

OFFICE OF ZONING AND ADMINISTRATIVE HEARINGS  
FOR MONTGOMERY COUNTY

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:  
PETITION OF COSTCO WHOLESALE : Case No. S-2863  
CORPORATION : OZAH No. 13-12  
:  
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A hearing in the above-entitled matter was held on  
May 29, 2014, commencing at 9:42 a.m., at the Office of  
Zoning and Administrative Hearings, 100 Maryland Avenue, 2nd  
Floor Council Hearing Room, Rockville, Maryland 20850  
before:

Martin L. Grossman  
Hearing Examiner

A P P E A R A N C E S

For the Applicant:

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C O N T E N T S

Surrebuttal				
Witnesses:	Direct	Cross	Redirect	Recross
Henry Cole				
By Mr. Goecke		40		
By Ms. Rosenfeld			112	
By Mr. Silverman				153

E X H I B I T S

Exhibit No.		Marked/Received
353(a)	Summary relating to PowerPoint presentation in Exhibit 353	163
353(b)	Narrative full report relating to PowerPoint presentation in Exhibit 353	169
431(c)	Corrected version of 431(b)	188
606(c)	February 2012 research report on allergic inflammation in the human lower respiratory tract affected by exposure to diesel exhaust	192
606(d)	Non-cancer health effects of diesel exhaust, February 2012	192
609	Ambient Ration Method Version 2	51
610	User's Guide for the AMS/EPA Regulatory Model-AERMOD	56
611	British Environmental Agency review of methods for NO2 conversion in plumes at short ranges, November 2007	72
612	Page 655 of the 2000 Glossary of Meteorology	91
613	Texas Implementation of the Motor Vehicle Emission Simulator MOVES Model	131
1-613	Except as previously noted, all exhibits were received in evidence	196

P R O C E E D I N G S

1 MR. GROSSMAN: This is the 36th day of a public  
2 hearing in the matter of Costco Wholesale Corporation, Board  
3 of Appeals No. S-2863, OZAH No. 13-12, petition for a  
4 special exception pursuant to Zoning Ordinance Section  
5 59-G-2.06 to allow petitioner to construct and operate an  
6 automobile filling station which would include 16 pumps.  
7 The subject site is located at 11160 Veirs Mill Road, Silver  
8 Spring, Maryland, Lot N, 631 Wheaton Plaza, Parcel 10, also  
9 known as Westfield Wheaton Mall, and it is zoned C-2.  
10 The hearing was begun on April 26, 2013, and the  
11 next session will be for oral arguments because, hopefully,  
12 this will be the last evidentiary session, oral closing  
13 arguments. I'm going to propose -- and we'll discuss it  
14 later -- that they take place on August 12, 2014, here in  
15 the second floor hearing room of the COB, the Council Office  
16 Building, at 9:30 a.m., and we'll discuss the dates for the  
17 briefs shortly.  
18 This hearing is conducted on behalf of the Board  
19 of Appeals. My name is Martin Grossman, the Hearing  
20 Examiner, which means I will take evidence and write a  
21 report and recommendation to the Board of Appeals which will  
22 make the decision in this case. Will the parties identify  
23 themselves, please?  
24 MS. HARRIS: Good morning. Pat Harris on behalf

1 of Costco.  
2 MR. GROSSMAN: Ms. Harris.  
3 MR. GOECKE: Good morning. Mike Goecke for  
4 Costco.  
5 MR. GROSSMAN: Mr. Goecke.  
6 MS. CORDRY: Good morning. Karen Cordry for  
7 Kensington Heights.  
8 MR. GROSSMAN: Okay.  
9 MS. ROSENFELD: Good morning. Michele Rosenfeld  
10 with Kensington Heights.  
11 MR. GROSSMAN: Good morning.  
12 MR. SILVERMAN: Good morning, Mr. Grossman. Larry  
13 Silverman for Stop Costco Gas Coalition.  
14 MR. GROSSMAN: Good morning.  
15 MS. ADELMAN: Good morning, Mr. Grossman. Abigail  
16 Adelman for Stop Costco Gas Coalition.  
17 MR. GROSSMAN: Good morning.  
18 MS. DUCKETT: Good morning. Eleanor Duckett,  
19 Kensington View.  
20 MR. GROSSMAN: All right. And I see Mr. --  
21 MR. BRANN: Good morning. Erich Brann for Costco.  
22 MR. GROSSMAN: -- Mr. Brann and Mr. Sullivan here  
23 as well. All right. And as I understand, before we went on  
24 the record, that Dr. Cole has not yet arrived. Is anybody  
25 able to check and see --

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1 MS. ROSENFELD: I can try.  
2 MR. GROSSMAN: All right. Hopefully, he didn't --  
3 did somebody speak to him to make sure that he remembers  
4 that --  
5 MS. ROSENFELD: Oh, he --  
6 MR. GROSSMAN: He knows? Okay.  
7 MR. SILVERMAN: He's very well aware, very well  
8 aware of it.  
9 MR. GROSSMAN: All right.  
10 MS. ROSENFELD: Yes. We were in communication by  
11 e-mail.  
12 MR. GROSSMAN: All right.  
13 MS. ROSENFELD: Yes.  
14 MS. CORDRY: This morning.  
15 MS. ROSENFELD: This morning, very early.  
16 MR. GROSSMAN: All right. Preliminary matters?  
17 MS. CORDRY: And he does have to come from the far  
18 side of Washington, diametrically opposed to where we are --  
19 MR. GROSSMAN: Okay.  
20 MS. CORDRY: -- around the circle. So --  
21 MS. ROSENFELD: He's coming from the Upper  
22 Marlboro area --  
23 MR. GROSSMAN: Okay.  
24 MS. ROSENFELD: -- so he has to deal with the  
25 Beltway.

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1 MR. GROSSMAN: All right. And, of course, the  
2 only witness scheduled for today is the cross-examination of  
3 Dr. Cole in surrebuttal, and then we'll discuss the  
4 objections to exhibits. And where we left off was the  
5 question of the applicant considering filing some additional  
6 exhibits in lieu of trying to call a reply witness, and I  
7 know that those were e-mails. Let's see. I'm not sure  
8 which exhibit numbers those were.  
9 The ones I have listed as being the new ones are  
10 606 through 608, 606 being a memo from Ms. Harris,  
11 submitting a CD; (a) is the CD, containing two  
12 health-related articles, and (b) is an e-mail from  
13 Ms. Harris regarding the article. 607 is a report submitted  
14 by Ms. Harris regarding Intersection 16, and 608 is an  
15 e-mail from Ms. Harris, submitting an Excel file, and 608(a)  
16 is the Excel file, summary of Wang 2011 data regarding  
17 Intersection 16, as I recall.  
18 MS. HARRIS: Mr. Grossman, actually, that 608(a)  
19 Excel file was relating to one of the, one of the documents  
20 that was supposed to be used on cross-examination.  
21 MR. GROSSMAN: Okay. All right. So, in any  
22 event, I stand corrected, and Dr. Cole has since arrived.  
23 Welcome, sir. All right. Let's talk for a second about,  
24 about that question. Has everybody agreed to the process,  
25 that we will admit the articles that have been cross-filed

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1 by the parties and there will be no further witnesses after  
2 Dr. Cole?  
3 MR. GOECKE: Yes.  
4 MS. ROSENFELD: Yes.  
5 MR. GROSSMAN: All right. All right. Good.  
6 MS. ADELMAN: I don't agree.  
7 MR. SILVERMAN: We don't agree.  
8 MS. ADELMAN: I think, yes, I think the Coalition  
9 doesn't agree.  
10 MR. SILVERMAN: We do not agree.  
11 MR. GROSSMAN: Do not agree --  
12 MR. SILVERMAN: No.  
13 MR. GROSSMAN: -- okay. So let me hear from the  
14 Coalition on the point.  
15 MR. SILVERMAN: Yes. I think, you know, they  
16 chose not to put -- let's talk about the medical stuff first  
17 and then the air pollution stuff.  
18 MS. CORDRY: That's all we're talking about right  
19 now, is the medical.  
20 MR. SILVERMAN: The medical, okay, yes.  
21 MR. GROSSMAN: Before I hear from you on that,  
22 what about you, Ms. Duckett, do you agree with KHCA or --  
23 MS. DUCKETT: No, I don't -- I didn't agree with  
24 submitting these last articles that they submitted, but I  
25 don't understand enough about a court process. I thought,

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1 why are they adding stuff in that seems brand-new on  
2 rebuttal of a witness who is not there? So I didn't agree  
3 with it. I told Karen I didn't agree with --  
4 MR. GROSSMAN: Okay.  
5 MS. DUCKETT: -- admitting those.  
6 MR. GROSSMAN: All right. So Ms. Duckett joins  
7 you, Mr. Silverman.  
8 MR. SILVERMAN: Yes. They, the applicant had the  
9 opportunity to do a rebuttal on medical matters. They stood  
10 by Dr. Chase. That's fine. That's their decision and we  
11 moved on. Now they're putting in medical evidence that was  
12 not referenced by Dr. Chase, has nothing to do with  
13 Dr. Chase's testimony, and of which we cannot cross-examine.  
14 One of them -- they're quite, they're voluminous and they're  
15 complex. There's no expert behind them. I know when  
16 Mrs. Adelman was testifying, we sort of gave her a little  
17 bit of a rush because she was bringing in expert documents,  
18 involved a very educated person, was not an expert in that  
19 field.  
20 So now we have documents hanging from a tree with  
21 no explanation, no nuance, no sense of -- no expert to guide  
22 us through what they mean and what they don't mean and what  
23 their limitations are and so forth, no cross-examination. I  
24 don't see how you could base a decision on that in which --  
25 well, that's it. I --

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1 MS. ADELMAN: But we -- yes.  
2 MR. SILVERMAN: -- don't see how you can base a  
3 decision on the matter or take guidance from it when you  
4 have no guidance from an expert, when we've been saying so  
5 many times, as various laywitnesses tried to put in learned  
6 treatises, that why -- I think you said, well, why do that  
7 when you have experts? Well, they have plenty of experts.  
8 They have unlimited resources. They chose not to go that  
9 route. So I don't think we should, it should, we should  
10 cloud the record with these items.  
11 MR. GROSSMAN: I'm not exactly sure what you mean  
12 by, we gave Mrs. Adelman a rush. I guess I won't explore  
13 that any further unless she wants to add on, but I think I  
14 have the sense of your point. Before I turn to the  
15 applicant, do you want to respond to that, Ms. Rosenfeld?  
16 MS. ROSENFELD: Well, certainly. In conceding to  
17 admitting these documents, we don't, we're not making any  
18 concessions on their relevance or their weight or their  
19 credibility --  
20 MR. GROSSMAN: Certainly.  
21 MS. ROSENFELD: -- and all of that remains to be  
22 argued. So I don't want our, at least from the point of  
23 Kensington View -- Kensington Heights, I don't want it to be  
24 presumed that we're accepting it at face value, the reports.  
25 MS. CORDRY: And I would note that one of the

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1 articles was already submitted by Dr. Chase as one of his  
2 references. So --  
3 MR. GROSSMAN: Right.  
4 MS. CORDRY: -- in that sense, it's not a new  
5 article anyway. He didn't reference it, he didn't talk  
6 about it, he didn't rely on it, but --  
7 MR. SILVERMAN: I do not have an objection to  
8 that.  
9 MR. GROSSMAN: So we're talking about one article?  
10 MR. SILVERMAN: One article, yes.  
11 MS. CORDRY: One of the three, yes.  
12 MS. ADELMAN: Right, one of the three.  
13 MR. SILVERMAN: I do not have an objection to  
14 that.  
15 MR. GROSSMAN: Okay.  
16 MR. SILVERMAN: I mean, I think that's fair game.  
17 MS. CORDRY: So based on all of that, we decided  
18 it was, considering the other objection or issues that could  
19 be raised with respect to the credibility, the partiality of  
20 the people doing it, the weight, the timing and everything,  
21 we thought it was not sufficiently problematic to object and  
22 bring another witness back and prolong this any further.  
23 So --  
24 MR. GROSSMAN: I mean, the trade-off was that the  
25 opposition put in additional articles as well --

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1 MS. ADELMAN: That's right.  
2 MR. GROSSMAN: -- you understand that?  
3 MS. ADELMAN: That's right.  
4 MR. SILVERMAN: I agree with that. I think the  
5 opposition's articles were really very relevant to our  
6 medical experts, and one of them, I think, was essentially  
7 an update. I think we -- we had a document that said you  
8 can't quote it, it's just a draft, and now we have another  
9 document that, this time, which is, which is essentially the  
10 same information that is quotable and is an official  
11 document. I think that's, I think it's a -- there's no  
12 surprise here, and I think it just illuminates the testimony  
13 that was given.  
14 And to the extent that Dr. Chase has cited a  
15 source, if they want to put that source in, that's fine; if  
16 they think that the health effects of diesel engines is  
17 relevant to this proceeding, that's fine. I wouldn't have  
18 an objection to that. I just don't think we should start  
19 bringing in a whole lot of new, really new things that have  
20 not been brought up before.  
21 MR. GROSSMAN: No, I mean, but your -- part of  
22 your objection was that there isn't an expert coming in to  
23 explain or be, or be responsive to cross-examination on the  
24 new articles, and I guess the same could be said about the  
25 additional health articles being proposed by the opposition

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1 in lieu of having Dr. Jison return to the stand. So I, I  
2 thought that was kind of a balanced thing, and --  
3 MS. ADELMAN: Right.  
4 MR. SILVERMAN: Well, I'm sure that's why my  
5 colleagues went for it, because -- on the substance of it,  
6 you know.  
7 MR. GROSSMAN: So would you prefer if we just  
8 struck all of those last articles from both sides?  
9 MR. SILVERMAN: Well, I guess my position is that  
10 Dr. Jison's pieces really were illuminated by her testimony.  
11 She essentially testified to them, even though they were --  
12 the documents she was looking at were less developed than  
13 the ones that are put in now as kind of an improvement on  
14 it. So I think there's a difference, but --  
15 MR. GROSSMAN: The same concern --  
16 MR. SILVERMAN: Yes.  
17 MR. GROSSMAN: -- that you raised, however, about  
18 the availability of cross-examination --  
19 MR. SILVERMAN: Yes.  
20 MR. GROSSMAN: -- with the whole thereto. That's  
21 why I think that there was a kind of balance. Well, let me  
22 hold off on, really on this until I hear from the applicant  
23 on that.  
24 MR. GOECKE: Sure. Sure, and I think,  
25 Mr. Grossman, you've pointed out how we got here. This was

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1 a compromise that was actually suggested by Ms. Rosenfeld,  
2 and I'm unclear whether she's objecting to this proposal now  
3 or if it's only -- she's not?  
4 MR. GROSSMAN: No.  
5 MS. CORDRY: No, we're not objecting.  
6 MR. GOECKE: Okay. So it's just Mr. Silverman and  
7 Ms. Adelman, and so --  
8 MR. GROSSMAN: And Ms. Duckett.  
9 MR. GOECKE: And Ms. Duckett as well. And so just  
10 to clarify how we got here, the whole point was to avoid  
11 having the additional medical experts testify, again,  
12 Drs. Jison and Dr. Bunn. If Mr. Silverman's objection is  
13 that he can't cross-examine the witness who would testify  
14 about this, we're happy to provide Dr. Bunn on June 6. We  
15 can make him available. He is available on that day.  
16 We had reached this compromise in an effort to  
17 avoid prolonging this hearing and adding additional  
18 testimony. So we would, you know, accept Ms. Rosenfeld's  
19 offer. This is the first we're hearing of any objection.  
20 You know, we told them that we were going to provide these  
21 documents. We received many, many documents that we could  
22 have submitted. We tried to pick a select few, to narrow it  
23 down, that were the most germane and without being  
24 repetitive or redundant.  
25 We think that these documents are highly relevant

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1 to the issues in this case. We think they would be helpful  
2 to you in making your decision. We think that  
3 Ms. Rosenfeld's caveats are well-noted in terms of their  
4 reliability, and if there's problems with the science, they  
5 can attack that in a closing brief, just as we can use them  
6 to support our position. We think it's a useful exercise  
7 and would ask that you allow all the documents in, as  
8 Ms. Rosenfeld and I had agreed.  
9 MR. GROSSMAN: All right. Has there been any  
10 consultation between the opposition factions here as to  
11 whether or not you want to try to resolve this among  
12 yourselves before --  
13 MS. CORDRY: I mean, we have talked some.  
14 Perhaps, maybe we can just wait and come back and talk again  
15 at the break and see if we have a final --  
16 MR. GROSSMAN: All right.  
17 MS. CORDRY: -- deal on this --  
18 MS. ADELMAN: Yes.  
19 MS. CORDRY: -- after hearing this discussion.  
20 Thank you.  
21 MR. GROSSMAN: Okay.  
22 MR. GOECKE: And I know Mr. Silverman says, well,  
23 she sort of testified about them before, but these are new  
24 documents that Dr. Jison has not testified about. So it's  
25 improper --

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1 MR. GROSSMAN: Right.  
2 MR. GOECKE: -- if -- I think, when applies, it  
3 has to apply consistently. So either they all come in or  
4 they don't all come in would be our position.  
5 MR. GROSSMAN: Okay. All right. So let's move to  
6 the next point in terms of the timing of the briefing.  
7 Assuming that today is the last evidentiary day, then it was  
8 agreed that the applicant's brief would be filed -- would be  
9 due 30 days after the final hearing date, Opposition brief  
10 would be due 20 days thereafter, and the reply brief due 10  
11 days after that. So the Applicant's brief is therefore due  
12 on June 30th since June 28th is a Saturday. So that moves  
13 it to the following Monday under that program. So that  
14 would be June 30 for the applicant's brief. The opposition  
15 brief would be due on July 21, 2014, because July 20 is a  
16 Sunday. Applicant's reply brief, if any, will be due on  
17 July 31, 2014, and then I am proposing that the next session  
18 would be for oral closing arguments, which the parties have  
19 requested, here in the second floor hearing room of the COB  
20 at 9:30 a.m. on Tuesday, August 12, 2014. And then -- yes,  
21 ma'am.  
22 MS. HARRIS: Oh, I'm sorry. Go ahead.  
23 MR. GROSSMAN: I was just going to say that after  
24 we adjourn today, the record will remain open only for  
25 briefs, oral closing arguments, and discussion of possible

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1 conditions.  
2 MS. HARRIS: I'm coming back from vacation on the  
3 12th, and I'm confirming that date with my husband as we  
4 speak. So that date won't work. The --  
5 MR. GROSSMAN: Okay.  
6 MS. HARRIS: -- 13th or 14th would work, I  
7 believe. Mike, is that correct?  
8 MR. GOECKE: It'll work for me.  
9 MR. GROSSMAN: Well, let me look at the calendar  
10 for a second.  
11 MS. CORDRY: The 13th is a Wednesday. Is that --  
12 would we be doing that oral argument here again? Is that a  
13 problem then because it's a Wednesday?  
14 MR. GROSSMAN: Yes, we -- I mean, probably the  
15 Board of Appeals will not be meeting, but I can't assume  
16 that. It's also my birthday, but I don't know that that --  
17 MS. HARRIS: Well --  
18 MR. GROSSMAN: -- but I'm not going to postpone it  
19 for that, just that --  
20 MR. COLE: I had to be here on my birthday.  
21 MR. GROSSMAN: That's true --  
22 MS. HARRIS: The 14th would be preferable,  
23 actually.  
24 MR. GROSSMAN: -- and did they buy you a beer  
25 afterwards? No --

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1 MR. SILVERMAN: No.  
2 MR. GROSSMAN: -- don't say that on the record.  
3 We won't find out. Let's see. I mean, we could do August  
4 14.  
5 MS. HARRIS: That would be better for me.  
6 MR. GOECKE: That works for us.  
7 MR. GROSSMAN: Does that work for everybody,  
8 Thursday?  
9 MS. ROSENFELD: Wait. Wait. I'm not sure. I'm  
10 not sure. Hold on.  
11 MR. GROSSMAN: I am going to be out of town on the  
12 15th. So --  
13 MS. ROSENFELD: I am probably going to be taking  
14 my daughter to college. The first move-in date is August  
15 15th.  
16 MR. GROSSMAN: Will you not be available on the  
17 14th, are you saying, or -- if your move-in date is the --  
18 MS. ROSENFELD: Actually, if the move-in date is  
19 the 15th --  
20 MR. GROSSMAN: How far --  
21 MS. ROSENFELD: -- the 14th would probably work.  
22 MR. GROSSMAN: Okay.  
23 MS. ROSENFELD: South Carolina.  
24 MR. GROSSMAN: Okay. Well, that's where, that's  
25 where I'm going -- well, that's another, that's another

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1 question.  
2 MR. SILVERMAN: Share rides, talk about the case.  
3 MS. ROSENFELD: Should we meet up for a beer?  
4 MR. GROSSMAN: Well, actually, I'm going to be in  
5 South Carolina for a wedding in June --  
6 MS. ROSENFELD: Okay.  
7 MR. GROSSMAN: -- but I'll be in Atlanta on August  
8 15th, but in any event, all right.  
9 MS. CORDRY: I believe that's fine for me --  
10 MS. ROSENFELD: I think the 14th will work.  
11 MS. CORDRY: -- I will double-check my work  
12 calendar when I get there tomorrow, but --  
13 MR. GROSSMAN: Okay.  
14 MS. CORDRY: -- as far as I know, that should be  
15 fine as well.  
16 MR. GROSSMAN: All right. Well, it's important, I  
17 guess, that we decide that now. You can call, perhaps, and  
18 check your calendar. The reason I say that is, since, once  
19 again, we're not issuing formal notices now to everybody, I  
20 have to announce it at the adjourn hearing date. So --  
21 MS. CORDRY: I'm reasonably sure that far out I  
22 don't have anything. So I should be --  
23 MR. GROSSMAN: Okay.  
24 MS. CORDRY: And I'll just work around it.  
25 MR. GROSSMAN: All right.

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1 MS. ADELMAN: There's no problem with the  
2 Coalition.  
3 MR. GROSSMAN: Okay. Great.  
4 MS. DUCKETT: August 16th, is that --  
5 MS. CORDRY: No, 14.  
6 MS. ADELMAN: August 14th.  
7 MR. GROSSMAN: No, August 14th.  
8 MS. ADELMAN: 14.  
9 MS. DUCKETT: 14th, right. Right. I'm okay with  
10 that.  
11 MR. GROSSMAN: Okay. Good. Then we're a go. So  
12 when we adjourn today, the record will close for everything  
13 except for closing oral arguments, briefs, and a discussion  
14 of conditions to be recommended, and we will resume here on  
15 August 14 at 9:30 a.m., Council Office Building, second  
16 floor hearing room, to hear, just to hear oral closing  
17 argument and discuss conditions. All right. Oh, and the  
18 nature of oral argument, I think, was agreed upon, that the  
19 applicant will have 40 minutes and the opposition will have  
20 40 minutes, similar to what the Council does when it has  
21 oral arguments on zoning and re-zoning matters.  
22 Any other preliminary or procedural matters?  
23 MR. SILVERMAN: There are other witnessless  
24 documents that the --  
25 MR. GROSSMAN: Witless or witnessless?

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1 MR. SILVERMAN: Witnessless, that is to say,  
2 documents without witnesses, hanging in the air. There's,  
3 Mr. -- there are two documents that they indicated they're  
4 going to cross-examine Dr. Cole on. One is from the  
5 American Petroleum Institute dealing with ARM2, and I don't  
6 recall there was any discussion by Mr. Sullivan or Dr. Cole  
7 or anybody else about ARM2. I never heard of it before, and  
8 I -- this is a, this is the cross-examination, and it seems  
9 to me, it's out of the scope and it's also an introduction  
10 of a whole new concept that -- I mean, we, you know, I'm  
11 sure Dr. Cole can deal with it and we could show how  
12 irrelevant it is, but at some point, if they thought this  
13 was an important document, they had every opportunity with  
14 their rebuttal testimony to bring it up or even the concept  
15 of it to bring up. And this ARM2 seems to be a modification  
16 of Stage II, EPA's -- Tier 2 of EPA, and they declined to  
17 use Tier 2. They went from Tier 1 to Tier 3. So I don't  
18 see where it's a pertinent document.  
19 MR. GROSSMAN: Okay. And as to pertinence, now,  
20 well, we'll see that when the document is attempted to be  
21 used. Usually, on cross-examination you can bring up a  
22 document that has not been in evidence. Here they followed  
23 the rule of prior disclosure. So you all knew that it was  
24 coming, as evidenced by your objection.  
25 So I'm going to wait until there's an attempt to

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1 use it on cross-examination; then you can raise any  
2 objection at that time, and let's see if it's irrelevant in  
3 the context of the cross-examination at that point. I don't  
4 want to rule on that preliminarily.  
5 MR. SILVERMAN: Okay. And then with regard to  
6 Mr. Guckert's new documents, there again, if he had  
7 something he wanted to introduce, he had, you know, their --  
8 they had their rebuttal, he could have introduced it, but  
9 this idea of, oh, well, we were hurt on our rebuttal and  
10 therefore we'll come up with a whole new thing, in a way,  
11 this is a -- I just think it was a humanitarian gesture. I  
12 mean, how many times does Ms. Cordry have to go through and  
13 correct Mr. Guckert's mistakes? I mean, we've done it twice  
14 and on two whole different theories, and now we've got some  
15 third thing. I don't, I don't pretend to understand it. I  
16 kind of got the ARM2 stuff, but I don't get this at all. I  
17 never have, but it just seems, this is a late date. I mean,  
18 they could keep on coming with theories endlessly. This is  
19 really late in the day.  
20 MR. GROSSMAN: All right. Let's turn, first of  
21 all, I guess, to Ms. Cordry on the humanitarian gesture.  
22 MS. CORDRY: I will have to say, although I do  
23 appreciate, Mr. Silverman, I believe, and if you're speaking  
24 of the HCM analysis that they submitted on --  
25 MR. SILVERMAN: Yes.

Page 23

1 MS. CORDRY: -- one day ago --  
2 MR. GROSSMAN: Which they indicated, it was a  
3 summary of what he testified to, I think, is what --  
4 MS. CORDRY: It appears to me, I do recall his  
5 testifying that they had used a default value of a certain  
6 percentage of trucks, they thought the number was lower,  
7 that because trucks are slower, I guess, and bigger, that  
8 they can take a little longer going through and it would  
9 make about a one-second difference and that this is now a  
10 re-version of the, revision of the document that shows the  
11 effect of that one second. I, all in all, I don't really  
12 care. I mean, the difference between 49 point --  
13 MR. GROSSMAN: We've worn you down after --  
14 MS. CORDRY: Well --  
15 MR. GROSSMAN: -- only 36 days?  
16 MS. CORDRY: Well, the point is he testified to  
17 the one second. Having him put in in detail the difference  
18 between the 50.63 and the 49.6, none of that affects the  
19 numerous points I made about why either one of those numbers  
20 is too low. So I will not fight this particular one coming  
21 in. I don't really think it does much of anything there,  
22 but that's fine.  
23 One point I would make on the articles, these new  
24 articles, although they were given to us, they weren't given  
25 to us anything like 10 days in advance. So we will

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1 certainly be objecting to those documents when they come in,  
2 to try to -- the other documents, when they try to  
3 cross-examine Dr. Cole about them.  
4 MR. GROSSMAN: Okay.  
5 MS. HARRIS: Mr. Grossman, if I could just comment  
6 on that?  
7 MR. GROSSMAN: Yes. Well, I was going to hear  
8 from Ms. Duckett first.  
9 MS. HARRIS: Okay. Okay.  
10 MR. GROSSMAN: Did you have anything to say on  
11 these points, Ms. Duckett?  
12 MS. DUCKETT: No. The Guckert e-mail? No, I  
13 don't have anything to say about that.  
14 MR. GROSSMAN: Okay.  
15 MS. HARRIS: I was going to remain silent until  
16 the comment about the 10-day period. The applicant has been  
17 extremely patient and forgiving in this case in regards to  
18 counting to 10 and documents submitted 10 days in advance,  
19 and so we -- and especially when it came to  
20 cross-examination documents.  
21 MR. GROSSMAN: Right.  
22 MS. HARRIS: So in fairness to all parties, I  
23 think there is no weight to that comment at all.  
24 MS. CORDRY: Well, that's --  
25 MS. HARRIS: I mean, we provided it as soon as we

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1 could after hearing Dr. Cole's testimony.  
2 MS. CORDRY: Okay.  
3 MR. GROSSMAN: I think that's fair. We've --  
4 MS. CORDRY: Well --  
5 MR. GROSSMAN: -- bent the rule, in terms of  
6 cross-examination, to the extent that it -- once again, it  
7 is an ad hoc rule that I have imposed here to ensure that in  
8 a case of this volume and complexity, that we got the  
9 fairest presentation of evidence, but I think it's fair.  
10 MS. CORDRY: I will have my, we will have our  
11 points about whether or not this information was not in  
12 their contemplation before then, but the last point -- and  
13 this is a different point -- I have a correction for a  
14 previously admitted document that I think is not going to be  
15 controversial. I think it'll be -- I'm just going to  
16 suggest we should do it at the end when we're doing the  
17 objections to the other documents. I can just show what  
18 this correction is and we can deal with it. I don't think  
19 we need to deal with it now, but just to let you know that.  
20 MR. GROSSMAN: I will leave it to your judgment as  
21 to when to raise it, but --  
22 MS. CORDRY: It's actually, was the argument  
23 document I put in about emissions and background levels and  
24 so forth; so it's not an evidentiary document. I found that  
25 what I had mailed to everybody was in fact the correct

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1 version but what had gotten copied and put in the record was  
2 a prior version. So I want to make sure that --  
3 MR. GROSSMAN: I see.  
4 MS. CORDRY: -- the version that stays in the  
5 record is the version that was sent to them at the time, and  
6 we've never actually -- nobody's actually ever come out and  
7 testified about that. We took that, if you recall, as being  
8 an advance on the argument. So --  
9 MR. GROSSMAN: The same thing as occasionally  
10 happened in the other direction with --  
11 MS. CORDRY: Right. Right, but this --  
12 MR. GROSSMAN: -- with the rebuttal report.  
13 MS. CORDRY: -- this time they were e-mailed the  
14 correct version. So --  
15 MR. GROSSMAN: Right.  
16 MS. CORDRY: -- the version that's in the record  
17 that I don't think anybody's ever looked at since it went in  
18 the record is the one that's in error. So --  
19 MS. HARRIS: Karen, which exhibit are you  
20 referring to?  
21 MS. CORDRY: It's 431(b). It's the one labeled  
22 Emissions Levels, Effective Monitor Choices and Other  
23 Corrective Factors.  
24 MR. GROSSMAN: Just in case somebody is just  
25 tuning in here, some of the documentation that Ms. Cordry

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1 produced that we allowed, we allowed because it really was  
2 just an advance on her closing argument or a portion of her  
3 closing argument. It was argumentative rather than  
4 evidentiary and was to be treated in that fashion, and I  
5 presume, I don't remember by specific numbers, but I presume  
6 that the one you're talking about here, 431(b), fits into  
7 that category.  
8 MS. CORDRY: Yes, that was the one that was --  
9 MR. GROSSMAN: Right.  
10 MS. CORDRY: -- predominantly the one that that  
11 was being taken as, and because it only came in as argument  
12 and really wasn't discussed at that time, I didn't review it  
13 then. It was really when I came back and was looking at  
14 some of it in terms of Dr. Cole's and Mr. Sullivan's  
15 testimony, that I realized that the version I had as the  
16 exhibit version --  
17 MR. GROSSMAN: Right.  
18 MS. CORDRY: -- was an incorrectly printed  
19 version.  
20 MR. GROSSMAN: Do you have a redline to show what  
21 has been changed?  
22 MS. CORDRY: I do. I do, yes. Do you --  
23 MR. GROSSMAN: Okay. Why don't you give that to  
24 the --  
25 MS. CORDRY: Right.

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1 MR. GROSSMAN: -- the applicant's counsel --  
2 MS. CORDRY: Okay.  
3 MR. GROSSMAN: -- so they can take a look at it  
4 during a break and see --  
5 MS. CORDRY: Yes, and to complicate it just  
6 slightly further, which is one of the reasons why I was just  
7 going to put it off, but let's, since we're already in the  
8 middle of this, let me just do it. When I was looking at  
9 it, I found three minor corrections that I wanted to have in  
10 the final version. One was a page cite was wrong. One was  
11 a quote that I did. I had slightly paraphrased instead of  
12 correctly quoting it. And the third one -- this is what I  
13 was learning when I was going back over this -- I had  
14 thought I had the last version of the protocol. What I had  
15 was the earlier version of the protocol. So one of my  
16 footnotes --  
17 MR. GROSSMAN: Which protocol?  
18 MS. CORDRY: The master protocol that had been  
19 worked on between Dr. Cole and Mr. Sullivan.  
20 MR. GROSSMAN: I see.  
21 MS. CORDRY: So one of my footnotes said, in his  
22 report Mr. Sullivan said he did such and such out of the  
23 protocol, and I said that was wrong, blah, blah, blah. What  
24 I realized was that I had been looking at an earlier version  
25 of the protocol and the final version of the protocol was in

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1 fact consistent with what Mr. Sullivan was saying. So I --  
2 MR. GROSSMAN: Okay.  
3 MS. CORDRY: -- so I have actually two redline  
4 versions. Let me, let me, I'll work on this all within a  
5 break, but I will give everybody a copy.  
6 MR. GROSSMAN: All right. It doesn't sound like  
7 any of those corrections --  
8 MS. CORDRY: No.  
9 MR. GROSSMAN: -- would be offensive to the  
10 applicant, but in any event, why don't you work it out on a  
11 break, and then I --  
12 MS. CORDRY: Right. Right. Right.  
13 MR. GROSSMAN: -- I don't know that I'd need the  
14 redline version if they don't object --  
15 MS. CORDRY: Okay.  
16 MR. GROSSMAN: -- because it sounds to me like two  
17 of the corrections are formalities, in effect, and the third  
18 one actually moves in their direction --  
19 MS. CORDRY: Right. Right.  
20 MR. GROSSMAN: -- to be corrected, according to  
21 the record.  
22 MS. CORDRY: So I will give them the original  
23 version that was in the record, a copy of that so they can  
24 look at it. I have the final, final version, and I have two  
25 redlines.

1 MR. GROSSMAN: I'm not sure why you need two  
2 redlines for that.

3 MS. CORDRY: Well, one was the redline of the  
4 exhibit version to my final version, and the other is a  
5 redline between what I submit -- I'll explain it. I can't  
6 even keep track myself right now, but there are, there are  
7 two.

8 MR. GROSSMAN: All right. All right. I'll go  
9 with that. All right. Now, did you, did the applicant wish  
10 to be heard further on the, on Mr. Silverman's objection to  
11 additional articles?

12 MR. GOECKE: I guess one other point I'd like to  
13 make is, to the extent that there are exhibits that have  
14 been submitted that no one has testified about, the  
15 opposition has submitted voluminous amounts of exhibits that  
16 no one has testified about. So I think this is another  
17 example of where they're trying to apply inconsistent rules  
18 to the proceeding.

19 MR. GROSSMAN: Well, let me stop you here. What  
20 about that, Mr. Silverman? There are tons of exhibits that  
21 have been submitted by the opposition for which there has  
22 not been an expert koshering here.

23 MR. SILVERMAN: Well, you know, we were, at the  
24 very -- the very first day of this case we were told that  
25 the opposition, we were emotionally, not driven by facts and

1 so forth. This is not, I'm not, this is not -- this is not  
2 an emotional statement, but when someone says you really  
3 don't know what you're talking about or you're not being  
4 scientific and so forth, then I think people like  
5 Mrs. Adelman and other educated people in the community have  
6 a right to say, oh, you know what, I've done a lot of  
7 research, I know something about it, and here's the basis of  
8 my opinion.

9 And we -- you may not take this charge that the  
10 opposition is all emotional too seriously. I really don't  
11 myself, but I mean, they made that. That was the opening of  
12 their case, and I think that opened the door to anything  
13 that sort of substantiates the reasonableness of our  
14 positions.

15 MR. GROSSMAN: Your submitting articles,  
16 scientific articles, without being verified by expert  
17 testimony does not entitle them to do the same?

18 MR. SILVERMAN: Actually, I don't think it does.  
19 I'd like to have it both ways.

20 MR. GROSSMAN: I understand. All right. Anything  
21 further from the applicant on the point?

22 MS. HARRIS: I think that speaks for itself. I  
23 think one of the goals here -- and you've said it  
24 consistently -- is fairness and equal approach to both  
25 sides, and --

1 MR. GROSSMAN: Right.

2 MS. HARRIS: -- I think Mr. Silverman just  
3 admitted that his preference is to not have it that way.  
4 So --

5 MR. GROSSMAN: All right. Yes. My ruling on it  
6 is I'm going to allow the articles, the agreement with, at  
7 least that portion of the opposition by Kensington Heights  
8 Civic Association, with the applicant in lieu of live  
9 testimony. As I've said before, certainly live expert  
10 testimony has a, subject to cross-examination, is given a  
11 certain weight here and there's a lesser weight given to  
12 articles which are, you know, from scientific sources but  
13 are not, have not been subject to, in effect, the  
14 cross-examination process. But given the nature of our  
15 proceeding here, we're allowing those in for the weight that  
16 they deserve, and I think the fairness aspect is to both  
17 sides here. Okay.

18 MS. CORDRY: So that is just the three articles,  
19 right, and nothing else that was submitted with respect to  
20 Dr. -- Dr. Bunn, Mr. Bunn?

21 MR. GROSSMAN: I'm not --

22 MS. ADELMAN: Doctor.

23 MS. CORDRY: He had a CV and various things like  
24 that, none of which are coming in because --

25 MR. GROSSMAN: Right.

1 MS. CORDRY: -- he's not being admitted as an  
2 expert or anything like that? Okay.

3 MR. GROSSMAN: That's correct. All right.

4 MR. SILVERMAN: Can I raise one other preliminary  
5 point?

6 MR. GROSSMAN: Yes.

7 MR. SILVERMAN: I don't know if this is  
8 appropriate, but I was reading about global warming in the  
9 newspapers and so forth, these latest reports, and I do hope  
10 that the Hearing Examiner will make a finding on this and  
11 express an opinion about it. I think to not discuss it at  
12 all, I mean, there's been evidence -- whether you're  
13 persuaded or not, I don't know -- but there's been evidence  
14 that this way of getting gas in stations that are designed  
15 to have lines increases global warming in the county, and I  
16 think it's very well for you to say, well, I can't do  
17 anything about it, but I hope you'll mention it because I  
18 think it would -- future readers, if there are any, of these  
19 proceedings, I think, would find fault with the process and  
20 the Hearing Examiner if the issue is not even discussed.

21 MR. GROSSMAN: Well, I expect lots of people to  
22 find fault with whatever I do, but it is a public policy  
23 matter, but it is not something, as I read the portions of  
24 the zoning ordinance that direct me and limit my scope of  
25 responsibility, it is not included here.

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1 I am not charged with making legislative decisions  
2 regarding things that affect the world, in general. I have  
3 a narrow scope, to deal with the potential adverse effects  
4 on the site, the immediate neighbors, and the general  
5 neighbor. That's the limited scope. So I don't think -- we  
6 have plenty here to keep us busy and to evaluate without  
7 trying to evaluate the issue of global warming or climate  
8 change, whatever you want to call it.  
9 MS. CORDRY: We will respectfully dissent from  
10 that, and I expect --  
11 MR. GROSSMAN: Right.  
12 MS. CORDRY: -- we will still make the argument to  
13 you, but we will not pursue it any further on the record  
14 today.  
15 MR. GROSSMAN: All right. Very good. Okay. Then  
16 I think we've finished our preliminary matters and we are  
17 turning to the resumption of the cross-examination of  
18 Dr. Cole and his surrebuttal.  
19 MR. COLE: Mr. Grossman --  
20 MR. GROSSMAN: And you are still under oath,  
21 Dr. Cole.  
22 (Witness previously sworn.)  
23 THE WITNESS: Yes, and if I can indulge you for a  
24 second, you asked a question last time that I didn't have a  
25 precise answer to.

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1 MR. GROSSMAN: All right.  
2 THE WITNESS: With your permission, I would like  
3 to come back to it, which was with regard to the choice of a  
4 monitoring site for background NO2 concentrations.  
5 MR. GROSSMAN: Yes.  
6 THE WITNESS: And I have a couple of slides here  
7 which, which I will refer to.  
8 MR. GROSSMAN: Slides that were previously  
9 submitted, you mean?  
10 THE WITNESS: No, but they're from data that was  
11 previously submitted.  
12 MR. GROSSMAN: Well, why don't you just -- before  
13 you get into slides --  
14 THE WITNESS: Okay.  
15 MR. GROSSMAN: -- just tell me what you're, what  
16 you're adding to your answer.  
17 THE WITNESS: All right. I've, I put together a  
18 set of criteria and said to myself, if I were going to  
19 choose a representative site --  
20 MR. GROSSMAN: Right.  
21 THE WITNESS: -- that had some conservancy based  
22 into it, which is what the applicants claim to have done, I  
23 would have the following criteria. Number one is that it  
24 should have a continuing, continuous record for a number of  
25 years. Number two is that you would have both ozone and,

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1 ozone and NO2 monitored at the same site -- let me just  
2 consult my list -- that you would have, that you would have  
3 at least suburban density so that it's representative of the  
4 level of traffic; and, finally, that my preference would be  
5 to choose something that was as close to the site, in other  
6 words, to the mall, as possible, and that was also in the  
7 same basic relationship of the site to the metropolitan  
8 area.  
9 Now, when I looked at those criteria, only, really  
10 only two stations had stood out, and those were the two  
11 District of Columbia sites. One was 34th Street Northeast,  
12 and the second was, the second was First Street Northwest.  
13 The, those sites meet all the criteria, and they are  
14 consistently about 10 parts per billion higher than the  
15 Arlington monitor, which is located a great distance from  
16 the site. So of those two I picked the closest, which has  
17 slightly lower values but it is the closest site to the  
18 mall, which would be the First Street Northwest. It's  
19 located to the north of the metropolitan area.  
20 MR. GROSSMAN: All right. So as I recall your  
21 testimony the last time, you had stated the criteria but you  
22 had not selected a site.  
23 THE WITNESS: Okay.  
24 MR. GROSSMAN: That's my recollection of it, and  
25 now what you're doing is saying you've now looked it over

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1 and the site you would have chosen -- and I presume you mean  
2 for NO2 one-hour background, is that correct?  
3 THE WITNESS: That is correct.  
4 MR. GROSSMAN: Okay. The site you would have  
5 chosen, a monitoring site, to get the background data would  
6 have been the First Street Northwest, D.C., site?  
7 THE WITNESS: Correct.  
8 MR. GROSSMAN: Okay. And was there a discussion  
9 of which site would be chosen when you were discussing the  
10 protocol with Mr. Sullivan?  
11 THE WITNESS: At the time, we were mainly focused  
12 on PM2.5, and if you look at the protocol, it has some  
13 discussion of the Rockville and Beltsville monitors, which  
14 do monitor PM2.5. I thought that was, those were close,  
15 fairly close to the site. I had some questions about  
16 whether they were representative, which I have expressed in  
17 previous submittals to you about the fact that these, that  
18 there was more sort of rural area and less traffic at those  
19 two sites. That would certainly -- that's in the record.  
20 MR. GROSSMAN: Are you saying you didn't have any  
21 discussion regarding NO2 monitoring in terms of the  
22 protocol?  
23 THE WITNESS: I don't recall any discussion of NO2  
24 monitoring or of the, particularly of your Arlington site.  
25 It is mentioned in the protocol, but I don't recall

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1 discussing that.

2 MR. GROSSMAN: All right. And until you came to

3 testify today about it, you had not selected the First

4 Street Northwest, D.C., site as the most appropriate for the

5 background monitoring for NO2?

6 THE WITNESS: Right. I had expressed a preference

7 for those D.C. sites to the north of most of the

8 metropolitan area, and in deference to your question, I

9 selected one of those as what I thought was the best, the

10 most representative, the most accurate.

11 MR. GROSSMAN: No, I mean, prior to today. You

12 talked about --

13 THE WITNESS: Right.

14 MR. GROSSMAN: -- Beltsville and Rockville. Was

15 there a discussion -- was there a recommendation or had you

16 reached this conclusion prior to today regarding an

17 appropriate monitoring site?

18 THE WITNESS: Not for NO2.

19 MR. GROSSMAN: Okay. All right. Thank you. All

20 right. Do you want to resume your cross-examination,

21 Mr. Goecke?

22 MR. GOECKE: I do, but before we get into it, I

23 think there's one more preliminary matter. You had raised a

24 question last time about the additive nature, about the

25 ratio that Mr. Sullivan had applied in and around the gas

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1 queue area as in terms of how that combined with background,

2 and I think, I think you have a misunderstanding of how he

3 had done that, and if we could, I'd just like to have

4 Mr. Sullivan correct that for the record.

5 MR. GROSSMAN: I'm not sure what, what you're

6 referring to. Do you have a transcript?

7 MR. GOECKE: We don't. The transcript is not

8 available yet --

9 MR. GROSSMAN: Not out yet.

10 MR. GOECKE: -- so unfortunately I don't, but it

11 was -- he can speak to it more intelligently than I can,

12 obviously -- but the issue itself was when you were asking

13 Dr. Cole, well, if he used the .25 ratio coming out of the

14 tailpipe --

15 MR. GROSSMAN: Yes.

16 MR. GOECKE: -- and then added it to a .5

17 background, that would get to a .75 of NO2 to NOx ratio.

18 And Dr. Cole at the time, I believe, was advocating for a

19 .8, and I think your point was, well, isn't it essentially

20 the same thing anyway.

21 MR. GROSSMAN: Yes. Well, that's --

22 MR. GOECKE: Right.

23 MR. GROSSMAN: -- for Dr. Cole to answer.

24 MR. SILVERMAN: Right.

25 MR. GROSSMAN: If I'm incorrect, I mean, Dr. Cole

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1 can straighten me out --

2 MR. GOECKE: Right.

3 MR. GROSSMAN: -- on it.

4 MR. GOECKE: Right. Okay.

5 MR. GROSSMAN: I don't think it's really a

6 Mr. Sullivan question.

7 MR. GOECKE: Okay.

8 MR. GROSSMAN: Okay.

9 SURREBUTTAL CROSS-EXAMINATION (Resumed)

10 BY MR. GOECKE:

11 Q And so, Dr. Cole, just touching upon the

12 monitoring locations that you mentioned a moment ago, so you

13 have no recollection of discussing NO2 monitoring sites in

14 your protocol discussions with Mr. Sullivan?

15 A That's my recollection.

16 Q Your recollection is that you have no

17 recollection?

18 A No. My recollection is we did not -- we discussed

19 monitoring sites in general. The issue of specifically NO2

20 in Arlington, in my recollection, did not come up.

21 Q And that's because you were more concerned about

22 PM2.5 at that point and not NO2?

23 A That's my recollection.

24 MR. GROSSMAN: Forgetting about Arlington for a

25 second, did you discuss in the protocol discussions a site

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1 to use as a monitoring site for NO2?

2 THE WITNESS: I don't remember that.

3 MR. GROSSMAN: Okay.

4 THE WITNESS: I do not recall any such discussion.

5 You'll remember that that was at a time when -- well, I'll

6 leave it at that.

7 MR. GROSSMAN: Okay.

8 BY MR. GOECKE:

9 Q But you saw the draft protocol report that

10 identified Arlington as the monitoring location that was

11 going to be used for NO2 background levels, correct?

12 A I believe it was in there.

13 Q And you never objected to Mr. Sullivan using that

14 location until today?

15 A Well, the answer to that is, at that point, it was

16 my impression that NO2 was not going to be a hot-button

17 issue because the numbers that I had seen were low relative

18 to the standard. That all changed, of course, when the --

19 Q Okay. Well, one thing at a time. You still

20 didn't answer --

21 MR. GROSSMAN: Well, don't cut him, don't cut him

22 off.

23 MR. SILVERMAN: Let him finish the answer.

24 MR. GROSSMAN: That all changed, yes. Go ahead.

25 THE WITNESS: Thank you. That changed, of course,

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1 when the famous error in converting parts per billion to  
2 micrograms per cubic meter occurred, and suddenly it was  
3 clear that NO2, the one-hour NO2 was in fact a very critical  
4 issue, and at that point, you know, I started to look in  
5 greater detail.

6 BY MR. GOECKE:

7 Q So your answer is, until today, you've never told  
8 Mr. Sullivan he shouldn't use the Arlington location for the  
9 NO2 background levels?

10 A Well, after the November 2nd protocol, there was  
11 no discussion about anything. He chose all kinds of methods  
12 without any consultation whatsoever with me. So --

13 Q So you're still avoiding the question. Until  
14 today, you never complained to Mr. Sullivan about the use of  
15 the Arlington location for NO2 background levels?

16 A What is the format for complaining to  
17 Mr. Sullivan? Is that an ex parte discussion? I came and  
18 testified, and I think, I believe I raised some concerns in  
19 previous testimony about that.

20 Q The error you're referring to in the conversion of  
21 parts per billion to micrograms per cubic meter, when did  
22 that -- when did you first become aware of that?

23 A I believe it was around June of 2013.

24 Q Yes. And you testified in this hearing on  
25 December, early December of 2013, correct?

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1 A That's right. It was December 5th and 6th.

2 Q For two days you testified, and during those two  
3 days of testimony, you never once suggested that he should  
4 have used the -- should have not used the Arlington location  
5 for NO2, monitoring background?

6 A Okay. I don't recall --

7 Q So that was an opportunity to complain.

8 A -- the exact testimony. Do you have some pages  
9 for me to look at?

10 Q I don't have pages. You don't remember whether or  
11 not you complained about that or not?

12 A I don't believe I complained about it at that --

13 Q But you agree, that was an opportunity for you to  
14 disagree with Mr. Sullivan's use of the Arlington location?

15 A Well, in answer to that, Mr. Sullivan has, under  
16 his work for Costco, the applicant, has continued to issue  
17 more and more reports, reports after June, when the  
18 correction was made. There was the August 2013 report. Now  
19 there's the rebuttal report. Those -- when you see  
20 additional documents and additional evidence, it invites  
21 additional perusal. That's the way the scientific process  
22 works. As more data becomes available, new questions arise.  
23 In fact, that exact point is made in EPA's 2011 guidance on  
24 one-hour NO2. It says the more and more conservative  
25 reports are made, the more departures there are from default

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1 values, the more scrutiny and the less agreement there is.  
2 That's simply the way the process works.

3 MR. GROSSMAN: Mr. Goecke, what's the exhibit  
4 number for the final protocol that was agreed to?

5 MR. GOECKE: I'm not sure. We can check the  
6 exhibit list.

7 MS. HARRIS: We can check, but it may take a  
8 while.

9 MR. GROSSMAN: Yes. I mean, I would actually like  
10 to look at that protocol.

11 MS. CORDRY: Okay.

12 MR. GROSSMAN: Okay.

13 BY MR. GOECKE:

14 Q Okay. And so taking what you're saying now, that  
15 with reduced conservatism, the modeling process invites more  
16 scrutiny, the fact remains that in terms of the Arlington  
17 monitoring location, you have never voiced any criticism, or  
18 not -- say, you've never suggested an alternative location  
19 until today?

20 A Well, that's, that would be correct.

21 Q Thank you. And can you tell me the criteria,  
22 again, that you applied in coming up with the two D.C.  
23 locations?

24 A One is that they have a continuous multiyear  
25 record, which the Arlington site meets that criteria.

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1 Q Okay.

2 A The second one is that ozone and NO2, the monitors  
3 be co-located. The two Washington sites meet that criteria.  
4 The Arlington site does not.

5 Q Okay.

6 A The --

7 Q I think one of them --

8 A -- the third one was that, that they have a  
9 minimal of suburban development, some combination of  
10 suburban and urban to be --

11 Q Okay. And you would agree that the --

12 A -- to be representative of the Wheaton site.

13 Q Okay. And you would agree that Arlington meets  
14 that minimum suburban development threshold?

15 A Yes, it does, but it doesn't meet two of the other  
16 criteria, which is being in proximity, closer proximity to  
17 the, to the site, the Wheaton site, and it's located  
18 entirely on the opposite side of the metropolitan area --

19 Q Okay.

20 A -- and I think that's -- did I give you four?

21 Q Okay. That's four. That's right.

22 A Okay.

23 Q And so these four criteria that you've come up  
24 with today, what -- are these, are these your criteria, are  
25 these from the scientific literature, are they from EPA

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1 guidance? How did you come up with these four criteria?  
2 A Well, EPA guidance manual talks about  
3 representativeness of the site --  
4 Q Yes.  
5 A -- and that was my criteria for being  
6 representative.  
7 Q And which guidance are you referring to  
8 specifically?  
9 A It's, I'm sure it's in Appendix W. I can't give  
10 you the exact cite.  
11 Q Okay. And does Appendix W, is proximity one of  
12 their criteria, Appendix W?  
13 A I'm not sure.  
14 Q And I think we talked about this at the last  
15 hearing. We agreed that Appendix W is more focused on  
16 representativeness as opposed to proximity, is that correct?  
17 A Yes --  
18 Q So --  
19 A -- but it doesn't give you a whole lot of detail,  
20 and to me, something that's entirely on the opposite end of  
21 the metropolitan area and subject to much different  
22 source-receptor relationships, depending upon wind  
23 direction, is not representative. That's my professional  
24 judgment.  
25 Q Would Beltsville meet your criteria?

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1 A I don't believe that Beltsville -- I'm trying to  
2 think whether they have -- can you show me the --  
3 Q If you haven't looked at it, that's fine. I'm  
4 just curious if you've analyzed it.  
5 A I don't think that Beltsville met the criteria,  
6 and I can't --  
7 Q Why not?  
8 A I'd have to go back and look at the --  
9 Q Do you know whether the NO2 background levels for  
10 Beltsville are higher or lower than Arlington?  
11 A I'd have to check that out.  
12 Q Would you agree that the locations in --  
13 A I believe, I believe that, for example, that ozone  
14 and possibly NO2 were only recorded for part of the year,  
15 for the summer, basically, because they're, those -- the  
16 concern there was ozone, regional ozone concentrations  
17 rather than NO2 specifically. That's my recollection. I'd  
18 have to -- I will, during a break, check that.  
19 MR. GROSSMAN: When you say only recorded for part  
20 of the year, are you talking about the D.C. locations --  
21 THE WITNESS: No.  
22 MR. GROSSMAN: -- the Arlington location, the  
23 Beltsville location?  
24 THE WITNESS: Those, for NO2 --  
25 MR. GROSSMAN: No, for ozone.

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1 THE WITNESS: For ozone?  
2 MR. GROSSMAN: Yes. You said, you just added on  
3 that you --  
4 THE WITNESS: Arlington, Arlington does not have  
5 ozone, number one.  
6 MR. GROSSMAN: And the two D.C. sites that you  
7 mentioned?  
8 THE WITNESS: The two D.C. sites have both NO2 and  
9 ozone for the whole year.  
10 MR. GROSSMAN: For the whole year. Okay.  
11 THE WITNESS: I believe that Beltsville -- and I  
12 do want the privilege of checking this out during a break to  
13 make sure I've got this right, because I'm not a Univac with  
14 a total recall of all the data --  
15 MR. GROSSMAN: Okay.  
16 THE WITNESS: -- I believe that's right, but I  
17 would like --  
18 MR. GROSSMAN: And you believe that what's right?  
19 That Beltsville what?  
20 THE WITNESS: Only records ozone for part of the  
21 year.  
22 MR. GROSSMAN: Okay.  
23 BY MR. GOECKE:  
24 Q And I noticed that you were looking at your  
25 computer before you made that last comment. Did you look at

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1 a document or some site to refresh your recollection?  
2 A I couldn't find it. I'm looking at a, I'm looking  
3 at a -- do you want to look at it?  
4 MR. GOECKE: May I approach?  
5 MR. GROSSMAN: You may, and if you prefer, the  
6 witness doesn't have to have any documents in front of him.  
7 THE WITNESS: Oh, that's fine. Fine. Fine. I  
8 didn't touch anything.  
9 MR. GOECKE: I'm just curious as to what he's  
10 looking at.  
11 THE WITNESS: Right there.  
12 BY MR. GOECKE:  
13 Q Okay.  
14 A I couldn't, I can't both pay attention -- as my  
15 wife will tell you, she can do six things at the same time,  
16 but I can only do one thing at a time. So have some --  
17 Q Okay. I'm just trying --  
18 A -- have --  
19 Q -- I'm just trying to focus on one thing right  
20 now, just on --  
21 A -- have forbearance.  
22 Q We're just going to focus on Beltsville right now.  
23 So would you agree that Beltsville meets the minimum  
24 requirement of suburban development as one of your four  
25 criteria?

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1 A Well, Beltsville is a lot of rural area. There is  
2 Route 1, that corridor next to -- but there's also an awful  
3 lot of rural space, which is missing from the Wheaton Mall.  
4 So I --  
5 Q So, in your opinion, no, it does not?  
6 A I don't think it's necessarily representative, no.  
7 Q Okay. Would it meet your criteria for proximity  
8 to the Wheaton site?  
9 A Yes, it would.  
10 Q And would you agree that the two monitoring  
11 locations in D.C. are more developed than the Wheaton  
12 location?  
13 A No.  
14 MR. GOECKE: And, Mr. Grossman, I'd like now to  
15 ask the witness a few questions about the document that  
16 Mr. Silverman alluded to before. This is the Ambient Ratio  
17 Method Version 2 --  
18 MR. GROSSMAN: Okay.  
19 MR. GOECKE: -- which has been distributed to  
20 everyone but not made part of the record yet.  
21 MR. GROSSMAN: All right.  
22 MR. SILVERMAN: I'd like to object to it being  
23 outside the scope.  
24 MS. CORDRY: Yes. We would like to object to this  
25 initially on the basis that --

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1 MR. GROSSMAN: Well, it's not marked as an exhibit  
2 yet?  
3 MS. ADELMAN: No.  
4 MR. GOECKE: It is not.  
5 MR. GROSSMAN: Okay. So let's mark it as an  
6 exhibit so we know what we're objecting to. This will be  
7 Exhibit 609.  
8 MS. ADELMAN: Have we had this for 10 days?  
9 MS. CORDRY: No. This is what we talked about  
10 earlier.  
11 MS. ADELMAN: This is the document.  
12 MR. GROSSMAN: This is the Ambient Ratio Method  
13 Version 2, also known as ARM2, for use with AERMOD -- that's  
14 A-E-R-M-O-D -- for one-hour NO2 modeling. All right. Now,  
15 what's the objection?  
16 (Exhibit No. 609 was marked  
17 for identification.)  
18 MS. CORDRY: The objection is based on that this  
19 does not meet the standard for admissibility or use in any  
20 way, shape, or form in a proceeding such as this, based on  
21 the Maryland standards of evidence. We did look up and find  
22 the May 2014 User's Guide from EPA on the AERMOD modeling,  
23 and this particular method is designated as a beta method.  
24 The beta method is referred to on page 17 of this document  
25 as a non-default option, and it further says: Inclusion of

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1 these draft beta-test options does not imply any endorsement  
2 of their use for regulatory or non-regulatory applications  
3 of the model. In addition, the designation of beta test to  
4 these draft enhancements does not imply that these options  
5 have completed rigorous internal, quote, alpha, unquote,  
6 testing prior to being included in a public release of the  
7 model.  
8 We think those statements, standing alone; make  
9 clear that this is not any kind of scientific method that  
10 has received general scientific acceptability. It is a, in  
11 the same parlance as a computer test, it's a beta test.  
12 It's an experimental document that's being reviewed, it's  
13 being considered, but it has not in any way, shape, or form  
14 even been endorsed by the EPA as a non-default option.  
15 So --  
16 MR. GROSSMAN: All right. First of all, where  
17 were you reading in the EPA?  
18 MS. CORDRY: We're reading from a document  
19 entitled User's Guide for the AMS slash EPA --  
20 MR. GROSSMAN: Hold it. User's Guide for the AMS?  
21 MS. CORDRY: Slash EPA Regulatory Model dash  
22 AERMOD.  
23 MR. GROSSMAN: Hold it a second. Regulatory Model  
24 slash AERMOD.  
25 MS. CORDRY: And it's --

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1 MR. GROSSMAN: And who puts that out?  
2 MS. CORDRY: This is the EPA. It's an addendum  
3 that was released in May 2014.  
4 MR. GROSSMAN: All right. So May 2014 addendum.  
5 MS. CORDRY: And I have --  
6 MR. GROSSMAN: Addendum to what?  
7 MS. CORDRY: To the original User's Guide for the  
8 AMS slash EPA Regulatory Model.  
9 MR. GROSSMAN: Is that published somewhere?  
10 MS. CORDRY: Yes. It's on the web, which -- where  
11 you can find it from the EPA, which is where we found it.  
12 MR. GROSSMAN: You don't have a Federal Register  
13 cite?  
14 MS. CORDRY: No. I could probably pull it up and  
15 find it.  
16 MR. GROSSMAN: Do you have a copy of that for the  
17 record, because I think that would be helpful?  
18 MS. CORDRY: We, yes, we printed out the whole  
19 thing. We will try to print the relevant pages. It was  
20 pages --  
21 MS. ROSENFELD: It's 159 pages. So --  
22 MR. GROSSMAN: Of course.  
23 MS. CORDRY: But the only, as I said, the only --  
24 MR. GROSSMAN: I know you're not --  
25 MS. ROSENFELD: The relevant --

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1 MR. GROSSMAN: -- it's against your better  
2 judgment to introduce anything that's not at least 150  
3 pages.  
4 MS. CORDRY: Right. Right. Well, we will  
5 certainly print out these, some of the relevant pages. We  
6 really only, obviously, got the original document a couple  
7 of days ago --  
8 MR. GROSSMAN: Right.  
9 MS. CORDRY: -- looking at this. That's from  
10 pages 17 and 18 of this document.  
11 MR. GROSSMAN: Okay. So pages 17 to 18.  
12 MS. CORDRY: Right.  
13 MR. GROSSMAN: Let's mark that --  
14 MS. CORDRY: All right.  
15 MR. GROSSMAN: -- and we'll put it in as Exhibit  
16 610.  
17 MS. CORDRY: Okay.  
18 MR. SILVERMAN: Mr. Grossman --  
19 MR. GROSSMAN: Mr. Silverman.  
20 MR. SILVERMAN: -- we have a less scientific, more  
21 legal objection.  
22 MR. GROSSMAN: I understand, but let me --  
23 MS. CORDRY: Right.  
24 MR. SILVERMAN: Okay.  
25 MR. GROSSMAN: -- let me deal with one at a time

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1 here.  
2 MS. CORDRY: And because this also deals with  
3 something that is a beta model to Tier 2, Tier 2, which they  
4 have already suggested they have not used in these, in their  
5 analysis, we're trying to figure out if this is now an  
6 attempt to bring in a Stage IV analysis at this process,  
7 Stage V. I'm not quite sure how many stages we're at now in  
8 their analysis, but this is a, this is a variation on a Tier  
9 2 model that they have never used in their documentation  
10 until this point.  
11 MR. GROSSMAN: The this antecedent you're  
12 referring to is 609?  
13 MS. CORDRY: 609, yes.  
14 MR. GROSSMAN: Okay. All right. But right now  
15 let me have 610 so that I can -- because you're referring to  
16 609 but you're holding 610.  
17 MS. CORDRY: Right.  
18 MR. GROSSMAN: Okay. Thank you.  
19 MS. HARRIS: Do you have an extra copy of that?  
20 MS. CORDRY: No, but they should be well aware of  
21 that document since they wanted to put in 609.  
22 MR. GROSSMAN: Well, let's be fair here. All  
23 right. So 610 --  
24 MS. ROSENFELD: Mr. Grossman, since there's  
25 limited pages in there that we anticipate referencing, I'm

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1 happy to make copies of those pages rather than introduce  
2 multiple copies. I didn't have time to make eight copies of  
3 a 159-page document.  
4 MR. GROSSMAN: Right. I think what we'll do is  
5 let them look at it during the break for sure, or they can  
6 take a break now, if they want, to look it over and see  
7 where they go from there, but hold on. Let me just write  
8 this. This is EPA May 2014 Addendum to User's Guide for the  
9 AMS slash EPA Regulatory Model-AERMOD, and I'll put parens,  
10 specifically pages 17 to 18. Hold on a second.  
11 (Exhibit No. 610 was marked  
12 for identification.)  
13 MS. CORDRY: There may be other pages that also  
14 describe that this is the beta model and so forth, but  
15 that -- the document is available on the EPA website. I  
16 don't believe it's published in the Federal Register. It's  
17 part of their internal guidance. Actually, if you look  
18 at -- yes, on page 18 it specifically describes it. The  
19 ARM2 option, which is referred to here, is one of the ones  
20 that's specifically listed there as being one of these beta  
21 options. So it does refer to it there.  
22 MR. GROSSMAN: Right. And are you suggesting that  
23 in this document, Exhibit 610, that the EPA is saying don't  
24 use ARM2, or are they saying we're not guaranteeing its  
25 accuracy or whatever because it hasn't been fully tested?

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1 MS. CORDRY: They're saying this is a document  
2 that was -- this is a new-attempt model. There are a great  
3 many variations on the accepted models out there, floating  
4 around.  
5 MR. GROSSMAN: Right.  
6 MS. CORDRY: This is a model that was developed by  
7 the American Petroleum Institute last summer, apparently.  
8 It is attempting to come up with a different way of doing  
9 the Tier 2 analysis, and the EPA said, here, I'll put it in  
10 the AERMOD, you can use it, you can play with it, you can  
11 do, you can beta test it, you can do these kinds of things,  
12 but it's certainly saying at this point exactly what it says  
13 there: it's not a -- it does not imply that they've  
14 completed the internal testing; it doesn't imply any  
15 endorsement of their use for regulatory or non-regulatory  
16 applications of the model.  
17 MR. GROSSMAN: I understand it's not endorsing it,  
18 but are you suggesting that the EPA rejects its use in the  
19 modeling?  
20 MS. CORDRY: I don't think they've probably gotten  
21 that far. At this point, if you recall, there are default  
22 options which you can use; there are non-default options  
23 which have to be specifically justified to the EPA to be  
24 used, which was what the Tier 3 OLM method was. This is  
25 another step beyond that which they, as far as I can tell

1 from this, they have simply said, here it is, you can play  
2 with it, but they have not said whether they're going to  
3 accept it or use it in any way, shape, or form yet.

4 I mean, you're reading the same language I'm  
5 reading, which came out on May 16th, I believe it was, yes,  
6 May 16th. So -- but I certainly cannot read that as saying  
7 that a beta test model can meet the criteria in Maryland law  
8 for general scientific acceptability when the agency itself  
9 says we have not taken any position on whether we're going  
10 to use, allow this.

11 MR. GROSSMAN: I'm going to give the applicant a  
12 chance to look this over before I rule on anything, but let  
13 me hear from Mr. Silverman now. He had some other point  
14 that he wanted to --

15 MR. SILVERMAN: Yes. I don't recall Mr. Sullivan  
16 mentioning ARM2 in his testimony. I don't recall him  
17 mentioning it in his testimony. I do recall, Mr. Sullivan  
18 acknowledged that he did, he skipped over Tier 2. This is a  
19 modification of Tier 2. So I think this is beyond the scope  
20 of the rebuttal. It is beyond the scope of the direct  
21 testimony of Dr. Cole and should not be admitted for that  
22 reason. And it's -- well, I'll stop there.

23 MR. GROSSMAN: Okay. All right. So you're --

24 MS. ROSENFELD: And we would join Mr. Silverman,  
25 as well, in his objections.

1 MR. GROSSMAN: Okay. So the objection is based  
2 on, number one, the beta status of it; number two, that it's  
3 beyond the scope of Sullivan and Dr. Cole's testimony?

4 MS. CORDRY: Right.

5 MR. GROSSMAN: Okay.

6 MS. CORDRY: And I would notice, just looking at  
7 this document itself, 609, on page little iv, so little 4,  
8 you know, the introduction, it says: Based on the analyses  
9 presented herein, it is recommended that ARM2 be approved by  
10 EPA as a refinement to the current fixed-ratio ARM method --  
11 which is the Tier 2 method; that's my parenthesis there --  
12 picking up again, for performing one-hour NO2 analyses, or  
13 be approved as an additional Tier 3 screening method.  
14 Consistent with other recent updates to AERMOD, EPA could  
15 implement this refinement by posting a memorandum on the  
16 SCRAM, S-C-R-A-M, website, authorizing the use of ARM2 for  
17 AERMOD modeling analyses and referencing this report as  
18 supporting documentation. An updated version of AERMOD  
19 should also be posted that includes the ARM2 model option.

20 At this point, all that's happened is that they  
21 have posted a version of AERMOD that includes this as an  
22 option, but they have clearly not included something that  
23 says that this is authorized to be used, referencing this  
24 report as supporting documentation. At this point, it's  
25 simply something that I think -- I mean, my opinion would be

1 from reading this that they put it out there and it's like,  
2 here it is, folks, you know, go ahead, do some more work on  
3 it; at some point, when we have enough rigorous internal  
4 alpha testing, maybe we'll consider making it a model, but  
5 at this point, it's just something out there that people can  
6 use to play with, as far as I can tell from this.

7 MR. GROSSMAN: Yes. I'm going to let the  
8 applicant take a look at this. One of the things that I'm  
9 wondering about is we don't know yet how it's going to be  
10 used in cross-examination. So I don't know how pertinent  
11 these objections are at this point, but let's let them look  
12 at the 610 comments in the addendum to the user guide. And  
13 how much time do you need to --

14 MR. GOECKE: Just a few minutes.

15 MR. GROSSMAN: Okay. All right. Why don't we  
16 come back -- it's 10 to, or eight minutes to 11:00 now --  
17 we'll come back at 11 o'clock?

18 MR. GOECKE: Thank you.

19 MR. GROSSMAN: Okay. And we're in recess then.  
20 (Whereupon, at 10:52 a.m., a brief recess was  
21 taken.)

22 MR. GROSSMAN: All right. Back on the record.  
23 Does the applicant wish to respond to the objection?

24 MR. GOECKE: Yes, we do.

25 MR. GROSSMAN: All right. You may proceed.

1 MR. GOECKE: Just a couple of comments. One, on  
2 page 18, beneath the numbered paragraphs there, I think  
3 right below No. 5 there's a sentence that says, you know,  
4 identification of this beta system is not an endorsement.  
5 It doesn't --

6 MR. GROSSMAN: Right.

7 MR. GOECKE: -- it doesn't say it's not allowed or  
8 whether it is allowed, but as you alluded to before we took  
9 the break, I think that their concerns are misplaced because  
10 we're not, we're not submitting any new analysis or any new  
11 report and that's not the purpose of why we're referencing  
12 this document, and with your indulgence, after a few  
13 questions I think it'll become clear as to what we're going  
14 to show with that.

15 MR. GROSSMAN: You have --

16 MS. ROSENFELD: Candidly, Mr. Grossman, I'd like  
17 to have a proffer of where this is going. This is certainly  
18 well beyond the scope of any direct testimony. It's beyond  
19 the scope of anything that's in the record. So --

20 MR. GROSSMAN: Well, I don't think we need a  
21 proffer. Let's get the question asked, and then you can  
22 object to the question. How's that?

23 MS. CORDRY: Well, but again, if the questioning  
24 is going to be based on a new form of modeling that has not  
25 been used before, that is not subject to these things, I

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1 mean, this is just an area that we don't need to be getting  
2 into.  
3 MR. GROSSMAN: Well, I don't know that until I  
4 hear the question. So when I hear the question, and I'll  
5 hear your objection at that point, it may or may not be an  
6 improper question. He may be questioning Dr. Cole about his  
7 opinion regarding the Stage III as opposed to Tier 3  
8 analysis by Mr. Sullivan. I don't know. I mean, let's hear  
9 the question, and then we'll know a little bit better in the  
10 sense that is a proffer when he asks the question. So --  
11 MR. GOECKE: Thank you.  
12 BY MR. GOECKE:  
13 Q Dr. Cole, if you could turn to page 3 of this  
14 document.  
15 MR. GROSSMAN: This document being 609?  
16 MR. GOECKE: 609, the --  
17 MR. GROSSMAN: Okay.  
18 THE WITNESS: Roman III or regular 3?  
19 BY MR. GOECKE:  
20 Q Regular 3.  
21 A Okay.  
22 Q And if you look at the second paragraph --  
23 A Yeah.  
24 Q -- and the second sentence --  
25 A Okay.

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1 Q -- which begins: As a plume containing NOx is  
2 transported --  
3 MR. GROSSMAN: Well, that's not what my page 3  
4 has. So --  
5 MR. GOECKE: On 609?  
6 MR. GROSSMAN: Oh, the second sentence. Okay. In  
7 the second sentence in the first full paragraph, is that --  
8 MR. GOECKE: The first full paragraph, that's  
9 correct.  
10 MR. GROSSMAN: Okay.  
11 BY MR. GOECKE:  
12 Q It reads: As a plume containing NOx is  
13 transported downwind over time, there is increased plume  
14 dispersion and entrainment of ambient air. The increased  
15 entrainment brings additional ambient ozone into the plume,  
16 which causes additional conversion of NO to NO2 through the  
17 fast oxidation reaction. These processes result increased  
18 NO2 to NOx ratios and decreased NOx concentrations with the  
19 plume's increased dispersion over time. Did I read that  
20 correctly?  
21 A I believe so.  
22 Q And do you agree with that statement?  
23 A I believe that's a true statement but it needs to  
24 be qualified --  
25 Q Okay.

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1 A -- in terms of testimony that I gave. I'm going  
2 to try and speak up because -- thank you. Thank you.  
3 MR. GROSSMAN: I don't know what the -- what does  
4 the wave to the audience --  
5 MS. CORDRY: The audience couldn't hear.  
6 THE WITNESS: Because there have been complaints  
7 from --  
8 MR. GROSSMAN: I see.  
9 THE WITNESS: -- various people that I don't --  
10 MR. GROSSMAN: Okay.  
11 THE WITNESS: And so I'm trying not to be --  
12 MR. GROSSMAN: Too quiet.  
13 THE WITNESS: Right.  
14 MR. GROSSMAN: Okay.  
15 THE WITNESS: I say qualify because this report  
16 further refers to the Janssen studies, which are based on  
17 power plant plumes. We've -- I've testified extensively  
18 that what happens to a power plant plume that's 30 feet --  
19 300 meters up in the air is very different from what happens  
20 along the ground when you've got a lot of cars and exhausts.  
21 The second thing is, the second thing is that this  
22 model has been evaluated -- has not been evaluated in this  
23 particular report for motor vehicle areas, for traffic.  
24 It's based on point sources such as refineries or a gas  
25 plant or in one case a power plant. So it's very important

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1 to qualify the rate of dispersion and mixing down to the  
2 molecular level by the circumstance you're looking at.  
3 MR. GROSSMAN: You're saying that this article  
4 pertains to particularly problematic power plant plumes?  
5 You don't have to answer that. Go ahead.  
6 MS. ADELMAN: Alliteration.  
7 THE WITNESS: Was that a --  
8 MS. CORDRY: That was a joke.  
9 THE WITNESS: -- PTP --  
10 MR. GROSSMAN: A joke, it was a joke. The Hearing  
11 Examiner gets to make the jokes. All right.  
12 BY MR. GOECKE:  
13 Q So it's your testimony, Dr. Cole, that the  
14 statement that I read from page 3 applies only to power  
15 plant plumes?  
16 A No. I said it applies in general but one must  
17 qualify. If one is going to talk about the time or the  
18 distance that it takes for the plume to mix downward, for  
19 the NOx to mix downward to the molecular level so it comes  
20 into contact with ozone, one must look at the particular  
21 circumstances. Secondly, I said that the evaluation studies  
22 that are cited here are not for ground-level motor vehicle  
23 sources; so they wouldn't apply here.  
24 Q I'm sorry. It wouldn't apply here because why?  
25 A Because the evaluation studies that are listed in

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1 this report are for point sources or industrial sources, not  
2 for roadways or traffic areas.  
3 Q Okay. So you disagree that a plume emitted from a  
4 parking lot or a gas queue would not disperse more over  
5 time, that NOx would not disperse more over time? I'm just  
6 trying to find out what portion of this you disagree with in  
7 terms of applying it here.  
8 A I didn't disagree with it. I qualified it.  
9 Q Well, you said --  
10 A I said --  
11 Q -- you said it doesn't apply here.  
12 MS. CORDRY: Asked and answered, I think, several  
13 times now.  
14 MR. GROSSMAN: Yes, but I think he can clarify. I  
15 think I understand his answer, but if you want to pursue it  
16 a little bit further, you can.  
17 MR. GOECKE: I'm sorry. I don't understand his  
18 answer, yes. So --  
19 MR. GROSSMAN: Okay.  
20 MR. GOECKE: -- I would like to pursue it further.  
21 THE WITNESS: Okay. The last time I was,  
22 testified and answered questions on this subject, I  
23 distinguished between the length of time and the distance  
24 that it takes for a plume to get from the exhaust down to  
25 the molecular level and I made a distinction between motor

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1 vehicles, which happen at ground level, where there's a lot  
2 of surface roughness, versus an elevated plume which may be  
3 100 meters high, which is not encountering that kind of  
4 dispersion.  
5 So my only point is, this is basically correct;  
6 the issue is the speed of time and the distance that it  
7 takes for the molecules to get in contact with one another.  
8 Is that clear?  
9 BY MR. GOECKE:  
10 Q I think it is. So --  
11 A Okay.  
12 Q -- let me try it this way. So the time and  
13 distance required to convert NO to NO2 would be different  
14 for a plume coming from the gas station queue as compared to  
15 a power plant tall stack plume?  
16 A Absolutely.  
17 Q Okay.  
18 MR. GROSSMAN: I think you mean NOx as opposed to  
19 NO, NO being presumably --  
20 THE WITNESS: Well, it's, should I -- can I  
21 clarify that for you?  
22 MR. GROSSMAN: Sure.  
23 THE WITNESS: Okay. So if you take a power plant  
24 plume, what's coming out of the stack is mostly NO. There  
25 is some NO2, which is formed in the hot exhaust.

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1 MR. GROSSMAN: Right.  
2 THE WITNESS: Those two things together are most  
3 of the NOx. So what remains to react with the ozone is the  
4 NO.  
5 MR. GROSSMAN: Okay. So you correctly stated it.  
6 THE WITNESS: Yeah.  
7 MR. GROSSMAN: Okay.  
8 BY MR. GOECKE:  
9 Q Okay. And so at the last hearing, when you  
10 testified that distance is not a factor, that wasn't  
11 entirely correct, was it? I mean, distance, as you say,  
12 time and distance are factors in the conversion of NO to  
13 NO2.  
14 A I don't believe that's a correct statement of what  
15 I said. I disagree with that understanding of what I said.  
16 Q Okay. Well, perhaps I misunderstood you. So you  
17 agree that distance is a factor in the conversion process of  
18 NO to NO2?  
19 A Distance is a factor, and the ground-level  
20 sources, the vehicle exhausts are going to react -- are  
21 going to dilute down to the molecular level both faster in  
22 time and in a shorter distance. So they will affect -- the  
23 NO2 will affect receptors that are much closer to the  
24 vehicles than it will, than the reaction takes place, let's  
25 say, in a power plant plume. And I made the point that even

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1 the document, the Environmental Agency document, not to be  
2 confused with EPA --  
3 Q Yes.  
4 A -- made the point, advised against or said it  
5 would not accept using that model, that Janssen method, for  
6 ground-level sources, for smaller sources.  
7 Q And so it's your testimony that the conversion  
8 process will happen more quickly in the gas station queue  
9 than it would in a plume emitting from a power plant stack?  
10 MS. CORDRY: I think that has now been asked and  
11 answered --  
12 MR. GROSSMAN: Well, let him, let him --  
13 MS. CORDRY: -- repeatedly.  
14 MR. GROSSMAN: I'll overrule the objection.  
15 THE WITNESS: That is my testimony.  
16 BY MR. GOECKE:  
17 Q Okay. And why is that exactly? Is that because  
18 the air is moving faster, or what's causing the process to  
19 happen more quickly in a gas station queue?  
20 A Well, you have to look at the scales of  
21 turbulence. As I testified last time, with a power plant  
22 plume, you have a very wide stack, and I showed pictures  
23 of -- since Mr. Sullivan focused on stable conditions, I  
24 showed a picture of a plume, a power plant plume under  
25 stable conditions. It was several hundred meters up in the

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1 air, and you could see that the plume was not mixing. You  
2 could see that plume for miles, which is what happens with  
3 an elevated plume under stable conditions.  
4 On the other hand, when you get down to the ground  
5 level, when you have cars, when you have much smaller  
6 plumes, when you have surface roughness that creates  
7 turbulence at a smaller scale in relationship to the  
8 smaller-scale plume that's coming out, I showed pictures of  
9 how rapidly exhausts from cars can disperse. So I think  
10 I've covered that in my previous testimony pretty well.  
11 MR. GROSSMAN: And I think you've covered it in  
12 the cross-examination. So --  
13 THE WITNESS: Can you hear me back there?  
14 MS. ADELMAN: Yes.  
15 MS. CORDRY: Much better. Much better. Thank  
16 you.  
17 MR. GOECKE: Mr. Grossman, I'd like to ask  
18 Dr. Cole a question about the Environmental Agency report  
19 that he just referred to. I don't have the exhibit number.  
20 MR. GROSSMAN: That's the British Environmental  
21 Agency --  
22 MR. GOECKE: Yes.  
23 MR. GROSSMAN: -- one? I think it might -- let's  
24 see.  
25 MR. GOECKE: Do you know what exhibit that is,

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1 Michele?  
2 MS. ROSENFELD: I don't, and I'm not sure it was  
3 ever exhibitized.  
4 MR. SILVERMAN: I'm not sure it was exhibitized.  
5 MS. ROSENFELD: It's the first --  
6 MR. SILVERMAN: It was referenced.  
7 MS. ROSENFELD: -- reference in Mr. Sullivan's  
8 report, but I don't think it was ever entered as an exhibit  
9 that I heard.  
10 MR. GROSSMAN: I thought it was, but maybe I'm  
11 mistaken.  
12 MS. ROSENFELD: It's been discussed a number of  
13 times.  
14 MR. GROSSMAN: I'm not seeing it, which doesn't  
15 mean that it wasn't introduced, but I'm not seeing it  
16 directly here. Do you have a copy there?  
17 MR. GOECKE: I only have one copy, but we can  
18 submit one. We can put it on the screen as well.  
19 MR. GROSSMAN: All right. What's your -- what's  
20 the question?  
21 MR. GOECKE: So I'm referring to page 47 of this  
22 report.  
23 MR. GROSSMAN: All right. Let's mark it since  
24 we're referencing it, and apparently, we're not -- gee, I  
25 know I've seen it before. Hold on a second.

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1 MR. GOECKE: Sure.  
2 MR. GROSSMAN: Let's see if I brought it in with  
3 me.  
4 MR. GOECKE: And we'll put a copy up on the screen  
5 as well.  
6 MR. GROSSMAN: This CAPCOA, I guess, was 567, and  
7 then I think it came up at the same time. All right. Well,  
8 let's mark this as Exhibit 611. We'll just say, British  
9 Environmental Agency review of methods for NO2 conversion in  
10 plumes at short ranges. Let's see if we have a date on  
11 this, November 2007. Okay. And you're looking at page 47?  
12 (Exhibit No. 611 was marked  
13 for identification.)  
14 MR. GOECKE: This is page 47, yes.  
15 BY MR. GOECKE:  
16 Q And if you would, Dr. Cole, please read the  
17 paragraph beginning, these urban schemes.  
18 A These urban schemes suggest that to assume 100  
19 percent conversion, the first option available to the EA is  
20 unrealistically conservative. Further, the photostationary  
21 state does not indicate 100 percent conversion. We  
22 anticipate that 100 percent conversion would frequently give  
23 too high an estimate of impact of, I think it says NO2 or --  
24 Q NOX.  
25 A I think, I think they meant to say NO2, because

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1 NOx has nothing to do with conversion, but anyway: From a  
2 regulatory perspective, a 100 percent conversion is the most  
3 conservative estimate that is possible to make. Work by  
4 Janssen of 1988 suggests that for large plumes there is a  
5 near-surface, a near-, I'm sorry, a near-source region with  
6 a low conversion, but that is rapidly asymptotic to the  
7 photostationary state after a modest travel time of perhaps  
8 200 seconds, according to our calculation, using their  
9 method. As such, it bears an unexpected but welcome  
10 similarity to our understanding of urban NO2 data. Hence we  
11 suggest that the Janssen method may be more applicable to  
12 smaller plumes than has been recognized hitherto, provided  
13 care is taken to use appropriate, conservative values of --  
14 MS. CORDRY: Alpha.  
15 THE WITNESS: -- alpha. This uses wind speed at  
16 plume height, O3 background, NO plus O3 rate constant and  
17 NO2 photolysis rate.  
18 BY MR. GOECKE:  
19 Q Thank you. So contrary to your earlier statement  
20 that the EA report said that the Janssen study was not  
21 applicable to situations such as the proposed Costco gas  
22 station, this says the opposite. This says that it actually  
23 bears an unexpected but welcome similarity to our  
24 understanding of urban NO2 data; hence we suggest that the  
25 Janssen method may be more applicable to smaller plumes than

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1 has been recognized hitherto.  
2 A Interesting you didn't read the last part of the  
3 last sentence: provided care is taken to use an  
4 appropriate, conservative value of alpha.  
5 Q Okay.  
6 A Now, somewhere else in this document they say that  
7 this agency doesn't accept the Janssen method for small  
8 plumes for urban sources. So I can't -- it's not at my  
9 fingertips, but I think you can find it.  
10 Secondly, I want to comment on the scientific  
11 nature of the statement. Sure, you can use the same  
12 framework to look at turbulence at different scales, but  
13 they're very careful in how they qualify this because they  
14 recognize that there's a difference in the turbulence from a  
15 plume that's way up in the air to something that's close to  
16 the ground and that's a smaller source. So that's why  
17 they're talking about an appropriate, conservative value of  
18 alpha.  
19 So I don't think this changes a thing. I think  
20 it's consistent with what I've said, that basically the  
21 physics of the atmosphere is the same in terms of the effect  
22 of motions, but the scales are so different here. It's like  
23 comparing apples and oranges.  
24 MR. GROSSMAN: I don't think alpha was defined in  
25 that paragraph. What is alpha?

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1 THE WITNESS: Alpha is a constant that takes into  
2 consideration the plume height, the wind speed, the ozone  
3 background, and the -- and the NO plus O3 rate constant.  
4 BY MR. GOECKE:  
5 Q But you agree that according to this, if you apply  
6 conservative values for alpha, however it's defined, you may  
7 have similarities at an urban -- in an urban situation  
8 compared to the power plant plume?  
9 A Right. For a power plant plume, they say 200  
10 seconds. Okay? For a plume near the ground, where you have  
11 all this surface roughness, Mr. Sullivan has testified that,  
12 that these vehicles add to the surface roughness, and I  
13 showed that not only does increased surface roughness  
14 increase the rate of mixing but it also slows the wind  
15 speed. So if you have a slower wind speed -- you have a  
16 slower wind speed, you're going to have more time for those  
17 pollutants to mix down to the molecular level.  
18 So I don't, you know, it's nice that they think  
19 that there's an optimistic way of doing it. You notice that  
20 the quote doesn't say they have a method. It just says,  
21 gee, maybe this is an avenue to explore provided you have  
22 the right constant, conservative constant. So --  
23 Q Okay. And let's talk about some of those  
24 constants. So in your calculations for one-hour NO2 at the  
25 site, you calculated the surface roughness?

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1 MR. GROSSMAN: When you say his calculations, what  
2 are you referring to? Is there a specific document you're  
3 looking at, or --  
4 MR. GOECKE: No. I don't believe he's prepared  
5 any document.  
6 MR. GROSSMAN: Oh, just in general from his  
7 testimony?  
8 MR. GOECKE: From his testimony, yes.  
9 MR. GROSSMAN: Okay.  
10 BY MR. GOECKE:  
11 Q And correct me if I'm wrong. You haven't  
12 provided -- you haven't given us any documents that shows  
13 your calculation or your estimate for one-hour NO2 levels,  
14 have you?  
15 A Do you have the slides from the last time? I  
16 think I gave a reference for the formula that I used.  
17 Q Yes.  
18 A It's not an unusual formula. It's fairly  
19 standard.  
20 Q Yes.  
21 A It's called the logarithmic profile, and it's a  
22 well-known fact that with greater roughness, the surface  
23 layer, the surface boundary layer is going to have slower  
24 wind speeds, period.  
25 Q Dr. Cole --

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1 A And the reason for that is that when you have  
2 turbulence, that takes away from the forward kinetic energy  
3 of the wind. It's simple physics. It's called the law of  
4 conservation of energy. It's simple.  
5 Q And so your testimony here is that the gas station  
6 will be more turbulent than air coming out of a power plant  
7 plume?  
8 A Yes.  
9 Q Okay.  
10 A Well, I'm going to qualify that. If you have the  
11 same stability and you have surface roughness, you're going  
12 to have turbulent scales that are very different between a  
13 power plant plume and what's happening at ground level. You  
14 just don't have those obstacles at 300 meters up in the air.  
15 Now, that doesn't say you don't have turbulence. You may  
16 have a lot of convective turbulence based on thermal eddies  
17 and whatnot, but that, that's not the kind of turbulence --  
18 he's not listening to my answer.  
19 MR. GROSSMAN: It's okay. You're still on the  
20 record. That's not the kind of --  
21 THE WITNESS: Let the record show they're not  
22 listening.  
23 MR. GROSSMAN: I'm sure a portion of their ear is  
24 trained to your statements. Did you want to finish your  
25 sentence?

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1 THE WITNESS: Mr. Goecke, you're --  
2 MR. GROSSMAN: No, no.  
3 THE WITNESS: -- and Mr. Sullivan --  
4 MR. GROSSMAN: Dr. Cole --  
5 THE WITNESS: -- you're lucky you're not in my  
6 class.  
7 MR. GROSSMAN: Dr. Cole --  
8 THE WITNESS: All right. Okay.  
9 MR. GROSSMAN: -- do you want to finish your  
10 sentence?  
11 THE WITNESS: This is the 36th session.  
12 MR. GROSSMAN: I know. I know, but do you want  
13 to --  
14 THE WITNESS: Okay.  
15 MR. GROSSMAN: But it's not your 36th session --  
16 THE WITNESS: Oh.  
17 MR. GROSSMAN: -- it's most of the rest of us, but  
18 in any event, did you want to finish your sentence?  
19 THE WITNESS: Yeah. Simply stated, again, is that  
20 you're going to have a kind of chop at ground level,  
21 particularly with the surface roughness on that mall  
22 surface, that induces very rapid mixing, more rapid mixing  
23 at the surface with the car exhaust than you will with a  
24 power plant plume that's going to take a much longer period  
25 of time, and that's exactly why, that's exactly why that

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1 statement in the Environmental Agency report is qualified.  
2 And I just want to repeat that they haven't come up with a  
3 method in that paper at all. They're just saying, gee, this  
4 might be an avenue to explore, it looks like good news, it  
5 might make things easier, but it doesn't say it will make,  
6 will use exactly the same constants or come up with the same  
7 answers, period.  
8 BY MR. GOECKE:  
9 Q Dr. Cole, in your opinion, is there any difference  
10 between the terms roughness length and surface roughness?  
11 A Well, surface roughness is, can be used in a  
12 qualitative way. The length is a numerical value that can  
13 be -- the z sub zero -- that can be plugged into various  
14 equations that give you information about the wind profile  
15 or the turbulence.  
16 Q Okay. And so do you have a copy of your slide  
17 show in front of you?  
18 A I don't. Do you?  
19 MR. GROSSMAN: That would be Exhibit -- let's see.  
20 MR. GOECKE: 581, I believe.  
21 MR. GROSSMAN: Yes, Dr. Cole's PowerPoint slide.  
22 THE WITNESS: If you could show me what you're  
23 referring to, I'd appreciate it.  
24 BY MR. GOECKE:  
25 Q Yes.

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1 MR. GOECKE: If I may approach?  
2 MR. GROSSMAN: Yes.  
3 BY MR. GOECKE:  
4 Q Slide 4 of 581 that I have, you have your  
5 logarithmic wind profile. I believe this is the slide you  
6 were referring to a moment ago.  
7 A Yeah.  
8 MS. ADELMAN: What page is that?  
9 MR. GOECKE: It's on Slide 4 of Exhibit 581.  
10 MR. SILVERMAN: Can you put it on the screen?  
11 THE WITNESS: Okay.  
12 BY MR. GOECKE:  
13 Q Okay. And so z0, according to your calculations,  
14 equals what?  
15 A That would be your, your roughness length.  
16 MR. SILVERMAN: Mr. Grossman, we don't have this.  
17 I wonder if we could put it on the screen, if Mr. Goecke has  
18 it on his computer?  
19 MR. GROSSMAN: Can it be put on the screen?  
20 MR. BRANN: I don't, I don't have --  
21 MR. GROSSMAN: Let's see if we -- here.  
22 MR. GOECKE: Do you have an extra copy?  
23 MR. GROSSMAN: Let's see if we -- here, it's in  
24 this file, 581. Which slide are you talking about?  
25 MR. GOECKE: Slide 4.

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1 MR. GROSSMAN: Slide 4. Okay.  
2 THE WITNESS: So --  
3 BY MR. GOECKE:  
4 Q We're waiting for everyone to --  
5 A Oh, okay.  
6 Q -- find the PowerPoint.  
7 MR. GROSSMAN: Ms. Rosenfeld, do you have a copy  
8 of that since it's your witness?  
9 MS. ROSENFELD: Yes, I do.  
10 MR. GROSSMAN: Are you sharing with Mr. Silverman?  
11 MS. ROSENFELD: Yes.  
12 MR. SILVERMAN: Yes.  
13 MR. GROSSMAN: Okay. All right.  
14 MS. ADELMAN: And me.  
15 MR. GROSSMAN: Okay.  
16 MS. ROSENFELD: And Ms. Adelman.  
17 MR. SILVERMAN: Right.  
18 MR. GROSSMAN: And Mrs. Adelman.  
19 MR. SILVERMAN: Of course, it's transparent to all  
20 of us here.  
21 BY MR. GOECKE:  
22 Q Well, let's try to decode it a little bit. So you  
23 were saying a moment ago, Dr. Cole, z0 -- z0, I'm sorry,  
24 what does z0 represent?  
25 A That is a roughness, a roughness -- a surface

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1 roughness length which is a characteristic -- it's that  
2 point, to be specific, z sub O or the surface roughness  
3 element is that point at which the -- below that point you  
4 really don't have a mean wind speed. You have a lot of  
5 turbulence, and when you reach that point, then you're  
6 dealing with an atmosphere which is, which is different.  
7 So that -- it's well-known that this logarithmic  
8 profile explains the curve; so -- and let me clarify that  
9 the only calculation I did was the curve on the extreme  
10 left, which I've enumerated here on the right side of the  
11 page.  
12 MR. GROSSMAN: Well, we must be looking at a  
13 different slide, because mine says, big whirls, little  
14 whirls. You said Slide 4, right?  
15 MR. GOECKE: Slide 4, yes.  
16 MS. ADELMAN: Logarithmic wind is what you want.  
17 MR. GROSSMAN: That's not --  
18 THE WITNESS: Is this what you're --  
19 MR. GROSSMAN: That's not what's labeled 4 on  
20 Exhibit --  
21 THE WITNESS: Is this what you're --  
22 MR. GOECKE: Yes.  
23 MS. ADELMAN: It's page 3, Mr. Grossman.  
24 THE WITNESS: It's this, it's this one.  
25 MR. GROSSMAN: It's page 3 --

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1 MS. ADELMAN: Yes.  
2 MS. ROSENFELD: No. It's 4.  
3 MR. GROSSMAN: -- but it's really Slide 4; is that  
4 what you're saying?  
5 MR. GOECKE: The version I have --  
6 MR. GROSSMAN: No. That's --  
7 MR. GOECKE: -- they weren't numbered. I think  
8 I've handwritten them in.  
9 MS. ADELMAN: Aren't there numbers? Mine has  
10 numbers.  
11 THE WITNESS: It's this, it's this one,  
12 Mr. Grossman.  
13 MR. GROSSMAN: All right. That's not what's on my  
14 copy.  
15 THE WITNESS: Okay.  
16 MS. ADELMAN: Page 4, my mistake.  
17 MR. GROSSMAN: Well, page 4 is not, that's not  
18 what's showing here. Let me see if we're talking about the  
19 same exhibit. Exhibit 581, right --  
20 MS. ADELMAN: Right.  
21 MR. GROSSMAN: -- or is that 587?  
22 MS. ROSENFELD: There was a 581, and then it was  
23 updated the morning of the hearing. There was 581, new.  
24 MR. GROSSMAN: Ah.  
25 MS. ROSENFELD: It did have page, each slide was

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1 numbered. The original one had handwritten numbers, page  
2 numbers.  
3 MR. GROSSMAN: Yes, I'm looking at one  
4 handwritten, and the page 4 I have handwritten --  
5 MS. ROSENFELD: It was updated subsequent to that,  
6 handed in at the hearing when Dr. Cole testified.  
7 MR. GROSSMAN: Let's see.  
8 MS. ADELMAN: Has a colored picture on the front.  
9 MS. ROSENFELD: The first page --  
10 MR. GROSSMAN: Let me see if we have -- do we  
11 have, do we have a --  
12 MS. ROSENFELD: The first page looks like this.  
13 MR. GROSSMAN: I know, but do we have an exhibit  
14 number for the updated version?  
15 MS. ROSENFELD: It was just, came in, I think, as  
16 581 and then new in parentheses.  
17 MR. GROSSMAN: Oh, I remember that picture, but  
18 let me see if -- so that was supposed to be substituted,  
19 right?  
20 THE WITNESS: Do you want to use this one?  
21 MR. GROSSMAN: No. Hold on one second, if you  
22 would. Let me see if we have -- for some reason that didn't  
23 get in. All right. All right. Maybe I thought this was  
24 just a copy you were giving me and it needs, now it needs to  
25 be substituted in here, and we'll do that. All right. So

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1 now, at least, I'm on the same page as everybody else.  
2 MS. ROSENFELD: Maybe we should label it 581(b).  
3 MR. GROSSMAN: Let's see what, 581, well, there is  
4 no -- you mean (a) and (b); is that what you're saying?  
5 Well, the only trouble is, I guess it's been referenced here  
6 before as 581. So maybe the simplest thing, if everybody's  
7 agreeable, is just to substitute it. Is that --  
8 MS. ROSENFELD: Yes.  
9 MR. SILVERMAN: Right.  
10 MS. ROSENFELD: Sure.  
11 MR. GROSSMAN: -- an agreeable way to do it?  
12 Okay. All right. So we'll substitute that 581. All right.  
13 So now I'm looking at the same logarithmic wind profile.  
14 All right. So is there a question pending, Mr. Goecke,  
15 regarding --  
16 MR. GOECKE: There is no question pending.  
17 MR. GROSSMAN: Okay.  
18 MR. GOECKE: So we may proceed?  
19 MR. GROSSMAN: Yes.  
20 BY MR. GOECKE:  
21 Q And so at two meters then, what happens to the  
22 air, Dr. Cole?  
23 A Two meters of height?  
24 MR. GROSSMAN: Two meters of height?  
25 MR. GOECKE: Two meters of height.

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1 THE WITNESS: No, it's -- are you talking about  
2 two meters of height or two meters of surface roughness  
3 element? Which are you talking about?  
4 BY MR. GOECKE:  
5 Q Two meters of height. Two meters --  
6 A I'm not clear on what you're saying. Are you  
7 talking about -- if you look at the two-meter height, you  
8 see three different curves with three different values of  
9 wind speed.  
10 Q No, I'm not talking about the graph, just two  
11 meters, two meters above the surface of the gas station  
12 queue.  
13 A Are you talking about this?  
14 Q Yes.  
15 A Okay.  
16 Q And on the right-hand side --  
17 A Yeah.  
18 Q -- you said for 10 meters of height, and z0 equals  
19 two meters, right?  
20 A Okay.  
21 Q Okay. What's the 10 meters of height?  
22 A That's to see what the speed is at the top of this  
23 chart.  
24 Q So this is to calculate the speed of the wind at  
25 10 meters of height?

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1 A Well, it gives you more information. If you use  
2 this equation, it gives you the way that the wind speed  
3 changes with height. So that at different -- for each of  
4 these different surface roughness elements, z sub naught,  
5 you have three different profiles. The bigger the point is,  
6 the bigger -- the choppy the air at the surface, the  
7 bigger the surface roughness elements, the slower the wind  
8 speed is going to be at any particular level, at least for  
9 the --  
10 Q Okay.  
11 A -- at least for the first 10 meters here.  
12 Q Okay. What's the wind speed at two meters?  
13 A Well, it depends on the curve. Are you talking  
14 about z sub naught, or are you talking about the height?  
15 MR. GROSSMAN: If I understand correctly, is this  
16 correct that the z sub zero doesn't refer to a height but  
17 you have different curves --  
18 THE WITNESS: Yeah.  
19 MR. GROSSMAN: -- for different levels of z sub  
20 zero --  
21 THE WITNESS: Right.  
22 MR. GROSSMAN: -- showing different results at  
23 different heights?  
24 THE WITNESS: Correct.  
25 MR. GROSSMAN: Okay.

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1 MR. GOECKE: Okay. Thank you.  
2 THE WITNESS: You're exactly right.  
3 BY MR. GOECKE:  
4 Q Okay. So based upon a z0 of two meters, what is  
5 the wind speed at two meters above the --  
6 A It's going to be zero.  
7 Q -- above the ground?  
8 A Right. It's going -- if you have at two meters z,  
9 then the wind at that speed is going to be zero. The wind  
10 speed will be zero.  
11 Q Is that what you think is happening at the gas  
12 station?  
13 A I don't have exact values. I haven't gone out and  
14 measured anything at the gas station. So it could be the  
15 one-meter curve; it could be the one-meter z-naught curve or  
16 the two-meter z-naught curve or -- I think the point is a  
17 general point --  
18 Q Okay.  
19 A -- that the bigger your surface roughness  
20 elements, the slower is the wind speed. It's, it's pretty  
21 straightforward.  
22 Q Okay. And you said you haven't taken actual  
23 measurements. Have you reviewed Mr. Sullivan's measurements  
24 at the site?  
25 A Yes, I have.

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1 Q And do you remember what those are?  
2 A Are you talking about the study that was done to  
3 look at the slope factors south of the ring road? Is that  
4 what you're talking --  
5 Q Well, tell me what you recall.  
6 A That's what I recall, that the issue was whether  
7 there would be cold-air drainage. He used a CALPUFF model,  
8 and in his view, he didn't see any evidence of drainage. In  
9 my view, I saw evidence of, in the data, of cold-air  
10 drainage from the ring road down to the, the nearby houses  
11 there.  
12 Q Okay.  
13 A That's what I recall. I'm not sure that he --  
14 what else you're driving at.  
15 Q Okay. What I'm driving at is air measurements  
16 he's taken above the surface on the mall site and how they  
17 might compare to your calculations here. Have you compared  
18 those at all?  
19 A No.  
20 Q Okay. Are you familiar, Dr. Cole, with the  
21 Glossary of Meteorology?  
22 A Well, I won't say I looked at it for many years,  
23 but I certainly know what it is. I have a copy of it.  
24 Q You have a copy? Where do you --  
25 A I do.

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1 Q -- keep your copy?  
2 A Over my desk.  
3 Q And how long have you had a copy?  
4 A For many years.  
5 Q So it's a reliable treatise or text in the  
6 industry?  
7 A Pretty much so.  
8 Q Okay. I'd like to show you an excerpt of that  
9 document.  
10 MR. GOECKE: Mr. Grossman, if we could have this  
11 marked, please, as well.  
12 MR. GROSSMAN: All right. I take it, these two  
13 pages are together somehow?  
14 MR. GOECKE: There's two pages. There's the --  
15 MR. GROSSMAN: They're not stapled; that's why.  
16 MR. GOECKE: They're not -- I'm sorry. Let me try  
17 it this way. I gave you two duplicates instead of two.  
18 MR. GROSSMAN: I'm sorry?  
19 MR. GOECKE: You have copies, two copies of one  
20 document.  
21 MR. GROSSMAN: All right.  
22 MR. GOECKE: So if you'd give that, one of those  
23 to me.  
24 MR. GROSSMAN: Because it looks like just two, two  
25 different pages.

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1 MR. GOECKE: All right.  
2 MR. GROSSMAN: I'm sorry. What am I supposed to  
3 give you?  
4 MR. GOECKE: I'm sorry. I'm sorry. We just made  
5 copies this morning. So I'm trying to give everybody the  
6 same thing. So we've got --  
7 MR. GROSSMAN: Oh, I see.  
8 MR. GOECKE: -- the title page and --  
9 MR. GROSSMAN: So it's a --  
10 MR. GOECKE: So you can use this --  
11 MR. GROSSMAN: I see. I see. I didn't realize  
12 that. Okay.  
13 MR. GOECKE: But not all of them are double-sided.  
14 MR. GROSSMAN: Okay.  
15 MR. GOECKE: So you've got one.  
16 MR. GROSSMAN: Okay.  
17 MR. GOECKE: One for Dr. Cole.  
18 MR. GROSSMAN: All right. So this will be Exhibit  
19 612, which is page 655 of the 2000 Glossary of Meteorology.  
20 Okay.  
21 (Exhibit No. 612 was marked  
22 for identification.)  
23 MR. GOECKE: Okay.  
24 BY MR. GOECKE:  
25 Q And if I could, Dr. Cole, I'd direct your

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1 attention towards the bottom of page 655 of Exhibit 612 --  
2 A Right.  
3 Q -- for the definition of roughness length and then  
4 the parenthetical: also called roughness coefficient. It  
5 reads: A measure of the roughness of a surface over which a  
6 fluid is flowing, defined as follows:  $z_0$  equals --  
7 A Epsilon.  
8 MR. SILVERMAN: Epsilon.  
9 BY MR. GOECKE:  
10 Q Epsilon, thank you, over 30 --  
11 A Right.  
12 Q -- over 30 units, where  $z_0$  is the roughness length  
13 and epsilon is the average height of surface irregularities.  
14 So on your slide show, you calculated  $z_0$  to be two meters.  
15 How high would the surface irregularities be at the proposed  
16 gas station?  
17 A Okay. Let me qualify --  
18 MS. CORDRY: Can you tell us where he, where he  
19 calculated  $z_0$  as being two meters as opposed to simply  
20 suggesting that as one --  
21 MR. GOECKE: Where who calculated it?  
22 MS. CORDRY: Well, I'm seeing four 10 meters  
23 height and  $z_0$  is two meters, but I don't see where he has  
24 calculated the two meters as opposed to simply using that as  
25 one, one of three inputs. Am I, am I missing something?

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1 MR. GOECKE: No. He hasn't shown his math.  
2 MS. CORDRY: Well, I mean --  
3 MR. GROSSMAN: No. I think --  
4 MS. CORDRY: -- that's not a math. That's just an  
5 input.  
6 MR. GROSSMAN: I think what she's saying is, your  
7 question implied that he had calculated  $z_0$  to be two meters.  
8 That was the implication of your question --  
9 MR. GOECKE: Right.  
10 MR. GROSSMAN: -- whereas -- what Ms. Cordry is  
11 saying is that the witness didn't assume  $z_0$  to be two  
12 meters; he just gave that as one of the values --  
13 MR. GOECKE: Okay. Let's try it --  
14 MR. GROSSMAN: -- possible values of it, if I  
15 understood the objection. Is that correct?  
16 MS. CORDRY: Right. Right. I just see it as --  
17 MR. GROSSMAN: And is that correct, Dr. Cole?  
18 THE WITNESS: That's correct.  
19 MR. GROSSMAN: Okay.  
20 THE WITNESS: What I wanted to do --  
21 BY MR. GOECKE:  
22 Q Let me try it a different way.  
23 A Excuse me. What I wanted --  
24 Q There's no question pending.  
25 MR. GROSSMAN: There's no question pending other

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1 than -- I just wanted to make sure I was accurately  
2 understanding the objection, and he's going to rephrase his  
3 question.  
4 THE WITNESS: Okay.  
5 BY MR. GOECKE:  
6 Q And so the surface irregularities we're talking  
7 about at the gas station queue are automobiles mostly,  
8 correct?  
9 A Automobiles, trucks, there are buildings. If you  
10 put in a --  
11 Q There are buildings in a gas queue?  
12 A Excuse me. There are buildings in the area which  
13 affect the turbulence regime in the gas station. There's a  
14 wall, and there's two buildings surrounding this area. I'm  
15 going to finish my statement. Also, also, when you build a  
16 gas station, is there not a structure in a gas station? Are  
17 there not trucks?  
18 Now, let me clarify that this diagram was -- I  
19 didn't make any representation of which surface roughness,  
20 if any of these, represents the gas station. My reason for  
21 putting in this diagram was to show the principle that wind  
22 speeds decrease. So if you have a .1 meter and then you  
23 compare it to one meter, you're going to see slower wind  
24 speeds. That was the purpose of this.  
25 Q If you were to apply the formula on page 655, what

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1 would epsilon be? What would be the average height of  
2 surface irregularities be?  
3 A I don't know. I haven't measured it. I don't  
4 know how high that structure is. You got a wall. You got  
5 buildings. You got big trucks.  
6 Q If we assume two meters for zO, how high would  
7 epsilon -- well, what number would epsilon need to be?  
8 A So would be 60 meters, I believe.  
9 Q And how many feet is that?  
10 A It's 180 feet approximately.  
11 Q Okay. So in order to get, for a height TM -- for  
12 a 10-meter height and have a zO of two meters, you would  
13 need an average height of surface irregularities of over 180  
14 feet?  
15 A Well, according to this equation --  
16 Q According to this equation.  
17 A -- and as I said, as I said, this is not meant to  
18 replicate the gas station but to show the principle. So,  
19 for example, at .1 meter, the height would be what? Point  
20 one meter, .1 meter, how would that work? Someone do the  
21 math. Point one meter equals 30. So that would be three  
22 meters.  
23 MR. GROSSMAN: What would be three meters?  
24 THE WITNESS: The surface roughness, according to  
25 this equation -- and there seems to be a footnote --

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1 MR. GROSSMAN: First of all, let's answer. What  
2 would be three meters?  
3 THE WITNESS: If you assumed a surface roughness  
4 of .1 meter --  
5 MR. GROSSMAN: Okay.  
6 THE WITNESS: -- okay, according to this --  
7 MR. GROSSMAN: A zO of .1 meter, yes.  
8 THE WITNESS: Yes. According to this equation, z  
9 naught would be 30 times .1 -- I'm sorry. That's not right.  
10 Wait a minute. Wait. Wait. Wait. Wait. Epsilon would  
11 be -- wait a minute.  
12 MR. GROSSMAN: While he's calculating, it occurred  
13 to me, does anybody recall from the testimony earlier  
14 whether or not -- which page references were being used for  
15 Exhibit 581? Were they the handwritten page references? So  
16 before I just automatically substitute something, maybe I  
17 should do an (a) and a (b) for 581, because I'm not sure  
18 what you referenced --  
19 MS. ROSENFELD: Oh, we were referencing the 581  
20 that has the colored pictures on the front page --  
21 MR. GROSSMAN: On the front. Well, that would  
22 be --  
23 MS. ROSENFELD: -- which is the exhibit that has  
24 the --  
25 MR. GROSSMAN: Typed --

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1 THE WITNESS: Okay.  
2 MS. ROSENFELD: -- typed --  
3 MR. GROSSMAN: -- numbers.  
4 MS. ROSENFELD: -- numbers on the bottom  
5 right-hand --  
6 MR. GROSSMAN: So you're sure that all of the  
7 testimony concerned 581 with the typed numbers --  
8 MS. ADELMAN: Yes.  
9 MR. SILVERMAN: Yes.  
10 MR. GROSSMAN: -- as opposed to --  
11 MS. ROSENFELD: Yes. We handed that out first  
12 thing --  
13 MS. ADELMAN: Yes.  
14 MR. SILVERMAN: Yes.  
15 MS. ROSENFELD: -- and used that as a reference.  
16 MR. GROSSMAN: Okay. All right. So we can  
17 substitute it then. Okay.  
18 THE WITNESS: So with a, if this equation applies,  
19 assuming that it's correct, the epsilon or the height of the  
20 irregularity for a .1 meter would be three meters. So  
21 you're dealing with a truck or maybe a big SUV or -- as I  
22 said, there's going to be structures with this gas station.  
23 MR. GROSSMAN: Mr. Goecke, where is this all  
24 getting me?  
25 MR. GOECKE: That he's overestimated the

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1 turbulence at the gas station, because the average surface  
2 irregularity is not over 180 feet.  
3 MR. GROSSMAN: That assumes that he was suggesting  
4 a z0 value of two meters as opposed to suggesting a general  
5 diagram of what the different lengths of z0 would result in,  
6 which is what he's testified to now, because he does have --  
7 one of the z0 values on his chart on page 4 of Exhibit 581  
8 is z0 equals 0.1 meters. So it's not, they're not all --  
9 his only reference is not to a z0 of two meters.  
10 MR. GOECKE: Okay. We'll move along.  
11 MR. GROSSMAN: Okay.  
12 BY MR. GOECKE:  
13 Q Dr. Cole, when you testified before, you predicted  
14 that the 98th percentile for one-hour NO2 concentrations  
15 near the gas station, the highest level would be 287  
16 micrograms per cubic meter. Do you stand by that testimony?  
17 A I'm not sure what testimony you're referring to.  
18 You'd have to show me exactly where that was.  
19 Q Do you have an opinion about what the 98th  
20 percentile one-hour NO2 heights level would be near the gas  
21 station?  
22 A What I said last time was that there is a distinct  
23 possibility or probability that it could exceed the  
24 standard. I'll stand by that. What I said last time was  
25 there's a distinct possibility that the gas station at peak

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1 periods could result in concentrations that were above the  
2 one-hour NO2 standard. So it was a, not a definitive  
3 answer. It was not a numerical answer. It was a statement  
4 of distinct possibility, which I will stand behind. If  
5 you're talking about --  
6 Q And so you don't have a specific number that  
7 you're, that you're estimating --  
8 A No.  
9 Q -- or modeling or calculating?  
10 A The 287, if you're referencing something specific,  
11 I don't know what it is.  
12 Q Okay.  
13 MR. GOECKE: Can we take a short break,  
14 Mr. Grossman? I think I'm almost done.  
15 MR. GROSSMAN: Okay. We'll break until 12:00  
16 noon. I have good news for you, Mr. Silverman. They have  
17 chicken livers for lunch.  
18 MR. SILVERMAN: Oh, no.  
19 (Whereupon, at 11:58 a.m., a brief recess was  
20 taken.)  
21 MR. GROSSMAN: Let's go back on the record then.  
22 Mr. Goecke, the floor is yours.  
23 MR. GOECKE: Thank you.  
24 MR. GROSSMAN: By the way, are we going to be  
25 making any more use of Exhibit 609?

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1 MR. GOECKE: No.  
2 MR. GROSSMAN: Okay.  
3 MR. GOECKE: No.  
4 MR. GROSSMAN: All right. So let's return to that  
5 objection issue. Do you still retain that objection given  
6 the limited --  
7 MS. CORDRY: Well, I suppose, reading it for those  
8 three sentences, which, as Dr. Cole has indicated, are  
9 somewhat of a truism, as qualified, if that's what they had  
10 to put this whole exhibit in for, then fine, I don't object  
11 to those three sentences.  
12 MR. GROSSMAN: All right. Anybody else have any  
13 objection at this point for me to rule on, or are we just --  
14 no.  
15 MR. SILVERMAN: Just so that --  
16 MS. CORDRY: As long as it's admitted only for the  
17 purpose of those sentences.  
18 MR. SILVERMAN: Those three sentences.  
19 MR. GROSSMAN: I presume that's correct. It was a  
20 cross-examination exhibit. Is that correct, Mr. Goecke?  
21 We're only -- your only reason for marking Exhibit 609 was  
22 for that reference that you used already in  
23 cross-examination, those few sentences?  
24 MR. GOECKE: Yes.  
25 MR. GROSSMAN: Okay. And so I would say the same

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1 applies to 610, as that limited purpose of -- well, I'm not  
2 sure. All right. Let's leave 610 out there for a minute  
3 and see if that has any bearing on this, but -- so the  
4 objection essentially is, by the opposition, is withdrawn to  
5 609.  
6 MS. CORDRY: Well, it's withdrawn to the extent of  
7 the sentences that were read into the record --  
8 MR. GROSSMAN: Right.  
9 MS. CORDRY: -- period.  
10 MR. GROSSMAN: And that's the only purpose for  
11 which they're seeking to use it.  
12 MS. CORDRY: Yes, I understand.  
13 MR. GROSSMAN: Right.  
14 MS. CORDRY: I understand. I just want to be  
15 clear that we are not agreeing to the admission of the  
16 exhibit as a whole.  
17 MR. GROSSMAN: Well, I wasn't going to just use  
18 this exhibit as my entire report and just --  
19 MS. CORDRY: Well, that would be good, although --  
20 might not be entirely bad in some respects, but that's okay.  
21 MR. GROSSMAN: All right. All right.  
22 BY MR. GOECKE:  
23 Q I'm handing you a copy of Exhibit 593. It's  
24 already been marked.  
25 MR. GOECKE: Would you like another copy?

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1 MR. GROSSMAN: I'm not sure what it is off the top  
2 of my head.  
3 MR. GOECKE: The 2013 --  
4 MR. GROSSMAN: Oh, okay. Yes.  
5 MR. GOECKE: Do you guys need copies?  
6 MS. ROSENFELD: Yes, please.  
7 BY MR. GOECKE:  
8 Q So it's your testimony, Dr. Cole, that you say you  
9 stand by today that the gas station is likely to exceed the  
10 EPA National Ambient Air Quality Standard for one-hour NO2  
11 concentrations, correct?  
12 A I said it was a distinct possibility.  
13 Q And when did you form this conclusion?  
14 A When did I form that conclusion?  
15 Q Yes.  
16 A By looking at successive -- particularly by  
17 looking at those reports that were done following the  
18 correction of the conversion error that was made in  
19 converting ppb to -- ppb to micrograms per cubic meter.  
20 Q Yes.  
21 A So that would have been looking at the evidence  
22 that came in in the August report and then looking at  
23 further evidence in the February rebuttal report.  
24 Q Looking at the information included on Exhibit  
25 593, are you familiar with the data shown here? In other

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1 words, have you looked at the EPA website, showing this  
2 information?  
3 A Yes, I have.  
4 Q And did you look at that before you reached your  
5 conclusion that the gas station is likely to exceed the  
6 one-hour NO2 standard?  
7 MR. GROSSMAN: He said distinct possibility. He  
8 didn't say likely.  
9 BY MR. GOECKE:  
10 Q A distinct possibility.  
11 A I'm sorry. Could you repeat your question --  
12 Q Sure.  
13 A -- your first question?  
14 Q Sure. In terms of your conclusion that the gas  
15 station has a distinct possibility of exceeding the one-hour  
16 NO2 standards, when you made that determination, had you  
17 reviewed the EPA data from the monitoring sites throughout  
18 the country?  
19 A I don't recall the exact sequence, but I will say  
20 that nothing in this data precludes my statement.  
21 Q Had you reviewed --  
22 A In my opinion, the applicant has not shown that  
23 the gas station, if built, would not, would not cause or  
24 contribute a violation of the one-hour NO2 standard.  
25 MR. GROSSMAN: And when you talk about a violation

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1 of it, you're actually talking about the 100-parts-per-  
2 billion standard, not the, we'll call it the Breyse/Cordry  
3 opinion that, that the EPA standard is actually, area-wide  
4 standard, is actually 50 to 85 parts per billion for NO2  
5 one-hour? You're talking about the actual NAAQS written-out  
6 100-parts-per-billion standard, is that correct?  
7 THE WITNESS: I'm talking about the standard and  
8 the language in the various guidance which repeatedly uses  
9 the term that an applicant must demonstrate that a proposed  
10 facility will not cause --  
11 MR. GROSSMAN: I'm just addressing the number.  
12 THE WITNESS: -- or contribute to the exceedance  
13 of a standard.  
14 MR. GROSSMAN: Right, but I'm just -- my question  
15 just addresses, which are you referring to as the standard,  
16 because Dr. Breyse and Ms. Cordry have put forward a  
17 postulate that you did not accept the last time, that the  
18 EPA area-wide standard for NO2 one-hour is somewhere between  
19 50 and 85 parts per billion, even though the actual NAAQS  
20 written-out standard is 100 parts per billion, but you did  
21 not accept that --  
22 THE WITNESS: No, I --  
23 MR. GROSSMAN: -- so I just want to make sure I  
24 understand which you're saying will be exceeded or may be  
25 exceeded.

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1 MS. ROSENFELD: Mr. Grossman --  
2 THE WITNESS: I am not an attorney.  
3 MR. GROSSMAN: Yes.  
4 MS. ROSENFELD: Yes. If I may, I think he said he  
5 didn't have an opinion on that. I don't think he said he  
6 didn't accept it.  
7 MR. GROSSMAN: No. I think he -- I don't agree  
8 with that. That's not my recollection, but let's find out  
9 now. He said, if I recall, he said he was afraid he was  
10 going to be asked that question and he did not accept that  
11 as a, as the standard.  
12 MS. ROSENFELD: Okay.  
13 MR. GROSSMAN: That's my recollection.  
14 THE WITNESS: All right. I am going to state for  
15 the record that I believe that is a legal question that I  
16 feel is -- what I, what I testified to and what I'll testify  
17 to clarify now is that when I look at these documents, what  
18 I'm looking for is whether or not any of the receptors that  
19 are modeled, or that, that it's likely that the air quality  
20 will exceed --  
21 MR. GROSSMAN: What?  
22 THE WITNESS: -- 100 parts per billion.  
23 MR. GROSSMAN: Right. That was my question.  
24 Okay.  
25 THE WITNESS: Okay. That is what I'm looking at.

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1 The other question is beyond, I'm going to just say, it's  
2 beyond my expertise.  
3 MR. GROSSMAN: Okay.  
4 THE WITNESS: I think, I'm just -- you got a  
5 proposed gas station. You got methods being used.  
6 MR. GROSSMAN: Well, when you say beyond your  
7 expertise, I'm not asking you --  
8 THE WITNESS: Because it's a legal --  
9 MR. GROSSMAN: -- I'm not asking you for health  
10 impacts. I'm just asking for the way that, based on your  
11 expertise, would the EPA, how it applies its standards. And  
12 if I understood your testimony, you considered the EPA  
13 standard for one-hour NO2 to be the 100-parts-per-billion  
14 standard, is that correct?  
15 THE WITNESS: For the purposes of this analysis.  
16 Now, others may argue --  
17 MR. GROSSMAN: I'm asking you what your opinion  
18 is.  
19 THE WITNESS: All right. What I'm saying is that  
20 I'm doing the analysis, looking for the potential for  
21 exceedances of 100 parts per billion.  
22 MR. GROSSMAN: Right. Okay.  
23 THE WITNESS: Now, it could be -- I'm going to  
24 qualify this a little bit to say that it's possible that if  
25 one place is 100, that doesn't exclude the possibility of

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1 health effects occurring at lower levels.  
2 MR. GROSSMAN: Well, you're not an expert in  
3 health effects.  
4 THE WITNESS: I know.  
5 MR. GROSSMAN: So I'm not asking you that  
6 question. I didn't ask you that question. See, you didn't  
7 have to -- you don't have to add that qualifier. I'm just  
8 asking you what you're applying -- what's your understanding  
9 of the way EPA applies its standards. That's all I'm asking  
10 you about, because that's your area of expertise.  
11 THE WITNESS: Correct. My area of expertise is to  
12 look at the modeling, to look at the meteorology, to look at  
13 the emissions --  
14 MR. GROSSMAN: Right.  
15 THE WITNESS: -- to look at the way the modeling  
16 is done, all of the assumptions, to look at the guidance and  
17 see if it's done according to the guidance, and to say,  
18 well, either yea or nay, you didn't follow the guidance, you  
19 did follow the guidance. And I said there's a distinct  
20 possibility that somewhere, that this gas station either  
21 causes or contributes to the exceedance of 100 parts per  
22 billion, period. That's it.  
23 MR. GROSSMAN: And I'm asking you, is that the way  
24 the EPA applies its standards? They look at the -- in your  
25 expert opinion, are they looking at the 100-parts-per-

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1 billion as the standard here --  
2 THE WITNESS: This is --  
3 MR. GROSSMAN: -- for NO2 one-hour?  
4 THE WITNESS: In my opinion, when they do these --  
5 when they look at applications, they're looking at 100 parts  
6 per billion.  
7 MR. GROSSMAN: Okay. All right. And to ease your  
8 mind, Opposition, I'm not saying that I think that that's  
9 absolutely the standard that applies in this case --  
10 MS. CORDRY: Well --  
11 MR. GROSSMAN: -- I am saying I want to understand  
12 what this witness is saying about what I'll call the  
13 Breyse/Cordry doctrine here --  
14 MS. CORDRY: I am --  
15 MR. GROSSMAN: -- which I understand, it's your  
16 statement based on the EPA administrator's statement in -- I  
17 recall the testimony very well.  
18 MS. CORDRY: I understand. I understand.  
19 MR. GROSSMAN: I understand. So don't, you don't  
20 have to get all --  
21 MS. CORDRY: Our position has always been it's the  
22 peak anywhere in the area, whether the gas station is the  
23 peak or not. So --  
24 MR. GROSSMAN: I understand. Believe me, I  
25 remember the testimony quite well, and I just want to make

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1 sure I understand this witness's position on it, and I  
2 understand that now also. Go ahead.  
3 MR. GOECKE: Thank you.  
4 BY MR. GOECKE:  
5 Q And, Dr. Cole, your opinion that --  
6 A I want to -- wait. Before -- excuse me.  
7 MR. GROSSMAN: There's no question pending now.  
8 We've had enough on that.  
9 BY MR. GOECKE:  
10 Q Your opinion that there is a distinct possibility  
11 of exceedances is not based on any actual modeling that you  
12 conducted, correct?  
13 A Correct.  
14 Q And Mr. Sullivan provided you with the input data  
15 that he relied on in his AERMOD analysis, correct?  
16 A Correct.  
17 Q And he also provided you with the AERMOD software,  
18 correct?  
19 A The AERMOD software?  
20 Q Yes.  
21 A The AERMOD software?  
22 Q Yes.  
23 A I'm not sure. I didn't see that, but it's readily  
24 available, whether he had --  
25 Q You weren't aware that it was provided to you in

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1 his data disks --  
2 A The software? I didn't see it.  
3 Q -- so that you could run the AERMOD program?  
4 A I didn't see that.  
5 Q Okay. But as you testified, it is readily  
6 available?  
7 A Right.  
8 Q It's available for free, in fact?  
9 A Yeah.  
10 Q You can download it from EPA's website?  
11 A Yeah, absolutely.  
12 Q So, you could have taken the inputs that  
13 Mr. Sullivan provided you and ran the modeling yourself?  
14 A Yes, if I agreed with the inputs, which I don't.  
15 Q And you could have changed the inputs if you  
16 disagreed with them?  
17 A I'm not the applicant.  
18 Q You could have changed --  
19 A I am not the applicant. It is --  
20 Q I understand that, but --  
21 A -- the burden of proof is not on me.  
22 MR. GROSSMAN: No, no, you're not, but you're  
23 not --  
24 BY MR. GOECKE:  
25 Q Thanks for your legal opinion.

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1 MR. GROSSMAN: -- you are not here to give a legal  
2 opinion on who has the burden of proof. That's not your  
3 question that he's posing to you.  
4 THE WITNESS: I didn't do the modeling.  
5 BY MR. GOECKE:  
6 Q That's not my question. My question is, you could  
7 have changed the inputs if you wanted to?  
8 A Yes, if I could run -- I could have used different  
9 backgrounds. I could have used -- I could have perhaps done  
10 an uncertainty analysis, which I don't think was done by the  
11 applicant. I could have done a lot of things. You have to  
12 understand, my both time and resources --  
13 MR. GROSSMAN: Well, I don't think we have to get  
14 into that. You've answered the question.  
15 MR. GOECKE: He's answered the question. He  
16 hasn't done those things. No further questions.  
17 THE WITNESS: No.  
18 MR. GROSSMAN: Okay. Any redirect?  
19 MS. ROSENFELD: There is. Could we take a lunch  
20 break now, and --  
21 MS. CORDRY: I think we can focus it tightly.  
22 MS. ROSENFELD: -- I think we can, I think we can  
23 pull some stuff out that we expected we might otherwise --  
24 MR. GROSSMAN: You're just looking out for those  
25 chicken livers for Mr. Silverman --

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1 MR. SILVERMAN: There you go.  
2 MR. GROSSMAN: -- I can tell.  
3 MS. ROSENFELD: That's right. I have  
4 Mr. Silverman's interest in mind here.  
5 MR. SILVERMAN: Always.  
6 MR. GROSSMAN: All right. I don't see why not.  
7 If it'll save some time, certainly so. It's -- well, that  
8 clock is a little bit wrong. It's actually 12:25 now, more  
9 or less. So we'll come back at 1:15.  
10 MR. GOECKE: Okay. Thank you.  
11 (Whereupon, at 12:25 p.m., a luncheon recess was  
12 taken.)  
13 MR. GROSSMAN: We're back on the record. Any  
14 redirect?  
15 MS. ROSENFELD: Yes, there is.  
16 SURREBUTTAL REDIRECT EXAMINATION  
17 BY MS. ROSENFELD:  
18 Q Dr. Cole, Mr. Goecke asked you questions about  
19 your selection of the First Street monitor as the background  
20 monitor that you would recommend have been chosen and also  
21 questioned, in part, why you hadn't raised that issue in  
22 December, in your December testimony. Is there a reason, in  
23 your mind, why you didn't raise it at that point in time?  
24 A Well, it became particularly critical when --  
25 after the rebuttal report was released, because that used

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1 the ozone limiting method. So it became particularly  
2 critical with regard to the NO2 issue, which, of course, is  
3 the purpose of the OLM.  
4 MR. GROSSMAN: While you're on the topic, did we  
5 ever figure out what the exhibit number was for the  
6 protocol?  
7 MS. HARRIS: I had asked my assistant to check.  
8 She does not see protocol in the exhibit list at all. So I  
9 don't know if it has a secret name, that we weren't able to  
10 easily identify it.  
11 MR. GROSSMAN: Does anybody recall if the protocol  
12 was --  
13 MR. GOECKE: It may not be an exhibit.  
14 MR. GROSSMAN: -- I know it's been referenced by,  
15 a number of times.  
16 MS. ROSENFELD: I don't think it was ever entered.  
17 MS. CORDRY: Yes, I don't know that it was. I  
18 think we have talked about it different times and pieces of  
19 it have shown up in other reports, but I'm not sure the  
20 entire document has been put in.  
21 MR. GROSSMAN: How big is the document, because I  
22 don't think I've ever -- I don't recall seeing it.  
23 MR. BRANN: Forty, 50 pages maybe, something like  
24 that.  
25 MS. CORDRY: Let me see if I have it. At

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1 different times I have brought it with me but may not have  
2 brought it today, but --  
3 MR. GROSSMAN: What do the parties feel about  
4 having that protocol in the record?  
5 MR. SILVERMAN: I think we've heard about it.  
6 MR. GROSSMAN: Pardon me?  
7 MR. SILVERMAN: I think we've heard all there is  
8 to hear. I don't think that it's going to show anything  
9 new.  
10 MR. GROSSMAN: Mr. Goecke.  
11 MR. GOECKE: I think it should be admitted as an  
12 exhibit. We've talked about it a lot.  
13 MR. GROSSMAN: That's true. I'd lean in that  
14 direction as well, and everybody's known about it all along;  
15 so it's no surprise to anybody.  
16 MR. GOECKE: Right.  
17 MS. CORDRY: I have about three pages from the  
18 original version, and that looks like all I have of it at  
19 the moment.  
20 MR. GROSSMAN: Okay.  
21 MR. GOECKE: We can submit a copy to you.  
22 MR. GROSSMAN: Okay. Thank you. Just, you can  
23 e-mail if it's short enough, or not, transfer big files and  
24 then, you know, copy to the other side, and we can --  
25 MR. GOECKE: Sure.

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1 MS. CORDRY: Yes. I mean, we may also want to  
2 consider having the original one come in, and Dr. Cole's  
3 response to it. We'll -- I think we should discuss that  
4 with him off the record because there was an original  
5 version, there were a number of changes made, there were --  
6 some of them were in response to what Dr. Cole said, some  
7 not, and so forth. So --  
8 MR. GROSSMAN: All right. I mean, I don't want to  
9 get too stuck in the weeds here as to that, just that it's  
10 to explain what the references are to whether or not it was  
11 agreed to in the protocol, the monitor location for the NO2.  
12 I guess it's -- at least what's in my mind now as a  
13 reference to it. I don't know if there's anything else  
14 that's an issue, but -- so I think what's really critical is  
15 what was the final document submitted, I suppose, as the  
16 protocol, but okay. I'm sorry, Ms. Rosenfeld.  
17 MS. ROSENFELD: No, that's quite all right.  
18 BY MS. ROSENFELD:  
19 Q Dr. Cole, going back to the four criteria that you  
20 had come up with for purposes of selecting the most, what in  
21 your opinion is the most appropriate background monitor, one  
22 of those criteria, you testified it was important that  
23 monitoring be available for both NO2 and ozone at the same  
24 site. Would that have been a factor that would have been  
25 important to your testimony in December of 2013?

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1 A No, because back then they were -- they hadn't  
2 used the ozone limiting method.  
3 Q And I would have the same question for the  
4 criteria that relates to having ozone monitoring year-round.  
5 Would that have been an important --  
6 A I'm sorry. If you could repeat that?  
7 Q Another factor that you considered was whether or  
8 not the monitor would have ozone monitoring year-round.  
9 Would that have been an important factor in December of 2013  
10 when you testified?  
11 A No, because the ozone limiting method was not  
12 being used.  
13 Q Okay.  
14 MR. GOECKE: And if I could interrupt. He was  
15 going to -- I believe Dr. Cole was going to check at a break  
16 whether or not the Beltsville site had year-round monitoring  
17 or not. He wasn't sure before. I don't know if he's had a  
18 chance to do that.  
19 MR. GROSSMAN: Have you had a chance to --  
20 MS. ROSENFELD: And that was my next question.  
21 MR. GROSSMAN: Ah, okay. He jumped the gun.  
22 BY MS. ROSENFELD:  
23 Q Did you have a chance to go back, and could you go  
24 through the monitors?  
25 A Yes. It has the, it has the full-year monitoring,

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1 but I consider that to be non-representative because it's  
2 got a lot of rural area around it.  
3 Q And with respect to Beltsville, how --  
4 MS. CORDRY: That was Beltsville, I think.  
5 MR. GROSSMAN: That was Beltsville.  
6 BY MS. ROSENFELD:  
7 Q I'm sorry, Beltsville. With respect to Rockville,  
8 how did you classify that one?  
9 A Well, that doesn't have NO2. It's rural as well.  
10 MR. GROSSMAN: Wait a minute. Rockville doesn't  
11 have NO2 monitoring at all, NO2 one-hour monitoring?  
12 THE WITNESS: No NO2 at Rockville.  
13 MR. GROSSMAN: Okay.  
14 BY MS. ROSENFELD:  
15 Q And, again, what was your view with respect to the  
16 Arlington monitor?  
17 A It only has part year for ozone.  
18 Q And how about its proximity?  
19 A It's located more than 12 miles away, and it's on  
20 the opposite side of the metropolitan area.  
21 Q And is there a reason -- I believe you had  
22 testified that it was important for monitoring for NO2 and  
23 ozone to come from the same monitoring location. Why, in  
24 your opinion, is that important?  
25 A Right, because what's, what's important is the

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1 mixture of those two things in the background air because  
2 that will affect the chemistry. So if you have things on  
3 the opposite side of the metropolitan area, for example,  
4 with a certain wind direction, you may have very different  
5 NO2 concentrations and ozone concentrations at a site  
6 located where the Wheaton Mall is.  
7 MR. GROSSMAN: Excuse me, Dr. Cole.  
8 THE WITNESS: Yeah.  
9 MR. GROSSMAN: Could you take your jacket off that  
10 chair for me, please? It's just distracting to my point of  
11 view. Thank you. You can put it on the other chair, if you  
12 want.  
13 THE WITNESS: You didn't want to borrow it?  
14 MR. GROSSMAN: I don't think it'll fit. Thank  
15 you.  
16 BY MS. ROSENFELD:  
17 Q We have spent a great deal of time talking about  
18 various dispersion effects and how that has implications for  
19 the mixing of the ozone and NO. Does EPA guidance factor in  
20 time or distance when computing that mixing under the ozone  
21 limiting method?  
22 A Well, Mr. Sullivan chose to use the ozone limiting  
23 method, and the ozone limiting method doesn't get into that.  
24 It just simply assumes that all of the, all of the ozone is  
25 available for conversion without any delay time or lag time.

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1 So if you're following that guidance for the OLM, there's no  
2 consideration of lag time between the emission and the  
3 mixing to the molecular level.  
4 Q And does that apply, as well, with respect to  
5 assuming no ozone within the tailpipe box that Mr. Sullivan  
6 identified?  
7 A Well, that's another departure from guidance, that  
8 close-in box which extends about 130 feet in all directions  
9 from the queue and the loading dock, and they assumed that  
10 there was no ozone reaction within that box and that's a  
11 departure from, from EPA's guidance on the ozone limiting  
12 method.  
13 Q And you testified that EPA guidance assumes  
14 instantaneous conversion under the ozone limiting method.  
15 Is there other -- are there other methodologies available if  
16 you were to --  
17 A Well, yeah.  
18 Q -- factor in dispersion?  
19 A I want to get these initials right. There's a  
20 model called the P, I always get the -- it's the plume  
21 molecular volume method. I'm trying to get the -- it's the  
22 PVMRM, plume volume molecular rate model, or something like  
23 that, and that, that does consider -- it gives you some  
24 information about the rate of mixing down to the molecular  
25 level, but Mr. Sullivan chose not to use that.

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1 Q And there has been a good bit of discussion about  
2 dispersion analysis. Is there a reason why you've spent  
3 time discussing that?  
4 A With regard to the ozone limiting?  
5 Q Yes.  
6 A The reason was that Mr. Sullivan, in his rebuttal  
7 report, presented information suggesting that it would take  
8 a very long time and a very long distance for the ozone and  
9 NO to mix at the molecular level but that's not covered at  
10 all in the ozone limiting method. The reason I commented on  
11 that was that the studies which -- upon which he drew those  
12 conclusions were for power plant plumes and do not apply to  
13 ground-level sources, where there's a lot more turbulent  
14 mixing at the scale that would disperse tailpipe emissions  
15 into the air.  
16 Q So do I understand your testimony correctly that  
17 regardless of whether that factor, the time factor for  
18 mixing and the distance factor for mixing, regardless of  
19 whether or not it's properly applied, it's not an  
20 application of the ozone limiting method itself?  
21 A No, it's not part of the guidance.  
22 Q You testified that in your opinion there's a  
23 distinct possibility that there would be an exceedance of  
24 the 100-parts-per-billion NO2 one-hour standard. Can you  
25 summarize the factors that support your conclusion in that

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1 regard?  
2 MR. GOECKE: Objection. Asked and answered. He's  
3 been over this.  
4 MR. GROSSMAN: I'm going to overrule it.  
5 THE WITNESS: Okay. First of all is the choice of  
6 background site. As I've testified earlier, had they used  
7 the closer First Street site, the values would have been  
8 about 10 micrograms per cubic meter higher.  
9 Secondly, they used this paired matching,  
10 hour-by-hour matching, and the values they were getting, I  
11 believe in Figure 2 of their rebuttal report, Figure 2 shows  
12 a background concentration in the range of 60 to 70. Had  
13 you used the 98th percentile value from, for example, from,  
14 from the First Street station, you would have had a number  
15 that was somewhere between, around 100, 90 to 100, somewhere  
16 in that ballpark.  
17 So right away you can see, just by looking at  
18 background and moving away from EPA's more conservative OLM  
19 and getting into this paired matching -- which EPA cautions  
20 against without a great deal of demonstration that it's  
21 appropriate, and I've testified that in my professional  
22 judgment this was not an isolated site and didn't, did not  
23 meet the criteria for hour-by-hour matching -- so if you  
24 take the background alone, were dealing with an addition of  
25 another 10 or maybe 15 or 20 parts per billion, which gets

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1 you up from their maximum value of about, I believe it's  
2 almost 160 or 157 of what they're showing in their Phase II,  
3 I mean, their Stage II.  
4 Then I find it unbelievable that they actually  
5 used a down-scale factor in their Stage II and Stage III to  
6 get from MOBILE6 to MOVES based on one study, a  
7 non-published paper. And I have described previously, and  
8 in the handouts today I've shown additional information from  
9 the Texas DEQ. Let's see. This was in today's -- the slide  
10 number is -- all right. If we look at Slide No. 11 --  
11 BY MS. ROSENFELD:  
12 Q Dr. Cole, you're reviewing from your notes. We  
13 haven't handed anything out today.  
14 A Oh, we haven't handed this out?  
15 Q No.  
16 A I thought we did.  
17 Q I can hand out a copy of the slide you're  
18 referencing.  
19 MR. GROSSMAN: Is that in his original package?  
20 In --  
21 MS. ROSENFELD: No. No.  
22 MS. ADELMAN: Is this 603?  
23 MS. ROSENFELD: No.  
24 MS. ADELMAN: No?  
25 MS. ROSENFELD: No.

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1 BY MS. ROSENFELD:  
2 Q Dr. Cole, did you do some additional research on  
3 MOVES versus MOBILE6 --  
4 A I did, yes.  
5 Q -- and the scale-up factor after your  
6 cross-examination of last time?  
7 A Yes, I did.  
8 Q What did you learn?  
9 A Well, the last time I testified, there was a study  
10 from the North Central Texas COG --  
11 MR. GOECKE: Mr. Grossman, I would object. This  
12 goes beyond the scope of cross-examination. I didn't ask  
13 him any questions about MOVES or MOBILE6.  
14 MR. GROSSMAN: I'm trying to remember whether last  
15 time you did, I mean, if it was part of your  
16 cross-examination. Not today you did not, but --  
17 MS. CORDRY: It's all on cross.  
18 MS. ROSENFELD: There was extensive  
19 cross-examination on the Texas COG report.  
20 MR. GROSSMAN: There certainly was. I mean, there  
21 certainly was discussion, a lot of discussion about that  
22 Texas COG report.  
23 MR. GOECKE: The PowerPoint presentation. It  
24 wasn't -- we didn't have the actual report. Well,  
25 Mr. Sullivan had a copy of it, but --

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1 MR. GROSSMAN: I'm trying to remember. Of course,  
2 we don't have a transcript of that.  
3 MR. GOECKE: Right.  
4 MS. HARRIS: Yes, we didn't have the report. It  
5 was just --  
6 MR. BRANN: It wasn't a report.  
7 MS. CORDRY: Well --  
8 MS. HARRIS: -- the PowerPoint that was mistaken  
9 for the report, and then I thought there was a conversation  
10 about getting the report in, which --  
11 MS. CORDRY: Okay.  
12 MS. HARRIS: -- never was submitted.  
13 MR. BRANN: It wasn't a report. The --  
14 MR. GOECKE: That's right.  
15 MR. BRANN: -- authors never created a report.  
16 MS. CORDRY: Okay.  
17 MS. ADELMAN: Well, is this not 603?  
18 MR. GROSSMAN: I'm going to err on the side of  
19 letting more in --  
20 MS. CORDRY: Right.  
21 MR. GROSSMAN: -- rather than less in here. So --  
22 MS. CORDRY: Right.  
23 MR. GROSSMAN: -- yes, it may be beyond the scope  
24 of your cross, but I'm going to let them go into it. I  
25 just --

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1 MS. CORDRY: Yes. Right.  
2 MS. ADELMAN: Do you think it's 603?  
3 MR. GOECKE: Yes.  
4 MS. CORDRY: Is that the COG report?  
5 MS. ADELMAN: It's the COG report, yes.  
6 MS. CORDRY: Okay. Then that --  
7 MR. GROSSMAN: Yes.  
8 MS. CORDRY: -- then that exhibit is in. Okay.  
9 MR. GROSSMAN: Right.  
10 THE WITNESS: Is that the slides or the COG  
11 report?  
12 MR. SILVERMAN: It's the COG report.  
13 MR. GROSSMAN: It's the COG. It's --  
14 MS. ROSENFELD: It's the slides.  
15 MR. GROSSMAN: -- Emission Inventories Development  
16 Using MOVES Model: A Dallas-Fort Worth, Texas, area case  
17 study by North Central Texas COG --  
18 MS. CORDRY: Right. And then what I think he's  
19 talking about now --  
20 MR. GROSSMAN: -- September of 2010.  
21 MS. CORDRY: -- is an additional study, similar to  
22 when Mr. Sullivan talked on the stand about additional  
23 studies that he had that were not in his report. So --  
24 MR. GROSSMAN: Well, in any event --  
25 MS. CORDRY: Right.

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1 MR. GROSSMAN: -- I overruled the objection to  
2 give you a little more leeway --  
3 MS. CORDRY: Okay. Okay.  
4 MR. GROSSMAN: -- because I cannot, I cannot  
5 recall if it's beyond, but even if it is a little bit beyond  
6 the scope of the cross, I'm going to let you do it.  
7 MR. GOECKE: Thank you.  
8 BY MS. ROSENFELD:  
9 Q And what did you learn?  
10 A Well, I found another study from Texas, this one  
11 from a Texas environmental quality agency, which was from  
12 the Houston-Galveston area, different from the Dallas-Fort  
13 Worth --  
14 MR. GOECKE: Well, I would object to this,  
15 Mr. Grossman. We haven't seen a copy of this report that  
16 he's referring to now.  
17 MS. CORDRY: Well, that's where I go back to,  
18 Mr. Sullivan referred to a number of studies on the stand  
19 that he had never provided to us, and at that point, it was  
20 like, an expert doesn't have to provide everything he relies  
21 on. So --  
22 MR. GOECKE: No, that's not true.  
23 MS. CORDRY: That is --  
24 MS. ROSENFELD: That is true.  
25 MR. GROSSMAN: Hold on one second, guys, one at --

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1 MS. CORDRY: -- that is exactly what was said  
2 about his reports.  
3 MR. GROSSMAN: -- one at a time. Yes --  
4 MS. CORDRY: We have copies of it here we can give  
5 to you.  
6 MR. GROSSMAN: -- it is true that an expert  
7 doesn't have to provide copies of everything he has relied  
8 on. I guess the question is, were the additional -- were  
9 the reports or studies that he relied on, were they  
10 referenced to you before in materials?  
11 MR. GOECKE: No.  
12 MR. GROSSMAN: I'm not talking about --  
13 MR. GOECKE: I'm sorry. No.  
14 MR. GROSSMAN: -- I'm talking about what  
15 Mr. Sullivan relied on.  
16 MS. CORDRY: He spoke, for instance, about a  
17 report by a Mr. Raynor or Dr. Raynor or something. That was  
18 not referenced in his prior reports, as far as I'm aware.  
19 It was not given to us before. It was just referenced on  
20 the stand. There were other references that were made to --  
21 MR. GROSSMAN: Toward text.  
22 MS. CORDRY: -- to other studies. There were  
23 other times -- he said, there are many more studies I've  
24 looked at that were not in his material, and kind of like,  
25 well, an expert doesn't have to put everything into his

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1 paper that he relies on. So I think --  
2 MR. GROSSMAN: Yes, I know. I'm just wondering if  
3 this -- I want to get back to the fairness --  
4 MS. CORDRY: Right.  
5 MR. GROSSMAN: -- issue if we're talking about  
6 additional research --  
7 MS. CORDRY: Right.  
8 MR. GROSSMAN: -- that was now done, and I just  
9 want to be fair to both sides here in terms of what we're  
10 talking about. So let's hear what it is, and then we'll  
11 decide whether or not it's something that should be  
12 excluded. So what are you talking about that you have  
13 found?  
14 THE WITNESS: Okay. I'm talking about a study of  
15 the Houston-Galveston area by the Texas air quality  
16 commission or council; no, it's -- DEQ. I'm sorry. Let me  
17 get this right.  
18 MR. SILVERMAN: It's a commission.  
19 THE WITNESS: Commission? And this time it was  
20 for the --  
21 MR. GROSSMAN: Well, let's identify it further,  
22 and when did you find this and --  
23 THE WITNESS: Okay. I actually came across this  
24 somewhat earlier and had forgotten about it, but it's  
25 parallel, it shows very similar results --

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1 MR. GROSSMAN: First, let's identify exactly what  
2 it is. You just --  
3 THE WITNESS: Okay. It's --  
4 MR. GROSSMAN: -- so now you've just identified  
5 it's from the Galveston area, but what is it?  
6 THE WITNESS: All right. Hold on now. I'm sorry.  
7 Pardon me for a second. I'm sorry.  
8 MR. GROSSMAN: While he's looking, how's your  
9 back, Mr. Sheveiko?  
10 MR. SHEVEIKO: (No audible response.)  
11 MR. GROSSMAN: That good, right? You've said  
12 enough --  
13 MR. SHEVEIKO: Thanks for asking.  
14 MR. GROSSMAN: -- nonverbal communication.  
15 MR. SHEVEIKO: Came here direct from my physical  
16 therapist.  
17 MR. GROSSMAN: Ah, okay.  
18 THE WITNESS: Okay. I'm looking at -- all right.  
19 The title of this is Texas Implementation of the Motor  
20 Vehicle Emission Simulator MOVES Model.  
21 MR. GROSSMAN: All right. Texas -- I see. Okay.  
22 Texas Implementation of the Motor Vehicle Emission -- oh,  
23 well, it's the MOVES model, okay, 9/29/10. Mr. Goecke, have  
24 you ever seen this before since a part of it has been handed  
25 out here?

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1 MR. GOECKE: No, we have not seen this document  
2 before.  
3 MR. GROSSMAN: Has this been referenced in  
4 anything before?  
5 MR. GOECKE: Not that I'm aware of.  
6 MS. CORDRY: Well, again I'd go back to --  
7 MR. GROSSMAN: Well, hold on a second. Hold on.  
8 MS. CORDRY: Okay.  
9 MR. GROSSMAN: I'm going to mark it as an exhibit  
10 subject to objection here, but I'm going to mark it as an  
11 exhibit so we have in the record what we're talking about.  
12 Exhibit 613 is pages 10, 9, I'm sorry, pages 9 -- it's very  
13 strange because the title appears to be on page 10 but then  
14 there's a page 9.  
15 MR. GOECKE: Right.  
16 MS. CORDRY: They just got copied in reverse  
17 order.  
18 MR. GROSSMAN: No, but they're numbered.  
19 MS. CORDRY: Right, I know. When we were putting  
20 it together, it got put in that order, but the actual title  
21 page is the one that's 10, and then it goes --  
22 MR. GOECKE: So these aren't the numbers, the page  
23 numbers for the exhibit; you numbered them?  
24 MS. CORDRY: These are the page numbers for -- we  
25 had put together a larger exhibit, which we decided not to

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1 put in. These are just -- those are page numbers from the  
2 larger exhibit that Mr. Cole, Dr. Cole had put together.  
3 MR. GROSSMAN: Texas Implementation.  
4 (Exhibit No. 613 was marked  
5 for identification.)  
6 MS. ROSENFELD: And page 9 is in the record.  
7 MS. CORDRY: Okay.  
8 THE WITNESS: Yes, page --  
9 MS. CORDRY: All right. So, actually, page 9 is  
10 actually from the prior document. I stand corrected.  
11 MR. GROSSMAN: Okay. From what prior document?  
12 MS. CORDRY: That was the --  
13 MS. ROSENFELD: That's the Texas COG --  
14 MS. ADELMAN: It's in 603.  
15 MR. GROSSMAN: Oh.  
16 MS. ROSENFELD: -- exhibit.  
17 MR. GROSSMAN: So you're saying page 9 is from the  
18 Texas COG.  
19 MS. CORDRY: Yes. Right.  
20 MS. ROSENFELD: As an excerpt from Exhibit --  
21 MR. GROSSMAN: An excerpt. The --  
22 MS. CORDRY: I was confusing my Texas, which I  
23 think Texas would never let me do.  
24 MR. GROSSMAN: And then page 11 -- so when was  
25 this put together?

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1 THE WITNESS: Which?  
2 MR. GROSSMAN: This exhibit that's, that we now  
3 have four pages of.  
4 MS. ROSENFELD: Dr. Cole was preparing a larger  
5 PowerPoint with the expectation that he would be showing it  
6 today. He was discouraged from introducing a lengthy new  
7 exhibit --  
8 MR. GROSSMAN: Right.  
9 MS. ROSENFELD: -- and this is an excerpt based on  
10 his research in follow-up to cross-examination questions the  
11 last time he was on the stand.  
12 MR. GROSSMAN: I mean, I'm even, I'm a little  
13 hinky about introducing an exhibit like this in the, during  
14 the redirect of a surrebuttal witness.  
15 MS. ROSENFELD: And I'm happy --  
16 MR. GROSSMAN: I mean, that's, that's --  
17 MS. CORDRY: I understand, but --  
18 MR. GROSSMAN: -- what creates a problem for me.  
19 It's a little bit different if you've got, when you've got  
20 the opportunity to introduce your responsive witness after  
21 it, but introducing a new, a new study that hasn't been  
22 mentioned before makes me concerned. Let's hear what it is  
23 that you're trying to bring out, and then we'll then  
24 entertain the objection --  
25 MS. CORDRY: Right.

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1 MS. ROSENFELD: I --  
2 MR. GROSSMAN: -- so we have the exhibit in the  
3 record here or, you know, marked in the record and then we  
4 can decide.  
5 BY MS. ROSENFELD:  
6 Q Dr. Cole, could you please explain why you think  
7 the information that you reviewed in the Texas  
8 Implementation Motor Vehicle Emission Simulator Model, dated  
9 September 2010, is important?  
10 A Because it reinforces the evidence I did put in  
11 the record, which is on page 9. Page 9 is for the  
12 Dallas-Fort Worth area, and page 11 in this exhibit from the  
13 Texas environmental quality commission gives further  
14 evidence to support the contention that MOVES, for  
15 light-duty -- and this is important because these last two  
16 pieces of evidence are specific, specifically break down the  
17 vehicle types -- so in the case of page 9, previously put  
18 into the record, you're looking at passenger cars, and you  
19 see that MOVES is approximately twice as high at this  
20 2.5-mile-per-hour speed than MOBILE6, and now looking at  
21 page 11, we see that the light-duty vehicles compares  
22 MOBILE6 and MOVES, and again, MOVES is substantially higher  
23 for the light-duty category for NX than is MOBILE6.  
24 So I wanted to put into the record, the reason for  
25 doing this is to put several reports, in addition to the

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1 Federal Highway Administration report by Claggett that I  
2 testified about in December, those are three studies which  
3 come to the opposite conclusion of the study that  
4 Mr. Sullivan quoted where he showed that -- he used that  
5 evidence from the, from the report, I'm going to pronounce  
6 it wrong, Ozguven, the Ozguven report. That study had the  
7 opposite finding in it, and he used it to apply a .7, what I  
8 call a scale-down factor, to multiply by emissions.  
9 MR. GROSSMAN: Right.  
10 THE WITNESS: So the point here is that, taking  
11 these three studies by government or quasi-government  
12 bodies, this evidence to me is more compelling than the  
13 evidence that Mr. Sullivan reported showing an opposite  
14 result, and he -- it's the first time in the rebuttal report  
15 that he used any correction factor.  
16 MR. GROSSMAN: I'm having a little difficulty  
17 determining, from looking at what you --  
18 THE WITNESS: Okay.  
19 MR. GROSSMAN: -- submitted here, as to whether or  
20 not these actually are two different things. They appear to  
21 be from the same conference, both of them from this 19th  
22 International Emission Inventory Conference in San Antonio  
23 on September 29, 2010, and how can I tell that what's on  
24 page 11 is actually not from the data you previously  
25 testified about?

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1 THE WITNESS: Because if you look at page 9, the  
2 study by Mr. Venugopal, if I'm saying that right, is based  
3 on the Dallas-Fort Worth study, whereas the study by Chris  
4 Kite here on page 11 of the, of the environmental, Texas  
5 environmental quality commission is for the  
6 Houston-Galveston area.  
7 MR. GROSSMAN: And where does it say that on this  
8 exhibit?  
9 THE WITNESS: That's a good question.  
10 MS. ROSENFELD: And, Mr. Grossman, looking at  
11 pages 10 and 11, you can see both of them have the same  
12 logo, the Texas Commission on Environmental Quality, TCEQ,  
13 in the upper left-hand corner of pages 10 and 11 --  
14 MR. GROSSMAN: Right.  
15 MS. ROSENFELD: -- and then if you look at the  
16 bottom right-hand corner of page 9, it says, North Central  
17 Texas Council of Governments. It's published by a  
18 different --  
19 MS. CORDRY: This was a --  
20 MS. ROSENFELD: -- different entity.  
21 MS. CORDRY: This was a conference. So there were  
22 a number of papers, apparently --  
23 MR. GROSSMAN: Right.  
24 MS. CORDRY: -- presented at the same time. I've  
25 actually got its little --

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1 THE WITNESS: Okay. Here's your answer.  
2 MR. GROSSMAN: Here's my answer?  
3 THE WITNESS: It's kind of cut off, but it says,  
4 HGB.  
5 MR. GROSSMAN: What page am I looking at?  
6 THE WITNESS: Page 11.  
7 MR. GROSSMAN: Page 11.  
8 THE WITNESS: I'm sorry. It got cut off there.  
9 It says, HGB, which is Houston-Galveston, a Spanish word  
10 with B, but it's the Houston-Galveston area, whereas the,  
11 page 9 is clearly the Dallas-Fort Worth, Texas, case. Now,  
12 we can provide the report, the September 29th report in  
13 full, which clearly shows that this is the Houston-Galveston  
14 study and whereas the page 9 -- they may have been at the  
15 same conference, but --  
16 MR. GROSSMAN: All right. Let me --  
17 THE WITNESS: -- probably were.  
18 MR. GROSSMAN: -- hear from Mr. Goecke now.  
19 MR. GOECKE: Sure. So we have several concerns in  
20 support of our objection. I mean, as Dr. Cole says, they  
21 could have provided it, but they didn't, and they obviously  
22 were contemplating relying on this as evidenced by the fact  
23 that they compiled a lot of other documents and numbered  
24 them. So they absolutely could have provided it to us  
25 earlier. They did not.

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1 On top of that, we don't have the full document;  
2 so we can't properly cross-examine him, even if we were  
3 allowed to by you today. In contrast, the Raynor report  
4 that Ms. Cordry was referring to, they were provided that.  
5 They had several days to review that, analyze it, and then  
6 cross-examine Mr. Sullivan. So this is --  
7 MS. CORDRY: Actually, we weren't ever provided  
8 it.  
9 MS. ROSENFELD: We haven't received it.  
10 MS. CORDRY: You said you could provide it, and we  
11 never got it and we never cross-examined on it. So -- it  
12 was never sent over.  
13 MS. ROSENFELD: No.  
14 MR. GOECKE: I think, I think we did, I think we  
15 did provide it to them.  
16 MS. CORDRY: No. I think you asked us to send  
17 you --  
18 MR. GROSSMAN: There seems to be a disagreement.  
19 MR. GOECKE: There is a --  
20 MS. CORDRY: I think you asked us to send you  
21 another list of what you had said you could do, and the  
22 Raynor report, I think, was mentioned but it was never sent  
23 over.  
24 MR. GROSSMAN: Did you have any other concerns  
25 that you --

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1 MR. GOECKE: Yes. You know, it's apples and  
2 oranges what they're comparing on these two documents. On  
3 page 9 it's the gasoline passenger vehicle; so it's gasoline  
4 passenger vehicles. On page 11 it's the aggregate vehicle  
5 category. That's a fleet mix. That includes both gas and  
6 diesel. So the references here are apples and oranges, as I  
7 said a moment ago.

8 To the extent they want to rely on the graph  
9 that's on page 9, as Dr. Cole said, that's already in the  
10 record. That was part of Exhibit 603, as Ms. Adelman points  
11 out. So they already have that portion into it. I just  
12 think it's prejudicial for us to have to respond to this at  
13 this time. Even if we could cross-examine him, we don't  
14 have the entire document, and we may want to then, you know,  
15 further cross-examine him on the Fujita article that's  
16 referenced here as well.

17 MR. GROSSMAN: All right. I'm going to get to the  
18 fairness thing in a second, but I do want to hear -- I  
19 hadn't noticed the aggregate category point before you  
20 mentioned it. So that's an interesting thing. Do you have  
21 a response to that, Ms. Rosenfeld? I mean, he's saying that  
22 this doesn't actually show what it's purporting to show, in  
23 any event, which is a light-duty non-diesel --

24 MS. ROSENFELD: That question is, I think, better  
25 directed at Dr. Cole.

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1 MR. GROSSMAN: All right. Dr. Cole.  
2 THE WITNESS: Okay. I will agree that it's not an  
3 exact comparison. It's not light-duty, couldn't involve  
4 light-duty trucks, for example, but I think that the fact  
5 that you've got such a wide difference between the MOVES,  
6 which is, in terms of grams per mile here, is 1.04 versus  
7 the light-duty, which is .66, it must be -- it's partially,  
8 at least, reflected by the large number of passenger cars  
9 that are on roadways.

10 MR. GROSSMAN: All right.  
11 THE WITNESS: So I would say it's not as good  
12 evidence as perhaps the one that's on the record, but in my  
13 judgment, it substantiates -- it helps to substantiate the  
14 other one.

15 MR. GROSSMAN: Okay.  
16 MR. SILVERMAN: And isn't that the crucial point?  
17 It's really not the documents. It's Dr. Cole's judgment.  
18 He said he -- he testified originally that the down-scaling  
19 was improper. We had documents about that, and now he  
20 reflected on it further, and he's doubling down on that  
21 point of view.

22 MR. GROSSMAN: He's doubling down, but the crucial  
23 point to me is the fairness issue, first of all, but also  
24 taking into account the fact that it's not really going to  
25 add much in terms of the specific issue we were addressing.

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1 I see little harm to excluding it, and I see potential  
2 prejudice including it at this stage, this late stage in the  
3 proceeding.

4 So I'm going to exclude this. It's marked as an  
5 exhibit, but I'm writing down to it, not admitted. I don't  
6 think it's going to really add to the evidence anyway given  
7 the fact that it's an aggregate and we have the two  
8 conflicting studies we already talked about. I think that's  
9 sufficient to highlight the point, and there's no reason to  
10 potentially do something unfair to the applicant here. So  
11 I'm going to exclude it.

12 MR. GOECKE: Thank you.  
13 MR. GROSSMAN: Okay.  
14 THE WITNESS: I would comment on the Fujita --  
15 MR. GROSSMAN: No, we're not, we're not -- we  
16 don't have to get into Fujita until it's, until it's, it  
17 comes up, if it comes up.

18 BY MS. ROSENFELD:  
19 Q Dr. Cole, you said you, you, your opinion was  
20 respect to the, whether or not the gas station would  
21 contribute, would cause or contribute to National Ambient  
22 Air Quality exceedances in the area. Would you consider the  
23 major roadways around the mall to be part of the area to be  
24 considered in that analysis?  
25 A Yes, I would.

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1 MR. GROSSMAN: I'm sorry. Can you repeat that  
2 question? I didn't quite follow that. Say that again.  
3 MS. ROSENFELD: Dr. Cole's been expressing his  
4 opinion as to whether or not the gas station would cause or  
5 contribute to exceedances of the National Ambient Air  
6 Quality.  
7 MR. GROSSMAN: Okay.  
8 BY MS. ROSENFELD:  
9 Q And my question is, do you consider the major  
10 roadways around the mall to be part of the area considered  
11 in this analysis?  
12 MR. GROSSMAN: And how far out are you defining  
13 your question to go, because -- are you going outside of the  
14 defined neighborhood here when you say the roadways?  
15 MS. ROSENFELD: The roadways including Veirs Mill  
16 Road, Georgia Avenue, and what's the other one?  
17 MS. ADELMAN: University Boulevard.  
18 MS. ROSENFELD: University Boulevard.  
19 MR. GROSSMAN: I have to go back and look to  
20 refresh my recollection as to whether or not they were,  
21 those roadways were defined in, the ones that are  
22 immediately adjacent to the --  
23 MS. ROSENFELD: And that's, that --  
24 MR. GROSSMAN: -- to the -- do you recall off the  
25 top of --

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1 MS. CORDRY: But I think we're talking about the  
2 EPA analysis of an exceedance, not necessarily,  
3 specifically, the different question of what is the  
4 neighborhood for the special exception process.  
5 MR. GROSSMAN: No, but for --  
6 MS. CORDRY: Well --  
7 MR. GROSSMAN: -- my mind, I just want to know,  
8 first of all, if we're talking about something outside  
9 the --  
10 MS. CORDRY: Well, I think --  
11 MR. GROSSMAN: -- the defined neighborhood.  
12 MS. CORDRY: I think we --  
13 MR. GROSSMAN: If you can find it there,  
14 Ms. Harris.  
15 MS. HARRIS: Good luck, right?  
16 MS. CORDRY: I'm not sure whether --  
17 MR. GROSSMAN: I can go back to the original staff  
18 report. I just can't recall whether the immediately  
19 adjacent ones --  
20 MS. HARRIS: It looks like the boundary is drawn  
21 inborn of --  
22 MS. CORDRY: Yes, I'm not sure we were trying --  
23 since nobody was living in there, I don't think, in that  
24 sense, we were trying to define that, but --  
25 MR. GROSSMAN: I mean, it might have been -- the

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1 defined boundary might have been at the road, the roads, I  
2 mean, included the mall and the area to the south and -- so  
3 it's right at the roadways. Okay. So understanding that,  
4 your question is, does he consider the roadways -- now, how  
5 far out are you? When you use the term roadways, are you  
6 just talking about those roadways immediately adjacent to  
7 the mall, whether or not they're defined in the  
8 neighborhood, or are you talking about roadways going out  
9 100 feet, a mile, or what are you talking about?  
10 MS. ROSENFELD: Generally, the roadways  
11 surrounding the mall, and let me, let me ask the question a  
12 little bit differently.  
13 BY MS. ROSENFELD:  
14 Q Did Mr. Sullivan model emissions levels on Georgia  
15 or Veirs Mill or University Boulevard in his 2012 report?  
16 A Which report?  
17 MR. GROSSMAN: I don't recall that being within  
18 the scope of the cross-examination. I mean, I don't want to  
19 go back over all the testimony, but I just don't recall that  
20 issue being an issue in cross-examination at all.  
21 MS. ROSENFELD: Well, in terms of what is and is  
22 not considered with respect to exceedances, I think that  
23 that's within the scope of the, of redirect.  
24 MR. GROSSMAN: What is and is not considered  
25 within this -- I'm not sure I even understand that, that

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1 response.  
2 MS. CORDRY: We're back to the same question again  
3 about, when the EPA is looking at causing or contributing to  
4 an exceedance and the way the standard applies and what's in  
5 the standard, we're looking at -- it generally talks about  
6 major roadways, and we're talking about, are these major  
7 roadways -- we're not talking about going up, you know, 20  
8 miles away and looking at major roadways, but --  
9 MR. GROSSMAN: I don't know. That was part of my  
10 question.  
11 MS. CORDRY: Well, that's what we were asking him.  
12 MR. GROSSMAN: What are we talking about, first of  
13 all?  
14 MS. CORDRY: Well, and that's where we're going  
15 back to, what the original modeling was, which included  
16 those roadways.  
17 MS. ADELMAN: Which roadways?  
18 MR. GROSSMAN: The original modeling, meaning the  
19 November 2012 --  
20 MS. ROSENFELD: In the November 2012.  
21 MS. CORDRY: Yes. Yes.  
22 MR. GROSSMAN: -- Sullivan report?  
23 MS. CORDRY: Right. Right.  
24 MR. GROSSMAN: Okay.  
25 MS. ROSENFELD: This is a very short line of

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1 questioning and, I think, will quickly become clear.  
2 MR. GROSSMAN: All right. Go ahead. You got,  
3 I'll give --  
4 MS. HARRIS: But it wasn't part of the  
5 cross-examination, is what's our --  
6 MR. GROSSMAN: Yes, I think that's true, but I'm  
7 going to give them a little bit of leeway here just so I  
8 understand. She's says very short. Let's keep it short.  
9 MS. ROSENFELD: And I think part of it did go to  
10 what was included in, in the levels, the final levels.  
11 MR. GROSSMAN: I don't know. I don't -- I'm not  
12 sure that I see that connection. It was a different area of  
13 analytical rather than geographical, but go ahead, and what  
14 is your question again, counsel?  
15 BY MS. ROSENFELD:  
16 Q I'm showing you Figure 1-16 on page 58 of the  
17 November 19th, 2012 --  
18 A Okay.  
19 MR. GROSSMAN: Sullivan report?  
20 BY MS. ROSENFELD:  
21 Q -- Sullivan report. And in that --  
22 MR. GOECKE: I'm sorry, Michele. Do you have a  
23 copy of this?  
24 MS. ROSENFELD: I'll show it to you. I'm going to  
25 show --

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1 MR. GROSSMAN: This is the November 2012.  
2 MR. GOECKE: November 2012?  
3 MS. ROSENFELD: Yes.  
4 MR. GOECKE: Okay.  
5 MR. GOECKE: All right. Thank you.  
6 BY MS. ROSENFELD:  
7 Q And looking at the roadways, are there isopleths  
8 that show the maximum levels of one-hour NO2?  
9 A Yeah. This is the predicted 98th percentile  
10 one-hour NO2. The highest isopleths, both along the  
11 roadways and adjacent to the proposed gas station site,  
12 are -- the highest isopleth here, was reported here, 175  
13 micrograms per cubic meter. I would add, this is before the  
14 correction was made in the background, which would raise  
15 this substantially. On the other hand, to be fair, this was  
16 the total conversion method. So -- but your question  
17 relates to the roadways? Can you repeat your question?  
18 BY MS. ROSENFELD:  
19 Q Are the maximum levels on the roadways also  
20 governed by the NAAQS?  
21 A Yes.  
22 Q And in subsequent reports did Mr. Sullivan include  
23 maximum roadway --  
24 MR. GOECKE: Objection. Leading.  
25 BY MS. ROSENFELD:

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1 Q -- levels?  
2 MR. GROSSMAN: Yes, that's, that is. Sustained.  
3 THE WITNESS: Did you have another --  
4 MR. GROSSMAN: No, you don't have -- there's no  
5 question pending now.  
6 BY MS. ROSENFELD:  
7 Q Have you seen any further analysis of maximum  
8 roadway concentrations in any subsequent reports?  
9 A They're not in the -- I believe they're not in the  
10 rebuttal report.  
11 Q Is it contained in the August report?  
12 MR. GOECKE: Objection. Leading.  
13 MR. GROSSMAN: Well, where is this all going?  
14 We've already gone over -- this seems to me to be a  
15 rehashing of things that have been discussed at great length  
16 previously and have not, was not really the subject of any  
17 of the cross-examination. I --  
18 MS. CORDRY: Well --  
19 MR. GROSSMAN: -- gave you the leeway, but --  
20 MS. CORDRY: Okay.  
21 MR. GROSSMAN: -- I don't see how it's tying in to  
22 anything on the cross-examination.  
23 MS. CORDRY: Okay. It's actually trying to tie  
24 into your questions about the way the EPA rule applies in  
25 terms of is this part of the area, is this part where it

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1 could cause or contribute to, and if -- where are the  
2 roadway levels.  
3 MR. GROSSMAN: That wasn't really my question, but  
4 I --  
5 MR. GOECKE: No.  
6 MS. CORDRY: Well, I thought it was your question.  
7 I thought you were asking him about how he viewed the EPA  
8 rule applying it and so forth.  
9 MR. GROSSMAN: I did, yes, but that wasn't -- that  
10 didn't deal with the kind of geographical thing. I used the  
11 term area-wide because that was used in terms of  
12 Dr. Breyse's testimony --  
13 MS. CORDRY: Right, but --  
14 MR. GROSSMAN: -- as a term. That was --  
15 MS. CORDRY: -- area-wide concentrations and then  
16 the peak anywhere in the area. So -- okay.  
17 MR. GROSSMAN: I mean, this issue has gone --  
18 MS. CORDRY: Okay.  
19 MR. GROSSMAN: -- been gone over to a  
20 fare-thee-well. You don't have to --  
21 MS. CORDRY: All right.  
22 MS. ROSENFELD: Mr. Grossman --  
23 MR. GROSSMAN: -- go over it. It wasn't subject  
24 to the cross-examination.  
25 MS. ROSENFELD: -- could we take a five-minute

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1 break?  
2 MR. GROSSMAN: I thought we took that over lunch.  
3 MS. ROSENFELD: Well, we did, but just to wrap --  
4 MS. CORDRY: Confirm that --  
5 MS. ROSENFELD: -- up any final points. We're --  
6 MR. GROSSMAN: Okay.  
7 MS. ROSENFELD: -- we're just about done.  
8 MR. GROSSMAN: All right. All right. Five-minute  
9 break.  
10 (Whereupon, at 2:12 p.m., a brief recess was  
11 taken.)  
12 MR. GROSSMAN: Back on the record. Ms. Rosenfeld.  
13 MS. ROSENFELD: Yes. Thank you.  
14 BY MS. ROSENFELD:  
15 Q Dr. Cole, we were talking about the factors that  
16 you thought supported your conclusion that there was a  
17 distinct possibility that the NAAQS would be exceeded for,  
18 in particular, one-hour NO2. Are there any additional  
19 factors that support your conclusion in that regard?  
20 A Yes, previously mentioned the background. In  
21 terms of additional pieces -- and I raised this issue in a  
22 submission to the Hearing Examiner in 2013 -- that there  
23 were a lot of sources which, I believe, my judgment is,  
24 which contribute to NOx concentrations, or emissions and  
25 concentrations that were not included in the source

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1 inventory.

2 MR. GROSSMAN: When you say a submission to the

3 Hearing Examiner in 2013, what are you referring to?

4 THE WITNESS: I'd have to look at that document,

5 in particular, but it was, it was, it was a discussion of

6 the modeling reports and the pieces that I felt were either

7 inaccurate or missing from the --

8 MR. GROSSMAN: So it's one of your original --

9 THE WITNESS: Yes.

10 MR. GROSSMAN: -- letters or whatever --

11 THE WITNESS: Yes.

12 MR. GROSSMAN: -- on that? Okay.

13 THE WITNESS: I can get you the exact date that

14 I'm talking about.

15 MR. GROSSMAN: All right. Well, go ahead then.

16 THE WITNESS: Okay. So missing sources. This is

17 a big mall, and the sources that were looked at in terms of

18 vehicle emissions, for example, were the west parking lot,

19 the parking garage, the loading dock, the ring road, and the

20 queue and the roadways, but there are a lot of other

21 commercial establishments in the mall which have loading

22 docks and which also have parking lots. We heard testimony

23 about --

24 MR. GROSSMAN: You don't think those are subsumed

25 in general background?

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1 THE WITNESS: No. We don't have any measurements

2 of background. I advocated measurements of background.

3 MR. GROSSMAN: No, but I mean, the monitoring

4 reports of background. You don't think that these other

5 sources, other than the ones listed by Mr. Sullivan, are

6 covered by the background, inclusion of background

7 measurements?

8 THE WITNESS: No, I don't. These are very close

9 to the gas station --

10 MR. GROSSMAN: Okay.

11 THE WITNESS: -- queue. They should have been

12 added as sources, in my judgment.

13 MR. GROSSMAN: Okay.

14 THE WITNESS: Another factor is, there's been

15 testimony that the traffic at various intersections on the

16 ring road was underestimated. I believe there was

17 testimony. To the extent that traffic is underestimated,

18 the number of vehicles would be underestimated and the

19 emissions would be underestimated.

20 There's another problem, which I think is very

21 serious, which is the, what I call the congestion factor.

22 There's a concept in roadway parlance called the

23 volume-over-capacity ratio, and basically, it states that as

24 you, as you get near the limit, as you put more cars on the

25 road, there's a much greater probability that there are

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1 going to be backups and congestion, and the studies which --

2 all of the studies show that when you have slower speeds,

3 that increases the emission rate for things like oxides of

4 nitrogen but other pollutants as well, including particulate

5 matter.

6 MR. GROSSMAN: Isn't this, once again -- I don't

7 see this as responsive to the cross-examination. It's kind

8 of a rehashing of much of the testimony that's already been

9 in here.

10 MS. ROSENFELD: Okay. I just have one final

11 question then.

12 BY MS. ROSENFELD:

13 Q These factors that you've discussed -- and I'm not

14 going to go through them all -- but the monitor selection,

15 MOVES to MOBILE, et cetera, do those each act in isolation,

16 or is there a cumulative effect of those different --

17 A Well, they would be --

18 Q -- modeling issues?

19 A They would be, the factors I've discussed would be

20 additive, number one, and a certain of these effects

21 interact in a synergistic fashion -- i.e., the congestion

22 factor -- compounding the impact.

23 MS. ROSENFELD: I have no further questions.

24 MR. GROSSMAN: Any recross from the Coalition?

25 MR. SILVERMAN: Just one.

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1 SURREBUTTAL RECROSS EXAMINATION

2 BY MR. SILVERMAN:

3 Q The Fujita study, Dr. Cole, would you tell us

4 about that and why it's relevant?

5 MR. GROSSMAN: How is that part of the --

6 MR. SILVERMAN: I thought I --

7 MR. GROSSMAN: -- responsive to the redirect?

8 MR. SILVERMAN: I thought I heard a discussion of

9 Fujita. So I --

10 MR. GROSSMAN: I don't think that came up on

11 redirect.

12 MR. SILVERMAN: Well, in that case, I'll withdraw

13 the question.

14 MR. GROSSMAN: Did anybody cover Fujita on

15 redirect?

16 MS. CORDRY: No. Sorry.

17 MS. ROSENFELD: No.

18 MR. GROSSMAN: So that's outside the scope of

19 redirect.

20 MR. SILVERMAN: Okay.

21 MR. GROSSMAN: All right. Ms. Duckett, any

22 recross from you?

23 MS. DUCKETT: Sorry?

24 MR. GROSSMAN: Any recross from KVCA?

25 MS. DUCKETT: Oh, no. No, sir.

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1 MR. GROSSMAN: All right. Any recross from the  
2 applicant?  
3 MR. GOECKE: No.  
4 MR. GROSSMAN: Okay. Well, congratulations.  
5 THE WITNESS: Thank you.  
6 MR. GROSSMAN: Have finished, and the final  
7 witness, too, at that. So thank you very much. I hear  
8 applause from the audience. All right. Shall we turn to  
9 the objections?  
10 MS. HARRIS: And, Mr. Grossman, before we get into  
11 them, or I had intended to mention one as we go down the  
12 list, but in reviewing the list, we realized that there was  
13 one report that was submitted that was not a complete  
14 report, and so I want to make sure, when we get to that,  
15 that we have an opportunity to discuss adding the -- making  
16 it a complete report.  
17 MR. GROSSMAN: Okay. Well, let's get to that when  
18 we get to it --  
19 MS. HARRIS: Okay.  
20 MR. GROSSMAN: -- and then you can raise the  
21 issue. I guess the easiest way to do this is to go back to  
22 the resubmitted objections, which I had probably put  
23 together and should be able to put my fingers on  
24 momentarily, theoretically. All right.  
25 MS. ROSENFELD: And, Mr. Grossman --

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1 MR. GROSSMAN: Yes.  
2 MS. ROSENFELD: -- in an abundance of optimism  
3 here, Mr. Goecke said he would take another look at the list  
4 and perhaps remove some, and --  
5 MR. GROSSMAN: Well, he did and he submitted the  
6 revised --  
7 MS. CORDRY: Even after the revised one.  
8 MS. ROSENFELD: After he --  
9 MR. GROSSMAN: Oh.  
10 MS. ROSENFELD: After he received KHCA's further  
11 response, he --  
12 MR. GOECKE: That's true. I took another look,  
13 and Ms. Harris and I discussed it, and we think this is  
14 going to be a very short conversation, actually.  
15 MR. GROSSMAN: All right.  
16 MR. GOECKE: We're content to allow the documents  
17 into the record and trust you to give them the weight they  
18 deserve with one exception.  
19 MR. GROSSMAN: Okay.  
20 MS. CORDRY: Okay. What's that?  
21 MS. HARRIS: And the one exception, as I said, it  
22 had to do with this --  
23 MR. GROSSMAN: Except for what Ms. Harris is about  
24 to tell me, you're withdrawing all of the objections to  
25 proposed exhibits in Exhibit 563?

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1 MR. GOECKE: Correct.  
2 MR. GROSSMAN: Okay.  
3 MS. CORDRY: I actually would, not to be  
4 difficult, but there was a couple -- there were two reports  
5 that we, the Florida Pedestrian Planning, the Aging Driver,  
6 that we did not -- we marked those, but we never actually  
7 admitted those, and I had said all along that was fine for  
8 those not to be admitted. So --  
9 MR. GROSSMAN: Okay.  
10 MS. CORDRY: -- that's fine.  
11 MS. ADELMAN: What numbers are they?  
12 MS. ROSENFELD: 367(b)?  
13 MS. CORDRY: (B) and (e), yes.  
14 MS. ROSENFELD: Okay. So are --  
15 MS. CORDRY: So I don't --  
16 MR. GROSSMAN: We'll put them in one of those  
17 Florida sinkholes, right?  
18 MS. CORDRY: Fine.  
19 MR. GROSSMAN: All right.  
20 MR. GOECKE: We have no objection to Ms. Cordry's  
21 objection to her documents.  
22 MS. HARRIS: Let the record reflect.  
23 MR. GROSSMAN: Turnabout is fair play, right?  
24 MS. HARRIS: Right.  
25 MR. GROSSMAN: All right.

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1 MS. HARRIS: So then the only exhibit in question  
2 or that I wanted to discuss briefly was Exhibit 353, which  
3 is the Michigan State placemaking study.  
4 MR. GROSSMAN: All right. Hold on one second.  
5 Let me pull that out. That's Folder 5. Now, you realize,  
6 Sarah is going to be mad at me because I've had her pulling  
7 these folders out, because we thought we were going to  
8 discuss the objections. So all the folders that have  
9 objected-to documents in them, she's been putting out each  
10 time, and of course, we never reach them until today. So --  
11 MR. BRANN: You can tell her it's my fault.  
12 MR. GROSSMAN: All right. Fair enough.  
13 MS. CORDRY: We'll blame you, Erich. Thank you.  
14 MR. BRANN: There you go. That's what I'm here  
15 for.  
16 MR. GROSSMAN: All right. So let's see.  
17 MS. CORDRY: To take the blame. All right. Let's  
18 see.  
19 MR. GROSSMAN: File 4. File 5.  
20 MS. CORDRY: So the placemaking document, all  
21 right, which I think we were trying to spare you, because  
22 that was a pretty long document, as I recall.  
23 MR. GROSSMAN: I'm sorry. Which one was it? 3?  
24 MS. HARRIS: 353.  
25 MR. GROSSMAN: 353. Okay. Hold on. By George, I

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1 have located it. Okay. Building Prosperous Places in  
2 Michigan --  
3 MS. HARRIS: Right.  
4 MR. GROSSMAN: -- Understanding Placemaking  
5 Values, Perceptions, and Barriers.  
6 MS. HARRIS: And, I mean, originally I was  
7 intending to object -- that was on our original list --  
8 MR. GROSSMAN: Right.  
9 MS. HARRIS: -- because it's irrelevant and it has  
10 to do with value of placemaking factors, not what a gas  
11 station does for property values, but we won't make that  
12 argument, but I do -- I want to note and I want to submit  
13 that only a portion of that report was submitted, that the  
14 entire report was not submitted. So, in fairness, I think  
15 that the entire study should be submitted, and I have copies  
16 here; so we can just submit the other, the narrative portion  
17 of the report.  
18 MR. GROSSMAN: You mean it's even fatter than this  
19 thing, which is already --  
20 MS. HARRIS: It is.  
21 MS. CORDRY: Right, which was --  
22 MR. GROSSMAN: -- pretty thick. It's a half-inch  
23 thick anyway.  
24 MS. HARRIS: It is 36 pages.  
25 MS. ROSENFELD: Actually, I think the whole thing

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1 is in there.  
2 MR. GROSSMAN: Well, then maybe we're talking  
3 about --  
4 MR. BRANN: Oh, no. She's talking about --  
5 MS. HARRIS: No. Well, I mean, the new -- this is  
6 what's in the record now --  
7 MR. GROSSMAN: Right.  
8 MS. HARRIS: -- and then, but it was only the  
9 PowerPoint portion. The actual report --  
10 MR. GROSSMAN: Okay. Yes.  
11 MS. HARRIS: -- was not submitted.  
12 MR. GROSSMAN: All right.  
13 MS. HARRIS: So for completeness sake and in order  
14 to take this report in full context, I think it's only fair  
15 that the entire report be in the record. So --  
16 MR. GROSSMAN: All right. Any objection to that?  
17 Why don't you take a look.  
18 MS. ROSENFELD: Let me take a look.  
19 MS. CORDRY: Okay. Let me just look again because  
20 I don't have it here right now.  
21 MS. HARRIS: I have two copies.  
22 MS. CORDRY: Okay. Great. So this is the  
23 narrative portion that goes with all of the --  
24 MS. HARRIS: Correct.  
25 MS. CORDRY: -- there's more --

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1 MS. HARRIS: And it's from the link that's  
2 referenced --  
3 MS. CORDRY: Right.  
4 MS. HARRIS: -- on the second page of the report.  
5 MR. GOECKE: Right. So just to build on what  
6 Ms. Harris said, Mr. Grossman --  
7 MR. GROSSMAN: Yes.  
8 MR. GOECKE: -- on the second page of Exhibit 353,  
9 there's, there's one, two, three, four, five bullet points,  
10 and the bottom one says, please see our website for more  
11 information, and then it provides a link. And so this  
12 document that Ms. Harris is submitting now is what you get  
13 when you go to that link --  
14 MR. GROSSMAN: Okay.  
15 MR. GOECKE: -- and that document puts this  
16 document in more context. And so --  
17 MR. GROSSMAN: Okay.  
18 MR. GOECKE: -- whereas we were originally  
19 objecting to this document because Mr. Core was relying on  
20 it to support his argument that the gas station could  
21 devalue the properties in the neighborhood, we don't think  
22 that that's what this document says --  
23 MR. GROSSMAN: Careful. Your -- you have a cord  
24 there. Okay.  
25 MR. GOECKE: -- and we were objecting to it, but

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1 it probably goes more to the weight of supporting it than  
2 its admissibility, and so we're okay with this document  
3 coming in, with you giving it the weight it deserves,  
4 provided that it's put in its complete context, which this  
5 link provides.  
6 MR. GROSSMAN: I understand.  
7 MS. CORDRY: And this is actually --  
8 MR. GROSSMAN: All right. So we're going to call  
9 this document that's just been handed me, the narrative  
10 portion of Exhibit 353, as Exhibit 353(a).  
11 MS. CORDRY: Right, and we may need to look at  
12 this again, because this document is dated March 30th; his  
13 document was dated April 25th. So I think there are --  
14 MR. GROSSMAN: The same year?  
15 MS. CORDRY: Yes, in the same year, but I think --  
16 my recollection was there were two, I found two different  
17 pieces of it at different times. So let me --  
18 MS. HARRIS: Trust me. If you look through  
19 353(a), it particularly pertains to 353.  
20 MS. CORDRY: Right, but there -- oh, I'm sure  
21 they, I'm sure they pertain. What I'm saying is there are  
22 things that I know we looked at -- there was much more in  
23 the document than just this, too, but there was, for  
24 instance --  
25 MS. HARRIS: The website leads you to the Michigan

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1 State --  
2 MS. CORDRY: But, in other words, this is also  
3 part of the --  
4 MS. HARRIS: -- Land Policy.  
5 MS. CORDRY: -- you know, this is a document we  
6 put in. This is another description of it, but this -- I  
7 don't mind having them both come in, but I just want it to  
8 be clear that this is not supplanting this document that we  
9 had in.  
10 MR. GROSSMAN: No --  
11 MS. CORDRY: Okay.  
12 MR. GROSSMAN: -- it's not supplanting it.  
13 MR. GOECKE: It's not supplanting it.  
14 MR. GROSSMAN: It's a narrative portion --  
15 MS. CORDRY: Right.  
16 MR. GROSSMAN: -- that pertains to Exhibit 353.  
17 MS. CORDRY: Right.  
18 MR. GROSSMAN: All right. So that's, this will be  
19 called 353(a), and let me write this down on the exhibit  
20 list. We'll say, narrative relating to PowerPoint in  
21 Exhibit --  
22 MS. DUCKETT: Mr. Grossman, I'm confused.  
23 MR. GROSSMAN: Hold on one second. So narrative  
24 -- 353(a) is narrative relating to PowerPoint in Exhibit  
25 353. All right.

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1 (Exhibit No. 353(a) was marked  
2 for identification.)  
3 MS. DUCKETT: Okay. 353 was submitted by the  
4 opposition --  
5 MR. GROSSMAN: Yes.  
6 MS. DUCKETT: -- and testified to by the  
7 opposition, but 353(a) is what the applicant has picked out  
8 as to what they think was those portions?  
9 MR. GROSSMAN: No. 353 is a different document.  
10 353(a) is a narrative, also called Building Prosperous  
11 Places in Michigan, and 353 is the PowerPoint presentation  
12 and various slides, but 353(a) is a narrative that discusses  
13 that PowerPoint presentation.  
14 MS. DUCKETT: That's also on the website, is  
15 that -- it's a different section of the website?  
16 MR. GROSSMAN: That's what I'm led to believe  
17 by --  
18 MS. CORDRY: Right.  
19 MS. HARRIS: No. It says, if I recall correctly,  
20 the website says, Building Prosperous Places in Michigan,  
21 and right below it are, is the report and then this  
22 document, which I forget what they called that document.  
23 MS. DUCKETT: Oh, okay.  
24 MS. HARRIS: It's all part of the same thing.  
25 MS. CORDRY: Right.

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1 MS. DUCKETT: Okay. Thank you.  
2 MS. CORDRY: Right. So there was an initial  
3 report, and then there was a PowerPoint presentation done  
4 about a month apart, and I can, I can send you a link to get  
5 to both of them, though. And hold on. We're just looking  
6 at this very quickly a moment. And how long is that  
7 document?  
8 MS. ROSENFELD: No, this is only --  
9 MS. CORDRY: I think you may have the summary  
10 document there.  
11 MS. HARRIS: They call it the summary document --  
12 MS. CORDRY: Okay.  
13 MS. HARRIS: -- on the web, but it's not the  
14 summary document.  
15 MS. CORDRY: Well, okay, because when I pull up  
16 the full report, it's 144 pages --  
17 MS. ROSENFELD: Yes, it says, Summary Report.  
18 MS. CORDRY: -- and then that's -- so we have a  
19 full document that was 144 pages. The one you have there,  
20 which is -- what did you say that was? Thirty-some-odd  
21 pages?  
22 MS. ADELMAN: Thirty-seven, yes.  
23 MS. CORDRY: And then there's the presentation,  
24 which was the PowerPoint. So I'm -- let's see. So let me  
25 go back to the summary version. We're just trying to make

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1 sure whether -- I mean, I'm not, I'm not really sure what --  
2 since I don't know why they're introducing this particular  
3 version of it, I don't know whether it raises an issue for  
4 us or not, but let me look at the summary version, see if  
5 that's what --  
6 MS. ROSENFELD: Is there a reason why you chose  
7 the summary version instead of the full report?  
8 MS. HARRIS: Actually, I was not aware that there  
9 was -- I did not see the full report.  
10 MS. ROSENFELD: There's a full report that's 144  
11 pages long that's also dated March 30, 2012.  
12 MS. CORDRY: Yes. So let me pull up the one  
13 that's labeled Summary and see if that looks like this one,  
14 and it probably does have the same cover on them. Right.  
15 Yes. So the one they have is the summary report; then  
16 there's a full report, which is exactly four times as long,  
17 and then there was the PowerPoint presentation there. So --  
18 The summary report, for instance, doesn't mention  
19 gas stations; the full report does. So -- and if we really  
20 want the full report in, which is the one that mentions gas  
21 stations, then I think we need the full report, which is 144  
22 pages, and I'm not sure it's really necessary to have that  
23 in here, but it's up to them.  
24 MS. ADELMAN: Does the PowerPoint have gas  
25 stations in there too?

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1 MS. CORDRY: Yes.  
2 MR. SILVERMAN: Yes.  
3 MS. ROSENFELD: Yes. Mr. Core testified.  
4 MS. CORDRY: Yes. That's why we put it in there,  
5 because that's the part where it talks about it.  
6 MS. ADELMAN: Okay.  
7 MR. GROSSMAN: Do you want us to take a break  
8 here, and you can look over the --  
9 MS. CORDRY: Right. Yes. Why don't --  
10 MR. GOECKE: Yes, please.  
11 MR. GROSSMAN: -- full report since we've actually  
12 truncated what we were going to have to do --  
13 MS. HARRIS: Yes, my apologies. I --  
14 MR. GROSSMAN: -- with regard to objections.  
15 So --  
16 MS. CORDRY: Right. Let's just take a couple  
17 minutes, and we can look at this.  
18 MR. GROSSMAN: Yes. I'll come back at, it's --  
19 oh, we're way off now. That clock is now --  
20 MS. SAVAGE: The clock is sick.  
21 MS. ADELMAN: That's why I wondered if it had a  
22 battery --  
23 MS. SAVAGE: It's very sick.  
24 MS. ADELMAN: -- because it's losing all the time.  
25 MR. GROSSMAN: It needs help.

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1 MR. COLE: It's 2:42.  
2 MR. GROSSMAN: Yes.  
3 MS. CORDRY: Yes, 2:42, we'll buy that.  
4 MR. GROSSMAN: So I'll come back in 10 minutes.  
5 Is that --  
6 MS. CORDRY: Okay. Yes, that should be fine.  
7 MR. GROSSMAN: -- does that sound about right?  
8 MR. GOECKE: Yes.  
9 MR. GROSSMAN: Okay. All right. We're in recess.  
10 (Whereupon, at 2:43 p.m., a brief recess was  
11 taken.)  
12 MR. GROSSMAN: All right. Back on the record.  
13 Are we all ready to resolve this final little issue?  
14 MR. GOECKE: I think so.  
15 MS. HARRIS: I think they raise a good point, and  
16 we're fine bringing in the full report as well as the  
17 summary report --  
18 MR. GROSSMAN: I knew it.  
19 MS. HARRIS: -- so we're in agreement.  
20 MS. CORDRY: Well, we certainly don't need --  
21 MR. GROSSMAN: Why settle for a 30-page report  
22 when you can have a 160-page report?  
23 MS. HARRIS: Exactly.  
24 MR. GOECKE: Right.  
25 MS. CORDRY: Okay. Well, I certainly don't think

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1 we need both --  
2 MS. ROSENFELD: And why have both if you only need  
3 one?  
4 MS. CORDRY: Yes. I don't think we need the  
5 summary report in addition --  
6 MR. GROSSMAN: Okay.  
7 MS. CORDRY: -- to the full report.  
8 MS. HARRIS: Well, I --  
9 MR. GROSSMAN: All right. So --  
10 MR. BRANN: No, the summary and the full report --  
11 UNIDENTIFIED SPEAKER: You need both?  
12 MR. BRANN: -- that's what she's saying. You want  
13 both?  
14 MS. HARRIS: I do want both.  
15 MR. BRANN: Okay.  
16 MS. HARRIS: I think we need it to put everything  
17 in context.  
18 MR. GROSSMAN: All right. So --  
19 MS. CORDRY: I will have to say, though, that  
20 these documents were available to them -- Mr. Core put in  
21 the document in advance --  
22 MR. GROSSMAN: We don't have to fight about this,  
23 do we? I mean, what's the -- it is something that was put  
24 in in this form by Mr. Core. I just, do you really, is it  
25 really worth an argument about?

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1 MS. CORDRY: It probably isn't, but you know, it's  
2 like --  
3 MR. GROSSMAN: No but.  
4 MS. CORDRY: But I must say, if it was, I wouldn't  
5 have any way of knowing it until I went through 144 pages of  
6 this, but I'm sure it's fine because I'm sure the summary  
7 presentation that they did was an accurate reflection of  
8 their report. So --  
9 MR. GROSSMAN: Okay. So 3 --  
10 MS. CORDRY: We'll expect full copies. We're not  
11 printing it.  
12 MR. GROSSMAN: -- oh, I must have marked it in  
13 the -- okay. So 353(a) will be the summary, and then 353(b)  
14 will be the full, the narrative full report. Right?  
15 (Exhibit No. 353(b) was marked  
16 for identification.)  
17 MS. CORDRY: Correct.  
18 MS. HARRIS: Yes.  
19 MR. GROSSMAN: Good. All right. Do we have any  
20 other issues that need to be resolved?  
21 MR. GOECKE: Can we give our reply case now?  
22 MS. ROSENFELD: The one --  
23 MR. GROSSMAN: Don't scare me, Mr. Goecke. I  
24 scare easily.  
25 MS. ROSENFELD: The one remaining exhibit, of

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1 course, we have not rescinded our objection to the rebuttal  
2 report, but we do have written motions --  
3 MR. GROSSMAN: Oh.  
4 MS. ROSENFELD: -- on those, and I assume you're  
5 going to handle that separately. I just wanted the record  
6 to be clear --  
7 MR. GROSSMAN: Well, I'm glad you actually --  
8 MS. ROSENFELD: -- that we have not --  
9 MR. GROSSMAN: -- raised that. Let's discuss that  
10 now, the challenge to the rebuttal report, which I said we  
11 would wait until we heard from Dr. Cole before, before  
12 ruling on that. Do you wish to argue that further, or are  
13 you satisfied with your written presentations, which were  
14 numerous?  
15 MS. CORDRY: Would it make sense to just have a  
16 no-more-than-five-page, just reference to the testimony, to  
17 supplement the discussion, or something like that?  
18 MR. GROSSMAN: I'm not sure I understand. A  
19 five-page reference to the --  
20 MS. ROSENFELD: Now, that we've had the benefit of  
21 the testimony on the report, you said --  
22 MR. GROSSMAN: You want to submit additional  
23 writing on this?  
24 MS. CORDRY: Yes.  
25 MR. GROSSMAN: No --

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1 MS. CORDRY: No? All right.  
2 MR. GROSSMAN: -- I don't think it's necessary.  
3 You're going to have closing arguments, but as far as the --  
4 MS. CORDRY: Well, then I think --  
5 MR. GROSSMAN: -- as far as the objection is  
6 concerned, you can orally state what you want to state now  
7 or rely on the numerous papers that have been filed.  
8 MS. CORDRY: Yes, I think the testimony that's  
9 come in has amply supported what we have stated, which is  
10 that this is not a report -- a methodology that has yet  
11 obtained general scientific reliability, which is the  
12 standard in Maryland for both court hearings and agency  
13 proceedings. Dr. Cole's testimony, I think, has made clear  
14 that the OLM method is a fairly simple method, in some  
15 respects, to apply; but even if we assume that you get past  
16 the point of saying this is something that should have to be  
17 approved by the EPA office and if you can take that  
18 position, the OLM method does not include these kind of  
19 aspects of limiting the use of additional conversions within  
20 a certain area and so forth.  
21 So for the Stage II, it is not an EPA method, and  
22 the Stage III, I think he has also, again, adequately  
23 explained that there is, again, no justification for a  
24 methodology that just arbitrarily cuts off the conversion  
25 ratio at .50. That, again, that's a refinement that

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1 Mr. Sullivan has come up with on his own. It may have some  
2 merit. It may not. It may as it goes through. If he put  
3 it out in a peer-reviewed report, it might be something that  
4 would be interesting. At this stage, it would appear to be  
5 something similar to the kind of beta report that the API  
6 was trying to submit and so forth. Obviously, Stage III  
7 isn't even the OLM method. I think that's been conceded.  
8 So we have two analyses that go beyond anything  
9 that the EPA has stated is available for use in their  
10 regulatory processes, and again, I would remind you that, as  
11 our evidence -- as our argument indicated, what the Maryland  
12 courts say is, they have retained the stricter standard for  
13 admissibility of evidence and that they do not wish to have  
14 these kind of issues debated and resolved, in the first  
15 instance, by a court as opposed to debated and resolved in  
16 the field of scientific analysis. And it seems to me that  
17 the EPA's determination of which models it accepts is a  
18 pretty good starting point for what is generally  
19 scientifically reliable and generally scientifically  
20 accepted.  
21 MR. GROSSMAN: Well, in fairness, it hasn't said  
22 that it won't accept the OLM method.  
23 MS. CORDRY: No, no, but he is not using the OLM  
24 method --  
25 MR. GROSSMAN: Well --

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1 MS. CORDRY: -- that's the point. He --  
2 MR. GROSSMAN: Well, no, I don't think that is the  
3 point. It is one point you argue that --  
4 MS. CORDRY: Well, okay.  
5 MR. GROSSMAN: -- and certainly in Stage III --  
6 MS. CORDRY: The point is --  
7 MR. GROSSMAN: -- his Stage III uses --  
8 MS. CORDRY: But also Stage II, because his Stage  
9 II, he arbitrarily does not apply the OLM method within a  
10 certain area and there's nothing in the OLM method, as  
11 Dr. Cole pointed out again today, there's nothing in the OLM  
12 method that says you don't apply it within some area in  
13 which you think it doesn't work. That isn't the way the OLM  
14 method works. It's a pretty simple method. You take the  
15 amount of NOx you have, you take how much ozone you have,  
16 and you compare the two and that's it. This tailpipe  
17 box/exclusion zone and so forth is just simply not the OLM  
18 method.  
19 So based on the fact that Maryland law says you  
20 don't start stepping outside the boundaries of what is  
21 generally acceptable in the court proceeding to begin with,  
22 we think it's clear that this rebuttal report is based on  
23 two methods, neither one of which has yet obtained the  
24 necessary scientific reliability. And it's not for this  
25 Hearing Officer proceeding to be trying to make that

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1 determination, in the first instance, precisely for, in some  
2 respects, the point that we have done, which is we spent  
3 three days with Mr. Sullivan and, you know, a day and a half  
4 with Dr. Cole, essentially going over new methods of  
5 analysis that, if they were not admitted, because they are  
6 not EPA methods, we would not have been going through. So  
7 that -- part of what they said is to save time, to save the  
8 burden on the courts but also simply because it does not  
9 want courts and juries and agencies to be making those  
10 determinations, in the first instance.  
11 So we think it's, we think it's very clear that  
12 the report has not been able to show that it meets the  
13 standard for Maryland law.  
14 MR. GROSSMAN: All right. Ms. Duckett, do you  
15 have anything to add to that?  
16 MS. DUCKETT: No.  
17 MR. GROSSMAN: Mr. Silverman or Ms. Adelman?  
18 MS. ADELMAN: No.  
19 MR. GROSSMAN: No? Okay. Applicant, do you wish  
20 to respond?  
21 MR. GOECKE: Yes. Thanks, Mr. Grossman. So --  
22 and there were several motions to strike Mr. Sullivan's  
23 report. I take it that this is only applying to the  
24 Frye-Reed basis. I think you had denied all their other  
25 motions, but we -- and we had not filed a response to their

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1 Frye-Reed motion because you had said we would take it up at  
2 the hearing. So my argument tailors to that, the bases, the  
3 arguments they make in the Frye-Reed motion.  
4 MR. GROSSMAN: All right. Well, they did have  
5 other, other grounds in their earlier motions which, I  
6 believe, I did formally act on, is that --  
7 MR. GOECKE: I think you denied all of them.  
8 MR. GROSSMAN: Yes.  
9 MS. CORDRY: Right. I mean, we --  
10 MR. GROSSMAN: Right. So this is --  
11 MS. CORDRY: -- we retain our objection to that  
12 result, but --  
13 MR. GROSSMAN: Right.  
14 MS. CORDRY: -- we're not rearguing that point at  
15 this point.  
16 MR. GROSSMAN: And by the way, we're talking about  
17 Exhibit 466. That's the Sullivan rebuttal report dated  
18 February 21, 2014.  
19 MR. GOECKE: And so in the motion to strike based  
20 on the Frye-Reed argument, they put forth three arguments.  
21 The first was that Mr. Sullivan's report and his testimony  
22 should be stricken because there was no EPA oversight that  
23 allowed him to do this methodology, and as we've talked  
24 about in prior hearings, this is not an air-permitting  
25 process. The EPA is not involved. They do not have the

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1 jurisdiction. You know, people have reached out to them.  
2 Even if we wanted them to opine on this, they haven't done  
3 it, they won't do it, and so that's not a basis to strike  
4 his report or his testimony.  
5 The second basis was that this is an improper  
6 application of the OLM methodology because that only applies  
7 to smokestack, emissions from power plants, not to vehicular  
8 emissions, and I'll talk about that in a moment.  
9 But then the third point was that there was no  
10 peer-review process or scrutiny of Mr. Sullivan's report.  
11 In terms of that, there's not a requirement that an expert  
12 report be subjected to a peer-review process or be published  
13 in order to be admitted or used in a quasi-judicial or  
14 judicial hearing, and to the extent that there hasn't been  
15 any scrutiny or review of that document, I think that's just  
16 not correct.  
17 As Ms. Cordry just said, there was five days of  
18 testimony from Mr. Sullivan and/or Dr. Cole dealing a lot  
19 with the OLM methodology. So it received a lot of  
20 attention; it received a lot of scrutiny. As you pointed  
21 out in one of the hearings, there's different benefits to  
22 the different procedures, and whereas the EPA-permitting  
23 process may require EPA guidance and oversight, here there's  
24 the ability to cross-examine witnesses on the stand. So we  
25 feel like there's been ample time and opportunity for them

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1 to cross-examine Mr. Sullivan and for their expert to opine  
2 on his methodology.  
3 Taking that away, the last argument is whether or  
4 not it's permissible for the OLM methodology to be applied  
5 here. You know, at one point they argued that this is a  
6 non-regulatory method and it should not be allow, but upon  
7 closer inspection what we saw was it was a non-regulatory  
8 default method, and so it's something that can be used, but  
9 it's just not, it's just not one of the default methods.  
10 It's discussed in Part 50, Appendix W, in the EPA  
11 guidance on air modeling. It's discussed in the two Tyler  
12 Fox memos. This is methodology that has been reviewed and  
13 analyzed by the EPA. It is something that can be used when  
14 your circumstances are appropriate, and Mr. Sullivan, very  
15 methodically in his rebuttal report, stated all the  
16 scientific literature upon which he relied to apply the  
17 methodology to this situation.  
18 If you go through Appendix B1, he cites about nine  
19 different articles that he relies on, justifying his math in  
20 the situation and why he applied it in the way that he did.  
21 In contrast, Dr. Cole, while he disagrees with that, has not  
22 cited any literature that says you cannot apply the OLM to a  
23 situation like this. Everyone agrees that it was typically  
24 created to deal with power plant plumes and stacks, but  
25 there's no literature that says it cannot apply here. It

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1 has not been rejected by the scientific community in this  
2 context.

3 In fact, when pressed today, you know, he  
4 testified at first that the Environment Agency report said  
5 that, based on Janssen, the plume, the dispersion,  
6 characteristics of a plume in a power plant would not apply  
7 to an urban environment, to this environment, but upon  
8 closer inspection that report did not say that. It said  
9 that it has, it's surprising, but it has similar  
10 characteristics to an urban environment and it may be  
11 appropriate provided you use other conservative methodology.

12 Mr. Sullivan has testified extensively about the  
13 conservatism baked into his modeling process, and yes, that  
14 conservatism has been reduced over time, but when we compare  
15 the results that he's modeled for the proposed gas station  
16 and compare them to the 411 monitoring sites that are out  
17 there, it supports and corroborates his testimony. It shows  
18 that his --

19 MR. GROSSMAN: That's not really the issue.  
20 MS. ROSENFELD: This goes well beyond --  
21 MS. CORDRY: That's --  
22 MR. GROSSMAN: We're talking about whether or  
23 not --  
24 MS. ROSENFELD: That's closing argument.  
25 MR. GROSSMAN: -- there's an evidentiary issue

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1 here as to whether or not it's appropriate to admit the use  
2 of, well, the rebuttal report entirely, but the key is the  
3 OLM method and the modified OLM methods that Mr. Sullivan  
4 used. So the question here is, they raised an objection not  
5 just to the use of OLM but also to the modified versions of  
6 OLM that Mr. Sullivan used --

7 MR. GOECKE: Yes.  
8 MR. GROSSMAN: -- do you want to respond to that?  
9 MR. GOECKE: Right, and as I said before, he cited  
10 the references in his report that support his application to  
11 not using OLM within the first 40 meters, and as Dr. Cole  
12 admitted today, it takes time and distance for the  
13 conversion to take place. And whereas with a plume stack,  
14 when you've got this forceful jet of air being emitted at  
15 very high altitudes and causing much more turbulence and  
16 much more mixing to the molecular level, the air on the  
17 ground is nowhere near that speed, and the reports that  
18 Mr. Sullivan relies on show that. So that contradicts what  
19 Dr. Sullivan, or Dr. Cole, rather, had testified.

20 So to the extent that Dr. Cole disagrees, his  
21 disagreement is not supported by the scientific literature,  
22 and it most certainly doesn't establish that it's been  
23 rejected by the scientific community to apply in this  
24 situation. So the scientific community has adopted OLM. It  
25 is something they apply. There's literature on this. The

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1 literature says it may be appropriate in this situation. My  
2 point before about comparing it to the 2013 data was merely  
3 to show, to the extent that conservatism is required when  
4 applying it, he's demonstrated, he's testified the evidence  
5 shows that he has still applied a conservative modeling  
6 analysis here.

7 MR. GROSSMAN: Well, I'm not going to get into the  
8 issue of whether or not it's conservative or not, just on  
9 the evidentiary question.

10 MR. GOECKE: Yes.  
11 MR. GROSSMAN: I'm satisfied, looking at what the  
12 EPA has had to say and listening to the testimony of  
13 Mr. Sullivan and Dr. Cole, that number one, that the  
14 methodology of OLM is accepted by the EPA, as indicated in  
15 their literature; moreover, their touchstone, as they have  
16 said in their literature, is that the most accurate model  
17 possible be developed. The question of whether or not  
18 Mr. Sullivan's model is the most accurate model or not is a  
19 question of legitimate controversy between the experts here.

20 I do not find that this is a situation under which  
21 the case law in Maryland should bar the rebuttal evidence  
22 and the rebuttal report by Mr. Sullivan. This is a  
23 legitimate argument as to how this model, or a version of  
24 it, should be applied to most accurately model the  
25 situation.

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1 MS. CORDRY: But, Mr. Grossman, if the EPA says  
2 you apply the OLM method in a particular way, which does not  
3 include all of these refinements that Mr. Sullivan is coming  
4 up with, and Mr. Sullivan wants to make an argument that his  
5 way is better than that but that's not what the EPA says to  
6 use, it seems to me that is precisely the kind of extension  
7 of the law, the kind of novel argument that case law in  
8 Maryland says, it fails to recognize that laymen should not  
9 on a case-by-case basis resolve a dispute in the scientific  
10 community concerning the validity of a new scientific  
11 technique. And he is taking a method which the EPA simply  
12 says here's how you do it, and he's saying that's not good  
13 enough, I want to refine their method further, and it seems  
14 to me that is not something that is without dispute.

15 MR. GROSSMAN: I don't find that this is a new  
16 scientific technique. I find that this is an application to  
17 the particulars of this particular situation. And one can  
18 argue about the merits of that application, but that's what  
19 it is. It's an argument between the experts as to the  
20 merits of the application. Now, I'm not arguing back and --

21 MS. CORDRY: Okay.  
22 MR. GROSSMAN: -- forth. I've already heard your  
23 argument and your response to what I said, but that's my  
24 ruling in the case. I am going to overrule that objection  
25 to the admission of the rebuttal report.

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1 MR. GOECKE: Thank you.  
2 MR. GROSSMAN: All right. Now --  
3 MS. CORDRY: There is just -- okay, not talking  
4 about that anymore.  
5 MR. GROSSMAN: Thank you.  
6 MS. CORDRY: There's just a couple of just, one  
7 was the correction of that background argument report which  
8 we gave you before, and I'll go over that now. One other  
9 matter, and this was -- this is just substituting a couple  
10 pages in, let's see, it would have been Exhibit -- it was  
11 something that was put in as a black-and-white copy, and in  
12 black and white, you can't tell what the exhibit is doing.  
13 So I have the color pages to substitute there. This would  
14 have been, let me see --  
15 MR. GROSSMAN: While you're cogitating that, there  
16 was something that was e-mailed to me. How did we finally  
17 address this highway capacity analysis results? Did we say  
18 that there wasn't a significant enough change that --  
19 MR. GOECKE: I think that was the one I said that  
20 it --  
21 MR. GROSSMAN: -- I don't remember if this has  
22 gotten an exhibit number. Let's --  
23 MS. HARRIS: I don't think it does, has.  
24 MS. CORDRY: Well, it's 607. That was --  
25 MR. GROSSMAN: Let's see. 607, report submitted

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1 by Pat Harris, Intersection 16, yes. Okay.  
2 MS. CORDRY: Right. Let me see.  
3 MR. GROSSMAN: Okay.  
4 MS. CORDRY: All right. Okay. Yes. This would  
5 go in Exhibit 453(a).  
6 MS. HARRIS: What number? I'm sorry.  
7 MS. CORDRY: 453(a).  
8 MR. GROSSMAN: Okay.  
9 MS. CORDRY: They were excerpts from the Annual  
10 Energy Outlook Early Release Overview.  
11 MR. GROSSMAN: Okay.  
12 MS. CORDRY: I believe it's (a). I think (b) --  
13 MR. GROSSMAN: Yes, it's (a).  
14 MS. CORDRY: Yes, right. And they were two -- let  
15 me give you a few of these. They were two charts that we  
16 had, and as I say, they were in black and white, and unless  
17 you have the color, you can't tell which goes to which.  
18 MR. GROSSMAN: All right.  
19 MS. CORDRY: So with the color, this indicates  
20 that the blue is the reference which is the 2014 case; the  
21 red is the 2013 case. So it shows that the 2014 updated  
22 case shows a little bit lower, again, a continuing drop in  
23 the energy use. So that's what --  
24 MR. GROSSMAN: Mine shows purple, not red.  
25 MS. CORDRY: Okay. Well, one is --

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1 MR. GROSSMAN: It's the color purple, as -- you  
2 can make a movie out of it.  
3 MS. CORDRY: One is a reddish purple, and the  
4 other is a bluish purple. The bluer purple -- in any case,  
5 you can --  
6 MR. GROSSMAN: All right.  
7 MS. CORDRY: -- you can tell the difference  
8 between the two of them. And then the --  
9 MS. ROSENFELD: And what is this?  
10 MR. GROSSMAN: So this is a substitute for --  
11 MS. CORDRY: This would be a substitute for the  
12 last two pages in 453(a).  
13 MR. GROSSMAN: Okay. So let me, sub for last --  
14 MS. CORDRY: Right.  
15 MR. GROSSMAN: -- two pages of Exhibit 453 --  
16 MS. CORDRY: So one is squares and one is  
17 circles --  
18 MR. GROSSMAN: -- (a).  
19 MS. CORDRY: -- but until you see the reference at  
20 the top --  
21 MR. GROSSMAN: Right.  
22 MS. CORDRY: -- reference at the top, it shows  
23 squares for both of them; so you can't tell which was which.  
24 MR. GROSSMAN: Right. I got you.  
25 MS. CORDRY: All right. All right. Now, the

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1 other piece that I was going to do was to substitute in --  
2 and I have shown this, the redlines and so forth to them.  
3 Do you guys have any problem then with --  
4 MS. HARRIS: With this?  
5 MS. CORDRY: No, no. No, with the 431  
6 substitution.  
7 MR. GOECKE: I didn't have a chance to go  
8 through --  
9 MS. CORDRY: Okay.  
10 MR. GOECKE: -- the entire document. I didn't see  
11 any concerns with what I did review.  
12 MS. CORDRY: Okay. Just, and I will give you the  
13 redlines if you care to look at them, but I don't know that  
14 they need to go in the exhibit. This was, again, the  
15 original 431(b), which is in. This is the final version  
16 that -- should probably just give it a new exhibit number  
17 rather than try to do something, but --  
18 MR. GROSSMAN: So --  
19 MS. CORDRY: What happened -- and let me, let me  
20 just be clear -- I e-mailed over to everyone on February 1 a  
21 version of this document --  
22 MR. GROSSMAN: Yes.  
23 THE WITNESS: -- and that was the correct version  
24 except for these three later minor changes that I made.  
25 Unfortunately, Ms. Rosenfeld and I, in the rush of getting

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1 everything done, miscommunicated and she copied, and what  
2 was placed into the record was an earlier version.  
3 MR. GROSSMAN: Okay.  
4 THE WITNESS: So I have given them both a redline  
5 of the final version to the one that's in the record, which  
6 has lots and lots and lots of changes, because it wasn't the  
7 right one --  
8 MR. GROSSMAN: Right.  
9 MS. CORDRY: -- and I've also given them a redline  
10 of just the couple, three changes that were made to the  
11 version that was e-mailed around.  
12 MR. GROSSMAN: Okay.  
13 MS. CORDRY: So --  
14 MR. GROSSMAN: So what I should be doing is taking  
15 what's in the record as 431(b) --  
16 MS. CORDRY: Yes.  
17 MR. GROSSMAN: -- and substituting this summary  
18 document --  
19 MS. CORDRY: We can either substitute --  
20 MR. GROSSMAN: -- or is that, is that --  
21 MS. CORDRY: We can substitute. We can strike  
22 that one. We can give it a new exhibit number, whichever  
23 you feel is easiest to do.  
24 MR. GROSSMAN: Well, this was referenced in the  
25 course of --

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1 MS. CORDRY: Okay.  
2 MR. GROSSMAN: -- of doing it; so maybe we should  
3 just give it a new --  
4 MS. CORDRY: Okay.  
5 MR. GROSSMAN: -- and -- although, I mean, the  
6 risk you run there, I guess, when it's being considered  
7 later on and we all have forgotten this conversation and  
8 certainly when the subsequent reviewers --  
9 MS. CORDRY: Right.  
10 MR. GROSSMAN: -- look at it, they're going to  
11 look back at this, at 431(b), as it's in the record.  
12 MS. CORDRY: Right. Let me --  
13 MR. GROSSMAN: Now, I'm concerned about taking  
14 anything out --  
15 MS. CORDRY: Right.  
16 MR. GROSSMAN: -- because page references and  
17 things --  
18 MS. CORDRY: Right.  
19 MR. GROSSMAN: -- that might have been, may have  
20 been made --  
21 MS. CORDRY: Why don't we call it 431(c) then --  
22 MR. GROSSMAN: All right.  
23 MS. CORDRY: -- and then it will all be together.  
24 We can list it as the corrected version of 431(b).  
25 MR. GROSSMAN: So Exhibit 431(c) -- by the way,

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1 somebody's going to supply Sarah with the narrative full  
2 report of 353(b)?  
3 MS. HARRIS: We will.  
4 MR. GOECKE: We'll do that.  
5 MR. GROSSMAN: Okay. All right. Exhibit 431 --  
6 oh, wait a minute. We may have had it already, 430. Let's  
7 see.  
8 MS. ROSENFELD: What number is this again?  
9 MS. CORDRY: 431(c) it will now be.  
10 MS. ADELMAN: (C).  
11 MR. GROSSMAN: 431(c) is corrected version of  
12 Exhibit 431(b). Okay.  
13 (Exhibit No. 431(c) was marked  
14 for identification.)  
15 MS. CORDRY: I think that's all I have for that.  
16 All these copies of other things I made just in case I  
17 needed them, I don't need them. All right.  
18 MR. GROSSMAN: Exhibit 453(a).  
19 MS. CORDRY: And I believe you got copies of those  
20 things that we, five pieces that we said would be, that are  
21 our five that are coming in, and they had their three.  
22 MR. GROSSMAN: I believe that yours are already in  
23 there, and --  
24 MS. CORDRY: Yes, I think so. I just want to  
25 double-check and make sure --

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1 MR. GROSSMAN: -- and theirs are as well, I  
2 believe. Is that --  
3 MS. CORDRY: Right, I think so.  
4 MR. GROSSMAN: -- do you guys want to check to  
5 make sure?  
6 MS. CORDRY: Because I have copies of that if  
7 anybody needs those pieces.  
8 MR. GROSSMAN: Yes, I see the 2009 article by  
9 Hesterberg, Bunn, et cetera, is Exhibit 594, and then 595,  
10 article about air quality at the Port of Long Beach. Were  
11 those, those the two, Mr. Goecke, that we're talking about,  
12 and --  
13 MR. SILVERMAN: The Long Beach article I think I  
14 put in.  
15 MR. GROSSMAN: Okay. Well, I just want to,  
16 which --  
17 MS. CORDRY: The other one came in later in an  
18 e-mail from Ms. Harris.  
19 MR. GROSSMAN: Okay. Do you want to check to make  
20 sure, Mr. Goecke, that your articles got in the record here,  
21 are exhibitized?  
22 MR. GOECKE: Yes.  
23 MS. ADELMAN: Now, which number is this, Karen?  
24 MS. HARRIS: So what number were you -- oh, the  
25 Port -- 595?

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1 MR. GROSSMAN: Well, Mr. Silverman says that was  
2 one of his, but we know that 594 was your Bunn article.  
3 MS. HARRIS: Yes.  
4 MR. GOECKE: Okay.  
5 MS. HARRIS: And then subsequently, the other Bunn  
6 article, that's 606.  
7 MR. GROSSMAN: Okay.  
8 MS. HARRIS: That's on a CD, which is, excuse me,  
9 606(a).  
10 MR. GOECKE: And then there was another one that  
11 you submitted too.  
12 MR. GROSSMAN: Well --  
13 MR. GOECKE: 606(a) --  
14 MR. GROSSMAN: 606(a) is just --  
15 MR. GOECKE: -- has two --  
16 MR. GROSSMAN: -- a CD.  
17 MS. HARRIS: Right.  
18 MR. GROSSMAN: Do you have a hard copy?  
19 MS. HARRIS: No, I do have --  
20 MR. GOECKE: Yes, I think we've got hard copies.  
21 So altogether there were three articles --  
22 MS. CORDRY: Right.  
23 MR. GOECKE: -- two that Dr. Bunn co-authored and  
24 then the --  
25 MS. CORDRY: Right.

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1 MR. GROSSMAN: I don't remember seeing these to  
2 hard copy. I remember seeing --  
3 MS. HARRIS: No, I don't think I --  
4 MR. GROSSMAN: -- it was on a CD.  
5 MR. GOECKE: Yes, I don't think you've seen them  
6 in hard copy.  
7 MS. HARRIS: I had not -- no, you're right.  
8 MR. GROSSMAN: Okay.  
9 MS. HARRIS: And then --  
10 MR. GOECKE: These came out over the weekend.  
11 MR. GROSSMAN: All right.  
12 MS. HARRIS: And then the other two articles that  
13 were on that CD were the two articles that we used in  
14 cross-examination of Dr. Cole, which I believe those were  
15 submitted this morning.  
16 MR. GROSSMAN: Okay. So why don't we call this  
17 606 --  
18 MS. HARRIS: (C) and(d)?  
19 MR. GROSSMAN: Yes. 606(c) is --  
20 MS. ROSENFELD: Do you have copies for us?  
21 MS. HARRIS: Oh, yes. I'm sorry.  
22 MR. GROSSMAN: -- research report on allergic  
23 inflammation in the human lower respiratory tract affected  
24 by exposure to diesel exhaust, and Exhibit 606(d) is  
25 non-cancer health effects of diesel exhaust. Let's see.

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1 The date on that one is May 21, 2008, and what was the date  
2 on this one? The other one, 606(c), was February 2012.  
3 Okay.  
4 (Exhibit Nos. 606(c) and  
5 606(d) were marked for  
6 identification.)  
7 MS. DUCKETT: Mr. Grossman, I have a question.  
8 MR. GROSSMAN: Yes, ma'am.  
9 MS. DUCKETT: Are 594, 605, and 606 all the same  
10 documents?  
11 MS. HARRIS: No.  
12 MR. GROSSMAN: No.  
13 MS. DUCKETT: Are they --  
14 MR. GROSSMAN: Well, wait a minute. 594? Let's  
15 see.  
16 MS. DUCKETT: 594.  
17 MR. GROSSMAN: 594, received at hearing, 2009  
18 article. That's the Bunn article, is 594, and --  
19 MS. DUCKETT: 605 and 606.  
20 MS. CORDRY: No. I think 594 and --  
21 MR. GROSSMAN: Well, it might be that 605(a) might  
22 be the same thing. It might have been that --  
23 MS. CORDRY: Yes, 594 and 605 --  
24 MR. GROSSMAN: -- that I just called it something  
25 when I --

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1 MS. CORDRY: Right.  
2 MR. GROSSMAN: -- and Sarah called it something  
3 close but not --  
4 MS. CORDRY: Right.  
5 MR. GROSSMAN: -- exactly the same. So, yes, they  
6 might be the same.  
7 MS. CORDRY: Right, but 606 has two, the other two  
8 articles. So there's three --  
9 MS. DUCKETT: Yeah, that's what I --  
10 MR. GROSSMAN: I won't give it twice as much  
11 weight just because it's in there twice --  
12 MS. HARRIS: Right.  
13 MR. GROSSMAN: -- although it's possible.  
14 MS. CORDRY: Well, if we did that, I have some  
15 documents that may be in more than that, and at the risk of  
16 confusing everybody at no end, I'm sorry, the -- those pages  
17 I see were actually in 453(d), not 453(a).  
18 MR. GROSSMAN: Ah. Okay. So the two pages that  
19 are added on -- these two?  
20 MS. CORDRY: The two color pages, yes.  
21 MR. GROSSMAN: They should be added on to 453(d)?  
22 MS. CORDRY: Right, or substituted. They're kind  
23 of in the middle of 453(d).  
24 MR. GROSSMAN: Oh, they're not at the end of  
25 453(d)?

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1 MS. CORDRY: No. They're in the middle.  
2 MR. GROSSMAN: Well, I see the two pages. I'm  
3 just saying --  
4 MS. CORDRY: Right. Yes.  
5 MR. GROSSMAN: -- where do they fit into 453(d)?  
6 MS. CORDRY: There's one, two -- three pages  
7 behind them. They're in the middle of 453(d).  
8 MR. GROSSMAN: Okay. So two pages sub for  
9 middle -- they're just black and white? Is that the only --  
10 MS. CORDRY: Yes --  
11 MR. GROSSMAN: Middle --  
12 MS. CORDRY: -- as I say, yes, the ones that I  
13 printed out, they're printed out in black and white, and  
14 then --  
15 MR. GROSSMAN: -- B and W, two pages of Exhibit  
16 453(d). Okay. We'll try to get that straight --  
17 MS. CORDRY: Right.  
18 MR. GROSSMAN: -- but you can always check to make  
19 sure, but let me write that on here somewhere. 453(d),  
20 substitute last -- substitute for two middle black-and-white  
21 pages. All right. You realize that my staff is going to  
22 hate you because I have now written this confusing thing  
23 that even I can't read and certainly won't be able to read  
24 after a couple of days.  
25 MS. CORDRY: Right.

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1 MR. GROSSMAN: All right. And this is, just so I  
2 don't get confused here, you gave me a copy of the old  
3 431(b). So --  
4 MS. CORDRY: Right.  
5 MR. GROSSMAN: -- let me give that back to you --  
6 MS. CORDRY: Okay. All right.  
7 MR. GROSSMAN: -- because I don't need that.  
8 MS. CORDRY: Okay.  
9 MR. GROSSMAN: All right. All right. Any other  
10 post-liminary matters?  
11 MR. GOECKE: One. On Exhibit 352, this was an  
12 excerpt -- this was received at the hearing on October 24th,  
13 excerpted from the NCEE Working Paper on August 2010,  
14 Preliminary Stated-Preference Research on the Impact of LUST  
15 Sites on Property Values. It looks like there are --  
16 MR. GROSSMAN: Wait a minute. Which one are you  
17 on?  
18 MR. GOECKE: I'm sorry, 352.  
19 MR. GROSSMAN: Oh, let me find it. 3 --  
20 MR. GOECKE: 352.  
21 MR. GROSSMAN: Hold on. This is back there. 352.  
22 Okay.  
23 MR. GOECKE: So I think this is another one that  
24 Mr. Core had testified about, and we had cross-examined him,  
25 using other portions of the LUST site. And I think we were

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1 supposed to provide you with a full copy of that and never  
2 did, and I don't have that today, but I will submit that to  
3 you.  
4 MR. GROSSMAN: Any problem with that, full --  
5 MS. ROSENFELD: That's what the transcript says.  
6 MR. GROSSMAN: -- full LUST?  
7 MR. SILVERMAN: Full LUST.  
8 MS. CORDRY: Full-bore LUST we need.  
9 MR. GROSSMAN: All right. Anything else regarding  
10 the exhibits?  
11 MR. GOECKE: Not from the applicant.  
12 MR. GROSSMAN: All right. So except as noted and  
13 what will be supplemented in those two exhibits, and those  
14 supplements and all the exhibits that have been submitted  
15 except as previously noted are here by admitted. I presume  
16 that nobody objects to that, is that correct?  
17 (Exhibits 1 through 613,  
18 except as previously noted,  
19 were received in evidence.)  
20 MS. CORDRY: I'm sure there must be a reason to  
21 object --  
22 MR. GROSSMAN: I'm sure --  
23 MS. CORDRY: -- but I won't.  
24 MR. GROSSMAN: -- but I hear no objections. So,  
25 as I said, they're all admitted except as previously noted,

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1 and there will be two additional filings that have already  
2 been given exhibit labels. Okay. Let me just -- you've all  
3 got down the dates now when your submissions are due --  
4 MS. HARRIS: Yes.  
5 MR. GROSSMAN: -- for the briefs, and you know the  
6 process.  
7 All right. Since we're not going to see each  
8 other for a couple of months, I just want to say, I truly  
9 appreciate the professional way you have all approached  
10 this, and we certainly have a fulsome record which to  
11 consider, and I should add on, not just, not just  
12 professional, but very courteous and civil in this process.  
13 So that's greatly appreciated. I think that that makes the  
14 best record, however this all turns out, for everybody's  
15 review. So we should go on from there. I should also thank  
16 our wonderful court reporter --  
17 MS. CORDRY: Yes.  
18 MR. GOECKE: Yes.  
19 MR. GROSSMAN: -- who has spent a lot of time --  
20 MS. CORDRY: Kathy, yea.  
21 MR. GROSSMAN: Kathy, thank you very much.  
22 MS. CORDRY: And to the extent we ever didn't get  
23 anything 10 days in advance, it's because we're still trying  
24 to --  
25 MR. GROSSMAN: You're still working.

1 MS. CORDRY: We're still working. Believe me,  
 2 that's all we do, is still work. We have never tried to  
 3 hold anything back, and we've just been finding things,  
 4 but --  
 5 MR. GROSSMAN: I understand. No, I think  
 6 everybody tried -- this is such a, this was such a  
 7 voluminous case in terms of witness testimony and exhibits  
 8 and so technical in parts of it that I think you all did  
 9 remarkably well on this.  
 10 So I think that's all. Once again, we are  
 11 adjourned until August 14 at 9:30 a.m. in the Council Office  
 12 Building, second floor hearing room, for closing oral  
 13 arguments and discussion of potential conditions. Other  
 14 than that, the record will not -- there will be no  
 15 additional evidentiary submissions except for the two items  
 16 that are going to be submitted that have already been  
 17 labeled.  
 18 MS. HARRIS: Thank you.  
 19 MR. GOECKE: Thank you.  
 20 MR. GROSSMAN: It's all understood? Thank you  
 21 very much.  
 22 MS. ROSENFELD: Thank you.  
 23 MR. SILVERMAN: Thank you, sir.  
 24 MR. GOECKE: Thanks a lot.  
 25 MS. ADELMAN: Thank you.

1 MR. GROSSMAN: We'll see you in August.  
 2 MR. BRANN: Thank you.  
 3 (Whereupon, at 3:35 p.m., the hearing was  
 4 adjourned.)  
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C E R T I F I C A T E

DEPOSITION SERVICES, INC., hereby certifies that  
 the attached pages represent an accurate transcript of the  
 electronic sound recording of the proceedings before the  
 Office of Zoning and Administrative Hearings for Montgomery  
 County in the matter of:

Petition of Costco Wholesale Corporation  
 Special Exception No. S-2863  
 OZAH No. 13-12

By:

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Wendy Campos, Transcriber

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