 4 comprised of several acres, it is all considered, in essence,
- 5 pretty much residential. And there is some lots that it is not
- 6 uncommon now to see residential lots that are two, three, or four
- 7 acres in size, and it is all considered residential.
- 8 Based upon the care that goes into the grounds around the
- 9 Knox property, and the statements by the Knoxs as far as their
- 10 use of the property, I would say that it would be reasonable and
- 11 proper to classify that four acres as residential.

- 12 Q. Okay. We also talked a little bit about a silencer that
- 13 was put on the fan. Do you recall that?
- 14 A. Yes.
- 15 Q. Based upon your knowledge and experience in the field,
- 16 is it possible that a silencer would not affect the noise that
- 17 the Knoxs here on their property?
- 18 A. Absolutely. Because what we have there, with all of
- 19 these mine vent fans that I have ever worked with is two
- 20 problems. One problem is the noise of the fan exhaust air coming
- 21 out the end of the cone or the evase, and also what we call a
- 22 structural ring or emission through the sides of the structure.
- 23 Typically, in an application like that, your sound levels
- 24 are -- you have a very significant amount of sound coming out the

- 1 shell or the sides of the structure. So you have to treat both.
- 2 You have to put the silencer on there for anybody who lives in
- 3 the direction of where the fan is pointed. And then in addition,
- 4 it is necessary to contain the noise that is trying to escape
- 5 from the structure for any people who live either to the side or
- 6 to the rear of the fan.
- 7 Q. Okay. There was quite a bit of discussion revolving
- 8 around Respondent's Exhibit Number 1. Do you have that letter in
- 9 front of you? This was your letter of January the 23rd of 2002.
- 10 A. Yes.

- 11 Q. You had indicated that some of the terms in there that
- 12 you used were relative. I don't believe you were able to explain
- 13 your answer. Could you do that for the Board now, please?
- 14 A. Yes. I refer to the term accurate measurement. And the
- 15 level of accuracy I am talking about when I talk about an
- 16 accurate measurement is one of a two minute duration, not using a
- 17 tripod, not using a ten foot cable, not checking the wind, but
- 18 having at least a measurement that was within a few decibels of
- 19 what a precision measurement would be. That is, in essence, what
- 20 I was talking about.
- 21 It was a measurement that was grabbed very quickly in a
- 22 matter of two minutes. Whereas the typical measurement that I
- 23 performed on the night, and is in my report to the Knoxs, took an
- 24 hour and a half to do. It was an hour of actual data gathering,

- 1 plus there was the about 15 minutes of set up time before and 15
- 2 minutes of going down afterwards checking calibrations, checking
- 3 weather conditions, and all of the other parameters that have to
- 4 be checked for a measurement to withstand scrutiny as being
- 5 absolutely accurate.
- 6 Q. With respect to the measurements you took at site two,
- 7 again, you were attempting to get an ambient measurement; is that
- 8 correct?
- 9 A. That's correct.
- 10 Q. Isn't an ambient measurement designed to get the lowest

- 11 possible level, or I should say to take a measurement in absence
- of the noise source that is causing the problem?
- 13 A. That's correct. If I could elaborate just slightly on
- 14 that, we are looking to establish two things there. We want to
- 15 find out how much noise we are getting from the noise source that
- 16 is the problem. And we also want to look at all other noise in
- 17 the area. As much as we can, when we do ambient we try to
- 18 separate the two, so we say this much noise is the background or
- 19 ambient and the other noise is the ambient plus the noise source.
- 20 That was the -- what site number two was designed to do is
- 21 to demonstrate that there was influence from the ambient or
- 22 background noise or there was not and the result was there was no
- 23 impact from any background noise, because the background noise
- 24 was not really measurable, it was so low.

- 1 Q. There was also a discussion, a question and answer,
- 2 concerning whether or not you took the same measurements at sites
- 3 two and three that you took at site one. One of the issues was,
- 4 well, you only -- at site two you only took a measurement for ten
- 5 minutes. But at site one it was an hour or more. Can you
- 6 explain why would you have the difference in the timing on things
- 7 like that?
- 8 A. Yes. In 1987 the Pollution Control Board adopted the
- 9 standard for a one hour measurement of a noise source that may or

- 10 may not be in violation of the numerical standards. The criteria
- 11 for measuring the ambient or background noise is significantly
- 12 different. What we do is we measure the background or ambient
- 13 noise until we reach a point where the analyzer stops
- 14 fluctuating. We have yet to find a situation out of hundreds of
- 15 measurements where we can't do it in a period of about ten
- 16 minutes.
- 17 On the night in question the analyzer stabilized within
- 18 probably ten seconds. I allowed the analyzer to run for ten
- 19 minutes just to be absolutely certain that I was taking a
- 20 measurement for the worse condition that we have ever found in
- 21 all my experiences with the Illinois EPA. But, again, that could
- 22 have been done much more quickly.
- 23 In theory, although it has never been seen, the ambient
- 24 could run as long as an hour if the noise was to fluctuate

- 1 greatly all over the entire spectrum. But, again, that has not
- 2 been anybody's experience to date.
- 3 MR. NORTHRUP: Okay. I have no further questions.
- 4 HEARING OFFICER HALLORAN: All right. Thank you, Mr.
- 5 Northrup.
- 6 Recross, Mr. Cox?
- 7 MR. COX: I don't have any. I would move to admit
- 8 Respondent's Exhibit Number 1.
- 9 HEARING OFFICER HALLORAN: All right. Any objection, Mr.

- 10 Northrup?
- 11 MR. NORTHRUP: No objection.
- 12 HEARING OFFICER HALLORAN: Respondent's Exhibit Number 1 is
- 13 admitted into evidence.
- 14 (Whereupon said document was admitted into evidence as
- 15 Respondent's Exhibit 1 as of this date.)
- 16 HEARING OFFICER HALLORAN: Mr. Zak, you may step down.
- 17 Thank you very much.
- 18 (The witness left the stand.)
- 19 HEARING OFFICER HALLORAN: Mr. Northrup, does that conclude
- 20 your case-in-chief?
- 21 MR. NORTHRUP: It does except with the one statement.
- 22 HEARING OFFICER HALLORAN: Okay.
- MR. NORTHRUP: Quite frankly, I am not sure if I need to do
- 24 this now or at the end of the case, so I will make it now to make

- 1 sure that I don't waive it.
- 2 HEARING OFFICER HALLORAN: Okay.
- 3 MR. NORTHRUP: And that is that I would like to make the
- 4 motion to amend the complaint to conform to the proofs,
- 5 specifically with respect to this violation of 106(a) or (b), the
- 6 prominent discrete tones. That violation was not specifically
- 7 included in the pro se complaint that was prepared and filed by
- 8 the Knoxs.

- 9 We -- the first time we have known that this was a
- 10 potential violation was with Mr. Zak's report. So we have had it
- 11 the exact same time, the same length of the time that the
- 12 Respondent has had it. I think it is appropriate to allow us to
- 13 amend the complaint to reflect the examination today and what is
- 14 in the report.
- 15 HEARING OFFICER HALLORAN: Very good. Not that I can rule
- on it but, Mr. Cox, do you have any response?
- 17 MR. COX: Yes. We would strenuously object to that. I
- 18 don't -- I mean, Mr. Northrup has been involved since very early
- 19 on here. He had an opportunity to review that, to review their
- 20 complaint, which I imagine he did when he came and met with them
- 21 on the first occasion or shortly thereafter.
- 22 And, you know, the first time we find out about it is last
- 23 week, you know, when we get the report. So, yes, we would object
- 24 to it.

- 1 HEARING OFFICER HALLORAN: Okay. That --
- 2 MR. NORTHRUP: My response to that is I found out at the
- 3 same time that Mr. Cox found out.
- 4 HEARING OFFICER HALLORAN: Your motion will be taken with
- 5 the record to the Board, and they will decide when they decide
- 6 the case.
- 7 MR. NORTHRUP: Okay. Very good.
- 8 HEARING OFFICER HALLORAN: Thank you. All right. With

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- 9 that said, do you rest your case-in-chief?
- 10 MR. NORTHRUP: Yes.
- 11 HEARING OFFICER HALLORAN: Okay. Thank you very much. We
- 12 can go off the record.
- 13 (Discussion off the record.)
- 14 HEARING OFFICER HALLORAN: All right. We will take a brief
- 15 recess.
- 16 (Whereupon a short recess was taken.)
- 17 HEARING OFFICER HALLORAN: All right. We are back on the
- 18 record. It is almost 3:00.
- 19 The Complainant is finished with their case-in-chief. I
- 20 believe it is the Respondent's turn.
- 21 MR. COX: Thank you. We would call Wally Schultz as our
- 22 first witness.
- 23 HEARING OFFICER HALLORAN: Please raise your right hand and
- 24 the court reporter will swear you in.

- 1 (Whereupon the witness was sworn by the Notary Public.)
- 2 WALTER F. SCHULTZ,
- 3 having been first duly sworn by the Notary Public, saith as
- 4 follows:
- 5 DIRECT EXAMINATION
- BY MR. COX:
- 7 Q. State and spell your full name for the record.

- 8 A. My name is Walter F. Schultz, W-A-L-T-E-R, F, as in
- 9 Frank, Schultz, S-C-H-U-L-T-Z.
- 10 Q. Mr. Schultz, how are you employed?
- 11 A. I am employed by Turris Coal Company.
- 12 Q. What do you do for Turris Coal Company?
- 13 A. I work in their engineering department.
- Q. Are you an engineer?
- 15 A. Yes.
- 16 Q. Okay. What sort of educational background do you have?
- 17 A. I graduated in 1981 from Montana College of Mineral
- 18 Science and Technology, with a bachelor of science in mineral
- 19 processing. I later received an MBA from Southern Illinois
- 20 University at Edwardsville in about 1994.
- 21 Q. Okay. Your bachelor's degree, is that an engineering
- 22 degree?
- 23 A. Yes, that is an engineering degree.
- Q. Okay. And how long have you worked in the mining

- 1 industry?
- 2 A. I have been employed in the mining industry since 1981,
- 3 basically in the coal mining and underground and surface
- 4 operations of coal mines.
- 5 Q. So we are not talking about strip mining, we are talking
- 6 about underground mining?
- 7 A. Yes.

- 8 Q. That is what Turris is involved in?
- 9 A. Yes.
- 10 Q. Prior to working for Turris, where were you employed?
- 11 A. Well, actually, my employment from 1981 to 1992 was with
- 12 a company called Shell Mining Company, which was a parent to
- 13 Turris, where I had numerous duties at that point within that
- 14 company.
- 15 From 1992 to 1998 I was employed by Ziegler Coal Holding
- 16 Company, again, in various coal mining, engineering related
- 17 functions. And then -- I am sorry -- from 1992 to 1995 I was
- 18 with Ziegler Coal Holding Company, and from 1995 to the present
- 19 with Turris Coal Company.
- 20 Q. Okay. Your entire professional career has been in
- 21 engineering associated with underground coal mining?
- 22 A. Yes.
- 23 Q. I expect you are familiar with both mine operations as
- 24 well as the regulation of coal mines?

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- 1 A. Yes.
- 2 Q. And in particular Turris?
- 3 A. Yes.
- 4 Q. How long have you actually been employed at the Turris
- 5 mine site, if you will?
- 6 A. I was employed from the period of 1982 to 1985, and then

- 7 I returned again in 1995 to the present.
- 8 Q. Okay. And the reason when you talk about different
- 9 employers, Turris has had several different owners over the
- 10 years, correct?
- 11 A. Different owners and Shell Mining was the parent -- the
- 12 initial parent, and I worked at their other locations, coal
- 13 mining locations.
- Q. Describe for the Board briefly what this exhaust fan is,
- 15 what we have been talking about and what it does?
- 16 A. The exhaust fan at Turris Coal, as stated before, is a
- 17 requirement of the Part 75 and 77 of the CFR 30, which are the
- 18 regulations for coal mines. It provides three essential things.
- 19 It removes explosive gases, primarily methane. The removal of
- 20 dust. And also the assurance that the amount of oxygen in the
- 21 air is greater than 19.5 percent, which is the minimum allowed.
- 22 Q. The dust that it removes, where does that dust get
- 23 deposited?
- 24 A. It typically settles out primarily in the return airways

- 1 of the mine itself.
- Q. It is not exhausted at the exhaust, correct?
- 3 A. A small amount.
- 4 Q. Is there any other source of air for the miners in the
- 5 mine other than that provided by the fan?
- 6 A. No, the fan is the primary source of air.

- 7 Q. Other than the safety issue requiring the air for the
- 8 miners, it is required by law, correct?
- 9 A. Yes.
- 10 Q. The three items you mentioned that the fan provides,
- 11 that is the ventilation, the removal of the methane, and the
- 12 removal of the dust from the mining area, how is that monitored?
- 13 A. It is monitored continuously. The fan is monitored
- 14 continuously with instrumentation that records the amount of
- 15 water gauge or the amount of resistance against the fan.
- 16 There are -- the mine is examined three times a day, a
- 17 preshift exam done every shift ahead of the shift that is coming
- 18 on to be sure it is in a safe condition. While the employees are
- 19 working on the unit, there are air readings taken throughout the
- 20 day on the unit to be sure that they have sufficient amount of
- 21 air going across the faces to allow them to cut coal.
- 22 Q. The readings that are taken, who takes those readings?
- 23 A. The readings are taken by Turris employees and also we
- 24 have -- are fairly regulated, and we have state and federal mine

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- 1 inspectors on the property that verify those readings when they
- 2 are present.
- 3 Q. How often are the mine inspectors present?
- 4 A. We probably have a mine inspector on the property every
- 5 day of the year.

- 6 Q. Okay. I am going to put up on the easel here what I am
- 7 marking as Respondent's Exhibit Number 6.
- 8 (Whereupon said document was duly marked for purposes of
- 9 identification as Respondent's Exhibit 6 as of this date.)
- 10 MR. COX: Can everybody see that okay?
- 11 Q. (By Mr. Cox) Can you explain what Respondent's Exhibit 6
- 12 is?
- 13 A. What Respondent's Exhibit Number 6 is, is just kind of a
- 14 typical ventilation of one of the operating units that would be
- 15 in use underground at Turris. The air is brought into the unit
- 16 on the intakes and is carried up the entries and then across the
- 17 faces that you see there. The State has a requirement, an
- 18 absolute minimum of 9,000 CFM at that point. MSHA has the same
- 19 volume requirement, but it is measured at a slightly different
- 20 location. MSHA requires that measurement to be taken along the
- 21 same line as the green markings indicate stoppings that isolate
- 22 the intakes from the neutrals.
- 23 Q. Okay.
- 24 A. There is also a requirement at the face that there be

- 1 6,000 CFM across the face of the miner when it is cut, and that
- 2 is done with a -- that little curtain designated taking air up to
- 3 be sure that the faces are swept with fresh air.
- 4 Q. When you talk about the faces, is that this area at the
- 5 very top of the --

- 6 A. Yes, that is the area at the very top where it is
- 7 designated that you have got four little pieces of equipment, two
- 8 continuous miners and then two roof bolters are kind of shown in
- 9 those slots.
- 10 Q. The gray squares in here --
- 11 A. Those are physically the coal that is left in place for
- 12 roof support. And the clear areas are the entries that are
- 13 removed but where the coal has been removed.
- 14 Q. Okay. On the right side of the chart here you have got
- 15 a label intakes. Is that where the air is being drawn in?
- 16 A. That is where the air is being drawn in. We try to
- 17 maintain significantly higher levels than the minimums required
- 18 by the State on our intakes.
- 19 Q. What are these green vertical lines in between the gray
- 20 squares?
- 21 A. Those are stoppings that are used to isolate the
- 22 different types of air within the coal mine.
- Q. Okay. The different tunnels, if you will?
- 24 A. Yes, so that the air that is coming up the intakes does

- 1 not get mixed with the neutrals.
- 2 Q. Okay. You have got -- then in the middle, you have got
- 3 a neutral area?
- 4 A. A neutral area which is where the conveyor belt that

- 5 conveys the coal out of the site and also where the travel ways
- 6 exist.
- 7 Q. Then on the far left side you have got blue squiggly
- 8 lines. Does that represent the --
- 9 A. That represents the air after it has been across the
- 10 faces and is in the returns, or which is then being drawn towards
- 11 the exhaust fan.
- 12 Q. Okay. So the bottom line is you have the air coming in
- 13 on the right going across the top and coming down on the left?
- 14 A. Yes.
- 15 Q. Okay. And at the top here where you have got the
- 16 arrows, you were explaining those are where the readings are
- 17 taken?
- 18 A. The readings are taken there across the top. Like you
- 19 say, the different points of which the two different regulatory
- 20 bodies require us to test them at.
- 21 Q. The green lines with the ovals around them, what do
- 22 those represent?
- 23 A. Those are actually curtains. The solid green stripes
- 24 are permanent stoppings that have been put in place. As the

- 1 mining is advancing up the pages in the case here those squiggly
- 2 lines or the green circles get replaced with solid stoppings as
- 3 the mining advances.
- 4 Q. Okay. Is it the State or the MSHA that you said is the

- 5 higher -- that you use higher than is required?
- 6 A. Yes. Well, the actual requirements are exactly the
- 7 same, of 9,000 CFM. It is actually the location where you take
- 8 it. But we typically move much higher quantities, up to 50,000
- 9 CFM into the unit to be sure that we have plenty of air to assure
- 10 the safety of our employees.
- 11 Q. Is that the reason, then, why you always exceed it? Or
- 12 is there another reason why you exceed the minimum that is
- 13 required?
- 14 A. To be sure that we have fresh air and the dust is
- 15 removed and methane is removed.
- 16 Q. Is there anything about mining in Central Illinois in
- 17 general that goes into that that causes you to have to exceed the
- 18 minimum, that you are aware of?
- 19 A. No.
- Q. Okay. If the readings that are taken of the three
- 21 different parameters are not in compliance, what happens?
- 22 A. We are issued violations and potentially you could be
- 23 issued closure orders.
- 24 Q. Have you ever been in danger of being closed because of

- 1 those?
- 2 A. Yes. In 1995, Turris Coal was reaching the ends where
- 3 they needed to do additional ventilation work.

- 4 Q. Okay.
- 5 A. They were having troubles with compliance.
- 6 Q. Okay. I am putting up here on the easel now what is
- 7 marked as Respondent's Exhibit Number 7.
- 8 (Whereupon said document was duly marked for purposes of
- 9 identification as Respondent's Exhibit 7 as of this date.)
- 10 Q. What is Number 7?
- 11 A. Exhibit Number 7 is an overall picture of the Turris
- 12 Coal Mine, its existing workings, and the two primary surface
- 13 facilities that we have. In kind of the upper right-hand corner
- 14 there is the original Elkhart facility which consisted of about
- 15 640 acres that had the original mine development that was done
- 16 there. And also outlined around it in dotted blue lines was the
- 17 initial reserves that Turris had acquired when they began
- 18 developing the mine in 1982.
- 19 Q. What do the black lines represent, that is kind of in
- 20 the middle of the map? What are those lines?
- 21 A. The black lines represent the areas that have been mined
- 22 by Turris in an outline form since 1982.
- O. Are these areas closed off now?
- 24 A. Yes, all of the -- primarily all of the areas there are

- 1 closed, as the mining has progressed to the south.
- 2 Q. There is kind of a long rectangular diagonal in the
- 3 middle of the map that runs from what is labeled Elkhart facility

- 4 to the Williamsville Portal. Does this have a name?
- 5 A. Yes. Those are what we call the main entries. That is
- 6 the part of the mine that remains open through the life of the
- 7 mine.
- 8 Q. Okay?
- 9 A. Travel ways and belt lines extend and carry the coal
- 10 from the areas that are currently being mined back to the Elkhart
- 11 facility in those underground entries.
- 12 Q. Okay. What is this area here in the middle that is
- 13 outlined with what looks like purple on the top and green on the
- 14 bottom?
- 15 A. That was an addition to our reserve base that was made.
- 16 The purpose was to acquire additional reserves to the south. We
- 17 had found -- if you look at map, most of the mining has occurred
- 18 south and west of the original site.
- 19 Q. But you said originally you owned -- you had all these
- 20 reserves. Why did you not mine up here?
- 21 A. That area was underlain by an area called a bedrock
- 22 valley, which led to very poor roof conditions and was just
- 23 uneconomical to mine.
- Q. The roof conditions, is that a safety issue?

- 1 A. Yes.
- Q. Okay. So you didn't mine essentially for safety

- 3 reasons?
- 4 A. Yes. Our safety record has improved tremendously since
- 5 we have moved towards the south.
- 6 Q. Okay. The green area, the large green area outlined at
- 7 the bottom, is this yet another -- the most recent area of
- 8 reserves that you have purchased?
- 9 A. The area in green was the most recent area of reserves
- 10 that were acquired or given to Turris Coal by Mobile. And it
- 11 reflects the area where our present and future mining are taking
- 12 place.
- 13 Q. Okay. You had mentioned, I believe, that it was in 1995
- 14 that you were starting to have some issues with the readings
- 15 coming back, the oxygen and the methane and the dust. Was that
- 16 as you were mining south?
- 17 A. As we were moving south we were kind of approaching into
- 18 that pink area there.
- 19 Q. Sort of here in the middle of the map?
- 20 A. Yes.
- 21 Q. Okay. And tell the Board more specifically what was
- 22 happening then?
- A. Well, what was happening we were having troubles
- 24 maintaining dust within the coal mine because we were unable to

- l properly ventilate the mine. That was due to the conditions of
- 2 the returns and also the size of the fan that we had at the

- 3 original site. Turris did install a temporary fan at the Elkhart
- 4 site. I believe it was in 1995.
- 5 Q. Okay.
- 6 A. And it operated -- or actually I believe -- excuse me.
- 7 It went in in 1997, and it was a temporary solution until we were
- 8 able to get our Williamsville Portal developed.
- 9 Q. Wally, let me have you come up here and identify some of
- 10 the things you have put on here before we explain anything else?
- 11 A. Sure.
- 12 Q. Why don't you label on here what you had indicated is
- 13 the main or the mains?
- 14 A. (Witness complied.)
- 15 Q. Okay. Put an A on the map where you said you started --
- 16 at the point you got to where you were starting to get all of the
- 17 violations?
- 18 A. (Witness complied.)
- 19 Q. Okay. Tell me, looking at that, you said you had the
- 20 fan up at the Elkhart facility, right?
- 21 A. Yes, initially.
- 22 Q. How far, if you know, was that fan having to pull the
- 23 air?
- A. To circulate the air up and back and through the

- 2 air.
- 3 Q. I assume that was part of the problem why you started to
- 4 run into problems?
- 5 A. Yes.
- 6 Q. Part of the reason that you moved the fan?
- 7 A. Yes.
- Q. Okay.
- 9 A. As you can see by the drawing, the Williamsville Portal
- 10 gets us near the center of our reserves.
- 11 Q. Why do you have to remove the coal dust from the faces?
- 12 A. Because there is two issues. There is a safety issue.
- 13 Some of the dust contains silica particles or silicosis so the
- 14 material needs to be swept past. And also there is an explosive
- 15 level with coal dust and air and methane, it could potentially
- 16 cause an explosion.
- 17 Q. Methane is explosive, and you said the coal dust adds to
- 18 that?
- 19 A. Yes.
- 20 Q. And the silica is that something you would inhale?
- 21 A. Yes.
- 22 Q. Okay. The longer you are having -- the longer distance
- 23 you are having to pull the air through, I assume the harder it is
- 24 for the fan?

- 2 Q. And where you are talking about, you know, the circuit,
- 3 we had Respondent's Exhibit Number 7, how the air was coming in
- 4 and going around, on this one, because your fan is down here now,
- 5 at the Williamsville Portal, right?
- 6 A. Yes.
- 7 Q. And when the fan was up here, and you were mining down
- 8 here, you are having to draw it in and run it however far down
- 9 and run it back, essentially, right?
- 10 A. Correct.
- 11 Q. Down one side of the main and back the other side of the
- 12 main?
- 13 A. Yes. Again, like I said, you have your intakes, and
- 14 neutrals, and returns, and the mains, just like you do on a unit.
- 15 Q. And then the same thing right now at the Williamsville
- 16 Portal, it is doing the same thing, not going up the mains, out
- 17 it is going out wherever you are mining right now?
- 18 A. Yes.
- 19 Q. Okay.
- 20 HEARING OFFICER HALLORAN: Mr. Cox, while you are over
- 21 there, could you run down Exhibits 6, 7 and 8 again, what they
- 22 were, please.
- MR. COX: Yes. Respondent's Exhibit Number 6 is -- well,
- 24 there is a label down on the lower right-hand corner. It says

- 1 Turris Coal Company, Elkhart Mine, Logan County, mining units set
- 2 up.
- 3 HEARING OFFICER HALLORAN: Okay. Thank you.
- 4 MR. COX: You are welcome. Then Exhibit Number 7 has a
- 5 label on it with the same information initially, but then it is
- 6 labeled reserve history.
- 7 HEARING OFFICER HALLORAN: Okay. Thank you.
- 8 MR. COX: You are welcome. I am now putting up Number 8,
- 9 Respondent's Number 8, which is labeled in the lower right-hand
- 10 corner, again, Williamsville site.
- 11 (Whereupon said document was duly marked for purposes of
- 12 identification as Respondent's Exhibit 8 as of this date.)
- 13 Q. (By Mr. Cox) Wally, can you briefly identify
- 14 Respondent's Exhibit Number 8?
- 15 A. Yes. This is just an enlarged view of the Turris Portal
- 16 site. It shows -- it has a picture there, diagonal lines, which
- 17 are the mains kind of running from the upper right-hand corner
- 18 towards the lower left. And those were the mains that extend all
- 19 the way back to the Elkhart facility, which is approximately four
- 20 and a half miles.
- 21 Q. Okay.
- 22 A. You know, is what you see there.
- 23 Q. Again, we see the little checkerboard pattern on there?
- 24 A. Yes.

- 1 Q. That's, again, what we were looking at on Number 6?
- 2 A. Yes.
- 3 Q. The interiors of the squares are what is left?
- 4 A. Yes.
- 5 Q. And the rest of it is mined out?
- 6 A. (Nodded head up and down.)
- 7 Q. You have got on here in the middle, East Main Street.
- 8 That's the street that --
- 9 A. That's the street that we are located and Mr. Knox
- 10 lives, yes.
- 11 Q. Okay. You have got actually labeled on here where it
- 12 says Knox, that is Mr. Knox's property?
- 13 A. Yes.
- Q. Mr. & Mrs. Knox's property?
- 15 A. Yes.
- 16 Q. And next to it is Turris?
- 17 A. Turris' 30 acres, yes.
- 18 Q. Okay. And it looks like you have also got labeled on
- 19 here the intake shaft?
- 20 A. Yes. That drawing shows the location of the intake
- 21 shaft and the exhaust shaft.
- 22 Q. Okay. The exhaust shaft is where the fan is?
- 23 A. Is where the fan is located and it is located in the
- 24 return side of the mains.

- 1 Q. Okay. You have got this main here going up diagonally
- 2 so the left hand or the top part of it is where you have got your
- 3 intake side, correct?
- 4 A. Yes.
- 5 Q. Okay. And then the other side of it is the return side,
- 6 right?
- 7 A. Yes.
- 8 Q. And then you have got -- in the middle you have got your
- 9 neutrals?
- 10 A. Yes.
- 11 Q. When you were looking at relocating the fan from
- 12 Williamsville, what is shown on this map that affected where you
- 13 had to put the fan?
- 14 A. Primarily what you see there is that the facility needs
- 15 to be located along the main development, which intersects
- 16 various township and county roads. And we prefer to locate along
- 17 a town -- a county highway so that we would have good access
- 18 through the years. So that limited us to the locations that we
- 19 could locate this site to this area that we have right here.
- 20 Q. Okay. You needed to go south, I assume, because that's
- 21 the direction you were mining?
- 22 A. Yes.
- 23 Q. You wanted to get closer so that the fan could work --
- 24 would work better?

- 1 A. Yes.
- 2 Q. And are there any primary roads like that that
- 3 intersected your mains anywhere else that you could have located
- 4 on?
- 5 A. No. You would have to go substantially further south to
- 6 hit the county road, and it would have probably been off our
- 7 reserves. So that was the primary road intersection that was the
- 8 choice.
- 9 Q. And, again, from looking at this, it has got to be on
- 10 the right side or the return side, correct?
- 11 A. Yes.
- 12 Q. So you had a very limited choice in terms of being
- either on what is labeled as Knox or on Bock property?
- 14 A. Yes.
- 15 Q. The Bock property is across the street from you?
- 16 A. Yes.
- Q. And Knox is next door?
- 18 A. Yes.
- 19 Q. When you started to have those problems with some of the
- 20 violations, in terms of getting the readings back you said in
- 21 1995, then, were there any engineering studies that were done or
- 22 did you guys just arbitrarily decide, well, we are going to have
- 23 to move the fan?
- 24 A. No. Engineering studies were done by Mr. Guy Hunt and

- 1 John Schmidt at Turris.
- 2 Q. Those are other engineers that work with you?
- 3 A. Those are other engineers that work at the coal mine.
- 4 Q. Did those, in fact, back up what you were finding, that
- 5 you did, in fact, need to move it?
- 6 A. Yes, very much so.
- 7 Q. Did the regulators have anything to do with you moving
- 8 the fan, other than the citations you were receiving?
- 9 A. Yes. You know, air is probably the most important
- 10 safety factor. So they are always very concerned whenever issues
- 11 of air quality or dust standards become involved.
- 12 Q. If you had not been ale to relocate the fan, what would
- 13 have happened?
- 14 A. Eventually it would have led to the closure of Turris
- 15 Coal.
- Q. Okay. When did the fan first start operating?
- 17 A. I believe it was in late October of 1999.
- 18 Q. Do you know when you first learned of a complaint that
- 19 the Knoxs had about the noise from the fan?
- 20 A. Yes, Mr. Knox called myself in that same time frame.
- Q. Okay. Shortly thereafter?
- 22 A. Shortly thereafter, yes.
- 23 Q. When you installed the fan initially, did you anticipate
- 24 that noise was going to be something that you were going to have

- 1 to deal with?
- 2 A. Yes, and we tried to do that. When we initially
- 3 installed the fan, we installed what is called an upcast or a
- 4 deal that deflects the noise up into the air.
- 5 Q. Okay.
- 6 A. So we anticipated it.
- 7 Q. You didn't just install the fan and put it there to see
- 8 what would happen?
- 9 A. No.
- 10 Q. Okay. Is the upcast still there?
- 11 A. No, it is not.
- 12 Q. What happened to the upcast?
- 13 A. It was removed at the recommendation of one of our
- 14 consultants, Dr. Schomer, in the process of us trying to work
- 15 through the noise complaint.
- Q. Okay. What -- after you got the complaint from Mr.
- 17 Knox, what is the first thing, the first significant thing that
- 18 you did to try to address the noise?
- 19 A. We began working with -- and one of the first things we
- 20 did was call Mr. Zak to try to get his input into the project.
- 21 He recommended the use of Dr. Schomer --
- 22 Q. Okay.
- 23 A. -- to act a consultant for us.
- Q. Who is Kayla Primm?

- 1 A. Kayla is an engineering associate who works for me.
- 2 Q. She is the individual that received a fax from Mr. Zak;
- 3 is that right?
- 4 A. Yes.
- 5 Q. Okay. You had Dr. Schomer out there after Greg Zak
- 6 recommended him?
- 7 A. Yes.
- 8 Q. Was he out there on multiple occasions?
- 9 A. Yes. He came out to the site twice.
- 10 Q. Okay. What were Dr. Schomer's recommendations, if you
- 11 can recall?
- 12 A. The first visit when Dr. Schomer came to the site, it
- 13 was while we still had the upcast on. And he recommended that
- 14 we -- part of the upcast was open towards the Knox residence, and
- 15 he recommended closing that off with some conveyor belting to try
- 16 to make -- as he called it, I believe, line of site noise.
- 17 So we had to get permission from the State and federal
- 18 people to install the belting on the fan, because of the
- 19 regulations that require that the fan and related equipment
- 20 within 100 feet cannot have any -- cannot be made out of any
- 21 combustible materials. So we used underground mine belting after
- 22 receiving approval from the State to do that.
- 23 Q. You did follow his first recommendation, then?
- 24 A. Yes.

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- 1 Q. What else, if anything, did Dr. Schomer recommend?
- A. He recommended possibly removal of the upcast after we
- 3 checked some other noise readings.
- 4 Q. Was that after you installed the belting and Mr. Knox
- 5 indicated that that did not do it?
- 6 A. Yes. He came back. That was in between his visits,
- 7 which I think were in January -- I mean, in November and then he
- 8 came back, I believe it was in January.
- 9 Q. Did you ever speak to Greg Zak about resolving these
- 10 issues or --
- 11 A. Yes.
- 12 Q. -- the noise problems?
- 13 A. (Nodded head up and down.)
- 14 Q. Do you know when you first spoke to him?
- 15 A. I don't remember the specific date but, yes, we
- 16 discussed some of the initial readings and then also the issue of
- 17 how far around a residence does the applicable regulations apply.
- 18 Q. Was that an issue that you had talked to Dr. Schomer
- 19 about also, in terms of the land classification?
- 20 A. Yes.
- 21 Q. Okay. What, if anything, did Mr. Zak tell you about
- 22 that?
- 23 A. He said typically it would be allowed a distance of 100
- 24 to 150 feet around the home.

- 1 Q. Okay. Outside of that, what did he say generally?
- A. It would be an agricultural type of application.
- 3 Q. Okay. Did Dr. Schomer make any comments about any of
- 4 that?
- 5 A. Yes.
- 6 MR. NORTHRUP: Objection. Hearsay.
- 7 HEARING OFFICER HALLORAN: Mr. Cox?
- 8 MR. COX: I don't think it is hearsay, because I think it
- 9 goes to their notice and motives behind all of this. I am not --
- 10 part of what we want to demonstrate here is that they have had
- 11 some -- they went out and got the consultant that Greg Zak
- 12 recommended, they proceeded based on what he told them, and part
- 13 of what he told them and part of what I would like to bring out
- 14 in testimony is that Schomer told them, look, the home is
- 15 residential and the rest is not, therefore, you are in
- 16 compliance. That, in part, has a bearing on how Turris has
- 17 addressed all of this, essentially, because they believed that
- 18 they were numerically in compliance with all of it.
- 19 HEARING OFFICER HALLORAN: Mr. Northrup?
- MR. NORTHRUP: Nothing.
- 21 HEARING OFFICER HALLORAN: I think I am going to allow it,
- 22 but kind of wrap it up.
- MR. COX: I didn't intend to dwell on it.
- 24 HEARING OFFICER HALLORAN: Okay.

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- MR. COX: I just wanted to establish that that is what they
- 2 were told early on.
- 3 HEARING OFFICER HALLORAN: The objection is overruled.
- Thank you.
- 5 (By Mr. Cox) What, if anything, did Dr. Schomer tell you
- about the land classification at the Knox property?
- 7 I think he noted that the proper classification would be
- Class C, because of the pond and the machine sheds and the
- 9 raising of geese and ducks around the pond.
- 10 The entire property was Class C or everything behind the Q.
- 11 house?
- 12 I don't think he got that specific. I don't know if Α.
- there was actually a line drawn. 13
- Okay. Did Dr. Schomer take any measurements? 14 Q.
- 15 Α. Yes.
- 16 What did he tell you about the results of those 0.
- measurements? 17
- That we should look at some additional remedies to try 18 Α.
- 19 to reduce the noise.
- 20 Did he say you were in compliance? Q.
- 21 He didn't say. Α.
- 22 What recommendations did Dr. Schomer make, other than Ο.
- 23 what we have already talked about, which I think was the belting
- 24 on the upcast?

- 1 A. He recommended that, you know, that potentially the
- 2 long-term solution would be the installation of a silencer --
- 3 Q. Okay.
- 4 A. -- and from that.
- 5 Q. I mean, you relied on Dr. Schomer's opinions, correct?
- 6 A. Yes.
- 7 Q. Did you rely on them in really doing all of your
- 8 remediation all along?
- 9 A. Up to the point to where, you know, he recommended a
- 10 turn-key type of solution at his second visit. So at that point
- 11 began working with a sound -- or a fan manufacturer and that to
- 12 develop a specification to send out bid documents to --
- 13 Q. Okay. For a silencer?
- 14 A. For a silencer. I also sent out bid applications for
- 15 barrier wells and I also sent out bids for enclosures.
- 16 Q. Okay. So you had -- you bid out the silencer, based on
- 17 what Dr. Schomer recommended?
- 18 A. Yes.
- 19 Q. And you purchased that and had it installed?
- 20 A. Yes, yes, we did.
- 21 Q. Okay. Anything else that Dr. Schomer recommended, that
- 22 you can think of?
- 23 A. No, I can't.
- 24 Q. Okay.

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- 1 Α. Well, I am sorry. He also recommended, I think, with
- the discussion of Mr. Zak of draping the --
- 3 Q. Okay.
- 4 I am not for sure if it came from Mr. Zak or him, but
- applying some belting to the fan to eliminate -- to reduce the 5
- 6 noise.
- 7 Okay. And you did that also? Ο.
- 8 Yes, which we did. We just draped the belting. We had Α.
- some used underground belt that we brought down and basically 9
- 10 draped over the evase section and just did not wrap it but just
- kind of laid it over in a horseshoe affect over it. 11
- And then at some point you did wrap it, correct? 12
- 13 Α. Yes.
- Was that at somebody's recommendation? 14 Q.
- 15 At the recommendation of Mr. Zak. Α.
- Okay. After the first time you talked to Mr. Zak and he 16 Ο.
- referred you to Dr. Schomer, do you remember when the next time 17
- 18 was that you talked to him?
- 19 I am sorry. Could you repeat the question? Α.
- 20 Q. Do you remember when the next time was that you talked
- 21 to him?
- 22 Α. To?
- To Mr. Zak, after that initial contact? 23 Q.

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- 1 think it was until the May 10th meeting that we had at the site.
- Q. Okay. That he testified about earlier today?
- 3 A. Yes.
- Q. Okay. At that time, what did Mr. Zak recommend?
- 5 A. He recommended a couple of things to us to try. One was
- 6 the removal of the belting that was hung and replaced with the
- 7 wrap belt. And then the second was because we couldn't get the
- 8 belting up snugly against that, we looked at installing some
- 9 additional steel panels on the outside of the inlet housing.
- 10 Q. Okay. Is that something you did?
- 11 A. Yes.
- 12 Q. Did you have to put the bid package together for those?
- 13 A. Yes, we did the engineering or the drawings to get the
- 14 sheet steel fabricated and bid and awarded and delivered to the
- 15 site. And then Turris installed it with their labor.
- 16 Q. After you had wrapped the belting over the fan, did you
- 17 have any conversations with Mr. Knox as to whether or not that
- 18 did any good?
- 19 A. Yes, I believe Mr. Knox said that it helped somewhat
- 20 towards the south of his property, but he didn't really notice a
- 21 difference at his home.
- 22 Q. Okay. Did you ever install any additional belting other
- 23 than on the evase?

- 1 of the house or of the fan that was radiating noise toward the
- 2 Knoxs to try to alleviate that. And we also placed belting on
- 3 the roof of the house to try to reduce the noise that was being
- 4 radiated from there.
- 5 Q. Did you talk to the Knoxs about that, if you can recall?
- 6 A. I don't recall. I don't recall specifically, but I
- 7 don't believe it had much of an affect on the noise levels.
- 8 Q. Okay. Other than the panels and the belting, did Mr.
- 9 Zak suggest anything else in the May of 2001 meeting?
- 10 A. Not to my recollection.
- 11 Q. Did he at any other time make any additional
- 12 recommendations, to your knowledge?
- 13 A. No. I was not present at the December meeting because I
- 14 was out of town. But to my knowledge, no.
- 15 Q. The suggestion that you build a building around the
- 16 whole fan enclosure, when is the first time that you were aware
- 17 that Mr. Zak made that recommendation?
- 18 A. In his report.
- 19 Q. His report from last week?
- 20 A. Yes.
- 21 Q. I am showing you what I have marked as Respondent's
- 22 Exhibit Number 2.

- 23 (Whereupon said document was duly marked for purposes of
- 24 identification as Respondent's Exhibit 2 as of this date.)

- 1 Q. Could you take a look at that multipage exhibit and
- 2 identify it?
- 3 A. Yes. This was the purchase order Turris issued to a
- 4 company called Danville Steel in Danville, Illinois, for the
- 5 fabrication of the metal panels that Mr. Zak recommended that we
- 6 install.
- 7 Q. Okay. And what was the cost of that steel?
- 8 A. The purchase price of the steel was \$7,725.00.
- 9 Q. Okay. I am showing you what I have marked as
- 10 Respondent's Exhibit Number 3.
- 11 (Whereupon said document was duly marked for purposes of
- 12 identification as Respondent's Exhibit 3 as of this date.)
- 13 Q. Could you identify Respondent's Exhibit Number 3?
- 14 A. Yes. This is a summary of the expenditures that I put
- 15 together that we have done in the remediation of the noise, and
- 16 also the estimated capital costs for the installation of the fan
- 17 itself.
- 18 Q. You have been the one primarily responsible for all of
- 19 what is represented on here?
- 20 A. Yes.
- 21 Q. You have got a total of it looks like outside
- 22 expenditures of \$96,452.84?

- 23 A. Yes, for the noise abatement.
- O. What about the Turris labor?

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- 1 A. That was -- the amount was \$30,250.00, and that was an
- 2 estimate based on man hours and an assumed labor rate of
- 3 \$5,500.00 a man month.
- 4 Q. I am showing you what I have marked as Respondent's
- 5 Exhibit Number 4.
- 6 (Whereupon said document was duly marked for purposes of
- 7 identification as Respondent's Exhibit 4 as of this date.)
- 8 Q. Could you identify that?
- 9 A. Yes. That is the summary or the detail of the amounts
- 10 paid for the installation of the fan and the purchase of the
- 11 upcast transformer substation and reflects the capital costs for
- 12 the fan.
- 13 Q. Okay. So it has both the fan itself and the cost
- 14 detailed on it of the initial noise control measures you
- implemented, correct?
- 16 A. Yes.
- 17 Q. What is the amount? Is it broken out on here somewhere?
- 18 A. Yes. I am showing a total expenditure of \$184,249.54.
- 19 Q. Okay. Do you know what part of that is the upcast?
- 20 A. Yes, the upcast purchase was \$15,976.00.
- Q. Okay. Between the upcast and the numbers on the

- 22 summary, Exhibit Number 3, does that represent the great majority
- 23 of the money that Turris has spent on remediation?
- 24 A. Yes.

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- 1 Q. There is nothing that is left out from there?
- 2 A. No.
- 3 Q. Is your time that you have spent on remediation included
- 4 within that Turris labor category?
- 5 A. No.
- 6 Q. How much time do you estimate that you have spent on
- 7 this?
- 8 A. Probably since this started in November of 1999, it
- 9 probably consumed six to eight months of my work.
- 10 Q. Okay. You indicated that to your knowledge the first
- 11 time Mr. Zak recommended a building enclosure was last week,
- 12 correct?
- 13 A. Yes.
- 14 Q. Since you got that last week, have you run some numbers
- 15 and put together an estimate of what that type of enclosure would
- 16 consist of and what it might cost?
- 17 A. Yes. I tried to put together a quick estimate, based on
- 18 some other work that I have had, and I came up with an estimate
- in the neighborhood of \$470,000.00.
- Q. Okay. That \$470,000.00, what assumptions did you make
- 21 when you were putting that together?

- 22 A. I basically looked at trying to determine how large the
- 23 building would be and the eave height that would be required and
- 24 then used some rule of thumb estimates that we have for metal

- 1 building construction. And then also the need for a more
- 2 elaborate noise protection system than just a metal building.
- 3 Q. What sort of noise protection system does this building
- 4 that you estimated have?
- 5 A. I believe what I had estimated was a building that would
- 6 be just a conventional all steel metal building, that had a
- 7 fairly thick acoustical insulation.
- 8 Q. When you say fairly thick, how thick?
- 9 A. Three inches, in that range.
- 10 Q. So you didn't -- was today the first day you heard the
- 11 five inch estimate that Mr. Zak indicated that he thought it
- 12 should have?
- 13 A. The five pound per square foot?
- 14 Q. Yes, the five pound. That three inches, is that thicker
- 15 or thinner?
- 16 A. That's a lot thinner. The five pound per square foot is
- 17 a very thick metal building.
- 18 Q. Okay. Anything else about your estimate that you
- 19 were -- in terms of the assumptions that you were making?
- 20 A. No.

- 21 Q. Okay.
- 22 A. Like I said, I used that in terms of a couple of other
- 23 previous quotations that I had received.
- 24 Q. I am showing you what I have marked as Respondent's

- 1 Exhibit Number 9 and Respondent's Exhibit Number 10.
- 2 (Whereupon said documents were duly marked for purposes of
- 3 identification as Respondent's Exhibits 9 and 10 as of this
- 4 date.)
- 5 Q. Both are multipage exhibits. Take a look at those and
- 6 identify those?
- 7 A. Respondent Exhibit Number 9 was a fax I had received
- 8 from a company that manufacturers enclosures. And I used this
- 9 quotation to try to establish an estimate for the larger building
- 10 that Mr. Zak had recommended in his report.
- 11 Respondent Exhibit Number 10, again, was a quotation that I
- 12 had received from Building Systems of Decatur, which was more
- 13 typical of a metal building versus more of an acoustical building
- 14 that was detailed in the IES proposal.
- 15 Q. The bottom line is you didn't pull the numbers for your
- 16 estimate out of thin air. You based it on information that you
- 17 previously received?
- 18 A. Based them on this and did it on a price per square foot
- 19 basis, yes.
- 20 Q. Is there a regulatory aspect to building this building

- 21 around the fan and exhaust shaft?
- 22 A. Yes. The building will have to get approval from the
- 23 State and federal MSHA people. Primarily for two reasons. One
- 24 is depending on the use or nonuse of explosion doors and trying

- 1 to keep the building air tight, we would need to be sure we could
- 2 get approval that those -- that in the event of an explosion that
- 3 MSHA would allow those gases to pass over and across the fan
- 4 where the fan motor is specifically.
- 5 MSHA has specific requirements that the fan be located
- 6 outside of the explosion and the doors be capable to relieve it.
- 7 So the building would have to be designed specifically for that
- 8 and approved, because the explosive gases would pass -- if you
- 9 enclose the entire fan house and motor house inside the bidding,
- 10 that explosion or gas would pass across the top of those -- of
- 11 that motor and that motor house. So you would want to be sure
- 12 that they approve that plan prior to implementing it.
- 13 Q. Do you have any idea if they would approve it?
- A. I don't have a feel at this point, because it is an area
- 15 that they would need to look at.
- 16 Q. In part because of the explosion and safety issues?
- 17 A. The safety issue is the only -- is the thing.
- 18 Q. Other than those issues, do you envision any other
- 19 problems in the design or building of some sort of building like

- 20 this?
- 21 A. Well, the issues -- if you could build the building with
- 22 explosion doors, I don't know if you could attain the air
- 23 tightness that sounded to be very much a requirement. Plus, to
- 24 keep it to where those would be soundproof, those doors would get

- 1 extremely heavy as compared to the others. So I don't know.
- 2 That is engineering that would need to be worked out.
- 3 Q. Do those doors have to be on top of the building or can
- 4 they be somewhere else?
- 5 A. The preference, since the existing explosion doors open
- 6 to the top, would be to have those doors located directly above
- 7 them so that the air does not have to go up against a roof and
- 8 then hit a weak wall. I think from an engineering standpoint, it
- 9 would be best to have those doors open at the roof.
- 10 Q. Do you agree that you can stand next to the fan, say 50
- 11 feet, and have a normal conversation?
- 12 A. Yes.
- 13 Q. You have been to the Knoxs'property at their invitation,
- 14 correct?
- 15 A. Yes.
- 16 Q. On more than one occasion?
- 17 A. I believe I was there -- once Dave asked me to come by
- 18 after we had installed the silencer, I believe it was.
- 19 Q. Do you know how far the fan -- the Knoxs' home is from

- 20 the fan?
- 21 A. Approximately 750, 800 feet, probably.
- 22 Q. Okay. So this is after you installed the silencer? You
- 23 guys installed the silencer?
- 24 A. Yes.

- 1 Q. What happened at that visit?
- 2 A. Well, Dave called and said that almost immediately upon
- 3 us setting that, that there was no noticeable difference in the
- 4 noise at his property. And he called and told me about it. And
- 5 $\,$ I told him I would then stop by on my way home from work and
- 6 listen to it. We went back into his shed, his two work
- 7 buildings, and listened to the fan at that point.
- 8 Q. What happened when you were in there listening to the
- 9 fan?
- 10 A. The fan noise was -- you could hear the fan and he also
- 11 subsequently turned the lights off, the fluorescent lights out,
- 12 to eliminate the humming that is typically associated with the
- 13 ballast of the fluorescence. Then after that we went into his
- 14 next shed back which was I guess the unfinished portion of the
- 15 shed. And there was -- you could hear -- you know, the fan noise
- 16 was slightly louder back there. Then after that we walked back
- 17 further south and noticed that, you know, the noise increased as
- 18 you went further south on his property as you approached the fan.

- 19 Q. Okay. Can you stand out in Mr. Knox's yard and have a
- 20 normal conversation?
- 21 A. Yes.
- 22 O. What else is in the area of the Williamsville Portal
- 23 other than Mr. Knox's home?
- 24 A. Pretty much all agricultural. I believe the next

- 1 nearest home would be the Hanken's residence, which is 1,000 feet
- 2 to the east, I guess. I don't know. It is primarily all
- 3 agricultural.
- 4 Q. Are you in compliance with the zoning regulations?
- 5 A. Yes.
- 6 Q. Does the coal company pay property taxes?
- 7 A. Yes, we do.
- 8 Q. Okay. Do you have any idea how much the property taxes
- 9 are that --
- 10 A. I would guess that Turris Coal pays in the neighborhood
- 11 of \$300,000.00 a year in property taxes.
- 12 Q. Is that to more than one county, if you know?
- 13 A. Yes, that would be between -- the maps didn't show it,
- 14 but our property intersects the Sangamon and Logan County lines.
- 15 Q. I am showing you what has been marked as Respondent's
- 16 Exhibit Number 11.
- 17 (Whereupon said document was duly marked for purposes of
- 18 identification as Respondent's Exhibit 11 as of this date.)

- 19 Q. Again, it is a multipage exhibit. Can you thumb through
- 20 that and identify that?
- 21 A. That would be a copy of the 1999 real estate taxes that
- 22 were due for 2000. This is Respondent's Exhibit Number 11.
- 23 Q. Is that for Logan County and Sangamon County?
- A. Yes, I believe that includes both counties. Yes.

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- 1 Q. Okay. How many people does the coal mine employ?
- 2 A. We have employment of approximately 215 individuals.
- 3 Q. Do you have any idea what the yearly payroll is?
- 4 A. I would estimate around \$12,000,000.00 a year.
- 5 Q. Do you have any idea what kind of payroll taxes get
- 6 paid?
- 7 A. I would estimate those around \$1,000,000.00 a year.
- 8 Q. Okay. I am showing you what I have marked as
- 9 Respondent's Exhibit Number 5.
- 10 (Whereupon said document was duly marked for purposes of
- 11 identification as Respondent's Exhibit 5 as of this date.)
- 12 Q. It is a two-page exhibit. Could you take a look at that
- 13 and identify that?
- 14 A. Yes. Respondent's Exhibit Number 5 is a summary of our
- 15 employee payroll tax or gross payroll and total HR taxes for
- 16 calendar years for 2000 and 2001.
- 17 Q. It shows both the total payroll for the year?

- 18 A. It shows that the gross payroll for the year 2001 is
- 19 \$14,285,762.13.
- 20 Q. And it shows a total employment taxes paid of what?
- 21 A. \$1,125,168.37.
- 22 Q. It shows similar information for 2001?
- 23 A. Yes, for year 2000, yes.
- Q. Does the coal mine pay any sales taxes?

- 1 A. Yes, we do.
- Q. What do you pay sales tax on?
- 3 A. We pay sales tax to some of our customers on the coal
- 4 sold, and then we also pay taxes on goods and services purchased
- 5 to produce the coal.
- 6 Q. Okay. How many tons of coal do you produce a year?
- 7 A. Typically Turris produces around 2,000,000 tons of --
- 8 clean tons, saleable tons per year.
- 9 Q. That varies from year-to-year?
- 10 A. Yes, plus or minus ten percent, I would say, has been
- 11 the range. It has fallen in the last few years.
- 12 Q. Do you know if the mine pays any franchise tax?
- 13 A. Yes.
- 14 Q. Okay. I am showing you what I have marked as
- 15 Respondent's Exhibit Number 12.
- 16 (Whereupon said document was duly marked for purposes of
- 17 identification as Respondent's Exhibit 12 as of this date.)

- 18 Q. Could you identify that exhibit?
- 19 A. Yes. That is an item that shows our sales for the tons
- 20 sold for calendar year 2000, which was \$1,840,828.00. And then
- 21 for calendar year 2001 it is \$2,215,648.00. It also itemizes the
- 22 sales tax paid. On coal sales in the year 2000 we paid
- 23 \$488,689.58, and \$727,338.54 in calendar year 2001.
- We have had sales tax paid on purchase in calendar year

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- 1 2000 of approximately \$160,568.05, and in the year 2001 it was
- 2 \$21,128.00.
- 3 Q. Okay.
- 4 A. It also shows our property tax paid for the two calendar
- 5 years and the franchise taxes paid.
- 6 Q. Okay. And presumably the Turris Coal Company is a
- 7 corporation?
- 8 A. Yes.
- 9 Q. Do they file an income tax return, do you know?
- 10 A. Yes.
- 11 Q. Where do the employees generally live, if you know, that
- 12 work at the coal mine?
- 13 A. Turris, when it was first developed, had a local hire
- 14 policy to try to hire within 35 miles of the mine. A significant
- 15 number of our employees live within that 35 mile radius.
- 16 Q. When you are talking about significant, are you talking

- 17 about 75 percent or greater?
- 18 A. I would say 75 or greater.
- 19 Q. Okay. Does Turris make any contributions to charity,
- 20 that you are aware of?
- 21 A. Yes, Turris donates to the local communities to the
- 22 extent that it can, and also this last fall the Village of
- 23 Williamsville needed a little help erecting a pavilion at the
- 24 park, and Turris donated labor to erect a building at the park.

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- 1 Q. Do you know if they donated any equipment to do that?
- 2 A. Yes, we used our small cherry picker and miscellaneous
- 3 hand tools and trucks.
- 4 Q. Do you know whether there was a value placed on that
- 5 contribution?
- A. No, I don't. I would estimate maybe \$10,000.00.
- 7 Q. In labor and equipment?
- 8 A. In labor and equipment.
- 9 Q. What about cash contributions?
- 10 A. Typically we donate about \$5,000.00 a year.
- 11 Q. In terms of electricity, who do you buy your electricity
- 12 from?
- 13 A. Menard Electric. It is a rural co-op in the area.
- Q. Do you buy a lot of electricity from them?
- 15 A. We are their largest customer.
- 16 Q. Do you have any idea what you spend on electricity every

- 17 year?
- 18 A. It is in excess of probably \$1,000,000.00.
- 19 Q. What about in terms of other products and services that
- 20 go into your production, on a yearly basis?
- 21 A. We typically, goods and services purchased at Turris
- 22 will run approximately \$10,000,000.00 a year.
- Q. Okay. Where does Turris supply its coal to?
- 24 A. Turris has several key customers. The primary customer

- 1 and the customer that the mine was built for is the generating
- 2 station here at City, Water, Light and Power in Springfield.
- 3 They are the largest customer burning approximately 1,000,000
- 4 tons a year.
- 5 Q. Do they buy coal from anyone else?
- A. No, we are the sole supplier for the City of
- 7 Springfield.
- 8 Q. Any other primary customers?
- 9 A. Yes, we have A. Staley Corporation. We are the sole
- 10 supplier for their products in Decatur.
- 11 Q. Do you know about how much you sell to them?
- 12 A. About in excess of 300 to 350,000 tons a year.
- 13 Q. Any other primary customers?
- 14 A. We are a sole source supplier to John Deere at their
- 15 Moline branch. We sell approximately 50,000 tons a year to them.

- 16 We are the sole supplier for the University of Illinois at the
- 17 Abbott Power Plant. They consume about 100,000 tons a year.
- 18 Q. Abbott is the plant that does their -- for the
- 19 Urbana-Champaign campus?
- 20 A. For the Urbana campus, correct.
- 21 Q. Okay.
- 22 A. We also sell coal to Eastern Illinois University. We
- 23 are the sole supplier there. We are the sole supplier for a lot
- 24 of the smaller State institutions, the prison in Lincoln, the

- 1 Development Center in Lincoln, and the School for the Deaf in
- 2 Jacksonville.
- 3 Q. Okay. Does the mine run 24 hours a day, seven days a
- 4 week?
- 5 A. Yes.
- 6 Q. How many --
- 7 A. I am sorry. The mine primarily runs five days a week,
- 8 24 hours a day. We do have people that work -- we have people on
- 9 the property all but I think it is 14 hours of the week. There
- 10 is two short periods over the weekend.
- 11 Q. Can you shut the fan down when the people aren't there?
- 12 A. No.
- 13 Q. Why not?
- 14 A. It requires -- because basically the way the law works
- 15 is to have people there, you got to have people there the shift

- 16 before, so that the people that want to go to work on their shift
- 17 can. So there is essentially no times that you can -- that you
- 18 are -- that you can have the fan shut down.
- 19 Q. How long can you have the fan shut down and operate?
- 20 A. 15 minutes requires complete removal of the people from
- 21 the mine, and the mine has to be completely re-examined before
- 22 the miners are allowed to go back under ground.
- Q. How many shifts a day do you run?
- 24 A. We run three shifts a day.

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- 1 Q. What are those shifts?
- 2 A. We work three shifts; 7:00 to 3:00, 3:00 to 11:00, and
- 3 11:00 to 7:00, three eight-hour shifts.
- 4 Q. Okay. The transition from the 3:00 to 11, the 11:00 to
- 5 7:00, is in the evening, correct, 11 p.m., at night?
- 6 A. Yes. I am sorry.
- 7 Q. When does -- when do the shift change activities kind of
- 8 get started and --
- 9 A. Well, usually you have people starting to show up to
- 10 work, you know, 10:00, 10:30, for the people who would be coming
- 11 on shift at 11:00.
- 12 Q. Okay.
- 13 A. And then you have the people come out of the mine and
- 14 shower, and so they are leaving any time from 11:00 to 12:00.

- 15 Q. To your knowledge, has anyone else ever complained about
- 16 the noise of the exhaust fan --
- 17 A. No.
- 18 Q. -- besides the Knoxs?
- 19 A. No.
- 20 Q. Would you be the one who would get that complaint?
- 21 A. Yes.
- Q. Okay. Or if not directly, it would be communicated to
- 23 you?
- 24 A. Yes.

- Q. It is your responsibility?
- 2 A. Yes.
- 3 Q. Are you familiar with the OSHA requirements for hearing
- 4 protection?
- 5 A. Yes, OSHA has a requirement of 85 decibels. It is a
- 6 time weighted average for a shift. And MSHA has a requirement of
- 7 90 decibels for an eight-hour shift.
- 8 Q. Is hearing protection required underground at the mine?
- 9 A. It is not required in all applications, but it is
- 10 recommended.
- 11 Q. Is it required if you are operating a piece of
- 12 machinery?
- 13 A. Yes, specific pieces of machinery that exceed the
- 14 decibel levels, it is required.

- 15 Q. How much, if you know, does the hearing protection
- 16 reduce the noise?
- 17 A. Depending on the type of hearing protection I have seen
- 18 it go anywhere from ratings of -- it is called an NNR, a noise
- 19 reduction rating, of anywhere from 10 to 30, depending on the
- 20 type of hearing protection worn.
- 21 Q. Okay. The building that Mr. Zak described earlier
- 22 today, based on what you heard, and the calculations that you
- 23 have done, is that building going to be more expensive than the
- 24 \$470,000.00, do you think?

- 1 A. Potentially it could, because what I estimated was kind
- 2 of two smaller buildings. So maybe one larger one could be more
- 3 expensive to construct.
- 4 Q. Okay. This Respondent's Exhibit Number 8, where you
- 5 have got the exhaust fan and the intake fan on there, in terms of
- 6 where you located the fan on the property, labeled Turris, how
- 7 much leeway did you have in terms of locating it where you could
- 8 locate it on that piece of property?
- 9 A. That was primarily the only location we could have
- 10 located it on that property. It needs to come down into what is
- 11 called an intersection of where the two roadways connect to get
- 12 maximum airflow.
- 13 Q. Okay.

- 14 A. So, you know, it was pretty much set because of that
- 15 location right there.
- 16 Q. Of course, as you previously said, it had to be on the
- 17 return side?
- 18 A. And on the return side, correct.
- 19 Q. Is the idea with the explosion that whatever comes out
- 20 as a result of the explosion, is it preferred that it go up, is
- 21 that why the --
- 22 A. Typically that is the arrangement just because that is
- 23 the direction that the airflow is going. So rather than force an
- 24 air direction change, most all of the fans that I have seen, the

- 1 explosion doors were located directly above the shaft.
- 2 MR. COX: Okay. I don't have anything further.
- I would move to admit, I believe it is Respondent's
- 4 Exhibits 2 through 12, I believe.
- 5 HEARING OFFICER HALLORAN: Any objection?
- 6 MR. NORTHRUP: No objection.
- 7 HEARING OFFICER HALLORAN: Okay. Respondent's Exhibits 2
- 8 through 12 are admitted.
- 9 (Whereupon said documents were admitted into evidence as
- 10 Respondent's Exhibits 2 through 12 as of this date.)
- 11 HEARING OFFICER HALLORAN: That said, I think we will take
- 12 a short break. Let's go off the record.
- 13 (Discussion off the record.)

- 14 HEARING OFFICER HALLORAN: All right. We are back on the
- 15 record. It is 4:15.
- 16 I want to note again that there are no members of the
- 17 public present, nor have there been throughout the hearing.
- 18 I believe Mr. Northrup is ready to cross-examine the
- 19 witness, Mr. Schultz.
- 20 MR. NORTHRUP: Right.
- 21 CROSS EXAMINATION
- 22 BY MR. NORTHRUP:
- Q. Mr. Schultz, let me show you what I have marked as
- 24 Plaintiff's Exhibit Number 5.

- 1 (Whereupon said document was duly marked for purposes of
- 2 identification as Complainant's Exhibit 5 as of this date.)
- 3 Q. Can you just identify that for me, please?
- 4 A. Yes, that was -- Plaintiff's Exhibit Number 5 was the
- 5 invitation to bid that was sent to various silencer manufacturers
- 6 for the manufacturer of a silencer for the property.
- 7 Q. Okay. And that is your signature on the front page?
- 8 A. Yes.
- 9 Q. Does this look like it is a complete copy of the
- 10 invitation to bid with all of the attachments and diagrams?
- 11 A. Yes.
- MR. NORTHRUP: Okay. Your Honor, at this point I would ask

- 13 that Plaintiff's Exhibit Number 5 be admitted into evidence.
- 14 HEARING OFFICER HALLORAN: Mr. Cox?
- MR. COX: I have no objection.
- 16 HEARING OFFICER HALLORAN: All right. Exhibit Number 5 is
- 17 admitted.
- 18 (Whereupon said document admitted into evidence as
- 19 Complainant's Exhibit 5 as of this date.)
- Q. (By Mr. Northrup) Mr. Schultz, let me show you what I
- 21 have marked as Plaintiff's Exhibit Number 6.
- 22 (Whereupon said document was duly marked for purposes of
- 23 identification as Complainant's Exhibit 6 as of this date.)
- Q. Can you tell me what that is?

- 1 A. Plaintiff's Exhibit Number 6 is an e-mail that I had
- 2 sent to Bob Schmidt, who is the president of IAC, whom we
- 3 purchased the silencer from outlining various options for
- 4 additional soundproofing.
- 5 Q. Okay. What is the date of this e-mail?
- 6 A. Bob responded on Monday, August 28th of 2000. I am not
- 7 for sure when the original was sent to him.
- 8 Q. Okay. If you look down at the bottom of the first page,
- 9 alternate number four, does that reference a block building with
- 10 an acoustical type roof?
- 11 A. Yes.
- 12 MR. NORTHRUP: At this point, Your Honor, I would ask that

- 13 Plaintiff's Exhibit Number 6 be admitted into evidence.
- 14 HEARING OFFICER HALLORAN: Mr. Cox?
- 15 MR. COX: No objection.
- 16 HEARING OFFICER HALLORAN: Plaintiff's Exhibit Number 6 is
- 17 admitted.
- 18 (Whereupon said document was admitted into evidence as
- 19 Complainant's Exhibit 6 as of this date.)
- 20 HEARING OFFICER HALLORAN: I do want to note for the record
- 21 that when I do say Plaintiff's Exhibit, it is actually
- 22 Complainant's Exhibit. I just want the Board to be aware of
- 23 that.
- Q. (By Mr. Northrup) You indicated earlier in response to a

- 1 question from Mr. Cox that you were aware that Turris pays
- 2 corporate income taxes?
- 3 A. Yes.
- 4 Q. Okay. Let me show you what I have marked as
- 5 Plaintiff's, meaning Complainant's, Exhibit Number 7.
- 6 (Whereupon said document was duly marked for purposes of
- 7 identification as Complainant's Exhibit 7 as of this date.)
- 8 Q. Can you tell me what that is?
- 9 A. That is a copy of -- Plaintiff's Exhibit Number 7 is a
- 10 copy of the corporate tax return for the year 2000 for Turris
- 11 Coal Company.

- 12 Q. Okay. Under the box with the letter D titled total
- 13 assets, underneath that there is a dollar sign and then a figure.
- 14 Do you see that up on the top right?
- 15 A. Total assets.
- 16 Q. Yes. What is that number?
- 17 A. \$66,782,534.00.
- 18 Q. Okay. The line right below that, line 1C, what is that
- 19 number?
- 20 A. That is \$45,288,654.00.
- Q. What does that reflect according to the tax return?
- 22 A. That says gross receipts or sales.
- 23 Q. Then, finally, down on line 30, what is line 30?
- 24 A. That is taxable income of \$2,114,798.00.

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- 1 Q. Okay. Thanks. What is the current price of a ton of
- 2 coal?
- 3 A. Approximately \$21.00.
- 4 Q. \$21.00 a ton?
- 5 A. (Nodded head up and down.)
- 6 Q. Referencing Respondent's Exhibit Number 8, now, this is
- 7 the one that shows where the exhaust shaft is located, correct?
- 8 A. Yes.
- 9 Q. Okay. You indicated that it was necessary that your
- 10 exhaust shaft had to go in the location identified; is that
- 11 correct?

- 12 A. Yes, and the returns.
- 13 Q. And the returns, okay. I am sorry. What do you call
- 14 these?
- 15 A. Those are the main developments.
- 16 Q. The main developments. Why could you not have placed
- 17 the exhaust fan in one of the main developments further southwest
- 18 on the Schemmer property?
- 19 A. Access to the site. We were close to Main Street.
- 20 Q. Okay. You wanted to be close to Main Street. Why is
- 21 that important to be close to the street?
- 22 A. Access.
- Q. Okay. Why is that important?
- A. For people to get to and from work.

- 1 Q. Okay. There is no regulation or no restriction that you
- 2 know of that you could have built a road down from East Main
- 3 Street to -- for lack of a better term -- my proposed location or
- 4 east from Bock Road?
- 5 A. No.
- 6 Q. Okay. In fact, the only limitation would really be the
- 7 cost?
- 8 A. Yes.
- 9 Q. So it is fair to say that you placed the exhaust fan at
- 10 that location because it was a cheaper alternative than any

- 11 other?
- 12 A. No, there were probably -- it was the optimum location
- 13 for the property that we acquired.
- 14 Q. Right, for the property acquired. But, I mean, anywhere
- on the Schemmer property?
- 16 A. I am sorry.
- 17 Q. The reason you did not place the exhaust shaft down here
- 18 on what is marked as the Schemmer property is because of the
- 19 cost, the cost of building an access road, the cost of gaining
- 20 access?
- 21 A. Yes, the property was bought, yes.
- Q. How much did you pay for the Turris property?
- 23 A. I believe we paid around \$11,000.00 an acre. It was
- 24 actually a trade with Mr. Schemmer.

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- 1 Q. How many acres total?
- 2 A. Thirty acres.
- 3 Q. Does Respondent's Exhibit Number 8 reflect the furthest
- 4 extent of your mining operations, or do they continue off the
- 5 map?
- 6 A. They will continue southerly, yes.
- 7 Q. So it is Turris' plan to continue operating in a
- 8 southerly direction?
- 9 A. Yes.
- 10 Q. As you move, as operations continue in a southerly

- 11 direction, will you have to draw more air out from underground
- 12 and provide more fresh air?
- 13 A. The quantity required is a function of the production
- 14 level.
- 15 Q. Okay.
- 16 A. So if the production level stays similar, the quantity
- 17 should stay similar.
- 18 Q. Okay. But it does make some difference the further out
- 19 you mine, the harder the fan will have to work?
- 20 A. Yes, it will increase the pressure of the fan, yes, sir.
- 21 Q. I think you indicated that was one of the problems with
- 22 the Elkhart?
- 23 A. Very much so.
- Q. Okay. Do you know, as the fan works harder, will it

- 1 become noisier?
- 2 A. I do not know -- without a silencer, yes, the fan curves
- 3 indicate it would get noisier. With the affects of the silencer,
- 4 I do not know.
- 5 Q. Okay. To provide the appropriate amount of air into the
- 6 mine, as well as the exhaust, do you have to put -- do you have
- 7 to put more air into it? Does the fan have to work harder?
- 8 A. I don't understand the question.
- 9 Q. That's a bad question. I will strike that. When you

- 10 were talking about Mr. Schomer and his apparent statement to you
- 11 that he felt the Knox property was agricultural, you indicated
- 12 that he said that because Mr. Knox was raising geese at the pond.
- 13 Do you recall that?
- 14 A. Yes.
- 15 Q. Is that what Mr. Schomer said, to the best of your
- 16 recollection?
- 17 A. Yes.
- 18 Q. Okay. Did he say anything specific about the use of the
- 19 machine shed?
- 20 A. No, I don't believe so.
- 21 Q. Okay. Looking at Respondent's Exhibits Numbers 3 and
- 22 4 -- tell me when you get those out.
- 23 A. Yes.
- Q. Okay. On Number 3, you have got the amount for the --

- to fabricate upcast at \$15,976.00. That number also appears on
- 2 Respondent's Exhibit Number 4, on the sixth page?
- 3 A. (Nodded head up and down.)
- 4 Q. I mean, those are the same numbers, right?
- 5 A. Yes.
- 6 Q. It is not a duplicate or anything?
- 7 A. No.
- 8 Q. Okay. Also on that total on page four, it is at
- 9 \$184,249.54. But on Exhibit Number 3, it seems that the total

- 10 number is \$173,341.01.
- 11 A. Yes.
- 12 Q. Do you see that? Do you know why there is a
- 13 discrepancy?
- 14 A. I believe the discrepancy is on Respondent's Exhibit
- 15 Number 4, the \$184,000.00 includes the \$15,000.00 for the
- 16 fabrication of the upcast.
- 17 Q. Okay.
- 18 A. And this was captured under the top for Mason
- 19 Manufacturing.
- Q. The capital cost summary, referencing Exhibit Number 3,
- 21 the capital cost summary for fan installation, those were costs
- 22 Turris had to spend if they wanted to continue to operate,
- 23 correct?
- 24 A. Yes.

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- 1 Q. Do you have any training or expertise in noise
- 2 engineering?
- 3 A. No, sir, I do not, other than what I have learned in
- 4 this exercise.
- 5 Q. You indicated that Turris had made a contribution to
- 6 Williamsville in the fall of 2001, building a --
- 7 A. A Pavilion.
- 8 Q. A pavilion?

- 9 A. Yes. For the park, yes.
- 10 Q. How did that come about? Did Williamsville contact
- 11 Turris or vice versa?
- 12 A. Williamsville contacted Turris, contacted Roger
- 13 Dennison, I believe, and asked for some help. I guess the long
- 14 story of the short was they received a grant from the State and
- 15 managed to exceed the grant and needed a little assistance in
- 16 completing the project. And to my knowledge -- well, I know. It
- 17 is still not complete.
- 18 Q. The mine ventilation fan, it does run all of time,
- 19 correct?
- 20 A. Yes, exactly as stated. It does have a brief
- 21 interruption when the electrical is checked. There was one brief
- 22 interruption, yes, that was just when the electrical check was
- 23 done or if there were some interruption of power.
- 24 Q. In any of your discussions with Mr. Zak, do you recall

- 1 that he had ever indicated that if the belting does not work or
- 2 the silencer does not work that another alternative was going to
- 3 be to build a building around the --
- 4 A. The recommendations for us to implement, of what I
- 5 remember, were those two. There were discussions of a building
- 6 but never the need to implement it. There was just general
- 7 discussions about other options.
- 8 MR. NORTHRUP: Okay. That's all I have.

- 9 HEARING OFFICER HALLORAN: All right. Thank you, Mr.
- 10 Northrup.
- 11 Any redirect, Mr. Cox?
- MR. COX: Briefly.
- 13 HEARING OFFICER HALLORAN: I am sorry. Before we go on,
- 14 did you want to offer Exhibit 7 into evidence, Mr. Northrup?
- MR. NORTHRUP: Sure. I will offer it.
- 16 HEARING OFFICER HALLORAN: Okay.
- 17 MR. COX: No objection.
- 18 HEARING OFFICER HALLORAN: All right. Complainant's
- 19 Exhibit Number 7 is admitted.
- 20 (Whereupon said document was admitted into evidence as
- 21 Respondent's Exhibit 7 as of this date.)
- 22 REDIRECT EXAMINATION
- 23 BY MR. COX:
- Q. Mr. Schultz, look at Plaintiff's Exhibit Number 6. That

- 1 was the e-mail message there.
- 2 A. Yes.
- 3 Q. Okay. Alternate number four is enclose fan and
- 4 discharge duct in a block building with an acoustical type roof.
- 5 The cost estimate is \$37,000.00. Is that option the same as what
- 6 Mr. Zak has proposed or what you have estimated?
- 7 A. No, it is not. What that was based on was enclosing

- 8 only the fan and the discharge duct or the evase with two
- 9 parallel concrete block walls and an acoustical roof. So it
- 10 would be in a building approximately 40 feet long, 40 or 45 feet
- 11 long, and maybe 16 feet wide and maybe 13 feet tall.
- 12 Q. You didn't have to worry about this whole blast door
- 13 issue?
- 14 A. No, the issues of -- since it was outside of the
- 15 explosion doors, there were no issues regarding explosion doors
- 16 or gases.
- 17 Q. It was significantly smaller than the other building
- 18 also, the building that is proposed?
- 19 A. Yes.
- 20 Q. What was the size of the building that you thought, that
- 21 you estimated it would need to be, do you know?
- 22 A. I believe approximately -- because the fan has a dog leg
- 23 in it --
- 24 Q. Okay.

- 1 A. -- when I looked at it, I proposed a fairly large
- 2 building that had -- looked at like a 24 foot eave height that
- 3 would allow the doors to open and then go totally -- it would sit
- 4 east-west. And I estimated that building would be about 60 by
- 5 80, because it did include -- I assumed that Mr. Zak would want
- 6 to include the motor house as well. So I roughed out a square.
- And then what I did along the evase section was made a

- 8 smaller building because when you enclose the motor house you
- 9 have to have height in there to remove the motor because now we
- 10 can do that outside with a fan. So we had to have enough height
- 11 in the interior crane to do the maintenance work that we can now
- 12 do with mobile equipment on the outside. So then I looked at a
- 13 smaller building that would be basically perpendicular to that
- 14 large building that would enclose the fan and discharge duct and
- 15 silencer going south.
- 16 Q. Okay. Referring to Plaintiff's Exhibit Number 7, which
- 17 is the tax return for 2000?
- 18 A. Yes.
- 19 Q. This does not show anything on line 31, which is total
- 20 tax, correct?
- 21 A. Correct.
- 22 Q. Is it your understanding that Turris does pay income
- 23 tax?
- 24 A. Yes.

- 1 Q. It is not reflected on this because it is a proforma and
- 2 there are a lot of other companies that are sister companies, if
- 3 you will?
- 4 A. Yes.
- 5 Q. Is that correct?
- 6 A. Yes.

- 7 Q. Referring to Respondent's Exhibit Number 8, the
- 8 Williamsville site, the large exhibit here that we have, Mr.
- 9 Northrup had asked you about property that I suppose is further
- 10 south of the property that Turris currently owns on there. Is
- 11 that your understanding?
- 12 A. Yes.
- 13 Q. And you didn't buy that property and you don't own it
- 14 now and you didn't own it then; is that correct?
- 15 A. Correct.
- 16 Q. So is another reason you didn't put it down there is you
- 17 didn't own the property?
- 18 A. Correct.
- 19 Q. What about at the time how far did the mine go -- how
- 20 far south at that time? Was it just to your property where the
- 21 shaft was, if you know?
- 22 A. I don't know exactly where we were at. But we were not
- 23 probably as fully developed as that map shows at the time that
- 24 the shafts were sunk. It would have been close but, you know,

- 1 when the shafts were sunk, the mine development had progressed to
- 2 the point where the shaft sinking directly entered into the mine
- 3 and it was not ahead of the mine and then we mined into it.
- 4 Q. Okay.
- 5 A. So we had mined somewhat past it at the point the shafts
- 6 were completed. I don't know exactly how far at that point.

- 7 Q. Okay. As to Dr. Schomer's indication to you that the
- 8 pond area was agricultural, was it just the fact that the geese
- 9 were back there, that he was raising geese?
- 10 A. I believe he made a comment about the orchard and the
- 11 pond with ducks and geese.
- 12 Q. Okay. No comments about the machine sheds or anything
- 13 like that?
- 14 A. I don't recall.
- MR. COX: I don't have anything further.
- 16 HEARING OFFICER HALLORAN: All right. Thank you, Mr. Cox.
- 17 Mr. Northrup, anything further?
- 18 RECROSS EXAMINATION
- 19 BY MR. NORTHRUP:
- 20 Q. With respect to the property to the south of the
- 21 Schemmer property, you could have purchased that, correct? There
- is no prohibition against you purchasing the property?
- 23 A. Yes.
- 24 Q. That is --

- 1 A. No. Yes, that is correct.
- Q. Okay. Turris owns the mineral rights -- I think that
- 3 was one of the earlier diagrams we saw -- quite a bit further
- 4 south from the Schemmer property, correct?
- 5 A. We own or have leased the coal rights.

- 6 Q. Okay.
- 7 A. Yes.
- 8 MR. NORTHRUP: All right. Nothing further.
- 9 HEARING OFFICER HALLORAN: Mr. Schultz, the shaded area,
- 10 you called that the main activity area?
- 11 THE WITNESS: The diagonal?
- 12 HEARING OFFICER HALLORAN: Yes.
- 13 THE WITNESS: Yes, that is what we call the main
- 14 development area. That's the part of the mine that remains open
- 15 for the life of the mine.
- 16 HEARING OFFICER HALLORAN: Okay. For the purposes of the
- 17 Board, I just wanted to let the Board know that it is kind of a
- 18 shaded area, a diagonal V type diagram on the map.
- 19 Okay. Anything further?
- 20 MR. NORTHRUP: Well, no, not with this witness. I may want
- 21 to call a rebuttal witness.
- 22 HEARING OFFICER HALLORAN: Okay. There is nothing further.
- 23 You may step down, Mr. Schultz. Thank you very much.
- 24 (The witness left the stand.)

- 1 HEARING OFFICER HALLORAN: We can go off the record for a
- 2 second.
- 3 (Discussion off the record.)
- 4 HEARING OFFICER HALLORAN: Back on the record. It looks
- 5 like everybody is ready. It is about 13 minutes until 5:00.

- 6 Mr. Northrup is going to have a case in rebuttal. You may
- 7 proceed.
- 8 MR. NORTHRUP: Yes. I would like to call Greg Zak in
- 9 rebuttal.
- 10 HEARING OFFICER HALLORAN: Mr. Zak, please step up. I
- 11 would like to remind you that you are still under oath.
- 12 THE WITNESS: Yes.
- 13 HEARING OFFICER HALLORAN: Thank you.
- 14 (Whereupon the witness was previously sworn by the Notary
- 15 Public.)
- 16 GREG ZAK,
- 17 having been previously duly sworn by the Notary Public, saith as
- 18 follows:
- 19 REBUTTAL EXAMINATION
- BY MR. NORTHRUP:
- 21 Q. Mr. Zak, we have had a lot of discussions today about
- 22 what a building might be around this fan to reduce the noise.
- 23 Based upon your experience, and knowledge, and training in the
- 24 noise field, would such a building have to be made out of steel?

- 1 MR. COX: I am going to object at this point. I don't
- 2 think this is proper rebuttal. And I also -- that's my primary
- 3 objection. I don't think it is rebuttal. I think it could have
- 4 been brought out in his case-in-chief.

- 5 HEARING OFFICER HALLORAN: Could you read the question
- 6 back?
- 7 (Whereupon the requested portion of the record was read back
- 8 by the Reporter.)
- 9 HEARING OFFICER HALLORAN: Yes, I am going allow him. He
- 10 may answer. I am going to overrule your objection, Mr. Cox.
- 11 You may answer if you are able.
- 12 THE WITNESS: Yes. Other materials besides pure steel
- 13 could be and normally are used.
- Q. (By Mr. Northrup) What other types of materials can be
- 15 used?
- 16 A. Typically what is normally done in a situation like
- 17 this, would be to, say, have a very thin layer of steel on the
- 18 outside like you would on a utility shed and then use studding or
- 19 two-by-four on the inside and drywall on that. The drywall would
- 20 actually provide the mass. So we would be looking at getting
- 21 almost all of our mass from the -- of say, the five pounds per
- 22 square foot from interior drywall or Sheetrock.
- 23 Q. Based upon your experience in the field, is there a cost
- 24 savings between the use of steel and drywall?

- 1 A. Yes. A number of years ago, when I worked for the
- 2 Agency, the ratio at that time was around 20 to 1. In other
- 3 words, if the steel cost 20 cents per pound, drywall would cost
- 4 approximately a penny per pound.

- 5 Q. The issue also came up of whether or not you would need
- 6 a single building or a double building -- or two buildings.
- 7 Based upon your experience and knowledge in the field, do you
- 8 have any opinion with respect to whether a single building or two
- 9 buildings would be required?
- 10 MR. COX: Again, I am going to interpose the same
- 11 objection. I think this is not proper rebuttal. They could have
- 12 brought all this out in their case-in-chief, and they waited
- 13 until we put on our case to defend against it, and now they are
- 14 ambushing us with this.
- 15 HEARING OFFICER HALLORAN: I am going to overrule your
- 16 objection. You may answer. You can file objection in your
- 17 posthearing brief. Actually, it is 14 days after the record is
- 18 in.
- 19 MR. COX: Okay.
- 20 HEARING OFFICER HALLORAN: Thank you.
- 21 THE WITNESS: In answer to the question about single
- 22 building versus two buildings, two buildings could very easily
- 23 work. The idea of mentioning one building was to present a large
- 24 simple alternative. However, breaking it down into two

- buildings, as long as the existing structure is contained to
- 2 contain the noise, two or possibly even more structures, if that
- 3 was more economical could, in fact, solve this noise problem.

- 4 MR. NORTHRUP: No further questions.
- 5 HEARING OFFICER HALLORAN: Thank you. You may cross, Mr.
- 6 Cox.
- 7 MR. COX: I don't have any cross.
- 8 HEARING OFFICER HALLORAN: Okay. Thank you very much. You
- 9 may step down, Mr. Zak.
- 10 (The witness left the stand.)
- 11 HEARING OFFICER HALLORAN: All right. Does that conclude
- 12 your case in rebuttal?
- MR. NORTHRUP: Yes, it does.
- 14 HEARING OFFICER HALLORAN: All right. We can go off the
- 15 record. Before we go off the record -- I am sorry -- I am
- 16 supposed to make a credibility determination.
- 17 MR. COX: I would like to put on a surrebuttal case. I
- 18 would like to call Wally Schultz.
- 19 HEARING OFFICER HALLORAN: Mr. Northrup, any objection to
- 20 that?
- 21 MR. NORTHRUP: No, not at this time. I may interpose the
- 22 same objection that Mr. Cox did, but I don't have any.
- 23 HEARING OFFICER HALLORAN: There is going to be an end to
- 24 this.

- 1 (Laughter.)
- 2 HEARING OFFICER HALLORAN: All right. Come on up, Mr.
- 3 Schultz.

- 4 MR. COX: I will make it short.
- 5 HEARING OFFICER HALLORAN: I will remind you that you are
- 6 still under oath.
- 7 THE WITNESS: Yes, sir.
- 8 HEARING OFFICER HALLORAN: Thank you.
- 9 (Whereupon the witness was previously sworn by the Notary
- 10 Public.)
- 11 WALTER F. SCHULTZ,
- 12 having been first duly sworn by the Notary Public, saith as
- 13 follows:
- 14 REBUTTAL EXAMINATION
- 15 BY MR. COX:
- 16 Q. Mr. Schultz, you heard Mr. Zak's testimony about what
- 17 the building could be made out of, correct?
- 18 A. Correct.
- 19 Q. Do you see any problems, from the engineering
- 20 standpoint, about using drywall, two-by-fours, or any of the
- 21 other construction that he talked about?
- 22 A. The initial issue there would be an issue with MSHA
- 23 because you are not allowed to build anything combustible within
- 24 100 feet of the fan. So you could not use wood in the

- 1 construction.
- 2 Q. Okay. What about in terms of are there any sort of

- 3 ventilation issues or moisture issues with the use of Sheetrock?
- 4 A. Well, assuming the building is now air tight and you may
- 5 potentially have a condensation issue with the building, because
- 6 you don't have -- you are not able to ventilate the roof, because
- 7 it needs to be totally enclosed. I don't know, but the main
- 8 thing that I see is the need to make sure it is noncombustible
- 9 construction.
- 10 MR. COX: Okay. I don't have anything further.
- 11 HEARING OFFICER HALLORAN: All right. Thank you, Mr. Cox.
- 12 Cross, Mr. Northrup?
- 13 CROSS EXAMINATION
- 14 BY MR. NORTHRUP:
- 15 Q. Rather than wood studs, are there metal studs that you
- 16 could use?
- 17 A. Yes.
- 18 MR. NORTHRUP: Okay. No further questions.
- 19 HEARING OFFICER HALLORAN: All right. Thank you very much,
- 20 Mr. Northrup.
- You may step down, Mr. Schultz. Thanks.
- 22 (The witness left the stand.)
- 23 HEARING OFFICER HALLORAN: Is that all?
- MR. COX: That's all.

- 1 MR. NORTHRUP: That's all.
- 2 HEARING OFFICER HALLORAN: Okay. Thank you. Before I

- 3 forget, and before we got into this rebuttal business, I am
- 4 supposed to make a credibility determination of the witnesses
- 5 that have testified here today. Based on my knowledge and
- 6 experience, I find that there are no issues of credibility with
- 7 any of the witnesses that have testified today.
- 8 With that said, let's go off the record briefly and get a
- 9 posthearing schedule and then we will jump back on and get out of
- 10 here by 5:00. Thanks.
- 11 (Discussion off the record.)
- 12 HEARING OFFICER HALLORAN: Okay. We are back on the
- 13 record. We have been discussing posthearing briefs.
- 14 We believe the record will be finished by June 21st or
- 15 probably on the web site by the 24th or 25th. Regardless,
- 16 Complainant's posthearing brief is due August 5th.
- 17 Then the Respondent's posthearing brief is due September
- 18 12th.
- 19 A reply by the Complainant, if any, is due on September the
- 20 25th.
- 21 The public comment period cut off date is July 19th, which
- 22 is a Friday.
- 23 All right. I think, with that said, I want to thank you
- 24 gentlemen for your civility and your professionalism. Have a

2	MR. NORTHRUP: Thank you very much.
3	MR. COX: Thank you.
4	(Hearing Exhibits were retained by
5	Hearing Officer Bradley P. Halloran.)
6	
7	(The hearing concluded at approximately
8	5:00 p.m.)
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1 STATE OF ILLINOIS)

0) SS
2	COUNTY OF MONTGOMERY)
3	CERTIFICATE
4	
5	I, DARLENE M. NIEMEYER, a Notary Public in and for the
6	County of Montgomery, State of Illinois, DO HEREBY CERTIFY that
7	the foregoing 221 pages comprise a true, complete and correct
8	transcript of the proceedings held on the 11th of June A.D.,
9	2002, at the Illinois Pollution Control Board offices, 600 South
10	Second Street, Springfield, Illinois, in the case of Gladys L.
11	Knox and David A. Knox v. Turris Coal Company and AEI Resources,
12	Inc., in proceedings held before Hearing Officer Bradley P.
13	Halloran, and recorded in machine shorthand by me.
14	IN WITNESS WHEREOF I have hereunto set my hand and affixed
15	my Notarial Seal this 22nd day of June A.D., 2002.
16	
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19	
20	
21	Notary Public and Certified Shorthand Reporter and
22	Registered Professional Reporter
23	CSR License No. 084-003677 My Commission Expires: 03-02-2003