

OFFICE OF ZONING AND ADMINISTRATIVE HEARINGS  
MONTGOMERY COUNTY, MARYLAND

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:  
PETITION OF COSTCO WHOLESALE : Case No. S-2863  
CORPORATION : OZAH No. 13-12  
:  
- - - - -X

A hearing in the above-entitled matter was held on  
September 16, 2013, commencing at 9:34 a.m. in the Rita  
Davidson Memorial Hearing Room, 100 Maryland Avenue,  
Rockville, Maryland.

Martin L. Grossman

Hearing Examiner

A P P E A R A N C E S

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C O N T E N T S

Witnesses:	Direct	Cross	Redirect	Recross
<b>Kenneth Chase</b>				
By Mr. Goecke	24			
By Mr. Adelman:		75		
By Ms. Rosenfeld:		145		

E X H I B I T S

Exhibit No.		Marked/Received
272	Applicant's response to the opposition's motion in limine	9
273	Mr. Silverman's response to the Hearing Examiner's question re small increments of air pollution	13
274	Disk with Sullivan Environmental data	16
275	IARC of June 2012 on carcinogenicity of diesel engine and gasoline engine exhaust and some nitro airings	147
276	EPA February 2011 air quality guide for nitrogen dioxide	161
277	EPA's MAAQS Standards	166

P R O C E E D I N G S

1 MR. GROSSMAN: A litany with which you may all be  
2 familiar by now. This is the 13th day of the public hearing  
3 in the matter of Costco Wholesale Corporation, Board of  
4 Appeals No. S-2863, OZAH No. 13-12, a petition for a special  
5 exception pursuant to Zoning Ordinance Section 59-G-2.06 to  
6 allow the petitioner to construct and operate an automobile  
7 filling station which would include 16 pumps. The subject  
8 site is located at 11160 Veirs Mill Road, Silver Spring,  
9 Maryland. That's Lot N-631, Wheaton Plaza Parcel 10, also  
10 known as the Westfield Wheaton Mall. And it is zoned C-2,  
11 general commercial.  
12

13 The hearing was begun on April 26, 2013, and  
14 resumed on May 1, May 6, May 23, June 4, June 17, June 19,  
15 July 8, July 30, July 31, August 2 and September 9, 2013.  
16 It was noticed to resume again today. The next session has  
17 been noticed for Friday, September 20, in this room, that is  
18 the second floor, OZAH Board of Appeals Hearing Room in this  
19 building, Council office building at 9:30 a.m.

20 This hearing is conducted on behalf of the Board  
21 of Appeals. My name is Martin Grossman. I'm the Hearing  
22 Examiner which means I will take evidence and write a report  
23 and recommendation to the Board of Appeals which will make  
24 the decision in the case. Will the parties identify  
25 themselves for the record please?

1 MR. BRANN: Erich Brann for Costco.  
2 MS. HARRIS: Good morning. Pat Harris for Costco.  
3 MR. GROSSMAN: All right.  
4 MR. GOECKE: Good morning, Michael Goecke on  
5 behalf of Costco.  
6 MR. GROSSMAN: Mr. Goecke.  
7 MS. CORDRY: Karen Cordry, Kensington Heights.  
8 MS. ROSENFELD: Michele Rosenfeld, Kensington  
9 Heights.  
10 MR. SILVERMAN: Larry Silverman, Coalition to Stop  
11 Costco Gas. Good morning, sir.  
12 MR. GROSSMAN: Mr. Silverman.  
13 MR. ADELMAN: Good morning, Mr. Grossman. Dr.  
14 Mark Adelman for the Coalition.  
15 MR. GROSSMAN: Dr. Adelman.  
16 MS. ADELMAN: Abigail Adelman, Stop Costco Gas  
17 Coalition.  
18 MR. GROSSMAN: All right.  
19 MS. DUCKETT: Eleanor Duckett, Kensington View  
20 Civic Association.  
21 MR. GROSSMAN: Okay. And --  
22 MS. SHEARD: Virginia Sheard, Kensington View.  
23 MR. GROSSMAN: Okay. Anybody else in the audience  
24 here who wishes to be heard today?  
25 (No audible response.)

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1 MR. GROSSMAN: All right. Other than witnesses  
2 who are going to be called by the parties, I see no other  
3 hands. So let me proceed with some preliminary matters.  
4 Since our last meeting, there were various filings  
5 and exchanges. Exhibit 267 was Kensington Heights Civic  
6 Association's reply to the applicant's opposition to  
7 Kensington Heights's motion before the Board of Appeals for  
8 summary disposition. Exhibit 268 were Ms. Cordry's filings  
9 on September 10, 2013, and they are parts, subparts A  
10 through N. Then Exhibit 269 was an e-mail from Mr. Goecke  
11 attaching 269(a), was Dr. Chase's September 10, 2013 letter,  
12 the amended report, in effect; and (b) Dr. Chase's  
13 references used in the letter. Exhibit 271, addition  
14 filings by Ms. Cordry. And that's the last e-mail I have on  
15 my list.  
16 As I understand it, the witnesses scheduled for  
17 today are Dr. Kenneth Chase and possibly Ms. Cordry  
18 testifying out of order on a community need issue if there  
19 is space in the day. And Mr. Sullivan is scheduled to be  
20 the applicant's last witness on September 20th. That's this  
21 Friday.  
22 Does anybody wish to state for the record what the  
23 Board of Appeals did? I have not received any formal  
24 information in that record and I'm talking about with the  
25 two summary disposition motions that were filed with them.

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1 Ms. Rosenfeld?  
2 MS. ROSENFELD: The Board of Appeals voted 4 to 0  
3 unanimously. There were four Board members present. Two  
4 remand the motions back to you for fact finding and a  
5 recommendation to them on proper disposition of the two  
6 motions.  
7 MR. GROSSMAN: Okay. I haven't received a  
8 resolution to that effect.  
9 MR. GOECKE: I think that's a bit of a  
10 mischaracterization of what happened. They voted to 4 to  
11 nothing not to hear the motion themselves and they said that  
12 you retained the authority to weigh in if you so choose, but  
13 they were not instructing you to decide the motion or to  
14 give a written report.  
15 MR. GROSSMAN: Do you disagree with Mr. Goecke's --  
16 MS. ROSENFELD: I --  
17 MR. GROSSMAN: -- re-characterization?  
18 MS. ROSENFELD: I believe I do. We can certainly  
19 get a copy of the transcript and see precisely what the  
20 motion was. I'm sure Ms. Freeman can get that.  
21 MR. GROSSMAN: I would assume that they will issue  
22 a formal resolution stating --  
23 MS. ROSENFELD: I would assume so.  
24 MR. GROSSMAN: -- whatever is it and that would be  
25 what they intended. But as I think I've mentioned before, I

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1 don't believe that I am empowered by, at least the current  
2 state of the rules, to grant a summary disposition.  
3 MS. ROSENFELD: And one of the Board members  
4 specifically asked that question and Vice Chair Perdue, who  
5 was acting as a chairman, said a record that no, if there  
6 were to be a final decision on those motions, it would have  
7 to be rendered by the Board of Appeals.  
8 MR. GROSSMAN: All right.  
9 MS. ROSENFELD: So they made it clear.  
10 MR. GROSSMAN: All right. So that I guess we  
11 would proceed as we were here on the assumption that if  
12 those motions come back, I would not be able to -- if I were  
13 to act on them, I would have to deny them as being something  
14 beyond my powers at this juncture.  
15 MS. CORDRY: If I might state, I don't know, that  
16 was not what they said. What they said was you can make a  
17 report and recommendation to them on those motions --  
18 MR. GROSSMAN: All right.  
19 MS. CORDRY: -- whether you require to,  
20 appropriate to, whatever, but that you make a report and  
21 recommendation and they would then make the final decision  
22 on them.  
23 MR. GROSSMAN: Okay. Well, let's see what they  
24 formally do in their resolution. But in any event, I'm just  
25 speaking about the nature of what my assignment is as

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1 Hearing Examiner, which is not to make final decisions in  
2 these kinds of cases. We do in some cases that are filed  
3 with us, but in this kind of case it's a Board of Appeals  
4 decision. So --  
5 MS. ROSENFELD: And I think that's consistent with  
6 their view of it as well.  
7 MR. GROSSMAN: All right. So, in any event, as to  
8 their -- there is, of course, the motion in limine that's  
9 still before me and I will await any response from the  
10 applicant on that. Okay. That's --  
11 MR. GOECKE: May I bring this up?  
12 MR. GROSSMAN: Absolutely. Thank you. Do you  
13 have a copy for --  
14 MR. GOECKE: I do.  
15 MR. GROSSMAN: -- the opposition?  
16 MR. GOECKE: Yes.  
17 MR. GROSSMAN: All right. This will be Exhibit  
18 272. It's a little warm in here today. Did we -- if my  
19 staff is monitoring this, I would ask them to adjust the  
20 temperature and get it a little bit cooler. All right.  
21 Exhibit 272 and that is applicant's response to the  
22 opposition's motion in limine.  
23 (Exhibit No. 272 was marked for  
24 identification.)  
25 MR. GOECKE: And I still --

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1 MR. GROSSMAN: I get that there?  
2 MR. GOECKE: I will submit to you an electronic  
3 copy of that in Word version by Friday.  
4 MR. GROSSMAN: Thank you.  
5 MR. GOECKE: I'll transfer the file.  
6 MR. GROSSMAN: Thank you very much. Appreciate  
7 that. Okay. I'll just remind everybody that I have to  
8 complete the hearing today by sometime between 4:30 and  
9 4:45. Any other preliminary or procedural matters? Well,  
10 let's take the applicant first.  
11 MS. HARRIS: Mr. Grossman, I thought we had  
12 addressed this at the beginning of the last hearing session,  
13 the issue of receiving data and reports from the opponents  
14 in a timely manner, and this is especially important now as  
15 they start with their case and we would just ask and that,  
16 again, an understanding that reports should be provided 10  
17 days prior to their witnesses going on. I mean we did  
18 receive information prior, within that 10-day period from  
19 Ms. Cordry. We're not going to make an issue of it today,  
20 but I don't want to be in this constant state where we're  
21 getting things, you know, three days before one of our  
22 witnesses going.  
23 MR. GROSSMAN: Right. Let's, since we're spread  
24 out over a long enough period of time in this hearing, let's  
25 endeavor to comply with that.

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1 MS. ROSENFELD: We will do that and just to note,  
2 these aren't, this isn't a report from Ms. Cordry.  
3 MR. GROSSMAN: Yes.  
4 MS. ROSENFELD: It is material that she reviewed  
5 in preparation for her testimony which we've provided.  
6 MR. GROSSMAN: Right. And I know that she has  
7 written extensively. I've read any number of submissions  
8 that she has made to various bodies regarding the needs  
9 issue and other issues.  
10 MS. ROSENFELD: Okay.  
11 MR. GROSSMAN: I think you have a pretty fair --  
12 but I understand your point and I think your point is well-  
13 taken.  
14 MS. HARRIS: And so it's not just reports, though.  
15 It's just anything that they may rely on?  
16 MR. GROSSMAN: They're going to rely on. Right.  
17 So you'll have an opportunity to look at it before.  
18 MS. CORDRY: I would request that if, for  
19 instance, an exhibit as one did come out within the 10-day  
20 period for the, supporting our case, we're not precluded  
21 from using it. Well, one of the exhibits I submitted was a  
22 news article that came out on September 10th, so it's a  
23 little difficult to provide it to them 10 days in advance  
24 and so forth and most of the rest of it was simply updating  
25 corrections of exhibits that they already had, just going

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1 over them to make sure they were in good shape and so forth.  
2 So I don't, I don't think there's been a particular  
3 violation in the spirit of that, but I do want to be clear  
4 that this area continues to develop.  
5 MR. GROSSMAN: Right. I mean to the extent  
6 something comes out that's more recent that can't be, you  
7 can't comply with it, I understand, but I also have to  
8 retain fairness to both sides and give them an opportunity  
9 to sufficiently prepare for cross-examination, so we'll have  
10 to adjust it as we did. And I'm not, I try not to be  
11 doctrinaire about these things because I think my role is to  
12 make sure we have a fair hearing that everybody has an  
13 opportunity to present their points and that the other side  
14 in each case has the opportunity to fairly examine those  
15 points. So that's my goal in all of this. All right.  
16 MR. SILVERMAN: Mr. Grossman.  
17 MR. GROSSMAN: Yes, sir?  
18 MR. SILVERMAN: Another, I hope it's a preliminary  
19 matter.  
20 MR. GROSSMAN: Yes.  
21 MR. SILVERMAN: At the last hearing you raised a  
22 question about how EPA deals with small increments of air  
23 pollution. I have prepared a short memo on that subject  
24 which I would like to give you and give the other parties,  
25 completed this morning.

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1 MR. GROSSMAN: That would be great. Thank you.  
2 MR. SILVERMAN: All right.  
3 MR. GROSSMAN: I saw that you had e-mailed me  
4 something this morning.  
5 MR. SILVERMAN: Yes, I --  
6 MR. GROSSMAN: I didn't have a --  
7 MR. SILVERMAN: -- it's been e-mailed all around.  
8 MR. GROSSMAN: All right. So this will be Exhibit  
9 273. Mr. Silverman, is this an individual filing or is this  
10 something on behalf of the Coalition?  
11 MR. SILVERMAN: Well, I was trying to get to it  
12 earlier. I haven't had a chance to review it with the  
13 Coalition, so at this point it's an individual filing --  
14 MR. GROSSMAN: All right.  
15 MR. SILVERMAN: -- I hope the Coalition will  
16 endorse.  
17 MR. GROSSMAN: Mr. Silverman's response to the  
18 Hearing Examiner's question regarding small increments of  
19 air pollution.  
20 (Exhibit No. 273 was marked for  
21 identification.)  
22 MR. GROSSMAN: Okay. Any other preliminary  
23 matters?  
24 MS. ROSENFELD: Yes, Mr. Grossman.  
25 MR. GROSSMAN: Ms. Rosenfeld?

1 MS. ROSENFELD: At the last hearing I told you I  
2 was going to provide for the record a copy of the NOT disk  
3 that we received from Costco on August 13th. I had it with  
4 me, but didn't hand it in. I'm handing this in now. I have  
5 previously provided a copy of this to Ms. Harris and Mr.  
6 Goecke, so --

7 MR. GROSSMAN: Okay. Is this a copy of the disk  
8 that I already have received from the applicant, Mr. Goecke?  
9 It's entitled duplicate copy of Sullivan Environmental  
10 Consulting, 8/13/13.

11 MR. GOECKE: It should be a duplicate. I think, I  
12 don't want to speak for Ms. Rosenfeld, but I think she's  
13 giving it to you because this is a disk that we circulated  
14 and then a week or 10 days later she e-mailed and said it  
15 doesn't contain the data that we're looking for and then we  
16 provided another disk. So I don't know what is or is not on  
17 the disk. I know the urban data for NOT was supposed to be  
18 on there. They're saying it wasn't and then we submitted  
19 another disk that apparently satisfied them.

20 MS. ROSENFELD: Which we got on, I believe, the  
21 26th which did have the data we were looking for.

22 MR. GOECKE: So the answer to your question is,  
23 yes, you should have this disk already.

24 MR. GROSSMAN: And so if you got it on the 26th,  
25 all the data that you were looking for, and we're now on

1 September 16, is there an issue in your mind still with  
2 regard to how this affects you?

3 MS. ROSENFELD: There was a question as to why we  
4 waived, why we filed our motion in limine at the time we did  
5 and we had to have the data that's on that disk in order to  
6 determine what the base numbers were at the time that Mr.  
7 Sullivan prepared his original December 2012 report,  
8 November 2012 report. It's just in there for the record to  
9 show what it was and we actually had received in the middle  
10 of August.

11 MR. GROSSMAN: I'll exhibitize it for you if  
12 that's what you want me to do. You know, we'll say that I  
13 don't have, I didn't have an issue as I think I stated at  
14 the last hearing. I said I wasn't thrilled at getting them  
15 two days before the hearing, but I understood given the  
16 timing of when the Sullivan reports were amended that I  
17 could understand the timing of your filing your motion. So  
18 it's not an issue with me in terms of acting on your motion.

19 MS. ROSENFELD: Okay.

20 MR. GROSSMAN: I'm, you know, unless you want me  
21 to?

22 MS. ROSENFELD: I would like it in the record.

23 MR. GROSSMAN: Okay. All right. So this will  
24 be --

25 MS. ROSENFELD: To preserve that.

1 MR. GROSSMAN: -- Exhibit 274, disk with Sullivan  
2 Environmental Data. Okay.

3 MS. HARRIS: Mr. Grossman, I realize that in  
4 providing the disk on 8/26, I neglected to also provide you  
5 a copy of it. So I --

6 MR. GROSSMAN: All right.

7 MS. HARRIS: -- need to do that and I'll bring  
8 that on Friday.

9 MR. GROSSMAN: Well, if this is the -- oh, so you  
10 don't have -- in other words, the updated disk that has all  
11 of the information that has been sent. Okay. So you'll  
12 provide that? All right.

13 MS. ROSENFELD: Mr. Grossman, a couple of other  
14 things.

15 MR. GROSSMAN: Yes, ma'am?

16 MS. ROSENFELD: I know you just got the opposition  
17 on the motion for summary, in the motion in limine. Do you  
18 have a sense for when you might rule on that just so we know  
19 in preparation for Mr. Sullivan on Friday?

20 MR. GROSSMAN: Sure. I would hope to rule by  
21 Wednesday --

22 MS. ROSENFELD: Okay.

23 MR. GROSSMAN: -- and I guess what I will do is,  
24 I'm not sure that I will issue a written order, but I would  
25 notify people by e-mail of what my ruling will be and then

1 I'll enter something formally, announce it more formally on  
2 the record at the next hearing.

3 MS. ROSENFELD: And after we've had an opportunity  
4 to look at this, we would like an opportunity to file it by  
5 tomorrow if appropriate, if you're not --

6 MR. GROSSMAN: Then you're really squeezing the  
7 time.

8 MS. ROSENFELD: I haven't looked at it, so I  
9 don't, I don't know if we choose to.

10 MR. GROSSMAN: All right. I'm not going to tell  
11 you you can't, but let's say if you're going to do that,  
12 then I may not be able to act until Thursday, depending on  
13 what time. If you filed it by noon tomorrow, then I guess I  
14 could act, or Wednesday. I also have some Council business  
15 I have to, committee business I have to attend to tomorrow,  
16 so I'm not sure what my schedule is going to be.

17 MS. ROSENFELD: We'll certainly keep the, all  
18 those time constraints in mind. There is also one other  
19 question, a preliminary matter. With respect to the updated  
20 Sullivan report that was filed on August 16th, you may  
21 recall that he provided to Planning Staff a detailed  
22 analysis in response to their health-related issues. Staff  
23 recommended denial of his special exception for health  
24 reasons.

25 MR. GROSSMAN: Right.

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1 MS. ROSENFELD: Two out of the five Board members  
2 agreed with Staff on that point. And if his updated report  
3 is going to be accepted in part or in whole, then I view  
4 that as a material change in the evidence that was provided  
5 in this case and that the updated report should be remanded  
6 or sent on to the Planning Staff for its review and  
7 consideration as happened with the amended plans. So I just  
8 would like you to keep that in mind as a procedural point --  
9 MR. GROSSMAN: Okay.  
10 MS. ROSENFELD: -- when you consider the motion in  
11 limine.  
12 MR. GROSSMAN: I think I've actually asked Ms.  
13 Harris to send a copy of -- to make sure that a copy -- I  
14 either did that or I asked Ms. --  
15 MS. HARRIS: It was the landscaping plans.  
16 MR. GROSSMAN: No, I was also -- I may have asked  
17 Ms. Cayman whether she had received a copy of the updated  
18 materials from Mr. Sullivan and had intended that they be  
19 supplied to Staff. I think that minimally should be done  
20 under the zoning ordinance. So if that has not been done,  
21 then certainly they should be supplied that and they have  
22 the opportunity to comment on it.  
23 MS. HARRIS: Okay. We will do that.  
24 MR. GROSSMAN: What I don't quite understand, the  
25 connection between, yes, I recall that after Technical Staff

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1 had issued its report, there were, there was a response from  
2 the applicant and then there was a further response from  
3 Technical Staff or maybe there was, maybe it was after the  
4 opposition. I'm trying to remember back. Somebody  
5 responded. And then there was a further response from  
6 Technical Staff to something that was filed after their  
7 report.  
8 MS. ROSENFELD: That may be. The supplemental  
9 report --  
10 MR. GROSSMAN: And I don't see the connection, and  
11 I didn't see the connection between that and the further  
12 obligations supplied Technical Staff with any amendments  
13 that happened recently.  
14 MS. ROSENFELD: Well, the zoning code requires  
15 that if there's a change to, if the applicant seeks to amend  
16 the petition for special exception or if there is a material  
17 change in the evidence provided in support of that, that it  
18 should be referred on to the Planning Staff.  
19 MR. GROSSMAN: I totally agree with that, but  
20 that's --  
21 MS. ROSENFELD: Okay.  
22 MR. GROSSMAN: -- independent of whether or not  
23 there was something done way back when the initial Technical  
24 Staff report was filed and then was, and there were  
25 responses. I'm saying that whatever further thing was filed

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1 changing the plans here in some way, usually I think that  
2 the, it may be that the zoning ordinance talks in terms of  
3 change of the plans. I can't recall an amendment to the  
4 plan and I'm not sure that the additional data from Mr.  
5 Sullivan fits squarely within that, but I would certainly  
6 require in any event, given the nature of this case, that a  
7 copy of that be furnished to staff and that they have the  
8 opportunity reply. So that's --  
9 MS. ROSENFELD: The zoning ordinance does speak  
10 specifically to plans and evidence in support of the  
11 application. But either way, if they're going to receive a  
12 copy, that satisfies my request.  
13 MR. GROSSMAN: Absolutely.  
14 MS. CORDRY: In response to your point, I believe  
15 after Mr. Sullivan's last report went in, there was no  
16 formal response by staff. There was some discussion at the  
17 public hearing before the Planning Board --  
18 MR. GROSSMAN: Okay.  
19 MS. CORDRY: -- but I would want to be able to  
20 file the response to that updated data that said their  
21 initial analysis was wrong, so --  
22 MR. GROSSMAN: All right. But didn't they file --  
23 they did file something, maybe it was in response to  
24 something that the opposition filed after their --  
25 MS. CORDRY: I think when it was actually filed

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1 was when I submitted my need report --  
2 MR. GROSSMAN: Yes.  
3 MS. CORDRY: -- I had a lot of attachments and  
4 somehow the attachments did not get put into the process  
5 there. So they actually filed a supplemental piece dealing  
6 with the need issue. I don't --  
7 MR. GROSSMAN: Okay.  
8 MS. CORDRY: -- I think it went to Mr. Sullivan's  
9 report.  
10 MR. GROSSMAN: Okay. Yes, I couldn't remember off  
11 the top of my head whether, but I remember that they filed  
12 something.  
13 MS. CORDRY: Right. Right. I think it was on the  
14 needs issue.  
15 MR. GROSSMAN: Some supplement. Okay. Well, in  
16 any event, the bottom line here, as we say, is that a copy  
17 of the updated report from Mr. Sullivan will be supplied to  
18 Technical Staff and they will, they're invited to comment on  
19 it. And I think in my e-mails, I thought of this issue and  
20 e-mailed them and they came in just to ask if she had  
21 received a copy and tendered that she had not and asked that  
22 a copy be supplied. So that has now been accomplished  
23 today. It's not there.  
24 MR. ADELMAN: Mr. Grossman, just for  
25 clarification. You said they may choose to respond. In

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1 your mind, is there ever a point in which the Planning Staff  
2 would be required to respond?  
3 MR. GROSSMAN: No, I don't the code requires that  
4 they respond, but they are, they have the opportunity to  
5 respond. The point is that if there are changes in the  
6 plans, that Staff be given the opportunity, okay? All  
7 right. Any other preliminary matters?  
8 (No audible response.)  
9 MR. GROSSMAN: Hearing none, we'll happily turn to  
10 our next witness.  
11 MR. GOECKE: And Costco would like to call Dr.  
12 Chase.  
13 MR. GROSSMAN: All right. Dr. Chase.  
14 MR. GOECKE: Chase, rather, I'm sorry. Would you  
15 step up here please, sir?  
16 MR. GROSSMAN: And, Mr. Chase, will you state your  
17 full name and business address for the record please?  
18 MR. CHASE: Kenneth H. Chase, M.D., and I work at  
19 1140 19th Street, N.W., in Washington, D.C.  
20 MR. GROSSMAN: Would you raise your right hand  
21 please?  
22 (Witness sworn.)  
23 MR. GROSSMAN: All right. You may proceed, Ms.  
24 Harris.  
25 MS. HARRIS: I'm going to --

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1 MR. GROSSMAN: Oh, Mr. Goecke, okay.  
2 MS. HARRIS: -- defer to Mr. Goecke.  
3 DIRECT EXAMINATION  
4 BY MR. GOECKE:  
5 Q Good morning, Dr. Chase. Can you tell us what you  
6 do for a living?  
7 A I have a, I'm a physician, originally boarded in  
8 internal medicine and I still have a small clinic with three  
9 or four exam rooms, chest x-ray, treadmill, et cetera, at my  
10 office on 19th Street in D.C. The larger part of what we do  
11 is consulting work to the Government and to the private  
12 sector on a nationwide basis and occasionally outside of the  
13 United States.  
14 Q What's the name of your company?  
15 A Washington Occupational Health Associates.  
16 Q And what's your role at Washington Occupational  
17 Health Associates?  
18 A I'm the founder and the president.  
19 Q When did you found the company?  
20 A July 1, 1980.  
21 Q In addition to being a practicing physician, can  
22 you elaborate a bit more on what else it is you do?  
23 A The, in addition to being boarded in internal  
24 medicine, I was later boarded in occupational and  
25 environmental medicine and that's the lion's share of what

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1 we do, dealing with work-related issues, fitness for duty,  
2 return to duty, as well as environmental issues, air, ground  
3 water, surface water, et cetera.  
4 Q Just so the record is clear, when you use the term  
5 boarded, what does that mean?  
6 A Board-certified by the American Board of  
7 Preventative Medicine.  
8 Q All right.  
9 A That's the particular board that administers board  
10 certification in the fields of occupational and  
11 environmental medicine.  
12 Q All right. And a moment ago you mentioned about  
13 seeing if people are fit to return to duty. Can you  
14 elaborate on what that means exactly?  
15 A A man or woman may sustain an injury at work or  
16 outside the workplace and not be able to perform their full  
17 duties for a period of time and eventually they may feel  
18 ready to return to duty and the employer may ask us to  
19 confirm that he or she is ready to assume the full duties of  
20 whatever job it is.  
21 Q Okay. And you testified that you work for some  
22 Federal agencies. Can you identify what agencies those are?  
23 A The Army Corps of Engineers on a worldwide basis;  
24 the FBI on a worldwide basis at times; Fannie Mae; the U.S.  
25 Capitol, in particular the architect of the Capitol; GSA and

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1 others.  
2 Q Thank you. Let's back up a bit. Where did you go  
3 to school?  
4 A UCLA.  
5 Q And what degree did you obtain at UCLA?  
6 A Bachelor's of mathematics with honors in 1964.  
7 Q Did you attend any other schools besides UCLA?  
8 A Well, I went to medical school at UCLA. I did my  
9 internship and first year residency at University of  
10 Michigan. I then spent two years at NIH and then I  
11 completed my third year medical residency at Georgetown  
12 University following which I joined the full-time faculty at  
13 George Washington University. I also had a part-time  
14 employment for a 3-year period overlapping what I just  
15 described at University of Maryland.  
16 Q Have you ever testified as an expert witness  
17 before?  
18 A Yes.  
19 Q Where?  
20 A I couldn't name all the, all the states, but all  
21 over the country.  
22 Q Could you estimate how many times you've been  
23 qualified as an expert witness?  
24 MR. GROSSMAN: Let's clarify that question.  
25 Expert witness in what?

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1 MR. GOECKE: In testifying before a trial or --  
2 MR. GROSSMAN: No, of, in what field of expertise?  
3 MR. GOECKE: In, oh sure, in the fields of  
4 internal medicine -- let's start with internal medicine.  
5 THE WITNESS: More often in occupational and  
6 environmental mostly.  
7 MR. GOECKE: Okay.  
8 THE WITNESS: And I would say it's average of five  
9 times a year for 30 years.  
10 BY MR. GOECKE:  
11 Q And your educational and work history is listed on  
12 your CV, is that correct?  
13 A Yes.  
14 MR. GOECKE: And I think that's been submitted to  
15 the record as Exhibit 17(h). May I -- at this time, Mr.  
16 Grossman, I'd like to offer Dr. Chase as an expert, a  
17 medical expert in the field of occupational environmental  
18 medicine, as well as internal medicine.  
19 MR. GROSSMAN: Okay. So occupational and is it  
20 environmental?  
21 MR. GOECKE: Yes.  
22 MR. GROSSMAN: And environmental and internal  
23 medicine. All right. Any voir dire of Dr. Chase?  
24 MR. ADELMAN: Uh-huh.  
25 MR. GROSSMAN: Would you like to go first, Ms.

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1 Rosenfeld?  
2 (Discussion off the record.)  
3 MR. ADELMAN: Go first, fine.  
4 MS. ROSENFELD: I'll defer to Dr. Adelman.  
5 BY MR. ADELMAN:  
6 Q Yes. Good morning, Dr. Chase. Can you hear me?  
7 A Yes.  
8 Q Good. So I understand from your statement that  
9 you're board-certified in internal medicine and occupational  
10 and environmental medicine. Both of those are termed  
11 general medical specialties, is that correct?  
12 MR. GROSSMAN: I'm sorry, both of those are termed  
13 what?  
14 MR. ADELMAN: Both of those are termed general  
15 medical specialties, is that correct?  
16 THE WITNESS: No, I don't think so. Occupational,  
17 internal medicine has become almost equivalent to general  
18 medicine in some ways, but occupational and environmental  
19 medicine is considered a specialty.  
20 BY MR. ADELMAN:  
21 Q A general medical specialty --  
22 A I'm not sure what you mean by --  
23 Q -- is that correct?  
24 A -- general. As opposed to --  
25 Q I'm referring to what the AMA terminology is.

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1 A AMA?  
2 Q American Medical Association.  
3 A I know who they are, but I don't know the intent  
4 of that qualified general.  
5 Q Well, how about the American Board of Medical  
6 Specializations, the categories general certificates and  
7 subspecialty certificates, are you familiar with those?  
8 A Yes, ADMS.  
9 Q ADMS, yes.  
10 A I'm familiar with them.  
11 Q All right. And --  
12 A Occupational and environmental medicine, there are  
13 only 3,000 physicians in the country --  
14 Q Okay.  
15 A -- at the most 4,000 who are --  
16 Q Okay.  
17 A -- board-certified in the field and that makes it  
18 a pretty small segment of the medical field --  
19 Q Absolutely, exactly --  
20 A -- as opposed to internal medicine --  
21 Q -- what my point --  
22 A -- where there are hundreds of thousands.  
23 Q My question is do you agree that both of areas in  
24 which you have board certification are general medical  
25 specialties?

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1 MR. GROSSMAN: Well, what -- I'm not sure where  
2 does that get us? What is that, what impact does that have,  
3 Dr. Adelman?  
4 MR. ADELMAN: I'll proffer that the specialty area  
5 in which Dr. Chase is certified is largely not relevant to  
6 the medical issues that are before you, Mr. Grossman.  
7 MR. GROSSMAN: Well, you can establish that if you  
8 want, but I'm just saying whether you call it in general or  
9 special or a sub-category of general, what they're called in  
10 that regard, how does that affect us?  
11 MR. ADELMAN: It affects my logical progression of  
12 demonstrating what areas Dr. Chase is or is not board-  
13 certified in.  
14 MR. GROSSMAN: All right. Well, let's move to  
15 that and get away from whether or not they're called general  
16 or special because I just don't think that makes a  
17 difference to our consideration.  
18 MR. ADELMAN: With all due respect, Mr. Grossman,  
19 I think it does make a difference. It makes asking the  
20 questions more difficult, but I'll defer to you.  
21 MR. GROSSMAN: Well, whether or not -- he's  
22 already answered your question, I let him answer your  
23 question and he wasn't familiar with what that  
24 characterization of a general specialization that you  
25 proffered to him. So he's already answered that.

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1 MR. ADELMAN: Fine. Thank you.  
2 BY MR. ADELMAN:  
3 Q Are you board-certified in any other general  
4 medical specialty or sub-specialty and, if so, which?  
5 A No.  
6 Q To be clear, so that there's no misunderstanding,  
7 this avenue that you are not board-certified in any of the  
8 following, and please correct me if I'm wrong, but to an  
9 upwards of certified in allergy and immunology, in geriatric  
10 medicine, in adolescent medicine, in cardiovascular disease  
11 and pulmonary disease, and internal and feral medicine or in  
12 pediatric cardiology, is that correct?  
13 A It's correct that I'm not board-certified in those  
14 fields. Nevertheless, most of the areas you just named are  
15 part of the practice of general internal medicine.  
16 Q In the -- have you in the last two years taken any  
17 continuing medical education courses and if so in what  
18 areas?  
19 A Yes, I continue obtaining continuing medical  
20 education in a number of areas, most often in occupational,  
21 environmental and preventative medicine. I didn't say it  
22 before, but preventative medicine is considered by most of  
23 my colleagues to be part of occupational and environmental  
24 medicine.  
25 MR. ADELMAN: Just a moment, Mr. Grossman.

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1 THE WITNESS: And I spent a week in Orlando in  
2 April getting CME's, continuing medical education, credits.  
3 I occasionally attend grand rounds at, medical grand rounds  
4 at George Washington University where the topics are all  
5 over the map. And there are other, there are other areas,  
6 sometimes one-day seminars in the District or lunch seminars  
7 on a particular topic that I attend to various  
8 organizations.  
9 BY MR. ADELMAN:  
10 Q Are those the grand rounds and lunch seminars do  
11 not, of course, qualify as continuing medical education  
12 courses, would you agree?  
13 A I think you asked me if they qualify and the  
14 answer is yes.  
15 Q As continuing medical education?  
16 A Yes, you're typically given a piece of paper when  
17 you leave the seminar that says this was good for one CME or  
18 three CME's, depending on the length.  
19 Q Okay. Thank you. Have you taken specifically or  
20 gotten any CME credits for the following topics or  
21 information you received recently in two years, in allergy  
22 and immunology, in geriatric medicine, in adolescent  
23 medicine, in cardiovascular medicine, in pulmonary disease,  
24 in internal and feral medicine or in pediatric cardiology?  
25 A Yes, to half of those.

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1 Q Which half?  
2 A Cardiology, pulmonary, allergy and I think --  
3 MR. ADELMAN: Would it be appropriate, Mr.  
4 Grossman, to ask as a supplement to the file we see those  
5 certifications?  
6 MR. GROSSMAN: Well, it's appropriate to ask  
7 anything you want and I think that is it required that he  
8 produce them? No, I wouldn't require him to produce them.  
9 MR. ADELMAN: Understood.  
10 MR. GROSSMAN: I think his -- you can certainly  
11 question him as you are, questioning him now about his  
12 qualifications --  
13 MR. ADELMAN: Okay.  
14 MR. GROSSMAN: -- and about the extent to which  
15 his qualifications are applicable to issues here, you're  
16 doing a good job of inquiring about, but I think his resume  
17 and what he's testifying to here is sufficient to establish  
18 his view of the credentials.  
19 MR. ADELMAN: Understood. Thank you.  
20 BY MR. ADELMAN:  
21 Q Dr. Chase, you spoke to the fact that you maintain  
22 an operational clinic. Have you in the last two years  
23 treated any patients? If so, without reaching any aspect of  
24 patient confidentiality, could you indicate what areas or  
25 what health problem you treated patients for?

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1 A Yes. My answer to your question depends a little  
2 bit on the time frame and the end of 2002 I stopped doing  
3 general internal medicine, but that didn't stop us from  
4 seeing patients for travel and immunization services, minor  
5 injury management and a variety of other conditions.  
6 Q What do you estimate approximately how many  
7 patients you saw in the last two years approximately?  
8 A 300.  
9 Q 300? And the majority were for occupational  
10 health and safety related issues, is that correct?  
11 A Yes. In some instances treatment was provided  
12 certainly for minor injury management. In other cases, that  
13 number 300, by the way, is probably low because I wasn't  
14 including all the pre-employment and onboard or in-service  
15 physical exams that we do so many of.  
16 Q Understood. Understood. Thank you. To be clear,  
17 I have a long list here. Have you treated any patients, any  
18 of the patients that you treated, do they fall into -- was  
19 the need for treatment in one of the following categories?  
20 First of all, with respect to children, have you treated any  
21 children?  
22 MR. GROSSMAN: In the last two years?  
23 MR. ADELMAN: Yes.  
24 MR. GROSSMAN: Are you asking has he treated any  
25 children in the last two years?

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1 MR. ADELMAN: Yes, precisely. Thank you.  
2 THE WITNESS: Certainly not as an ongoing treating  
3 physician like a pediatrician would.  
4 MR. ADELMAN: Well --  
5 THE WITNESS: But we've administered  
6 immunizations, vaccinations to children who are traveling  
7 with their parents abroad.  
8 MR. ADELMAN: Okay.  
9 THE WITNESS: And that could be for either  
10 vacation or a change in work assignment, the FBI being a  
11 good example of people who get assigned overseas.  
12 BY MR. ADELMAN:  
13 Q I'm sorry, I couldn't understand that.  
14 A The FBI would be a good example of workers who end  
15 up with overseas assignments and they take their families  
16 with them.  
17 Q Okay. And those would fall into the category, the  
18 general category I mean, of preliminary evaluation,  
19 preventative medicine, is that correct?  
20 A Yes.  
21 Q Specifically, have you treated any children for  
22 any of the following: Depression, anxiety, acute  
23 bronchitis, asthma or chronic productive cough?  
24 MR. GROSSMAN: Where does depression and anxiety  
25 fit into what we're looking at in this case?

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1 MR. ADELMAN: Those are conditions that are known  
2 or thought to arise from exposure to the various pollutants  
3 in automobile, automobile exhaust, excuse me.  
4 MR. GROSSMAN: You may answer the question. Have  
5 you treated children for any of the disorders that were  
6 listed by Dr. Adelman? Do you want him to list them again?  
7 THE WITNESS: No. No. Anxiety and depression in  
8 children is something I'm familiar with. My wife is in the  
9 field of special ed and so we've had many chats about ADHD  
10 and related conditions she's seen, but that's not -- no, I  
11 haven't done that in my office. Have I ever been asked to  
12 help understand a child's asthma, on occasion, or other  
13 allergies?  
14 BY MR. ADELMAN:  
15 Q The question was not what you were asked to  
16 evaluate. The question was have you treated a child as a  
17 patient for asthma, chronic productive cough --  
18 A No.  
19 Q -- acute bronchitis.  
20 A I didn't hear the last thing you said.  
21 Q Acute bronchitis.  
22 MR. GROSSMAN: Acute bronchitis, have you treated  
23 a child for asthma --  
24 THE WITNESS: No. No, we typically refer them to  
25 their personal pediatrician when we feel that's warranted.

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1 BY MR. ADELMAN:  
2 Q With respect to adults that you've treated, have  
3 you treated an adult for any of the following lung diseases,  
4 including COPD, emphysema, asthma, lung cancer or with  
5 respect to other systems within the respiratory system, have  
6 you treated any adults for arterial sclerosis,  
7 cardiovascular disease, diabetes or any of the various  
8 components?  
9 A I, yes is the answer.  
10 Q Could you elaborate?  
11 A Like I said in 2002, I terminated the traditional  
12 practice of internal medicine, but for over 30 years I  
13 treated all of those conditions on both inpatient and  
14 outpatient basis and in emergency rooms and ICU's.  
15 Q To clarify, my question went to the patients that  
16 you have treated in the last two years.  
17 A If you restrict it to the last two years, no.  
18 MR. GROSSMAN: And what relevancy is the  
19 distinction between the last two years or the last 10 years,  
20 Dr. Adelman?  
21 MR. ADELMAN: Medicine, as you know, Mr. Grossman,  
22 is a rapidly changing field. Treatments at five years ago  
23 were considered to be the state-of-the-art are frequently,  
24 completely irrelevant and no longer considered in any way  
25 valid.

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1 MR. GROSSMAN: Well, how about you made the cut-  
2 off the last two years, so you're talking about anything  
3 before 2011. I --  
4 MR. ADELMAN: I would be happy to amend that to  
5 three years.  
6 MR. GROSSMAN: Well, I'm just -- I don't know  
7 that -- I just wanted to know what the basis is for that  
8 particular cut-off and your question, so that I can evaluate  
9 whether it really makes a difference in terms of this  
10 witness's qualification.  
11 MR. ADELMAN: The number two was picked  
12 arbitrarily based on the assumption that if I said recently,  
13 you would immediately question what did recently mean.  
14 MR. GROSSMAN: That's a fair observation.  
15 MR. ADELMAN: So I picked two years and if you  
16 feel that three is a better number, I'll pick three.  
17 MR. GROSSMAN: I don't have an opinion on whether  
18 it's two or three, I just wanted to know on what you based  
19 your distinction of two years versus his overall experience.  
20 Let me --  
21 MR. ADELMAN: Well, I can clarify the point a bit  
22 further. As you know, I taught medical students for roughly  
23 40 years and so I had to keep current on the sorts of  
24 information they needed to know --  
25 MR. GROSSMAN: Well, I can't have you testify now,

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1 but --  
2 MR. ADELMAN: Sorry.  
3 MR. GROSSMAN: -- but when you have an opportunity  
4 to testify, you can certainly elaborate whatever you think  
5 is relevant to this case.  
6 MR. ADELMAN: Fine.  
7 MR. GROSSMAN: Let me ask you -- Dr. Chase, you  
8 list on your curriculum vitae, that's Exhibit 17(h), that  
9 you're an associate clinical professor of medicine,  
10 Department of Medicine, George Washington University School  
11 of Medicine from 1995 and it's blank. To the present, I  
12 presume? Are you still in that position?  
13 THE WITNESS: Yes, and I still teach medical  
14 students who rotate through our clinic and residents and  
15 fellows on a periodic basis. One of them is sitting in the  
16 room, room right now sitting in and we've got, he's, he has  
17 an MD, but he doesn't done a residency yet and starting next  
18 month, pardon me, November 5th, we'll have a woman with us  
19 full-time for several months who is board-certified in  
20 internal medicine, has practiced internal medicine and  
21 she's --  
22 MR. GROSSMAN: Well, let me cut you off because I  
23 don't think that that -- that goes beyond my question to  
24 you. Let me ask you if you keep current on current  
25 developments in occupational, environmental and internal

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1 medicine?  
2 THE WITNESS: Yes, I do.  
3 MR. GROSSMAN: Okay. Go ahead. I'm sorry. I  
4 didn't mean to interrupt.  
5 THE WITNESS: Are you a physician?  
6 MR. ADELMAN: Pardon me?  
7 MR. GROSSMAN: Dr. Adelman, I think he's asking if  
8 you're a physician.  
9 MR. ADELMAN: I'm a Ph.D. I taught medical  
10 students for many, many years.  
11 THE WITNESS: Understood. No problem.  
12 MR. GROSSMAN: Okay.  
13 MR. ADELMAN: Mr. Grossman --  
14 THE WITNESS: Maybe it's relevant for me to add  
15 or, that I get the, I still read the New England Journal of  
16 Medicine every week, hard copy, along with the Journal of  
17 Occupational Environmental Medicine. I guess I've been  
18 reading the New England Journal of Medicine for 40 years  
19 minimum.  
20 MR. GROSSMAN: I mean the reason I asked those  
21 questions is the voir dire seemed to go to the question of  
22 whether or not you kept up-to-date on medical developments  
23 and so I was further inquiring about that and whether or not  
24 you were currently a professor at George Washington  
25 University Medical School and that would also bear on that

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1 issue. All right. Go ahead, Dr. Adelman.  
2 MR. ADELMAN: Mr. Grossman, according to his CV,  
3 according to his CV, Dr. Chase is an M.D. with  
4 certifications only in the general specialties of internal  
5 medicine and occupational medicine. A reading of his CV has  
6 revealed no evidence he has conducted any research or has  
7 any, or very little, experience in treating patients for the  
8 variety of conditions which are of concern to the opposition  
9 as being in principle caused by automotive exhaust fumes.  
10 Furthermore, the answers to our questions indicate  
11 that he's not an expert. He's judged by a board  
12 certification in almost any of the areas that are relevant  
13 to the medical concerns raised in this case. Furthermore,  
14 it appears that his testimony from reading his testimony is  
15 based primarily, if not exclusively, on Mr. Sullivan's  
16 reports. And we will question Dr. Chase in detail as to  
17 whether or not he's actually read those reports in detail.  
18 MR. GROSSMAN: Well, that's something that goes  
19 beyond -- the question right now is the voir dire as to his  
20 expertise.  
21 MR. ADELMAN: Well, then in conclusion we object  
22 to having Dr. Chase accepted as an expert witness in the  
23 various areas of medicine that are relevant to this case.  
24 MR. GROSSMAN: We being the --  
25 MR. ADELMAN: The Coalition.

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1 MR. GROSSMAN: -- the Coalition? Okay. All  
2 right. Ms. Rosenfeld, do you have any questions of this  
3 witness?  
4 MS. ROSENFELD: I would join with Dr. Adelman. I  
5 also would like to object to his admission as an expert  
6 witness, but on different grounds. He was never identified  
7 as such. If you look at the pre-hearing submission which is  
8 hearing Exhibit 3(a), and reviewed a number of the witnesses  
9 that were identified. Mr. Stephen Gang will testify as an  
10 expert in land planning in Montgomery County. Mr. Joe  
11 Russell, certified expert, certified architect, will testify  
12 as an expert in the field of architecture. Mr. Mark Willard  
13 will testify as an expert in the field of landscape  
14 architecture. Thomas Flynn as an expert in the field of  
15 market analysis. It goes on and on.  
16 Dr. Kenneth Chase, on the other hand, was  
17 identified as follows.  
18 "Dr. Chase will testify that based on the  
19 conclusions set forth in Sullivan's environmental  
20 consulting air quality, air and noise analysis,  
21 the filling station will not adversely affect the  
22 health, safety or general welfare of the  
23 residents, visitors or workers in the area of the  
24 filling station."  
25 He was not identified as an expert. He certainly was not --

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1 MR. GROSSMAN: You didn't consider that sufficient  
2 to identify him as an expert --  
3 MS. ROSENFELD: I did not. Not what we have --  
4 MR. GROSSMAN: -- along with his resume, his  
5 curriculum vitae in Exhibit 17(e)?  
6 MS. ROSENFELD: We have, we have one, two, three,  
7 four, five, six, seven, eight witnesses who were  
8 specifically identified as experts. We have two who are  
9 not, Mr. Brann and Mr. Agliata, were not identified as  
10 experts. And certainly at no point in his submission was he  
11 identified as an expert in, quote, occupational and  
12 environmental medicine and internal medicine. So I would  
13 object to him being admitted as an expert and I would ask  
14 that his testimony be limited to the scope of Mr. Sullivan's  
15 noise, air quality, odor and noise analysis reports.  
16 MR. GROSSMAN: Ms. Rosenfeld, did you know he was  
17 going to testify as an expert? The truth now.  
18 MS. ROSENFELD: I would not know the scope of his  
19 testimony.  
20 MR. GROSSMAN: But to answer my question, you knew  
21 he was going to testify --  
22 MS. ROSENFELD: To answer your question --  
23 MR. GROSSMAN: -- as an expert?  
24 MS. ROSENFELD: -- I knew he would be proffered as  
25 an expert, yes, I did.

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1 MR. GROSSMAN: I think that that's quite apparent  
2 from the filings here and the discussions and if you wanted  
3 to raise this procedural point, you certainly could have  
4 done so months, many months ago, so I inject that as the  
5 ill-founded. And as to the witness's expertise, I think  
6 he's been amply demonstrated as an expert in the fields that  
7 were proffered, occupational, environmental and internal  
8 medicine and I accept him as an expert as such.  
9 And I'll reiterate the standard, of course, for experts  
10 is not that they necessarily have to have a degree in  
11 something, although this expert is certainly highly degreed,  
12 it is that they have, they can offer evidence beyond the can  
13 of laymen in a particular area that will be of assistance to  
14 the fact finder. And he certainly qualifies as an expert in  
15 that area. You can certainly cross-examine him on the  
16 substance of his testimony, but he's qualified as an expert.  
17 All right. And I accept him as an expert in those fields.  
18 Okay. Do you wish to begin your examination on the  
19 substance?  
20 MR. GOECKE: Yes. Thank you, Mr. Grossman.  
21 BY MR. GOECKE:  
22 Q Dr. Chase, what was your role in this case? What  
23 did Costco hire you to do?  
24 A Costco asked me to review the situation, the  
25 issues at hand which everybody here is familiar with and to

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1 add my expertise to the Costco team. That was hardly to  
2 limited to reading Sullivan's reports. I read everybody's  
3 reports that were given to me.  
4 Q So when you say everybody's reports, who are you  
5 referring to?  
6 A That were given to me, Dr. Jison, Dr. Breysse,  
7 David Sullivan and there may have been one or two other  
8 ones, but I didn't limit myself to reviewing their reports.  
9 I reviewed, extensively reviewed the medical and scientific  
10 literature that applies to the questions on this case, both  
11 domestic and otherwise.  
12 Q How many -- I'm sorry.  
13 A I also went back to some, re-reviewed some similar  
14 cases that my organization has been involved in in years  
15 past looking for parallels.  
16 Q Could you find any?  
17 A None identical, no.  
18 Q Were there any prior projects you worked on that  
19 were helpful in forming your opinions in this case?  
20 A Yes. I mean you could take noise, for example.  
21 I'm the person who designed the Hearing Conservation Program  
22 for Amtrak. I'm the guy who designed the Hearing  
23 Conservation Program for Conrail and numerous printing  
24 companies throughout the metropolitan, Washington, D.C. area  
25 and a few Government agencies as well. My company is the

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1 only organization in the metropolitan Washington area that  
2 puts on a hearing conservation course, a 3-day hearing --  
3 MS. ROSENFELD: Objection.  
4 THE WITNESS: -- conservation course.  
5 MR. GROSSMAN: All right. Hold on one second, Dr.  
6 Chase. There's an objection pending.  
7 MS. ROSENFELD: Well, I have two objections.  
8 Number one, I certainly don't see the relevance. And,  
9 number two, there's no discussion of noise whatsoever in Dr.  
10 Chase's report.  
11 MR. GROSSMAN: I think that's, well, do you want  
12 to respond, Mr. Goecke?  
13 MR. GOECKE: He's responding to my question of did  
14 he draw from any prior experience that have helped him form  
15 his opinions in this case, in this case, rather. And he's  
16 identifying some and it's true that he doesn't identify  
17 noise specifically in his report, but he does testify that  
18 there's going to be no adverse health effects to the general  
19 neighborhood, visitors or workers at the site which  
20 purportedly would include noise if we consider loud noises a  
21 potential adverse health effect and that would fall under  
22 that umbrella.  
23 MS. ROSENFELD: And if I may just respond? His  
24 report says it's -- it addresses air quality, adverse  
25 impacts on air quality. There's no discussion in this

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1 report whatsoever about noise.  
2 MR. ADELMAN: Mr. Grossman, can I add a  
3 complication?  
4 MR. GROSSMAN: Of course, Dr. Adelman.  
5 MR. ADELMAN: The opposition has never raised  
6 noise as a health issue. It is a nuisance issue, but we  
7 have never raised noise as a matter of health impact.  
8 MR. GROSSMAN: All right. I think actually Dr.  
9 Adelman's complication is a helpful clarification and I do  
10 think that Ms. Rosenfeld raises a fair point that your, that  
11 the report filed on behalf of Dr. Chase doesn't give them  
12 notice that he will be testifying regarding health impacts  
13 of noise. I certainly didn't take it to mean that when I  
14 read it. So I think it's fair to say that even though his  
15 answer may be responsive to your question, your question is  
16 legitimately objectionable to the extent it goes to that.  
17 MR. GOECKE: Okay. I'll move on.  
18 MR. GROSSMAN: Sustained is the ruling on that.  
19 BY MR. GOECKE:  
20 Q Dr. Chase, you testified that you read numerous  
21 scientific reports or articles related, or as part of your  
22 preparation for this case. Can you estimate how many  
23 articles you think you've read?  
24 A I didn't finish answering the previous question.  
25 Q We're going to, we're going to move on --

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1 MR. GROSSMAN: You're going to move on --  
2 MR. GOECKE: -- from that question.  
3 MR. GROSSMAN: -- because they objected to it and  
4 I sustained that objection to that question.  
5 THE WITNESS: You did?  
6 MR. GROSSMAN: Yes.  
7 THE WITNESS: Oh. 80 to 100.  
8 MR. ADELMAN: Clarification. Were those read in  
9 preparation for this case, 80 to 100?  
10 MR. GROSSMAN: Well, let's let him --  
11 MR. ADELMAN: I'm sorry.  
12 MR. GROSSMAN: -- ask his questions and then you  
13 can cross-examine on any points that are raised.  
14 BY MR. GOECKE:  
15 Q I shouldn't have been so quick before. If there  
16 are other examples from your past that do not relate to  
17 noise that helped you form your opinions or helped you  
18 conduct your analysis in this case, please talk about those.  
19 A I testified in Oakland less than a year ago on a  
20 case, so I had to get up to speed on, again, on carbon  
21 monoxide, that it dealt with carbon monoxide for decades  
22 both in occupational and non-occupational settings.  
23 Q Are there any other things you did to prepare your  
24 opinions in this case?  
25 A I reviewed selected relevant sections of the

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1 Federal Register. I reviewed regulatory documents, mostly  
2 EPA, occasionally a few others.  
3 Q And in reviewing these studies and doing these  
4 reports, did you form any opinions about whether or not the  
5 proposed Costco gas station may adversely affect the health  
6 of the residents, workers and neighbors of the proposed  
7 special exception?  
8 A Yes.  
9 Q And what is your opinion?  
10 A No effect.  
11 Q And what is that based on?  
12 A The -- none of the criteria pollutants that are  
13 regulated by EPA that have been discussed in this case  
14 already will be exceeded by the proposed Costco gas station.  
15 Q And when you say criteria pollutants, what are you  
16 referring to?  
17 A Carbon monoxide, lead, nitrogen dioxide, what's  
18 called PM2.5, which is an abbreviation for airborne  
19 particulate matter of 2.5 microns or less in diameter and I  
20 don't think I mentioned CASAC yet, but I've -- CASAC is  
21 actually independent of EPA and CASAC is the committee  
22 that's responsible for recommending what are called NAAQS  
23 for short, that's National Ambient Air Quality Standards,  
24 that do have the force of law.  
25 Q And I take it that CASAC is an acronym also. What

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1 does that stand for?  
2 A The Committee for -- it is the Committee Advisory,  
3 Council Advisory Scientific Air Quality Committee. I may  
4 have botched that a little bit. I'm sorry.  
5 Q That's the general idea?  
6 A But that's the general idea.  
7 MR. GROSSMAN: All right. By the way, Mr. Goecke,  
8 when you asked your question about who would be affected by  
9 the, by the proposed gas station, you asked, I think, about  
10 workers and residents. You asked about visitors?  
11 MR. GOECKE: I thought I did. I'll ask it again  
12 though just to be sure.  
13 MR. GROSSMAN: Let's, yes, let's make sure we --  
14 MR. GOECKE: Okay.  
15 MR. GROSSMAN: -- find out what the doctor's  
16 opinion, Dr. Chase's opinion is on all of that.  
17 BY MR. GOECKE:  
18 Q Let me ask you this question again, Dr. Chase. In  
19 your professional opinion, will a proposed gas station  
20 adversely affect the health or general welfare of the  
21 residents, visitors or workers to the area?  
22 A No.  
23 MR. GROSSMAN: No? Thank you. Okay.  
24 BY MR. GOECKE:  
25 Q And you testified that none of the criteria

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1 pollutants will exceed the EPA standards. Tell us what  
2 significance the EPA national ambient air quality standards  
3 have in this case.  
4 MR. GROSSMAN: I'm going to, once again, interrupt  
5 for one second to ask what about, will the proposed gas  
6 station have any health impact on students attending schools  
7 in the area or people at play or whatever, or attending a  
8 local swimming pool?  
9 THE WITNESS: No, I've been to that school and  
10 what I noticed was the paths leading up to the front door  
11 is, it was littered with cigarette butts.  
12 MR. GROSSMAN: Well, let's, that's not really  
13 responsive to my --  
14 THE WITNESS: I've taken photos of it.  
15 MR. GROSSMAN: That's not responsive to my  
16 question. I just want to make sure that I know your opinion  
17 as to health impacts of all the people who might be in this  
18 area and I'm just not sure that the description of  
19 residents, visitors or workers covers everybody who might be  
20 subjected to this. So that's why I ask whether or not in  
21 your opinion the proposed gas station based on your review  
22 would have any health impacts on the students in nearby  
23 schools or those in other and nearby recreation areas.  
24 THE WITNESS: Well, I know there's a pool and  
25 tennis courts and I know about the -- I've been to the

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1 school. No, I put them in the same category. They won't  
2 have any impact and that's actually based on CASAC's  
3 standards and comparing CASAC standards to the modeling done  
4 by the Sullivan Group and the measurements taken at a  
5 relatively similar station in Sterling, Virginia.  
6 MR. GROSSMAN: Are you -- I'm going to let Mr.  
7 Goecke continue. And I do, I want to remind you that I want  
8 to hear Dr. Chase's opinions both with regard to Mr.  
9 Sullivan's original assumptions as well as with regard to  
10 the assumptions he modified in his August 16 report, okay?  
11 MR. GOECKE: Thank you.  
12 BY MR. GOECKE:  
13 Q All right. We'll get to the Stephen Knolls School  
14 a bit more specifically in a moment, but you were testifying  
15 about the significance of CASAC and their role with EPA and  
16 the development of the National Ambient Air Quality  
17 Standards. Can you elaborate on that? What are those  
18 standards? Why are they important?  
19 A They're the only standards that apply to air  
20 quality in Montgomery County or Maryland --  
21 Q Okay.  
22 A -- for that matter.  
23 Q Do you know what those standards are intended to  
24 do?  
25 A They're to protect the public, to protect people,

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1 public health and welfare and they are based on, they are  
2 determined by a group of 22 experts from all over the  
3 country in a variety of relevant disciplines, not just  
4 medicine, but medicine, industrial hygiene, toxicology,  
5 epidemiology --  
6 Q And those 22 members are on CASAC?  
7 A Yes, there are seven permanent members and  
8 depending on what the assignment is for CASAC, which is,  
9 quote, "Independent from EPA," but they give advice to the  
10 administrator of EPA, so they invited 15 additional experts  
11 from around the country. So 15 plus seven is 22. So we  
12 have 22 experts in all these relevant disciplines  
13 formulating the recommended standards. And they do this by  
14 statute every five years and they were updated late last  
15 year most recently.  
16 Q So it's your testimony that the EPA national  
17 ambient air quality standards are based, at least in part,  
18 on the CASAC recommendations?  
19 A I think totally on the CASAC recommendation.  
20 Q Okay.  
21 A They occasionally have some disagreements that  
22 they have to work out and they have, there's some  
23 mechanization for that as well.  
24 Q Okay. You testified that the standards are  
25 intended to protect the public health. Does that include

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1 sensitive populations?  
2 A Yes, they're designed -- there's a wide margin of  
3 safety for the general population, but wide enough that  
4 it's, they're intended to protect vulnerable populations  
5 that would include the elderly, persons with emphysema,  
6 COPD, chronic constructive pulmonary disease, asthma --  
7 Q What about asthma?  
8 A -- children, any vulnerable subset and that's  
9 called out in the statute and has been there for decades.  
10 Q And when you say spelled out in the statute, what  
11 do you mean?  
12 A There's a paragraph, well, there's a parenthetical  
13 that says, "Including vulnerable members of the population  
14 such as individuals with asthma," et cetera, all the  
15 conditions listed as good examples.  
16 Q So the EPA is required to set standards that  
17 protect those types of conditions or that --  
18 A And that requirement derives from the Clean Air  
19 Act originally adopted in 1963.  
20 Q And so as it pertains specifically to the Stephen  
21 Knolls School, is it your testimony that those standards are  
22 designed to protect children at that school?  
23 A Yes.  
24 Q One of the concerns that the opposition has raised  
25 is that children at the school, their local residents, could

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1 be at an increased risk of developing asthma. Do you think  
2 the potential emissions from the Costco gas station will  
3 cause more children or local residents to develop asthma?  
4 MR. GROSSMAN: Let me broaden that question. You  
5 say the emissions from the gas station. I take that  
6 question to include anything, any emissions that may be  
7 generated as a result of the gas station whether it is cars  
8 that are queued in line, cars that are at the pumps, action  
9 at the pumps, trucks that are delivering gasoline, they're  
10 delivering the fuel, or cars that are on the ring roads  
11 attending it. I'm taking that question as a broad question  
12 to include all of those.  
13 THE WITNESS: I'm taking it the same way and my  
14 answer is no.  
15 BY MR. GOECKE:  
16 Q You've reviewed Mr. Sullivan's reports in this  
17 case, is that correct?  
18 A Yes.  
19 Q And do you remember how many reports you  
20 submitted?  
21 A I think five, one, a draft in 2011; a pretty  
22 complete one in November of 2012; and then there were, that  
23 was followed by three supplements, two in January, or maybe  
24 one was December or one in January of 2013; and the latest  
25 one which was mentioned earlier, August 16th of 2013.

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1 Q And you heard Mr. Grossman mention a moment ago  
2 about whether your opinion had changed between the Sullivan  
3 reports that were done before the August 16, 2013, report  
4 and the most recent supplement that he submitted. Did his  
5 most recent submission cause your opinions in this case to  
6 change at all?  
7 A No.  
8 Q And why do you say that?  
9 A Well, I'm aware that an arithmetic error was  
10 caught I'm guessing by a Dr. Cole. I don't know if he's in  
11 the room or not, but it was buried in the calculation for  
12 NO<sub>2</sub>, nitrogen dioxide. The Sullivan, as I understand it,  
13 divided a number by 188 when he should have multiplied it by  
14 188. And his August 16th supplement or revision clarifies  
15 that and gives us, I guess, more accurate estimates of what  
16 background NO<sub>2</sub> levels are.  
17 Q Okay.  
18 A But other than that, no.  
19 Q Your conclusions in this case are based, at least  
20 in part, on Mr. Sullivan's reports, is that correct?  
21 A Correct.  
22 Q And, specifically, the finding that --  
23 MR. GROSSMAN: Let's try not to lead this witness.  
24 Ask him non-leading questions.  
25 MR. GOECKE: Sure. Sure. Sure.

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1 BY MR. GOECKE:  
2 Q What portions of Mr. Sullivan's report were most  
3 important to you in coming to your conclusions?  
4 A His estimates of what the, what the likely  
5 concentration levels of the criteria pollutants were likely  
6 to be as a result of operating, building and operating the  
7 Costco gas station.  
8 Q Okay. Can you characterize the level of  
9 anticipated emissions from Costco gas station and all of the  
10 uses associated with that gas station?  
11 MR. GROSSMAN: What does that question, when you  
12 characterize, what do you mean by that?  
13 MR. GOECKE: What I mean by characterize? In  
14 terms of the significance of those contributions.  
15 MR. GROSSMAN: You mean individually, by  
16 individual pollutant or what exactly are you asking?  
17 MR. GOECKE: The quantity of emissions that are  
18 likely to come from the proposed special exception and the  
19 related uses, are they significant.  
20 MR. GROSSMAN: All right.  
21 THE WITNESS: Can I refer to a document?  
22 MR. GROSSMAN: If you can't answer it without  
23 referring to the document, yes. If you need to refer to a  
24 document, you may.  
25 THE WITNESS: Okay. I'll answer it without

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1 referring to the document. The calculated emissions are so  
2 much lower than background. For example, for PM<sub>2.5</sub>, it's  
3 known that the background levels are around 10.8 micrograms  
4 per cubic meter. The Costco gas station would contribute  
5 about 1/10,000 of that amount to background. And the other  
6 pollutants are typically 100th of background. I can't say  
7 that for noise, but again the Costco noise levels are  
8 based --  
9 MR. GROSSMAN: We're not talking about noise  
10 levels.  
11 MR. GOECKE: Let's not talk about noise.  
12 THE WITNESS: We're not?  
13 MR. GROSSMAN: We're not talking about noise.  
14 It's just --  
15 MR. GOECKE: We're not going to talk about noise.  
16 MR. GROSSMAN: -- just air quality.  
17 THE WITNESS: Okay.  
18 MR. GOECKE: Just the criteria for the air  
19 quality.  
20 MR. GROSSMAN: For air quality.  
21 THE WITNESS: I stand by my answer.  
22 MR. GROSSMAN: And, Dr. Chase, would you please  
23 speak up a little bit because there's no loud speaker in  
24 here and they're having a little trouble hearing you in the  
25 back.

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1 BY MR. GOECKE:  
2 Q Dr. Chase is the amount of emissions important  
3 then to your conclusions?  
4 A Yes.  
5 Q And why is that?  
6 A Dose makes the poison.  
7 Q What do you mean does makes the poison?  
8 A Something that Paris Health just said in the 15th  
9 Century, but it stuck. The -- almost anything, virtually  
10 any substance at a high enough dose can be harmful and,  
11 conversely, if the dose is low, low enough, it's not going  
12 to make any difference.  
13 Q Thank you.  
14 A And when I say that, I will go a step further on  
15 that one. There's no way that anybody would be able to  
16 measure the health impacts of the Costco gas station because  
17 the emissions are going to be so low. It's like white  
18 noise. You won't be able to separate it out from background  
19 from what's already there.  
20 Q Okay. Members of the opposition are arguing that  
21 the EPA national ambient air quality standards are  
22 insufficient to protect the public health. How do you  
23 respond to that?  
24 A I noticed that. It's the -- those are our  
25 national standards. Those are the only standards that apply

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1 to the state of Maryland. And as far as I know, the states  
2 are free to adopt stricter standards if they wish to and  
3 California did to a degree and that's reported to, that  
4 organization is called CARB, C-A-R-B, the California Air  
5 Research Board. And in disputes like this one, often the  
6 experts will refer to the CARB standards, as well as the EPA  
7 standards. Though, Maryland --  
8 Q I'm sorry, go ahead.  
9 A The proposed Costco station meets both sets of  
10 standards.  
11 Q Are you familiar with the World Health  
12 Organization guidelines for air quality?  
13 A Yes.  
14 Q Should those guidelines apply in this context?  
15 A No.  
16 Q Why not?  
17 A Well, they're only guidelines. They're not  
18 standards. They don't have the force of law. They're not  
19 enforced. And they're world guidelines for countries that  
20 have much worse air pollution problems than we do.  
21 Q Do you know whether CASAC or the EPA considered  
22 the WHO guidelines when forming the national ambient air  
23 quality standards?  
24 A Yes.  
25 Q And did they or did they not?

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1 A They did.  
2 Q How do you know that?  
3 A I can't remember which document transcript I read,  
4 but CASAC considered everything under the sun is what I can  
5 tell.  
6 Q Okay. Are you familiar with the EPA Integrated  
7 Risk Information System known as IRIS?  
8 A IRIS?  
9 Q Yes.  
10 A Yes, at least to a degree. I don't have it  
11 memorized, but --  
12 Q Can you tell us what that system is?  
13 A They identified particular chemicals and assigned  
14 risk factors to them, typically cancer risk factors.  
15 Q And what type of contaminants do they analyze?  
16 A I don't know all of them, but I believe mostly  
17 chemicals that are considered to have carcinogenic potential  
18 for humans.  
19 Q Do they include volatile organic compounds?  
20 A Yes.  
21 Q And have you analyzed those numbers in comparison  
22 to this situation?  
23 A I'm not sure what you --  
24 Q Sure. Sure.  
25 A I'm not sure what you -- yes, I did.

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1 Q Let me try it this way. Did the IRIS database  
2 factor into your conclusions in this case at all?  
3 A Yes.  
4 Q In what way?  
5 A It was helpful in my reaching an agreement with  
6 Sullivan's conclusions.  
7 Q And what were Sullivan's conclusions?  
8 A That the proposed Costco gas station and the  
9 associated activities with it would not pose any human  
10 health risks.  
11 MS. ROSENFELD: Objection.  
12 MR. GROSSMAN: Yes?  
13 MS. ROSENFELD: Mr. Sullivan was not proffered nor  
14 did he opine on health.  
15 MR. GROSSMAN: I understand that. He's, this  
16 witness is stating his understanding of Mr. Sullivan's  
17 conclusions. So you can cross-examine on the point, but he  
18 can state what his understanding is. So your objection is  
19 overruled.  
20 BY MR. GOECKE:  
21 Q Did Mr. Sullivan's reports analyze whether or not  
22 the VOC levels, if it exceeded IRIS standards or the --  
23 A Did you say VOC?  
24 Q Yes, and -- yes. What is --  
25 A I thought you said VOQ, but -- yes.

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1 Q Okay. And based on Mr. Sullivan's conclusions  
2 about VOC levels, what is your conclusion about the  
3 potential health effect to the residents, visitors, workers  
4 of the proposed Costco gas, excuse me, proposed Costco gas  
5 station site and the surrounding neighborhood?  
6 MR. GROSSMAN: And that includes people in the  
7 schools and recreation users too?  
8 MR. GOECKE: Including --  
9 THE WITNESS: Negligible.  
10 BY MR. GOECKE:  
11 Q And why is that?  
12 A They're too low.  
13 Q Let's talk about diesel fumes for a second. The  
14 opposition has complained that there's going to be fumes  
15 from diesel that will create an adverse health impact.  
16 First of all, do you know if Costco intends to sell --  
17 MR. ADELMAN: Objection. The opposition never  
18 made such an assertion. We never raised a concern about  
19 diesel.  
20 MR. GROSSMAN: All right. I think that's correct.  
21 As far as I -- I mean there have been questions by the  
22 opposition that may have led you to believe that that was an  
23 issue for them, but I don't know if they've asserted that  
24 per se. But the opposition, there were so many documents  
25 filed by the opposition that I can't say for sure that they

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1 did or didn't. Why don't we, instead of characterizing what  
2 the opposition has raised as a point, why don't you just ask  
3 a question?  
4 MR. GOECKE: Sure. Sure. Sure.  
5 BY MR. GOECKE:  
6 Q Do you know if Costco intends to sell diesel fuel  
7 at the gas station?  
8 A They do not.  
9 Q Okay. Do you anticipate that there will be any  
10 emissions from these vehicles as a result of the proposed  
11 gas station?  
12 A These vehicles?  
13 Q Will there be any emissions from any diesel  
14 vehicle, yes.  
15 MR. GROSSMAN: Are you talking -- when you say any  
16 diesel, are you talking about vehicles visiting to get gas  
17 or are you talking, are you including the trucks that  
18 deliver the fuel?  
19 MR. GOECKE: I'm referring to all of that.  
20 MR. GROSSMAN: Okay.  
21 MR. GOECKE: And I've been trying to do it in a  
22 non-leading way.  
23 MR. GROSSMAN: All right.  
24 THE WITNESS: I don't think I can say zero --  
25 MR. GOECKE: Right.

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1 THE WITNESS: -- but I can say minimal. As I  
2 understand it, the design of the underground storage tank is  
3 state-of-the-art. You've got primary and secondary vapor  
4 recovery.  
5 BY MR. GOECKE:  
6 Q Well, I'm talking about diesel fuel here now, not  
7 the unleaded fuel that will be sold at the gas station.  
8 Some folks are saying that the emissions from diesel  
9 delivery trucks, as Mr. Grossman mentioned, other diesel  
10 vehicles that come to the site.  
11 A I'm sorry, I got off track. Let me back up. It's  
12 my understanding that Costco is going to have fuel delivered  
13 by trucks that were made, manufactured in 2010 or 2012,  
14 certainly not older than 2010.  
15 MR. SILVERMAN: Objection.  
16 THE WITNESS: And that makes a huge difference.  
17 BY MR. GOECKE:  
18 Q All right.  
19 MR. GROSSMAN: What's your objection, Mr.  
20 Silverman?  
21 MR. SILVERMAN: That was not, that was not the  
22 testimony. Their testimony was about their delivery trucks  
23 in the warehouse. They did testify that the trucks  
24 delivering to the gas station were not in their control.  
25 MR. GROSSMAN: No, I think what they -- as I

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1 recall the testimony, it is that they would require, Costco  
2 requires that they would be clean diesel trucks or the new  
3 clean diesel technology for all the trucks that would be  
4 delivering gas to that station. That's my recollection.  
5 Mr. Brann, is that correct?  
6 MR. BRANN: That's correct.  
7 MR. GROSSMAN: That's my recollection of Mr.  
8 Brann's testimony.  
9 MR. SILVERMAN: That Costco requires the gas  
10 trucks to be clean diesel?  
11 (Discussion off the record.)  
12 MR. GROSSMAN: All right. We can't -- that's my  
13 recollection of Mr. Brann's testimony, but in any event, the  
14 witness -- your objection is not well-founded from a  
15 different standpoint. It's the witness's answer. It's his  
16 understanding that controls his answer. You can cross-  
17 examine if you can raise evidence that is contrary to his  
18 understanding, you can use that either in cross-examination  
19 or in your own testimony, but he's entitled to answer based  
20 on his understanding.  
21 MR. SILVERMAN: Thank you.  
22 BY MR. GOECKE:  
23 Q So, Dr. Chase, let's assume, whether it's true or  
24 not, that Costco requires its delivery trucks to be clean  
25 diesel vehicles. Are you familiar with clean diesel?

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1 A Yes, I am.  
2 Q And what does that mean, tell us about clean  
3 diesel vehicles.  
4 A Well, I guess a watershed, the right time would be  
5 2007 and the design of diesel engines, as well as diesel  
6 fuel, from about 2006 to 2007 forward are cleaner, they're a  
7 lot cleaner. They're about 100-fold cleaner than they were  
8 10, 15 years ago and that's been true since about --  
9 certainly post 2007, it's the case and there are reasons for  
10 that.  
11 Q And when you say cleaner, how are they cleaner?  
12 A They're equipped with devices like high-efficient,  
13 catalyzed, high-efficiency diesel particulate filters in the  
14 exhaust system that trap the bad stuff and goes, filters out  
15 periodically themselves cleaned or regenerated is the term  
16 used in the industry. And they have -- I forget what the  
17 something or -- they have a couple of other devices too, but  
18 that's the, probably the most important one that assures  
19 cleaner fuel.  
20 Q In terms of the bad stuff that the filters catch,  
21 does that include particulate matter?  
22 A Yes.  
23 Q Okay.  
24 A Yes.  
25 Q And, again, there's been testimony in this case

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1 and putting aside whether it's true or not, well, actually  
2 no. There's been testimony in this case about the clean  
3 diesel actually reducing particulate levels in an area. Are  
4 you familiar with this concept?  
5 A I am.  
6 Q And what --  
7 MS. ROSENFELD: Objection. Again, well beyond the  
8 scope of anything that was even suggested as within his  
9 expertise. He is not here to testify as an expert on  
10 gasoline emissions equipment or diesel engine functioning or  
11 any other mechanical testimony.  
12 MR. GROSSMAN: Do you want to respond to that  
13 objection?  
14 MR. GOECKE: He's talking about air quality and  
15 this goes to the air quality in the area.  
16 MR. GROSSMAN: No, I sustain the objection. I  
17 think it is beyond the scope of what he's listed for in  
18 terms of health and -- besides which we've had ample  
19 testimony about this area from the people who are, that deal  
20 with those concepts.  
21 BY MR. GOECKE:  
22 Q Okay. So, Dr. Chase, just so we're clear, based  
23 on your experience and training in the work that you've done  
24 in this case, in your professional opinion will the proposed  
25 Costco gas station have any adverse health effects on the

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1 visitors, the workers, the neighbors of the Costco gas  
2 station, including occupants or visitors to the swimming  
3 pool or the Stephen Knolls School?  
4 A No.  
5 Q And do you reach that conclusion with a reasonable  
6 degree of scientific certainty?  
7 A Yes.  
8 Q One final question, Dr. Chase. Do you consider  
9 yourself to be biased?  
10 A No.  
11 Q Thank you.  
12 MR. GOECKE: No further questions.  
13 MR. GROSSMAN: That's a strange question.  
14 MR. GOECKE: What, the biased question?  
15 MR. GROSSMAN: Yes. I'll let it go. Let me just  
16 ask before I take a break and open this up to cross-  
17 examination, Dr. Chase, you mentioned when you were asked  
18 about the change in the Sullivan reports, you mentioned the  
19 arithmetic correction, but it's my understanding of his  
20 August 16 report that he did more than make a mathematical  
21 correction with regard to the, his arithmetic mistake  
22 earlier on. He also relaxed certain assumptions in his,  
23 from his earlier report. Are you familiar with that, the  
24 relaxation of the assumptions that he had that he had  
25 characterized as very conservative and now he was giving in

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1 his, I don't remember his exact language, but the idea was  
2 less conservative assumptions which still were, would more  
3 accurately portray the predicted circumstance? Are you  
4 familiar with the changes in his report in that regard?  
5 THE WITNESS: Not in detail, but I've been, I'm  
6 aware of that. I've been told that.  
7 MR. GROSSMAN: Well, I guess my question is you  
8 testified that under his modeling based on his November 2012  
9 study as amended in January of 2013, that you didn't believe  
10 there would be any ill health effects because there were  
11 minimal contributions of background from the proposed Costco  
12 gas station, is that correct?  
13 THE WITNESS: Correct.  
14 MR. GROSSMAN: Now there's been testimony in this  
15 case that if you applied the rural standard, EPA standard  
16 for measuring dispersion, meteorological dispersion of the  
17 pollutants, in and around the area of the proposed gas  
18 station that there might be an exceedance of the National  
19 Ambient Air Quality Standards for NO2 in certain areas, are  
20 you familiar with that?  
21 THE WITNESS: Yes.  
22 MR. GROSSMAN: Okay. And so I wanted to get,  
23 given those, that's the, those are the, based on the  
24 original assumptions which I say were later modified in the  
25 August 16, 2013 modeling. Given those original assumptions

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1 and what is your opinion as to whether or not these possible  
2 exceedances of the NO2 standards for National Air Quality,  
3 Ambient Air Quality Standards would have on health impacts  
4 for those residents, workers, visitors and so on in the  
5 area?  
6 THE WITNESS: Again, a wide margin of safety was  
7 employed by the CASAC Committee in coming up with their  
8 numbers. And the, and in fact the change of multiplying by  
9 188 instead of dividing by 188 didn't make that big of a  
10 difference in the NO2 levels.  
11 MR. GROSSMAN: When you say didn't make that big,  
12 what if you applied the rural dispersion standards? It may  
13 have, it may, and I'm not going to conclude myself whatever  
14 it did, but it may have pushed the, as alleged by the  
15 opposition, it may have pushed the levels in certain areas  
16 over the NAAQ standards. Does that make a difference to you  
17 in terms of your analysis of the health impacts of those in  
18 that area?  
19 MR. GOECKE: Well, Mr. Grossman, if I may, are you  
20 asking him to assume there's going to be an exceedance or  
21 are you asking him to opine of whether or not it should be  
22 rural or urban analysis?  
23 MR. GROSSMAN: I'm certainly not asking him to  
24 determine whether it should be rural or urban analysis. I'm  
25 asking -- this is a, evolved from the point I asked you to

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1 go into, that is I wanted him to hear his opinion under both  
2 sets of assumptions because I'm not sure how I'm going to  
3 rule on the motion in limine which governs the second set of  
4 assumptions. So if you have him testify under the first set  
5 of assumptions that were made, one could conclude from that  
6 that there were going to be exceedances of NO2 based on the  
7 air quality standards.  
8 MR. GOECKE: So your question then is --  
9 MR. GROSSMAN: If they, if there --  
10 MR. GOECKE: -- if there are exceedances --  
11 MR. GROSSMAN: Right. If there are these  
12 exceedances based on the use of the rural dispersion rates,  
13 if there are exceedances, what if, how would that effect, if  
14 at all, your opinion on health, potential health impacts on  
15 those in the area?  
16 THE WITNESS: My understanding and my, based on  
17 personal observation, is that this is urban, not rural.  
18 MR. GROSSMAN: That's not my question. That's not  
19 my question. I'm trying to get at what your analysis is of  
20 the health impacts from this potential gas station if all of  
21 the assumptions made by Mr. Sullivan in his original  
22 reporting in November of 2012, as amended in January of  
23 2013, were applied, except that the mathematical correction  
24 was not.  
25 THE WITNESS: It didn't make that big of a

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1 difference. You may have an exceedance, but that doesn't  
2 equate to a clinical health effect.  
3 MR. GROSSMAN: No, well, that's really my  
4 question.  
5 MS. ROSENFELD: I'm sorry, I couldn't hear.  
6 MR. GROSSMAN: He said you may have had an  
7 exceedance, but that does not amount to a clinical health  
8 effect. I think I'm quoting you correctly.  
9 THE WITNESS: Yes.  
10 MR. GROSSMAN: Okay. And in this case, in your  
11 opinion, would it amount to a clinical health effect based  
12 on those original assumptions?  
13 THE WITNESS: No.  
14 MR. GROSSMAN: Okay. All right. Let's take a  
15 break now until 25 after 11:00 and then we'll come back with  
16 cross-examination.  
17 MS. CORDRY: Could it be a little longer, Your  
18 Honor? This is a lot of new testimony that we're learning.  
19 MR. GROSSMAN: No.  
20 (Recess.)  
21 MR. GROSSMAN: All right. Are you ready to go  
22 back on the record?  
23 MS. ROSENFELD: Yes.  
24 MR. GROSSMAN: Before we begin the cross-  
25 examination, I might mention I wasn't incorrect. On

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1 September 6th, I sent an e-mail to Ms. Harris and Mr. Goecke  
2 with copies to everybody saying not only to send, please  
3 send an electronic copy of the corrected landscape and plant  
4 list plan you filed today, but also please forward to Renee  
5 Kamen of Technical Staff a copy of Mr. Sullivan's  
6 supplemental report of August 16, 2013. So you may have  
7 done it already. I don't know.  
8 MS. HARRIS: No, my apologies. I know I haven't  
9 done that because I --  
10 MR. GROSSMAN: Okay.  
11 MS. HARRIS: -- obviously did not focus on the  
12 second part of that e-mail, but I will.  
13 MR. GROSSMAN: Okay. All right. So cross-  
14 examination. Who wishes to begin? Dr. Adelman?  
15 MR. ADELMAN: Is that okay?  
16 MR. ADELMAN: Dr. Chase, I just have a number of  
17 things that I just, my questions are largely scripted based  
18 on my reading of the report, but in addition you said a  
19 number of things I would like to question you about. So  
20 this may seem a bit illogical. The reason I say that is  
21 that doctors and scientists like to try to be logical, but  
22 it may not work.  
23 MR. GROSSMAN: That never stops lawyers, so don't  
24 worry.  
25 MR. ADELMAN: Well, I'm going to try, but it's

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1 going to be tricky.  
2 MS. HARRIS: I would think, Your Honor, that I  
3 have been criticized on occasion for being too logical at  
4 least when dealing with our political clients. So I try to  
5 be logical. Thank you.  
6 MR. GROSSMAN: I try, but often fail, but never  
7 admit it.  
8 MR. ADELMAN: That said, I'm going to be jumping  
9 back and forth between notes I made and notes that I picked  
10 up.  
11 CROSS-EXAMINATION  
12 BY MR. ADELMAN:  
13 Q You said that you ostensibly reviewed the medical  
14 literature relevant to this case, is that correct?  
15 A Yes.  
16 Q And if I understood you, you said that you read  
17 some 80 to 100 articles that were relevant to that, this  
18 case, is that correct?  
19 A I said 80 to 100, but I was including articles,  
20 reports and miscellaneous publications, mostly medical and  
21 scientific articles, but not all.  
22 Q Okay. Of the, your, your letter has as a  
23 supplemental list of some, I believe, 15 articles that you  
24 referenced. Are those part of the 80 or so, 100 articles  
25 that you read?

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1 A Are they what?  
2 Q Are they a subset of the 80 to 100 articles that  
3 you read?  
4 A Yes.  
5 Q Were they selected and you felt they were  
6 particularly relevant to this case or particularly  
7 substantive, or were they a random selection of all the  
8 articles?  
9 A The ones you're asking me about --  
10 Q The ones that you listed as references.  
11 A Correct. I don't recall assuming.  
12 Q Okay.  
13 A I think at the time I was trying to get my -- I'm  
14 not a truck driver. I was trying to get my arms around what  
15 the nature of the change in truck, diesel truck engine  
16 design was and how and why it might be relevant to this  
17 case. So there, I think there, the ones that are listed  
18 there tend to have that theme in common.  
19 Q And I can jump back to the, well, can you explain  
20 why given that you acknowledge that the proposed gas station  
21 won't be selling diesel fuel and that trucks delivering,  
22 using diesel fuel to power themselves are probably not going  
23 to be emitting much diesel fumes, why almost every article  
24 that you list in your reference list had to do with diesel  
25 fuel and the possibility that exposure to diesel fumes will

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1 cause cancer? In your mind is that the primary issue in  
2 here?  
3 A No, I think I just answered your question a moment  
4 ago. At the time I assembled those articles, I was focusing  
5 on, I was trying to get a better understanding of the  
6 relevance of change of the new technology, in fact that's  
7 what they call it, NTDE, new technology diesel exhaust.  
8 Q I understand and it's admirable that you're  
9 attempting, you were attempting to understand new  
10 technology, but you filed a brief report and there's 15  
11 references.  
12 MR. GROSSMAN: No, I think he answered your  
13 question so that's fine by me.  
14 BY MR. ADELMAN:  
15 Q In your mind, you mentioned a number of sources of  
16 standards the Federal Registry Case Act, in your mind do  
17 these all, do these groups all agree or do they always  
18 accept one another's recommendations? If not, who takes  
19 precedence?  
20 MR. GROSSMAN: Who takes what?  
21 MR. ADELMAN: Precedence. Which, if two agencies  
22 come up with different standards and they don't agree, how  
23 does one decide which standard to accept in your opinion?  
24 THE WITNESS: Well, I can give you an example.  
25 When CASAC proposed lowering the annual standard for PMQ.5

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1 from 15 to 12, I believe Jonathan Sammit, because he was the  
2 chair, and he submitted it to Lisa Jackson who, EPA  
3 minister, and she didn't go along with it. And it ended up,  
4 CASC didn't sit still for that, so it ended up in, I  
5 believe, D.C. Court. And the judge told Ms. Jackson that he  
6 couldn't follow her reasoning very well, so sent her back to  
7 the drawing board. And the upshot of it was CASAC was  
8 looking for a lower level. They were looking for a 11, 12,  
9 15 or 14 as I recall --  
10 MR. ADELMAN: Uh-huh.  
11 THE WITNESS: -- and they ended up settling on 12.  
12 But that required the involvement of a court and a judge.  
13 BY MR. ADELMAN:  
14 Q Precisely. Then would you agree that whatever  
15 standard is presented in this case, for example, is the  
16 product of a process in which different groups may disagree  
17 and, in fact, often is adjudicated. It's not in the  
18 scientific sense a fact, it's a consensus.  
19 MR. GROSSMAN: Well, when you say it's not a fact,  
20 what's the antecedent for it? Do you mean the regulation?  
21 MR. ADELMAN: The regulation. For example, a  
22 specific number not to be exceeded.  
23 MR. GROSSMAN: Well, I just want to understand --  
24 I want to make sure that your question to him -- I  
25 understand your question to him and that it's clear. Are

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1 you asking whether the regulation is a fact? A regulation  
2 is a regulation, so I don't understand what you're asking.  
3 So I'd ask you to rephrase that.  
4 MR. ADELMAN: I will rephrase.  
5 BY MR. ADELMAN:  
6 Q To what extent is the number stipulated by the  
7 regulation to which all adjudicating bodies agree?  
8 MR. GROSSMAN: Once again, I think I have to stop  
9 you. I think that's more of a legal question than an expert  
10 question. You're asking to what extent is any regulation a  
11 fact to which all adjudicating bodies agree. That's a  
12 legal, that's calling for a legal conclusion, so I'm not  
13 going to let you ask that question.  
14 MR. ADELMAN: Fine. Well, then could I --  
15 MR. GROSSMAN: I understand it's difficult to  
16 frame these questions. I'm just trying to make sure that  
17 when you ask the question that it elicits an answer that's,  
18 we can, that's cognizable in this kind of proceeding.  
19 BY MR. ADELMAN:  
20 Q Dr. Chase, you just stated, did you not, that the  
21 standard that was set was reached by a process involving  
22 judicial evaluation, is that correct? Am I paraphrasing you  
23 properly?  
24 A Probably, but don't leave out the five-year  
25 process during which the CASAC Committee was reviewing the

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1 world's literature came up with the recommendation and for  
2 whatever reason, I don't know the reason, they then, the EPA  
3 administrator didn't act on it and CASAC, I believe it was  
4 Dr. Sammick, took, I guess he took it to court. I was told  
5 it was D.C. Court.  
6 Q Okay.  
7 A I didn't know D.C. Court did stuff like that,  
8 but --  
9 Q Okay.  
10 A -- and it got resolved to CASAC's satisfaction.  
11 Q Okay.  
12 MR. GROSSMAN: Sir, where are you going with this  
13 line of questioning? I don't quite -- what's the point  
14 you're trying to get to, Dr. Adelman?  
15 MR. ADELMAN: There is no, no, I can't testify.  
16 MR. GROSSMAN: Well, you can answer my question.  
17 MR. ADELMAN: There is no firm, white line in the  
18 sand. It's a zone, if you will, that different groups  
19 stipulate numbers to and in some cases, in fact, disagreed  
20 strongly and go to court over it to reach a quote,  
21 "Conclusion," which is then treated as a scientific fact.  
22 MR. GROSSMAN: All right. I don't know. I think  
23 that's more in the area of an argument than. But I mean I  
24 guess you, to the extent you can from this witness, I think  
25 you've gotten what you can on this point.

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1 MR. ADELMAN: I agree. Thank you for your  
2 additions.  
3 MR. GROSSMAN: So I take it that you ultimately  
4 want me to be in the zone when I figure out what the  
5 standard is that is supposed to applied.  
6 MR. ADELMAN: Precisely, Mr. Grossman, precisely.  
7 BY MR. ADELMAN:  
8 Q I nabbed your quote of a (indiscernible) and your  
9 essential statement that almost anything at a high note  
10 level can be harmful. The adverse of that is at what point  
11 is something negligible because you said a number of  
12 effects, potential effects, risks will be negligible. How  
13 do you as a doctor define negligible risk?  
14 A Well, it depends on what age you're talking about.  
15 In this case we have a mechanism in this country for setting  
16 air standards and it's done through the process we've  
17 already discussed. This CASAC Committee, which is  
18 independent of EPA and they've proved that, gets together  
19 numerous times over a five, every five, and then every five  
20 years makes a new recommendation.  
21 MR. GROSSMAN: But I think his question was what,  
22 how do you define negligible? You used the term as  
23 something that was negligible, but I think that the question  
24 went to what do you mean by negligible?  
25 THE WITNESS: Oh, in my earlier testimony?

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1 MR. ADELMAN: Yes.  
2 THE WITNESS: Clinically insignificant.  
3 BY MR. ADELMAN:  
4 Q What does clinically insignificant mean? I'm  
5 sorry, I don't mean to be argumentative. What --  
6 A Producing no lasting damage.  
7 Q So does that mean it could produce damage which is  
8 treatable, is that what you mean by no less than damage?  
9 A No, that's not what I mean. It might be  
10 transient. It might be temporary, but it doesn't produce a  
11 permanent health effect. That's what I meant by negligible.  
12 Q You are not suggesting that it does not produce  
13 mortality, correct?  
14 A Some people are more sensitive to odors than  
15 others.  
16 Q I'm not -- I'm talking about -- oh, I'm sorry, I  
17 forgot all these odors. I apologize.  
18 A So it's conceivable that a very sensitive person  
19 might detect an odor from the gas station, but it's not  
20 going to harm them.  
21 Q Thank you. You've just stated clearly a point I  
22 wanted answered. The standards, EPA standards, CASAC  
23 standards, whichever standards are set are for world  
24 population, is that correct?  
25 MR. GOECKE: I'm sorry, for what population?

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1 MR. ADELMAN: World population  
2 MR. GOECKE: A population?  
3 MR. ADELMAN: Or a population. For example, the  
4 population of the United States or the population of  
5 Maryland or the population of Montgomery County, therefore,  
6 a large number of people.  
7 THE WITNESS: Yes.  
8 BY MR. ADELMAN:  
9 Q There is variability in the sensitivity of people  
10 to various pollutants, odors, et cetera, correct?  
11 A As I said earlier, under the Clean Air Act, the  
12 CASAC Committee has to take into consideration the most  
13 vulnerable subset of populations and I gave it --  
14 Q In your mind how did CASAC in this case define  
15 most vulnerable to your mind, your expert opinion?  
16 A Through the review of medical and scientific  
17 literature and debate, discussion.  
18 MR. GROSSMAN: Are you getting more -- his answer  
19 went to the process of how they do it. Your question went  
20 to what the, definitionally?  
21 MR. ADELMAN: Precisely.  
22 MR. GROSSMAN: Okay.  
23 MR. ADELMAN: Or what, how does one measure, in  
24 essence, most vulnerable.  
25 MR. GROSSMAN: Is there a definition of the most

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1 vulnerable portion of the population that they are required  
2 to take into consideration?  
3 THE WITNESS: Well, the examples that I see most  
4 often cited are children, the elderly, asthmatics, persons  
5 with emphysema, a chronic lung disease.  
6 MR. ADELMAN: And you said  
7 THE WITNESS: If I recall, it does not include  
8 somebody with terminal cancer. I think they -- that's a  
9 carve out.  
10 BY MR. ADELMAN:  
11 Q Which would make sense, yes. I believe this is a  
12 correct quote, but please tell me if I'm wrong. I believe  
13 you said the following. "You may have an exceedance, but  
14 that does not amount to a clinical health impact." Is that  
15 a direct quotation of what you said?  
16 A Yeah, it's close enough.  
17 Q The fact that an exceedance doesn't amount to a  
18 clinical health impact, does that in any way obviate the  
19 need to assess whether, in fact, an individual has had a  
20 health impact or might we expect it to have a health impact?  
21 A Well, it's a compound question and one phrase I  
22 have it, that hasn't come up yet as warning is the exercise  
23 of professional judgment.  
24 Q I'm sorry?  
25 A Professional judgment has to come into play at

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1 some point.  
2 Q Correct. I understand. The Hippocratic, in the  
3 various versions says, does it not, that medicine is an art  
4 and a science? The art is the judgment, are we agreed on  
5 that?  
6 MR. GROSSMAN: So --  
7 THE WITNESS: No.  
8 MR. GROSSMAN: Yes. That's too philosophical for  
9 this process.  
10 BY MR. ADELMAN:  
11 Q Let me try to be. Well, as you said, I make it  
12 (indiscernible) sometimes. Let me go back to my -- I'm  
13 attempting to understand how the document arose so I'm sure  
14 that I understand what you did to reach your conclusions.  
15 And some of these questions I will skip because you've  
16 already answered them, I believe. So when you were  
17 contacted by Costco, they were asking you for an assessment  
18 of the potential adverse impacts on air quality if this gas  
19 station was approved, is that correct?  
20 MR. GROSSMAN: Well, I don't think that's what he,  
21 he said health, health impacts.  
22 MR. ADELMAN: I'm just, I'm just quoting --  
23 MR. GROSSMAN: You said potential adverse impacts.  
24 I'm just saying I think they asked him about potential  
25 adverse health impacts, is that --

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1 MR. ADELMAN: No, actually his report --  
2 MR. GROSSMAN: Okay.  
3 MR. ADELMAN: -- I'm going to have him read it.  
4 MR. GROSSMAN: All right. I -- go ahead, you can  
5 ask that question.  
6 BY MR. ADELMAN:  
7 Q Do you recall who actually contacted you, was it a  
8 specific representative of Costco?  
9 A Yes. It was David Sullivan. The initial call --  
10 Q So Mr. Sullivan?  
11 A The initial call was placed to me by David  
12 Sullivan.  
13 Q Oh. Was he then, already had the contract or  
14 hired as a consultant by Costco?  
15 A I'm sure he was.  
16 Q Do you --  
17 A He was already on, he had been on board --  
18 Q Did you know Mr. Sullivan?  
19 A I'm sorry?  
20 Q Did you know Mr. Sullivan at that point?  
21 A If I go back in time 30 years or more, there was a  
22 company in Northern Virginia called VERSAR and they did  
23 environmental engineering and related work. David Sullivan  
24 was either employed by them or consulted for them. I was  
25 never employed by them, but I consulted to them for reasons

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1 related to occupational environmental health. And that's  
2 how he and I first met and got to know each other. And then  
3 I didn't hear from him for 25 years until a year ago, maybe  
4 a little more than that now, and he told me about this  
5 project, asked me if I would be --  
6 MS. ADELMAN: We can't hear back here.  
7 MR. GROSSMAN: Can you try to keep your voice up a  
8 little bit, Dr. Chase, because they can't hear you in the  
9 back row.  
10 MS. ADELMAN: Thank you.  
11 THE WITNESS: Okay. I'll try and speak --  
12 MR. GROSSMAN: Those in the back row could  
13 probably come to -- up a little closer if you wanted if  
14 you're having trouble hearing, but I -- maybe just --  
15 MR. ADELMAN: Do you have a microphone that was,  
16 is still available? We could give it to Dr. Chase.  
17 (Discussion off the record.)  
18 MR. GROSSMAN: Yes, but anybody in the back row  
19 can move closer in and, Ms. Adelman, you could move closer  
20 this way so perhaps you could hear better too and that might  
21 solve the problem in part. There are chairs open here.  
22 MS. ADELMAN: Mark will be thrilled.  
23 MR. GROSSMAN: This is, in the legal business this  
24 passes for togetherness.  
25 MR. ADELMAN: It is not acceptable.

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1 THE WITNESS: I'll try and speak louder.  
2 MS. ADELMAN: Thank you. Thank you, Dr. Chase.  
3 THE WITNESS: And I guess that's an opening for me  
4 to let you know that I'm hard of hearing.  
5 MS. ADELMAN: So two of you.  
6 THE WITNESS: So there may come a point in time  
7 when I'm asking somebody else to speak up. So far I've done  
8 okay thanks to these new hearing aides that I'm wearing  
9 right now. I'm sorry, where were we?  
10 BY MR. ADELMAN:  
11 Q So you were, in fact, contacted by Mr. Sullivan?  
12 A Correct.  
13 Q And you have a long-standing acquaintance with  
14 him?  
15 MR. GROSSMAN: Well, 25 years ago and then he  
16 hadn't heard from him.  
17 THE WITNESS: I hadn't heard from him in 25 years,  
18 so I didn't know who he was when he first called. I  
19 recognized the name and then he reminded me that he was a  
20 meteorologist who worked for a consultant to VERSAR and I  
21 said, oh, that David Sullivan.  
22 MR. ADELMAN: So --  
23 THE WITNESS: And he introduced me to Patricia  
24 Harris and later I met Mike Goecke and Erich Brann and Jeff  
25 Ishida.

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1 BY MR. ADELMAN:  
2 Q So that sort of answers my next question. Do you  
3 know if Costco contacted others with your sort of expertise  
4 before they selected you or --  
5 A No, I don't.  
6 Q Do you know why Costco hired you?  
7 A In part based, not for sure, but I'm speculating  
8 in part based on David's recommendation because David had  
9 seen me in action before; he knew what I had done with  
10 VERSAR, he knew some of it; my CV and there was an initial  
11 interview in which I told them I've got an awfully long  
12 history of getting involved in projects not necessarily  
13 identical to this, but similar, projects that raise the same  
14 kinds of questions.  
15 Q Okay.  
16 A And I may have given him three references to boot.  
17 Q Okay.  
18 A But I don't remember. I said I may have given  
19 them the names of references. I don't remember.  
20 Q Thank you. So you were hired as a consultant.  
21 Have you been hired as a consultant in other matters that  
22 are very closely like this one? I realize you've done a lot  
23 of consulting, but with respect to this situation which is  
24 acknowledged by almost everyone as almost unique, a very  
25 large gas station in the parking lot of a mall, et cetera,

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1 et cetera, have you been a consultant in any comparable  
2 situation?  
3 MR. GOECKE: Mr. Grossman, I would like to object.  
4 We've already established his qualifications and he's been  
5 admitted as an expert.  
6 MR. GROSSMAN: Yes, aren't these questions more  
7 addressed to the qualifications as an expert rather than to  
8 the testimony he's given? This is beyond the scope of any  
9 direct that he's given.  
10 MR. ADELMAN: You would think so. I've tried --  
11 I've never gotten the line between voir dire and I'll drop  
12 that question. Sorry.  
13 MR. GROSSMAN: The voir dire goes to his  
14 qualifications as an expert. The cross-examination you're  
15 doing now is supposed to be directed to the testimony that  
16 he gave on the substance of the case.  
17 MR. ADELMAN: Well --  
18 MS. CORDRY: Mr. Grossman, I turn to his  
19 testimony. I believe he did -- he was asked about what  
20 other projects he's worked on that were of assistance to him  
21 in trying to reach his opinion, so it seems to me that's  
22 exactly the area that Mr. Adelman is inquiring, that is very  
23 much a part of his direct testimony granted he was cut off  
24 in terms of testifying about noise.  
25 MR. GROSSMAN: Right. Right, but I don't

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1 understand, what was your last question, Dr. Adelman?  
2 MR. ADELMAN: That fundamentally was the question.  
3 He's essentially said that he has experience as a consultant  
4 in matters like this and that helped him reach his  
5 conclusions and I'm trying to basically ask him to what  
6 extent did you have previous consulting experience and  
7 testimony, as well as experience --  
8 THE WITNESS: May I offer --  
9 MR. ADELMAN: -- relevance.  
10 MR. GROSSMAN: I --  
11 THE WITNESS: -- a short answer?  
12 MR. GROSSMAN: I think -- hold on one second. I  
13 think you're right, Ms. Cordry, he did testify about that,  
14 so I would allow, I'll overrule the objection and you can  
15 ask that question. Go ahead, answer it.  
16 THE WITNESS: I went back over our list of  
17 inactive projects and active projects and I came up with a  
18 list of -- just looking at air quality, indoor air quality,  
19 as well as outdoor air quality and I came up with a list  
20 which I have with me. I can have Tim pull it out of that  
21 black bag, 60, at least 60 projects related to air quality,  
22 the health effects of air quality.  
23 BY MR. ADELMAN:  
24 Q That's not my question. My question is to what  
25 extent had any of your testimony or experience in, about a

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1 large gas station in a mall parking lot in the situation  
2 that everyone, I believe, has come to regard as a unique  
3 situation, what is the closest comparable consulting and  
4 testimonial experience?  
5 MR. GROSSMAN: I don't know if that was your  
6 question, but we can ask that question. Go ahead.  
7 THE WITNESS: None that are identical to this  
8 scenario. I think it's unique. I think it's unique from  
9 many perspectives. But may I look at the list if I want to  
10 try to tell him what's closest?  
11 MR. GROSSMAN: He is indicating yes, he would like  
12 to have you look at the list.  
13 MR. ADELMAN: That's fine.  
14 MR. GROSSMAN: So take a moment to have the  
15 gentleman review this.  
16 THE WITNESS: I know from memory that it's seven  
17 or eight power plants, seven or eight power plants that we  
18 were retained on. One of them was from Puerto Rico, the  
19 others were in the United States. I think I mentioned a  
20 carbon monoxide case.  
21 BY MR. ADELMAN:  
22 Q Why don't we just wait until you have the list so  
23 you can look at that?  
24 A I can't hear you.  
25 MR. GROSSMAN: He asked just wait until you see

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1 the list. I think your --  
2 THE WITNESS: Okay.  
3 MR. GROSSMAN: -- your colleague is producing.  
4 MR. BRANN: Dr. Chase, do you know which folder it  
5 was in? Is it in the suitcase or is in this black folder?  
6 THE WITNESS: I think it's in the black folder.  
7 Can you hand it to me?  
8 MR. BRANN: Sure.  
9 THE WITNESS: It's got secret pockets that --  
10 though I could be wrong. You're right, it's pretty much not  
11 in here. So --  
12 MR. GROSSMAN: Why don't we do this. During the  
13 lunch hour you can take a look for it and see if you have it  
14 and in the meanwhile we'll go on to some other area.  
15 BY MR. ADELMAN:  
16 Q Well, I just, I'll just say could you give us an  
17 example of the closest, similar situation and then we can  
18 come back to this later on when you have your list?  
19 A Well, power plants generate noise and emissions,  
20 and usually people are opposed to a big power plant being  
21 built in their backyard, the Nimby syndrome. And half of  
22 them were not litigation cases, they were consulting, they  
23 were, about half of them consulting engagements. We've  
24 consulted to a number of local schools and school districts.  
25 Arlington Public Schools was a fairly long project and it's

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1 specific schools that in the District and I think one in  
2 Maryland, maybe two, near the front of Brysse or the front  
3 of Jison.  
4 MR. GROSSMAN: All right. Let's -- Dr. Chase,  
5 let's just go on to the next area.  
6 THE WITNESS: Okay.  
7 MR. GROSSMAN: Move on to something else.  
8 BY MR. ADELMAN:  
9 Q Not to beat this to death, Dr. Chase, in what way  
10 is a power plant comparable to this gas station?  
11 MR. GROSSMAN: Let's move along to a different  
12 line because I really -- explain to me how this is really  
13 going to help me in terms of resolving this case, whether  
14 this witness, how this witness compares a power plan to this  
15 gas station. I mean I really want to -- I want to have you  
16 hone in on the things that are going to affect analysis of  
17 the facts in this case.  
18 MR. ADELMAN: We will proffer that this witness's  
19 testimony by his answers, in fact, is not relevant to the  
20 case at hand as we attempted to state in the voir dire.  
21 MR. GROSSMAN: Well, that's fine. You can go  
22 ahead and prove that if you can, but I don't think that the  
23 fact that he's testified regarding power plants before  
24 really, or the distinction you're attempting to make really  
25 makes a difference in terms of how I analyze what he has

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1 testified to in this case and the substance.  
2 MR. ADELMAN: It would seem to go to his  
3 experience, his -- I'm sorry.  
4 BY MR. ADELMAN:  
5 Q So you were hired by Costco. Was the fee for your  
6 services in any way, any way contingent on the outcome  
7 (indiscernible)?  
8 A Of course not.  
9 Q Fine. So in response to, one response you sent,  
10 this letter. I assume you have a copy of this letter, is  
11 that your letter?  
12 MR. GROSSMAN: This is the letter of September 10,  
13 2013?  
14 MR. ADELMAN: November 19, 2012.  
15 MR. GROSSMAN: Oh, that's the original.  
16 MR. ADELMAN: The original. This is Exhibit  
17 15(b).  
18 MR. GROSSMAN: Right.  
19 MR. ADELMAN: I just want to make sure that Mr.,  
20 Dr. Chase has a copy available. If not --  
21 MR. GROSSMAN: Do you have a copy of your  
22 original?  
23 THE WITNESS: I have it in the, it's in the room,  
24 but I just don't know which folder.  
25 MR. GROSSMAN: All right. Would you, Dr. Adelman.

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1 MR. ADELMAN: And I have -- do you need one?  
2 MR. GROSSMAN: I have a copy here. Thank you.  
3 Now you've got -- you've filmed yourself now. What are you  
4 going to do about that?  
5 (Discussion off the record.)  
6 MR. GROSSMAN: I just want to see if it's edited  
7 out or not. All right. Here, Dr. Chase, here's a copy.  
8 BY MR. ADELMAN:  
9 Q Could you please make sure that that is your  
10 letter because I'm going to ask you some questions based on  
11 your reading of your letter. So would you just take a look  
12 and make sure that it's what you sent.  
13 A It's on letterhead. It's dated November 19th and  
14 it's signed by me --  
15 Q Okay.  
16 A -- in the original.  
17 MR. GROSSMAN: We'll take your word for it, Dr.  
18 Adelman, that you haven't modified the terms of the letter.  
19 MR. ADELMAN: I didn't photo shop this.  
20 BY MR. ADELMAN:  
21 Q And you provided a slightly different version of  
22 that report on September 10th which I have here. And there  
23 were a few minor revisions. In several instances you've  
24 referred, have you not, to we found or we studied certain  
25 things. What sort of assistance did you have in preparing

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1 the original report, 15(b), dated November 19th or the new  
2 report of September 10th? Did you generate both of these  
3 entirely by yourself?  
4 A Yes.  
5 Q Thank you. Are you aware that at the last hearing  
6 applicant for the, counsel for the applicant referred to  
7 your exhibit as conclusionary in nature?  
8 A Can I say in --  
9 MR. GROSSMAN: I don't, I don't have any -- I  
10 don't remember that exact quote in any event, but so --  
11 BY MR. ADELMAN:  
12 Q I'm virtually certain, but would you agree that  
13 your statement, your reports are conclusionary, they are a  
14 series of conclusions?  
15 A Did he say conclusionary?  
16 MR. GROSSMAN: Yes, conclusionary is what he said.  
17 Do you mean --  
18 THE WITNESS: Yes.  
19 MR. GROSSMAN: -- did they reach a conclusion? I  
20 don't know what that means exactly.  
21 MR. ADELMAN: Actually, I'm trying to get the  
22 witness to explain if he agrees it's what Ms. Harris said,  
23 what does that mean? What is the substance of this?  
24 MR. GROSSMAN: Well, it doesn't really matter how  
25 Ms. Harris characterized it if she did say that. I don't

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1 recall her saying that, but let's have the witness testify  
2 as to what he thinks. I don't understand what --  
3 BY MR. ADELMAN:  
4 Q So I'm quoting that letter. In reaching the  
5 conclusion that potential adverse impacts will not, excuse  
6 me, potential adverse impacts will not adversely affect the  
7 health or general welfare of the residents, you relied on  
8 the Exhibit 15(a), which is Dr. Sullivan's report, heavily,  
9 is that correct? I believe you said that.  
10 A Well, he did five reports, so I, I relied on the  
11 totality of them and I relied on my professional experience  
12 both personally and -- those 60 projects I mentioned before,  
13 I wasn't the lead on all of them. My vice president was the  
14 lead on some of them and he's, I don't know if it matters,  
15 but he's an M.D., Ph.D., board-certified toxicologist who  
16 still teaches part-time at Columbia School of Public Health  
17 and very well published.  
18 Q Did you yourself or your close associates do any  
19 independent, scientific study of air pollutants existing at  
20 the site of the proposed special exception?  
21 A The proposed Costco --  
22 Q Yes.  
23 A -- site? No.  
24 Q You conducted, in essence, an independent  
25 literature review involving some 80 to 100 articles which

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1 you filed with District Court, all of which with respect to  
2 this report were about diesel fuel and cancer risk. Did you  
3 do any independent literature review in connection with the  
4 various vehicle, automobile emissions and the impact of  
5 those emissions or potential impact of those emissions on  
6 cancer or various product diseases?  
7 A I heard what you said, but I didn't understand  
8 what the question was.  
9 MR. GROSSMAN: He's asking -- he's saying that the  
10 literature that you cited in the attachment to your letters  
11 addresses, according to what Dr. Adelman says, addresses  
12 only diesel emissions.  
13 THE WITNESS: He's right.  
14 MR. GROSSMAN: And his question is did you also  
15 review literature regarding normal automobile emissions?  
16 THE WITNESS: Yes. I said yes.  
17 BY MR. ADELMAN:  
18 Q Could you site one or two of those articles, or  
19 more to the point, why did you not include those in your  
20 list of references?  
21 A Over the span of about a year, I was trying to  
22 keep the articles organized in some systematic way. For  
23 example, I reviewed all of the citations by Dr. Jison. You  
24 already have that list. You already know what those are and  
25 so do I. The same is true for Dr. Breyse. And the other

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1 ones -- and I have those with me and I have the other ones  
2 with me too. I wasn't asked to expand my original reference  
3 list. And I also felt like I was running out of time  
4 because this case has been very time-consuming and I've got  
5 enough, a lot of other responsibilities, so I didn't get to  
6 it. It could be done.  
7 Q I understand. When you filed this report on  
8 November 9th, Dr. Chase, when you filed this report on  
9 November 19, 2012, there were no filings, were there, by Dr.  
10 Jison or Dr. Breyse. All of those came subsequent. I'm  
11 asking you, this report, this 2-page letter and one I have  
12 pages of references, was filed at a time when the references  
13 you just mentioned had not been proffered. You read --  
14 MR. GROSSMAN: All right. Well --  
15 MR. ADELMAN: I'm sorry?  
16 THE WITNESS: You're not wrong. That's correct.  
17 Maria Jison filed her first report in early January; her  
18 second one later in January; her third one in, or fourth one  
19 in March, March 29th, I believe; and Breyse's, both of  
20 Breyse's submissions were from 2013 as well.  
21 MR. GROSSMAN: I think what Dr. Adelman is trying  
22 to get at here is that on November 19, 2012, when you filed  
23 your initial report, you only, and you only referenced  
24 literature regarding diesel emissions, the other literature  
25 you're mentioned that is cited by Dr. Jison and Dr., is it --

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1 MS. CORDRY: Breyse.  
2 MR. GROSSMAN: Breyse, but is it doctor?  
3 MS. CORDRY: Doctor, yes.  
4 MR. GROSSMAN: Yes, Dr. Breyse, had not yet been  
5 submitted in this case. So what literature, upon what  
6 literature regarding normal car emissions did you base your  
7 review as summarized in the November 19, 2012 report?  
8 THE WITNESS: Well, you're correct on the time  
9 frames. I'm not disputing that. It would take me quite  
10 awhile to go back and figure out which other articles I had  
11 reviewed before I ever saw Jison or Breyse's reports.  
12 MR. GROSSMAN: Okay.  
13 THE WITNESS: But it's a process that I started  
14 last year.  
15 MR. GROSSMAN: So I guess, so I think that's the  
16 essence of what Dr. Adelman is getting at, it appears from  
17 the fact that you only cited diesel literature here, there's  
18 a question that he raises to whether or not you had a basis  
19 in the literature when you wrote this report for conclusions  
20 regarding normal car emissions. I think that's what he's  
21 getting to in his question. So are you answering, are you  
22 telling me that you did or did not look at other literature,  
23 scientific literature regarding car emissions prior to  
24 writing your November 19, 2012 report?  
25 MS. HARRIS: Mr. Grossman, can I also clarify one

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1 thing?  
2 MR. GROSSMAN: Not yet. Let him answer my --  
3 MS. HARRIS: Okay.  
4 MR. GROSSMAN: -- question first.  
5 MS. HARRIS: Okay.  
6 THE WITNESS: I did, but please keep in mind that  
7 last fall I was under a misconception, I guess you could  
8 call it, that there was more concern about diesel than there  
9 was about gasoline and that made sense to me.  
10 MR. GROSSMAN: Why did that make sense to you?  
11 THE WITNESS: Because diesel is potentially more  
12 hazardous to human health than gasoline emissions. Diesel  
13 emissions are.  
14 MR. GROSSMAN: Okay. Dr. Adelman.  
15 MS. HARRIS: Mr. Grossman --  
16 MR. GROSSMAN: Yes, Ms. Harris?  
17 MS. HARRIS: -- just to clarify. In connection  
18 with the zoning text amendment, 12-07, which preceded the  
19 filing, Mr., Dr. Breyse had, in fact, submitted a letter  
20 and so it may very well, he may, Mr., Dr. Chase may have had  
21 that in his possession at the time that he reviewed,  
22 prepared his November 2012 report.  
23 MR. GROSSMAN: Well --  
24 MS. CORDRY: Any other testimony you want to give?  
25 MR. GROSSMAN: I don't know the answer to that.

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1 You could answer that, but I guess we have to allow that  
2 caveat just because the question assumed, hypothetically,  
3 that those letters had not been produced at that time. So  
4 do you know if you had seen any letter from Dr. Breyse  
5 prior to the November 12, November 19, 2012 report you  
6 wrote?  
7 THE WITNESS: There was a letter from him and it's  
8 probably in my folder. I didn't throw anything away. But  
9 it wasn't a formal report.  
10 MR. GROSSMAN: Okay. Dr. Adelman.  
11 BY MR. ADELMAN:  
12 Q Have you read Mr. Sullivan's November 2012 report  
13 that's labeled as Exhibit 15(a)? Have you read it in its  
14 entirety? It's very long. Have you read it in its  
15 entirety?  
16 A I don't think so.  
17 Q Could you give us a feeling how much of it or what  
18 parts you have read or you read?  
19 A I think I read 90 percent of it, but there were  
20 passages that were over my head that were very technical and  
21 over my head. So I skipped them.  
22 Q Okay. And you've already said you read in detail  
23 the various supplemental reports that Mr. Sullivan filed  
24 since November 2012, again you read most of them, 90  
25 percent?

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1 A I read 100 percent of that one.  
2 Q And you are aware, are you not, that in December  
3 of 2012 the EPA lowered its standard for PM2.5?  
4 A I am.  
5 Q What's the new standard, do you know?  
6 A I think I mentioned it, 12 micrograms per cubic  
7 meter on an annual basis.  
8 Q Okay.  
9 A They left the 24-hour standard unchanged at 35.  
10 Q So would it be accurate to say that you've  
11 minimally revised your report, the one dated September 10,  
12 2013, I'm sorry, below the -- what was that exhibit number?  
13 MR. GROSSMAN: The exhibit is, the September 10,  
14 2013 letter is dated, is Exhibit 269(a).  
15 MR. ADELMAN: 269(a).  
16 BY MR. ADELMAN:  
17 Q So 269(a) is very, very similar to 15(b), your  
18 original filing. So your conclusions have not changed  
19 despite the fact that EPA standards have been revised  
20 outward, is that correct?  
21 A I was told I had only 24 hours in which to prepare  
22 that September 10th letter and I believe that came from Mr.  
23 Grossman.  
24 MR. GROSSMAN: It did, but the question to you is,  
25 relates to any changes in the letter, in the original one.

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1 So I'd go to the substance of the question.  
2 THE WITNESS: I don't have the September 10th  
3 version in front of me, but --  
4 MR. GROSSMAN: Do you have an extra copy of the --  
5 (Discussion off the record.)  
6 MR. GROSSMAN: Your client.  
7 MS. HARRIS: September 10th, I already have a copy  
8 of that.  
9 THE WITNESS: Could you repeat the question?  
10 BY MR. ADELMAN:  
11 Q Yes. I'm sorry. Given that your new submission,  
12 the updated submission is only minimally different from the  
13 original submission, is it reasonable to state that you have  
14 not changed your conclusions despite the fact the EPA  
15 revised its standard downward?  
16 A I think that's a mischaracterization of where I  
17 was coming from. I was aware -- at the time of the November  
18 letter, I was aware of the impending change in the EPA  
19 standard. It was pretty widely known in some circles.  
20 CASAC had been working on this for years. And, secondly, I  
21 didn't -- you're correct, I didn't change my opinion, my  
22 professional opinion remained the same.  
23 Q So your professional opinion was and is that  
24 it changed downward from 15 to 12 was not substantively  
25 important?

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1 MR. GROSSMAN: Well, I don't think he said that,  
2 but just so I understand your qualification to your  
3 testimony, Dr. Chase, are you saying that when you wrote  
4 your November 19, 2012 opinion that you took into account  
5 what you considered an impending change in the standard, in  
6 the air quality standard?  
7 THE WITNESS: I think I said imminent.  
8 MR. GROSSMAN: All right. Imminent, impending,  
9 whatever you want to call it.  
10 THE WITNESS: And I think it was announced in the  
11 Federal Register on 12/14.  
12 MR. GROSSMAN: So I guess the reason I wanted to  
13 clarify that is because the sense of your question is, well,  
14 they changed the standard between November of 2012 and  
15 September of 2013, yet the conclusions didn't change and the  
16 sense of his answer is he took into account the change, if  
17 I'm understanding him correctly, even in his November 2012  
18 letter because it was imminent?  
19 MR. ADELMAN: And that would be my --  
20 MR. GROSSMAN: And so --  
21 MR. ADELMAN: -- conclusion from what Dr. Chase  
22 said and I would like a clarification on that, is that what  
23 he said?  
24 MR. GROSSMAN: Is that what you're saying?  
25 THE WITNESS: I think I'm being mischaracterized

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1 again. I had a good idea that EPA was going to make the  
2 annual standard lower or stricter or more protective for all  
3 of us, for all of society, but that -- even if they hadn't  
4 done that, I would have come up with the same opinion.  
5 MR. GROSSMAN: Okay.  
6 BY MR. ADELMAN:  
7 Q In your numerous testimonies, have you ever  
8 concluded that air quality effects would constitute a health  
9 risk in a specific situation? Have you ever testified that  
10 air quality impact of a specific situation would constitute  
11 a health risk?  
12 A I'm quite sure I have, but I have to go back to  
13 that list of 60 Tim has got over there or did you find it?  
14 MR. ST. PIERRE: I did. Do you want it now?  
15 MR. GROSSMAN: If you have it.  
16 MR. ST. PIERRE: It's right on top.  
17 MR. GROSSMAN: Thank you.  
18 THE WITNESS: And, again, these are not all  
19 litigation cases. Probably less than half are litigation  
20 cases. I mean one of the things I did on here was I was in  
21 charge of diesel exhaust training for Amtrak locomotive  
22 mechanics and how to protect them, how to minimize their  
23 exposure. What's the name of the train station in Philly?  
24 Penn --  
25 MR. GROSSMAN: Penn Station.

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1 THE WITNESS: -- Penn Station? Yes, most of that  
2 went on at Penn, at Penn Station in Philadelphia. Power  
3 plant projects Bucksport, Maine; Jacksonville.  
4 MR. GROSSMAN: Well, I don't think he's asking you  
5 to read them all. I think what he's asking -- the question  
6 is take a look at the list and can you recall from that,  
7 refreshing your recollection from that list, can you recall  
8 if in any of the cases where you actually testified, did you  
9 testify that a single source would create air pollution to  
10 the extent of creating a health hazard. Is that a fair  
11 characterization of your question?  
12 MR. ADELMAN: It sounds right.  
13 MR. GROSSMAN: Okay.  
14 THE WITNESS: I'd have to go back -- to give you a  
15 complete answer, I would have to go back to my office and  
16 pull these files. But I think one example would be  
17 effective diesel exhaust in Atlantic City. Our client was  
18 Spencer Gifts, Inc., a power plant in Orlando. Oh, we've  
19 also consulted to numerous Federal agencies on air quality,  
20 the Bureau of National Affairs, DOT, EPA itself.  
21 MR. GROSSMAN: I understand, but right now his  
22 question is, if you can tell, if you can't tell from looking  
23 at the list, Dr. Chase, that's okay, you just have to tell  
24 us one way or the other. Can you tell whether or not there  
25 have been instances where you have testified as an expert

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1 and found an air pollution source that would create a hazard  
2 to health? If you can't --  
3 THE WITNESS: Yes. Yes, I can.  
4 MR. GROSSMAN: You can? Okay.  
5 THE WITNESS: I just can't do a thorough job.  
6 MR. GROSSMAN: Okay.  
7 THE WITNESS: I mean I did it for Fannie Mae.  
8 MR. GROSSMAN: Okay.  
9 THE WITNESS: I did it for the Department of  
10 Transportation Headquarters building. That turned into a 2-  
11 year project. That involved black mold, stachybotrys  
12 chartarum. Senate Childcare Center probably; the Florence  
13 Bertel School, the gym; Fort Myer Construction probably; GSA  
14 probably; Kiplinger Washington Editors, I don't think that  
15 was litigation; MCI.  
16 MR. GROSSMAN: All right. I mean I think that's  
17 the best that Dr. Chase can do from looking at all this.  
18 BY MR. ADELMAN:  
19 Q Which I made to the previous point, Dr. Chase, I  
20 seem to recall that Mr. Sullivan's number in his original  
21 report for PM2.5 were above 12. And if you were aware, as  
22 you stated, that it was highly like the EPA was going to  
23 lower its standard to below 12, would that not have led you  
24 to come to a different conclusion in the original report?  
25 A No.

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1 Q You've stated, have you not, that the standards of  
2 --  
3 A I think I remember the number you're referring to  
4 and it was just a little bit above 12 and a wide margin of  
5 safety is built into these numbers.  
6 Q I refer you now to the copy of your letter of  
7 November 19th. There's a couple of passages. I'd like you  
8 to read it. Sir, could you read, please, the first sentence  
9 up to the comma just before, just after air quality?  
10 A Which page are you on?  
11 Q This is the first page of your 2-page letter.  
12 A Okay.  
13 Q The first sentence.  
14 MR. GROSSMAN: Which date?  
15 MR. ADELMAN: November 19th.  
16 MR. GROSSMAN: Okay.  
17 BY MR. ADELMAN:  
18 Q "It is my understanding."  
19 A The first paragraph?  
20 Q Just the first sentence up to the comma.  
21 A "It is my understanding that some local residents  
22 have expressed concerns regarding potential,  
23 adverse impacts on air quality."  
24 Q Did you come to that understanding by discussing  
25 this with any of the local residents or was that conveyed to

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1 you by Mr. Sullivan or someone from Costco?  
2 A No.  
3 Q No?  
4 A I said, no, I didn't have discussion with  
5 residents.  
6 Q So how do you know what their concerns were or  
7 are?  
8 A My client told me.  
9 Q Your client told you?  
10 MR. GROSSMAN: Why do you look surprised at that,  
11 Dr. Adelman? Wouldn't you anticipate that?  
12 MR. ADELMAN: No, actually I think I better not  
13 say anything, Mr. Grossman, that will be interpreted as  
14 testimony.  
15 MR. GROSSMAN: Well, but you can answer my  
16 question, but --  
17 MR. SILVERMAN: He just asked you.  
18 MR. GROSSMAN: -- but it's all right. If you  
19 prefer not to, you don't have to.  
20 MR. GROSSMAN: I just --  
21 MR. ADELMAN: I did --  
22 MR. GROSSMAN: I just --  
23 MR. ADELMAN: I did expect it and I'm  
24 disappointed.  
25 MR. GROSSMAN: All right.

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1 BY MR. ADELMAN:  
2 Q Do you happen to recall who specifically told you  
3 of the concerns of the residents?  
4 A Patricia Harris.  
5 Q Thank you.  
6 A And David Sullivan, but he wasn't my client.  
7 Q So when you speak of local residents, you name, do  
8 you not, the residents who live in a neighborhood, the  
9 vicinity of the proposed gas station?  
10 A I do.  
11 Q To your mind, what exactly is that neighborhood?  
12 A There's a hundred definitions that you could use.  
13 The --  
14 Q How about the definition that your client uses?  
15 A I don't recall. I think they -- I think they used  
16 street boundaries and street names.  
17 MR. ADELMAN: For the record, Mr. Grossman, I'm  
18 reminding the witness that the client he's serving does not  
19 include any residences in its definition of neighborhood.  
20 MR. GROSSMAN: I understand.  
21 THE WITNESS: I messed up.  
22 MR. GROSSMAN: It is true, isn't it? Your  
23 definition of neighborhood was just including the mall  
24 property, was it not?  
25 MS. HARRIS: That Mr. Gang testified to, that's

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1 correct. I'm sorry, Mr. Flynn in his revised -- I'm  
2 confusing the needs with the general, with the land use  
3 definition.  
4 MR. GROSSMAN: Well --  
5 MS. CORDRY: Mr. --  
6 MR. GROSSMAN: -- the Technical Staff defined the  
7 neighborhood in a way that included nearby residences,  
8 whereas your expert and your proffer was that your  
9 definition of neighborhood would not have included them.  
10 But Mr., Dr. Chase does include, does say some local  
11 residents, so I don't know how finely you can parse that,  
12 Dr. Adelman, because he says some local residents, so he's  
13 obviously including a concept of people who live in the  
14 area. Exactly what that means, I don't know, but --  
15 MR. ADELMAN: That's precisely my point.  
16 MR. GROSSMAN: Right.  
17 MR. ADELMAN: Thank you, Mr. Grossman.  
18 BY MR. ADELMAN:  
19 Q Dr. Chase, would it be unreasonable to assume that  
20 Costco employees who work at the store and who may work at  
21 the gas station if it's built might also be concerned about  
22 health risks?  
23 A It's possible.  
24 Q Possible? Thank you.  
25 A Is that the question?

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1 Q Thank you. What about people who use the pumps?  
2 MR. GROSSMAN: Well, no, he didn't answer the  
3 question. He said, "Is it possible?" He's asking you is  
4 that your question, is it possible?  
5 MR. ADELMAN: Yes, that's my question, sorry.  
6 THE WITNESS: Well, there's no gas station there.  
7 I guess not the, employees should be warehouse or --  
8 MR. ADELMAN: I asked you specifically if the gas  
9 station is built. Let me re-read it.  
10 MR. GROSSMAN: I'm sorry. If the gas station were  
11 built, is it possible that employees of the gas station  
12 might also -- and do you have anything else?  
13 MR. ADELMAN: Have concerns.  
14 MR. GROSSMAN: Have concerns?  
15 THE WITNESS: Anything is possible.  
16 MR. GROSSMAN: Anything is possible.  
17 BY MR. ADELMAN:  
18 Q Anything is possible. What about people who use  
19 the parking lot and who patronize the various stores that  
20 are abutting the parking lot? If the gas station is built  
21 in the parking lot, might those people also be concerned  
22 about potential adverse air quality impacts?  
23 A Anything is possible, but you're leaving so much  
24 out of the question like how much time would it take for a  
25 person to get out of their car, go into the warehouse and

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1 buy their stuff, pack their car up and leave. So I guess  
2 I'd say possible, but not plausible.  
3 Q Dr. Chase, are you aware of the concept of  
4 secondhand smoke impact, smoking impact?  
5 A Of course.  
6 Q All right. Do you personally know anything about  
7 the air flow patterns and dispersal of air pollutants in the  
8 parking lot other than what you've read in Dr., Mr.  
9 Sullivan's report?  
10 A No.  
11 Q Have you read pages 75 and 76 in Mr. Sullivan's  
12 report?  
13 MR. GROSSMAN: Well, I think that's an unfair  
14 question unless he has it in front of him. Did you --  
15 MR. ADELMAN: I'm about to provide it.  
16 MR. GROSSMAN: All right. Well, then let's  
17 provide it because I -- I don't think you can ask the  
18 witness to memorize the page numbers.  
19 MR. ADELMAN: Well, I think --  
20 (Discussion off the record.)  
21 BY MR. ADELMAN:  
22 Q What you have, Dr. Chase, is it's 2-sided. It was  
23 taken directly from Mr. Sullivan's report. It was 15(a). I  
24 don't need you to read it out loud, but could you just scan  
25 it please? I have a question after you've had a chance to

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1 read it over.  
2 A It looks like you've given me two copies of the  
3 same thing.  
4 MR. GROSSMAN: You handed him two documents? Is  
5 one supposed to be for me?  
6 THE WITNESS: I think it's a duplicate of this.  
7 MR. ABRAMS: One was supposed to be for you, sir.  
8 MR. GROSSMAN: Oh, okay. Thank you.  
9 MR. ADELMAN: Sorry.  
10 BY MR. ADELMAN:  
11 Q So it's two pages.  
12 MR. GROSSMAN: Because I certainly know I wouldn't  
13 remember the page numbers. All right.  
14 THE WITNESS: What do you want -- did you want me  
15 to read something?  
16 MR. GROSSMAN: He wanted you to skim it.  
17 BY MR. ADELMAN:  
18 Q I just want you to skim that document.  
19 (Discussion off the record.)  
20 MR. GROSSMAN: While he's looking, Dr. Adelman,  
21 how much longer do you think your cross-examination will  
22 take?  
23 MR. ADELMAN: I would expect about an hour.  
24 MR. GROSSMAN: Okay. So after -- perhaps maybe  
25 this would even be a good time to break so people have an

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1 opportunity to get some lunch before they close down the  
2 cafeteria.  
3 MR. ADELMAN: After he responds to my question on  
4 this.  
5 MR. GROSSMAN: I don't think you posed a question  
6 yet.  
7 MR. ADELMAN: No.  
8 MR. GROSSMAN: That's why maybe it's, maybe it's  
9 not a bad time to --  
10 MR. ADELMAN: No.  
11 MR. GROSSMAN: -- to break.  
12 MR. ADELMAN: I didn't pose it first because it  
13 would be unfair to do that.  
14 MR. GROSSMAN: Right. So why don't we -- do you  
15 want him to answer this question first, whatever you're  
16 about to pose, is that what you'd like, you'd prefer?  
17 MR. ADELMAN: How about if it's okay with you, we  
18 can break now and he can have time to look at that.  
19 MR. GROSSMAN: Okay.  
20 MR. ADELMAN: And then --  
21 MR. GROSSMAN: I think that's fair. Dr. Chase --  
22 THE WITNESS: Yes?  
23 MR. GROSSMAN: -- what we're going to do is before  
24 he asks any question regarding those two pages, we're going  
25 to break for lunch and then when we come back after lunch,

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1 he's going to ask you whatever questions he has regarding  
2 pages 75 and 76 of the November 19, 2012 Sullivan report,  
3 okay?  
4 THE WITNESS: Can I take this with me?  
5 MR. GROSSMAN: You may take it with you.  
6 MS. HARRIS: Mr. Grossman?  
7 MR. GROSSMAN: Ma'am?  
8 MS. HARRIS: Can we get a sense of how long Ms.  
9 Rosenfeld's questions and cross will be as well only because  
10 I'm wondering whether Ms. Cordry is going to be testifying  
11 today because we have Mr. Flynn here if she is. I think the  
12 question is is it likely that Ms. Cordry is going to be  
13 testifying today.  
14 MS. ROSENFELD: I guess between one and two hours.  
15 MR. GROSSMAN: All right. So if we come back here  
16 at 1:45, if Dr. Adelman takes an hour, that would be 2:45.  
17 I think we're probably -- one to two hours you said? I  
18 think it's unlikely that Ms. Cordry will testify because we  
19 have to leave by 4:45. So it's unlikely. It's possible,  
20 but generally speaking in double numbers the attorneys give,  
21 Dr. Adelman, I don't know, I don't want to make any  
22 predictions.  
23 MS. HARRIS: Okay. Well, we'll make our own  
24 judgment. Thank you. That's all.  
25 MR. GROSSMAN: All right. So we'll come back at

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1 1:45. We're in recess.  
2 (Recess.)  
3 MR. GROSSMAN: All right. We're ready for your  
4 question, Dr. Adelman, regarding pages 75 and 76.  
5 MR. ADELMAN: All right. Should we do that or  
6 should Dr. Chase, would Dr. Chase like to respond to those  
7 couple of questions before of what he was going to look at  
8 his files?  
9 MR. GROSSMAN: I don't know, oh, you mean the  
10 previous --  
11 MR. ADELMAN: Yes.  
12 MR. GROSSMAN: -- let's get with the question that  
13 you --  
14 MR. ADELMAN: Okay. Fine.  
15 MR. GROSSMAN: -- were about to ask --  
16 MR. ADELMAN: Fine.  
17 MR. GROSSMAN: -- and, when we broke.  
18 MR. ADELMAN: Right.  
19 BY MR. ADELMAN:  
20 Q Dr. Chase, you've had a chance to look at this  
21 page 75 and 76 from Mr. Sullivan's report, is that correct?  
22 A Yes.  
23 Q And would you agree that in a general sense those  
24 pages refer to the risk of cancer potentially caused by  
25 benzene?

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1 A Yes.  
2 Q Which is, in essence, a major focus of your  
3 report, is that correct?  
4 A Part of my report.  
5 Q Fine. Thank you. Are you aware that cancer can  
6 be caused by many other airborne pollutants?  
7 A Say again?  
8 Q Are you aware that cancer can be caused or may be  
9 caused by many other airborne pollutants, not just benzene?  
10 A Yes.  
11 Q Are you aware that in addition to the four VOC's  
12 that you enumerated in your letter, there are various other  
13 airborne pollutants which are found in automotive exhaust  
14 and automotive emissions?  
15 A Yes.  
16 Q Are you aware that, are you aware that these other  
17 pollutants constitute a range of potential health risks?  
18 A Well, many of them are not well-characterized, so  
19 we don't know, but there's a lot of polycyclic, aromatic  
20 hydrocarbons.  
21 Q And many of them are reasonably well-characterized  
22 as to potential health risk, is that correct?  
23 A Benzene has been --  
24 Q Other than Benzene?  
25 A One three budadine (phonetic sp.).

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1 MR. GROSSMAN: I don't think he was asking you to  
2 list them, I think he's asking you if there are other  
3 pollutants other than benzene that are characterized or  
4 could be potential health risks, is that --  
5 MR. ADELMAN: Precisely. Precisely.  
6 MR. GROSSMAN: Are there other --  
7 THE WITNESS: Yes.  
8 MR. GROSSMAN: Okay.  
9 BY MR. ADELMAN:  
10 Q Yes? That wasn't intended to be a yes or no, I'm  
11 sorry. But since you started to name some of the compounds,  
12 what I'm interested in is can you name some of the health  
13 risks, potential health risks, and with respect to any of  
14 the health risks you can mention, could you state the  
15 pollutant or pollutants that are presently sought to be  
16 causative of those health risks?  
17 MR. GOECKE: That's a compound question. Could we  
18 break that down for him please?  
19 THE WITNESS: Yes.  
20 MR. GROSSMAN: Yes, it might be easier. That's a  
21 fair question.  
22 BY MR. ADELMAN:  
23 Q Could you list one specific health risk and the  
24 pollutant that is currently thought to be involved in  
25 imposing that health risk, other than benzene?

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1 A Other than benzene? There are other potential  
2 emissions from -- you didn't say we were talking about  
3 diesel and so, but it sounds, sounds --  
4 Q I'm definitively not talking about diesel, other  
5 than diesel, what are emissions, not benzene?  
6 A From diesel exhaust or just --  
7 MR. GROSSMAN: No, not, not diesel.  
8 MR. ABRAMS: Not diesel.  
9 MR. GROSSMAN: Auto emissions, but not diesel  
10 emissions.  
11 THE WITNESS: Air emissions? Air emissions, but  
12 not diesel?  
13 MR. GROSSMAN: Not diesel.  
14 THE WITNESS: Not significant.  
15 BY MR. ADELMAN:  
16 Q The question was not as to significance. The  
17 question was can you name one specific pollutant and a  
18 health risk which is thought to be associated with exposure  
19 to that pollutant?  
20 A Formaldehyde and irritation of the pulmonary tract  
21 at, again, at a high dose.  
22 Q I'm sorry, I couldn't hear you.  
23 A At a high enough dose, formaldehyde can produce  
24 mucous membrane and lung irritation. But the gas station  
25 we're talking about has got some pretty impressive vapor

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1 control measures.  
 2 Q Since you --  
 3 A -- and design.  
 4 Q Since you raised that point, the vapor control  
 5 emissions are on gas pumping stations, are they not?  
 6 MR. GROSSMAN: I'm sorry, what do you mean they  
 7 are on the gas pump stations?  
 8 MR. ADELMAN: I'm asking -- the question is about  
 9 stuff coming out of the tailpipe of the cars.  
 10 MR. GROSSMAN: Okay.  
 11 MR. ADELMAN: Those are auto emissions. The vapor  
 12 control devices are, to my knowledge, not on the tailpipes  
 13 of the cars, is that correct?  
 14 THE WITNESS: Correct.  
 15 BY MR. ADELMAN:  
 16 Q Thank you. Those auto emissions, those auto  
 17 emissions contain a number of components, do they not?  
 18 A Yes.  
 19 Q For example, PM2.5, correct?  
 20 A From cars?  
 21 Q From cars.  
 22 A Yes.  
 23 Q And what health risks or risk are associated with  
 24 PM2.5?  
 25 A Well, they're dose dependent.

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1 Q I understand that.  
 2 A Concentration dependent.  
 3 Q What risks are potentially associated?  
 4 A Irritation of the pulmonary system, the lungs, and  
 5 we think lung cancer.  
 6 Q Others, are there other risks?  
 7 A At high enough levels, cardiovascular.  
 8 MS. ROSENFELD: I'm sorry, cardiovascular?  
 9 MR. GROSSMAN: At high enough levels,  
 10 cardiovascular. Are there other risks?  
 11 MS. ROSENFELD: Cardiovascular what?  
 12 MR. GROSSMAN: He asked if there were other risks  
 13 and he has answered at high enough levels, cardiovascular.  
 14 THE WITNESS: Or heart.  
 15 BY MR. ADELMAN:  
 16 Q Carbon monoxide?  
 17 A What about it?  
 18 Q Is it in automotive exhaust?  
 19 A At very low levels.  
 20 Q Does the level present in automotive exhaust  
 21 constitute a potential health risk?  
 22 A The way you phrased it, I guess my answer would be  
 23 yes.  
 24 Q Thank you. What about nitrogen dioxide present in  
 25 automotive exhaust, yes or no?

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1 A You asked me about nitrogen dioxide, didn't you?  
 2 Q Yes.  
 3 MR. GROSSMAN: Yes, he asked if nitrogen dioxide  
 4 was present in automotive exhaust.  
 5 THE WITNESS: At low levels, yes.  
 6 BY MR. ADELMAN:  
 7 Q Does its presence in automotive exhaust, and  
 8 therefore in the air around the automobiles, constitute a  
 9 potential health risk, yes or no?  
 10 A No.  
 11 Q No health risk? If we could return, if you would  
 12 return to your letter of November 19th, Exhibit 15(b)? I  
 13 had you previously read the first half of the first  
 14 sentence. Could you please read the second half of that  
 15 sentence now, beginning with, despite state-of-the-art?  
 16 A "Despite state-of-the art emission controls on  
 17 Costco's existing property in Wheaton, Maryland."  
 18 Q You're now testifying on special exception case S-  
 19 2863, are you not?  
 20 A I think I am. I don't know the number.  
 21 Q All right.  
 22 MR. GROSSMAN: He doesn't know the number.  
 23 BY MR. ADELMAN:  
 24 Q Are you aware that the gas station in question is  
 25 proposed, that is to say the process we're going through is

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1 to determine if it can be built, it has not been built, are  
 2 you aware of that?  
 3 A I know that.  
 4 Q Thus, there are no state-of-the-art control,  
 5 emission controls at the existing site, is that correct?  
 6 A Not in place, but they're part of the design.  
 7 Q Are you aware that Costco doesn't, in fact, own  
 8 the property in question that is zoned by Westfield and  
 9 leased, or will be leased by Costco?  
 10 MR. GROSSMAN: What difference does that make?  
 11 THE WITNESS: No.  
 12 MR. ADELMAN: It goes to the expert witness's  
 13 expertise as to the basic facts of the case.  
 14 MR. GROSSMAN: I don't see how that in any way  
 15 affects his health opinions and I think if you're segueing  
 16 off the sentence, which I admit this first sentence might be  
 17 ambiguous as to state-of-the-art emission controls on an  
 18 existing property, he doesn't say the existing gas stations,  
 19 it is an existing property and whether or not he says it's  
 20 owned by Costco or not, it's their property in the lease in  
 21 a leasing sense, so I just don't see where that would help  
 22 us at all. Let's try -- I mean let's try to stick to an  
 23 area --  
 24 MR. ADELMAN: I'll move on. I'll move on.  
 25 MR. GROSSMAN: -- that is relevant to what I have

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1 to decide.

2 BY MR. ADELMAN:

3 Q Are you aware that Costco was forced, excuse me,

4 are you aware that the County Council passed EPA 12-07? Are

5 you aware of the EPA 12-07 passed by the County Council?

6 MR. GOECKE: Objection. Relevance.

7 MR. GROSSMAN: Yes, what is the relevance of that,

8 whether he's aware of the ZTA?

9 MR. ADELMAN: Withdrawn.

10 BY MR. GROSSMAN:

11 Q Could you please read the entire sentence that

12 begins, it's the third paragraph that begins with, this

13 report, and ends with, exposure to it, could you read that

14 sentence? First page of your letter, third paragraph.

15 MR. GROSSMAN: All right. Well, you can all read

16 it. It speaks for itself. He doesn't have to read it.

17 What about it?

18 MR. ADELMAN: Well, then can Dr. Chase explain to

19 me, to us in, to you, sir, in layman's terms what that

20 sentence means?

21 MR. GROSSMAN: All right. And we're talking about

22 this report? Which one? There are two of them.

23 MR. ADELMAN: This report provides a --

24 MR. GROSSMAN: Okay. And it's -- okay. I see it.

25 (Discussion off the record.)

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1 MR. ADELMAN: November 19th.

2 MR. GROSSMAN: Okay.

3 MR. ADELMAN: It's the same, it's the same in

4 both --

5 MR. GROSSMAN: All right.

6 MR. ADELMAN: -- reports.

7 MR. GROSSMAN: So what did you mean -- he's asking

8 what did you mean by this sentence, the one that begins,

9 this report provides, --

10 MR. ADELMAN: In layman's terms --

11 MR. GROSSMAN: -- a 95 percent upper limit, et

12 cetera?

13 THE WITNESS: That's based on the Sullivan report

14 and it's one of several ways that, providing conservatives

15 in cancer risk estimations or projections.

16 BY MR. ADELMAN:

17 Q Could you please explain what the sentence means

18 in layman's terms?

19 A Well, it assumes that an individual is potentially

20 exposed for 70 years, 24 hours a day, which is implausible,

21 but it does assume it and that the cancer risk protections

22 for each of the substances that he looked at included a 95

23 percent upper limit.

24 MR. GROSSMAN: What does that mean? What do you

25 mean by 95 percent upper limit? Upper limit of what?

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1 THE WITNESS: I don't have the Sullivan report in

2 front of me. I'm not exactly sure. I don't want to mis-

3 speak.

4 BY MR. ADELMAN:

5 Q All right. That sentence is not set off by

6 quotes, this is your report. I'm asking you a question

7 about your report.

8 A I know, but I still took it from Sullivan's

9 report.

10 MR. GROSSMAN: He's actually referring to Sullivan

11 in this sentence. He says he, the sentence before it refers

12 to the report by David Sullivan, November 2012, and it says

13 this report provides. He's referring to the Sullivan report

14 there.

15 MR. ADELMAN: I understand that. I'm asking the

16 witness to explain the sentence.

17 MR. GROSSMAN: I know, but you -- I know, but you

18 said just before that, you said you're not asking about the

19 Sullivan report, you're asking about his report and he is

20 referencing the Sullivan report in this statement. I don't

21 think that's -- he's not saying, if I understand you, Dr.

22 Chase, you're not saying that this 95 percent upper limit

23 point is part of your independent conclusion, you're saying

24 that's something you took from the Sullivan report, is that

25 correct?

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1 THE WITNESS: Yes.

2 MR. GROSSMAN: Okay.

3 BY MR. ADELMAN:

4 Q In the last sentence of that paragraph you refer

5 to a wide margin of safety, is that correct?

6 A Yes.

7 Q What do you mean by a wide margin of safety?

8 A That is defined by CASAC, the CASAC Committee.

9 Q And what is the definition?

10 A I don't offhand know, but it would go something

11 along if they thought that the risk of developing cancer

12 after 70 years of exposure, that substance X was 10, for

13 their purposes they changed the 10 to 20. I'm not saying

14 that's what they did because I don't know without having

15 CASAC report in front of me. And so that it's not taken out

16 of context, I also pointed out that the CASAC calculations

17 were taking into account sensitive populations as we defined

18 earlier today.

19 Q I want you to return to the point that of the 15

20 references you cite in your file, 14 based on your titles,

21 reflect studies related to cancer risk and/or benzene

22 usually, only pick between the two, and you agreed that that

23 is the case. I have a copy of one of the references, while

24 I trip over all the cords.

25 (Discussion off the record.)

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1 BY MR. ADELMAN:  
2 Q First of all, am I correct in assuming that --  
3 MR. GROSSMAN: Dr. Adelman said that you had  
4 indicated that all of these references attached to your  
5 report related to the effects of benzene. I know that you  
6 had testified they were all related to diesel engines. I  
7 don't recall you saying, but I may be mistaken --  
8 MR. ADELMAN: I'm sorry, I may have mis-spoke.  
9 Excuse me. Yes, I'm, thank you for catching that. What I  
10 meant to say was that they're all studies on diesel and oral  
11 cancer risk.  
12 BY MR. ADELMAN:  
13 Q Am I correct in assuming you've actually read all  
14 15 of the articles?  
15 A Oh, I did.  
16 Q Good. The article that I gave you is No. 15 on  
17 your list of references. I wonder if you could look through  
18 the title for me?  
19 A Carcinogenicity of diesel, engine and gasoline  
20 engine exhaust and some nitro-airings.  
21 Q The reason I call this out is that it does refer  
22 to gasoline engine exhaust. Could you please turn to the  
23 second page, that's page No. 664, and look at the next to  
24 the last paragraph. It begins, in conclusion. Could you  
25 please read that paragraph?

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1 A I don't have a page 664.  
2 Q It's the --  
3 MR. GROSSMAN: It's the second page in this.  
4 MR. ADELMAN: -- double-sided.  
5 MR. GROSSMAN: Yes. And it's the next to the last  
6 paragraph.  
7 THE WITNESS: In conclusion, do you want me to  
8 read it?  
9 MR. ADELMAN: Yes, please.  
10 THE WITNESS: "The working group classified diesel  
11 engine exhaust as carcinogenic to humans, Group 1, and  
12 gasoline engine exhaust as possibly carcinogenic to humans,  
13 Group 2B.  
14 BY MR. ADELMAN:  
15 Q Thank you. Would you agree that that paragraph  
16 seems to state that one or more elements in gasoline exhaust  
17 from automotive tailpipes are possibly carcinogenic?  
18 MR. GOECKE: Objection. The statement speaks for  
19 itself.  
20 MR. GROSSMAN: Well, no, but he can ask him his  
21 opinion. He's here as a health expert. Yes, that's  
22 overruled. You can answer.  
23 THE WITNESS: Well, you're picking parts of the  
24 article and taking things out of context.  
25 MR. ADELMAN: I --

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1 THE WITNESS: You didn't mention the fact that  
2 this is based on studies done with fuels and engines  
3 produced before the year 2000. That makes a huge  
4 difference.  
5 BY MR. ADELMAN:  
6 Q Are you objecting to the article that you cited?  
7 MR. GROSSMAN: Well, he's not objecting to the  
8 article.  
9 THE WITNESS: No.  
10 MR. GROSSMAN: He's saying you cited only one  
11 paragraph of an article that has multiple things in it and  
12 he's saying that the study was done regarding at least  
13 automobile engines before 2000. So he's clearing up, I  
14 guess you would say, the point you're raising.  
15 BY MR. ADELMAN:  
16 Q What is the date of publication of the article?  
17 A 2012.  
18 Q Is it a fairly recent article?  
19 A The article is fairly recent.  
20 Q Fine. And it summarizes --  
21 A The data that they're citing is not.  
22 MS. CORDRY: If I'm looking at this, the only  
23 reference I see before 2000 seems to be talking about the  
24 diesel engines. Maybe I'm missing it. But the bottom of  
25 the front page of the very bottom of the first column

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1 they're talking about the diesel engine exhaust in their  
2 extracts, but I don't see the 2000 referring to the gasoline  
3 engine exhaust which are, that was on the second page  
4 starting at the second paragraph in the second column there.  
5 MR. GROSSMAN: Can you tell, Ms. Cordry, from the  
6 audible whether they're considering vehicles before 2000 or  
7 not in your reading?  
8 MS. CORDRY: Well, I'm reading, the only reference  
9 I see to the year 2000 is the statement, the diesel, bottom  
10 of the first page --  
11 MR. GROSSMAN: Right.  
12 MS. CORDRY: "The diesel engine exhaust and their  
13 extracts used in carcinogenicity studies with  
14 experimental animals would generate from fuels in  
15 diesel engines produced before 2000."  
16 MR. GROSSMAN: Right.  
17 MS. CORDRY: Then it goes on and talks about  
18 diesel engines some more and finishes talking about diesel  
19 engines and that's the second page.  
20 MR. GROSSMAN: I'm just saying can we tell --  
21 MS. CORDRY: Oh.  
22 MR. GROSSMAN: -- can we tell whether, from the  
23 article whether or not the data they're referencing for  
24 ordinary car emissions is from older or more recent engines?  
25 MS. CORDRY: Well, you can't tell, but there's

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1 certainly nothing to suggest that it is. And by contrast to  
2 the part about saying what they're talking about with diesel  
3 engines, I would suggest maybe they are.  
4 MR. GROSSMAN: Well, let me ask you this. Is it  
5 really disputed in this case by anybody that car exhaust  
6 fumes can have, depending on dosage, health effects? I'm  
7 not sure where -- I don't know that that's a dispute at  
8 issue, is it?  
9 MS. CORDRY: Well --  
10 MR. GROSSMAN: Applicant, is it disputed that a  
11 car exhaust in certain dosages can have health effects?  
12 THE WITNESS: May I response?  
13 MR. GROSSMAN: Yes, sir.  
14 THE WITNESS: On page 2, middle column, it  
15 says,  
16 "Gasoline exhaust and cancer risk was  
17 investigated in only a few epi-studies and because  
18 of the difficulty to separate effective diesel and  
19 gasoline exhaust, evidence for carcinogenicity was  
20 evaluated as inadequate,"  
21 end quotes.  
22 MR. GROSSMAN: Right. That's as to one type of  
23 health effect, but I guess my question was broader. Is it  
24 disputed in this case, applicant's counsel, that car  
25 exhausts, depending on the dosage, can have some adverse

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1 health effects? Is that a true issue in this case?  
2 MS. HARRIS: I don't believe it is a true issue.  
3 THE WITNESS: I can speak --  
4 MS. HARRIS: But I don't think it's the issue at  
5 hand either.  
6 MR. GROSSMAN: Right. Well, no, but I thought  
7 that the question was raised when to, whether or not car  
8 exhaust can have adverse health effects. There is also a  
9 question about, more specifically, carcinogenic effects.  
10 Maybe I overly-broadened my concept of the question. Maybe  
11 the question was directed just to carcinogenic effects. Dr.  
12 Adelman?  
13 MR. ADELMAN: You're precisely -- that's precisely  
14 what I intended to ask.  
15 MR. GROSSMAN: If there's any health effect? So  
16 is it -- I took it from your earlier testimony, Dr. Chase,  
17 that, but you were saying that depending on the dosage,  
18 emissions, these types of emissions could have health  
19 effects, but it all was dosage dependent. Did I  
20 misunderstand that?  
21 THE WITNESS: No, you didn't misunderstand that.  
22 That's exactly correct. And maybe it would help if I told  
23 you -- I'm not in disagreement with all these experts and  
24 scientists all over the world who have reported on the  
25 hazards of fossil fuels, gasoline and diesel included. But

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1 there -- too many of the, and we still haven't talked about  
2 Jison and Breyse, but too much of the literature out there  
3 is so dated that you can't translate it to, you can't apply  
4 it to the present and you can't apply it to the proposed  
5 Costco gas station. And I'm trying to make a compelling  
6 argument for I can tell you why.  
7 MR. GROSSMAN: All right.  
8 THE WITNESS: And earlier I mentioned the  
9 watershed or benchmark year of 2007. That's the year that  
10 most folks agree that the design of diesel engines and their  
11 exhaust systems radically changed. We haven't mentioned at  
12 all about the use of ultra-low sulfur fuel in diesels. That  
13 matters. That's protective of health.  
14 I did mention the high-efficiency, catalyzed  
15 diesel particulate filters and there's a couple of other  
16 devices in -- I'm not an expert on diesel engines, but a  
17 couple --  
18 MS. ROSENFELD: Excuse me, Mr. Grossman --  
19 THE WITNESS: -- of other devices.  
20 MR. GROSSMAN: Yes?  
21 MS. ROSENFELD: I would renew the objection that I  
22 made earlier. All of this goes to mechanical and design  
23 impacts of engines and fuels and filters, all of which goes  
24 well beyond the scope of his report.  
25 MR. GROSSMAN: Well --

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1 THE WITNESS: If I recall, that's human health.  
2 MR. GROSSMAN: Hold on one second. I am taking  
3 his, whatever he offers about this, I'm considering whatever  
4 the health evidence is. I'm not taking him as an expert in  
5 diesel mechanics, but he's talking about the health impacts  
6 of the modern diesel engine versus earlier versions. So to  
7 that extent --  
8 MS. CORDRY: He's talking about gasoline engines.  
9 MS. ROSENFELD: Which again is not --  
10 MR. GROSSMAN: I understand, but you've also  
11 raised the point about the diesel trucks that are delivering  
12 the fuel. I agree with you that the vast majority of your  
13 case is not about the effects of diesel fuel because the  
14 only diesel fuel that will be impactful here, if at all,  
15 will be the delivery trucks. But you did raise that point  
16 as an issue and that you were careful to show how long each  
17 diesel truck would be there and would they be running or not  
18 and so on and so forth in your, in the evidence. So I  
19 assume that that's part of your case, is it not?  
20 MS. ROSENFELD: And none of those projections are  
21 in his report. I'm sitting here with an expert who is going  
22 to testify, or in the process of testifying on this  
23 information. I have absolutely no way to cross-examine him  
24 on what he's testifying about right now. He's providing  
25 information, it may or may not be well-founded, and I have

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1 no, no basis on which to cross-examine the accuracy of his  
2 statements.

3 MR. GROSSMAN: Well, it depends on which  
4 statements you're talking about, about the health impacts or  
5 what happened with diesel trucks. And he has -- we've  
6 already had the testimony in the record about the changes to  
7 diesel technology. So I don't, I just don't -- it's not an  
8 area that I'm taking him as an expert on in changes in  
9 diesel technology. What I'm taking him as an expert on is  
10 the health impact. So the question is does he have  
11 testimony he has offered, he is in the middle of a sentence,  
12 an objective regarding, I thought, about the health impacts  
13 and I thought it was going to get into car emissions rather  
14 than diesel, but he has talked mostly about diesel, but I'm  
15 sure he'll get into cars, so let's hear the whole statement  
16 that he has to say about that.

17 THE WITNESS: There's a lot that, I don't know, I  
18 haven't read all the transcripts, but does everybody know  
19 that when the diesel truck, delivery truck shows up to  
20 offload the fuel, they're required to turn off their engine?

21 MR. GROSSMAN: Well, I understand, but we're  
22 not -- we just want to hear, because of your expertise is  
23 not as to how they operate the engines, it's as to the  
24 health impacts of anything. That's what I, your testimony  
25 and, in fact, your summary report is restricted to because

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1 in fairness to the other side, they have to know in advance  
2 the area in which you're going to testify to and it's not  
3 technically the operation of a diesel truck, it is what are  
4 the health impacts, if any, from the proposed operation of  
5 this Costco gasoline station.

6 THE WITNESS: If I could respectfully disagree a  
7 little bit?

8 MR. GROSSMAN: All right. Certainly.

9 THE WITNESS: As an expert board-certified in  
10 occupational and environmental medicine, we, the concept of  
11 dose response was drilled into me 40 years ago and I can't  
12 talk about health without talking about dose or --

13 MR. GROSSMAN: I expect you to talk about --

14 THE WITNESS: -- potential exposure.

15 MR. GROSSMAN: I expect you to talk about dose. I  
16 understand that. But my question, my question to you went  
17 to the dose aspect, but you indicated you were going to tell  
18 me about kind of, or more broadly describe what you felt  
19 were the health impacts here, if I understood you.

20 THE WITNESS: That I could trust in my written  
21 report, but I'll say it again. I don't think there's going  
22 to be any health impacts from this gas station and if it  
23 goes forward, there's no one in the world who would be able  
24 to design a study that would be able to show that there's  
25 been any incremental contribution to adverse health in the

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1 Wheaton community, the neighborhood, however you define it.  
2 It's just not possible.

3 MR. GROSSMAN: Presumably, people could measure at  
4 least the level of pollutants, is that correct?

5 THE WITNESS: Yes, that's been done in Sterling,  
6 Virginia, and it's been modeled for Wheaton and you're  
7 talking, you're talking tiny fractions of what's already out  
8 there.

9 MR. GROSSMAN: I understand, but what I'm just,  
10 I'm just asking you, I presume, though, that one could right  
11 now, I presume, take measurements of the various pollutants  
12 and then if the station were operation, take measurements  
13 after, over some period of time thereafter to see if you're  
14 correct about there being only a tiny increase.

15 THE WITNESS: You could, but it would be a waste  
16 of time and money because you won't be able to demonstrate  
17 it. The fact that the background --

18 MR. GROSSMAN: You won't be able to demonstrate  
19 what? You won't be able to demonstrate health impact or you  
20 won't be able to demonstrate whether or not this --

21 THE WITNESS: Incremental health impact or  
22 background.

23 MR. GROSSMAN: I understand from what you've said  
24 that that's your opinions, but you could take the  
25 measurement, you could take measurements of whether or not

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1 there's been an increase in the level of one pollutant or  
2 another, is that correct?

3 THE WITNESS: Not only could you do so, my  
4 understanding is Costco plans to do so, monitoring, if the  
5 gas station is built, they're going to be doing monitoring  
6 every three months or something like that.

7 MR. GROSSMAN: Okay.

8 MR. SILVERMAN: Is that his testimony that they're  
9 going to do that?

10 MR. GROSSMAN: Well, that was his understanding.  
11 I don't know if that's the case, but that was his  
12 understanding.

13 MS. CORDRY: I don't see Mr. Brann shaking his  
14 head yes on that.

15 MR. GROSSMAN: That may be the case if -- that's  
16 something that the parties ought to consider as a potential  
17 condition if, in fact, the Board of Appeals were to approve  
18 a special exception here, the question of monitoring to see  
19 if there, what, if any, increases there are and various  
20 pollutant levels over some period of time. But, anyway,  
21 that's something for the future. It is something that the  
22 parties should consider as a potential condition. But we're  
23 off the track here.

24 MR. SILVERMAN: Stop me if I'm out of line, but --

25 MR. GROSSMAN: All right.

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1 MR. SILVERMAN: -- you can't --  
2 MR. GROSSMAN: I'm just going by --  
3 MR. SILVERMAN: Thank you. But you have to have,  
4 basically have to start from someplace. I mean if they were  
5 going to monitor, they would be doing it now.  
6 MR. GROSSMAN: They would have to, well, but the  
7 gas station -- if the Board of Appeals tomorrow were to  
8 approve the gasoline station, it would still have to be  
9 built and so on. So you still have time to establish a  
10 baseline before anything was operational.  
11 MS. CORDRY: And then what, shut down the gas  
12 station if it goes over the level?  
13 MR. GROSSMAN: I don't know.  
14 MS. CORDRY: Unbuild it?  
15 MR. GROSSMAN: Well, it depends on -- I mean there  
16 are operational conditions that the Board of Appeals could  
17 conceivably set that would limit, you know, adverse effects  
18 if necessary. But, anyway, that's, once again, we're way  
19 out of, way out of order. It is something that should be  
20 considered as a potential condition should the Board of  
21 Appeals decide to approve a special exception here. But  
22 let's try to get back to the track here and in order to do  
23 that, I think, let's -- instead of my pushing the question,  
24 I'll go back and let Dr. Adelman continue his questioning.  
25 MR. ADELMAN: I have just a few last questions.

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1 BY MR. ADELMAN:  
2 Q Long before you took the oath that you took here  
3 today, when you graduated from medical school you were  
4 required to take the Hippocratic oath, of course, right?  
5 A Uh-huh. Yes.  
6 Q Do you happen to recall which version of the  
7 Hippocratic oath you took?  
8 MR. GROSSMAN: Why is that --  
9 MR. ADELMAN: Because it has different clauses as  
10 to what a physician does or does not intend to do.  
11 MR. GROSSMAN: I'm not going to allow that  
12 question. I just think it's --  
13 MR. ADELMAN: I'm done.  
14 MR. GROSSMAN: -- off the beam of what we're about  
15 here.  
16 MR. ADELMAN: I'm done.  
17 MR. GROSSMAN: And I'm not going to go into his,  
18 he's been approved as an expert after a voir dire and the  
19 nature of this Hippocratic oath, we're not going into here.  
20 All right.  
21 THE WITNESS: Could I make one comment? It is a  
22 follow on to his comment.  
23 MR. GROSSMAN: Well, no, because I stopped his  
24 question, so in fairness, no further comment about that.  
25 Let's turn to Ms. Rosenfeld.

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1 MS. ROSENFELD: Yes.  
2 MR. GROSSMAN: Are you next up in terms of cross-  
3 examination?  
4 MS. ROSENFELD: Yes. Thank you very much.  
5 BY MS. ROSENFELD:  
6 Q Dr. Chase, in your September 10, 2013 report, you  
7 say in your third, full paragraph that in reaching these  
8 opinions you relied on the comprehensive sampling data for a  
9 similar Costco gas station in Sterling, Virginia. Can you  
10 describe what that sampling data was and where it is  
11 contained in the current record?  
12 A I gave you back a copy. If you would let me,  
13 could I --  
14 (Discussion off the record.)  
15 THE WITNESS: I'm sorry, Michele?  
16 BY MS. ROSENFELD:  
17 Q Yes. You say you relied on the comprehensive  
18 sampling data for a similar Costco gas station in Sterling,  
19 Virginia. What's the first sentence of your third, full  
20 paragraph? What data did you review from Sterling?  
21 A Data that was reported by David Sullivan.  
22 Q And can you tell me what report that's in and  
23 where it's cited?  
24 A No.  
25 Q What data was it?

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1 A I probably have it in my suitcase, but I --  
2 Q Do you recall what data it was, what -- it says  
3 comprehensive sampling data. About what, the number of  
4 cars, the hours of operation, can you describe what the data  
5 was?  
6 A An air scents --  
7 Q Air scent?  
8 A -- for criteria air pollutants as defined by EPA.  
9 Q And do you remember which pollutants?  
10 A Carbon monoxide, lead, sulfur dioxide, nitrogen  
11 oxides, PM2.5, is that six?  
12 Q I have five, carbon monoxide, lead, sulfur  
13 dioxide, NOX, PM2.5.  
14 A Well, I left one out.  
15 Q Maybe -- hold on. Ozone?  
16 A Sorry?  
17 Q Ozone, like that perhaps been one?  
18 A That might be it.  
19 Q Or VOC's?  
20 A No.  
21 Q So were those actual air samples that were taken  
22 at Sterling?  
23 A I wasn't there, but that's my understanding.  
24 Q Do you know if the, what information was  
25 extrapolated from that data?

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1 A Yes, average, average concentrations of the six  
2 airborne agents we just identified, but it gets a little  
3 complicated because EPA under the National Ambient Air  
4 Quality Standards, EPA requires that the levels be average  
5 for three, three years, with the exception of carbon  
6 monoxide and lead, but the other four, they have to do a 3-  
7 year average.  
8 Q So are you saying that these are air samples that  
9 come from EPA monitoring sites or do you know if there were  
10 sites, specific samples taken at Sterling?  
11 A No, I believe these were taken at the Sterling gas  
12 station.  
13 Q Can you, if I were to give you the November 2012  
14 report, would you take a look through and show me where that  
15 date is either included or summarized?  
16 A If you show me what --  
17 Q The, you know --  
18 MR. GROSSMAN: The Sullivan, the Sullivan report?  
19 MS. ROSENFELD: This, yes, Mr. Sullivan's report  
20 from November 2012.  
21 THE WITNESS: Okay.  
22 MR. GROSSMAN: While he's looking at that, I'll  
23 mention that I marked the article form, the IARC of June  
24 2012 on carcinogenicity of diesel engine and gasoline engine  
25 exhaust and some nitro airings as an exhibit, Exhibit 275,

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1 since we referenced it in the testimony.  
2 (Exhibit No. 275 was marked for  
3 identification.)  
4 THE WITNESS: It begins on page 113.  
5 BY MS. ROSENFELD:  
6 Q Okay. And the title of that section?  
7 A I'm sorry?  
8 Q And just to refresh my memory, would you read the  
9 title of that section?  
10 A It's Section 2.1. Is that what you're asking?  
11 Q And the title, is there a caption?  
12 A A Sterling, Virginia, Costco study, 2010.  
13 Q Okay. And what pollutants were included in that?  
14 A Benzene, carbon monoxide, VOC's, noise and odor  
15 impacts. And this continues for a number of pages.  
16 Q And can you tell if any of these were drawn from  
17 actual samples at Sterling?  
18 A Can I what?  
19 Q Were there actual samples taken at the Sterling,  
20 Virginia site?  
21 A That's what it says.  
22 Q And lead?  
23 A And what?  
24 Q Lead is not included?  
25 A I'm looking for it right now. I don't think so.

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1 Q And NOX?  
2 A Apparently not.  
3 Q And what about PM2.5?  
4 A Give me a moment.  
5 MR. SILVERMAN: What?  
6 MS. ROSENFELD: He asked for a moment.  
7 MR. SILVERMAN: Oh.  
8 MR. GROSSMAN: While he's looking at that, can  
9 somebody clarify something for me in terms of the terms NOX  
10 and NO2? Does NOX include nitrogen dioxide?  
11 MR. SILVERMAN: Yes.  
12 MS. ROSENFELD: Yes.  
13 MR. GROSSMAN: Well, as well as other nitrous  
14 oxides?  
15 MR. SILVERMAN: Yes.  
16 MR. GROSSMAN: So it's just a broader category of  
17 all nitrous oxides?  
18 MR. SILVERMAN: Yes.  
19 MR. GROSSMAN: Okay.  
20 Isn't it the other way around, NOX includes NO2 and other  
21 nitrogen oxides?  
22 THE WITNESS: Isn't it the other way around, NOX  
23 includes NO2 and other nitrogen oxides?  
24 MR. GROSSMAN: That's, yes, that's what I thought  
25 I was saying.

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1 THE WITNESS: Okay.  
2 MR. GROSSMAN: Okay.  
3 THE WITNESS: I'm not finding it.  
4 BY MS. ROSENFELD:  
5 Q And while you're looking --  
6 A But I'm not, I'm not sure this is the only place I  
7 should be looking.  
8 (Discussion off the record.)  
9 THE WITNESS: I can't find it.  
10 BY MS. ROSENFELD:  
11 Q Okay. And can, is sulfur dioxide in here?  
12 A Say it again?  
13 Q Sulfur dioxide?  
14 A Nope.  
15 Q So it appears you were mistaken about that, is  
16 that correct?  
17 A Say again?  
18 MR. GROSSMAN: Mistaken about what?  
19 MS. ROSENFELD: About which air sample, which  
20 pollutants were contained as air samples in Mr. Sullivan's  
21 report.  
22 THE WITNESS: Meaning he didn't do all of them?  
23 MS. ROSENFELD: Correct.  
24 THE WITNESS: Evidently, at least, or if he did,  
25 they're not in this report. There are some other things he

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1 measured that we didn't talk about like valuing ethyl  
2 benzene, zylene, as well as benzene.  
3 BY MS. ROSENFELD:  
4 Q And do those all fall into the category of VOC's?  
5 A Are those VOC's, is that -- yeah.  
6 Q Do they fall within that category?  
7 A Yes.  
8 Q And can you tell if there were actual, physical  
9 samples taken at the Sterling site --  
10 A Yes.  
11 Q -- for those VOC's? Earlier you testified that  
12 you read the whole November 12th Sullivan report with the  
13 exception of some passages that I think you described as,  
14 quote, over your head. Could you just generally point to  
15 the sections that you did not review?  
16 A This is, we're talking about almost a year ago.  
17 MR. GROSSMAN: I understand, but if you can find  
18 the sections and answer her question --  
19 THE WITNESS: That I did not review or --  
20 MR. GROSSMAN: Yes, that you found that were, as  
21 you characterized them, over your head I guess because of  
22 arcane, meteorological analysis that might have been in some  
23 of the sections. She's entitled to ask that question.  
24 THE WITNESS: Well, there's a lot of these.  
25 MR. GROSSMAN: What are you holding up, what page

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1 are you holding up? Can you read the page?  
2 THE WITNESS: The page number is 27.  
3 MR. GROSSMAN: Is that one with an isopath on it  
4 of --  
5 THE WITNESS: Yeah.  
6 MR. GROSSMAN: -- the meteorological dispersion?  
7 THE WITNESS: Yeah.  
8 MR. GROSSMAN: Okay.  
9 MS. ROSENFELD: Actually could you read the --  
10 THE WITNESS: I think so.  
11 MS. ROSENFELD: -- title of that figure please?  
12 THE WITNESS: The title of the figure?  
13 MS. ROSENFELD: Yes.  
14 THE WITNESS: "Topographic map showing the three  
15 kilometer radius circle used to define land use  
16 characteristics of the area surrounding the  
17 proposed Costco gas station."  
18 MR. GROSSMAN: What are you saying about that,  
19 that particular figure? I mean you said there are a lot of  
20 these and then you held it up. What did you mean by that,  
21 sir?  
22 THE WITNESS: That I'm not good at reading  
23 isoplats.  
24 MR. GROSSMAN: All right.  
25 MR. SILVERMAN: Could you repeat that please?

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1 THE WITNESS: That I'm not an expert, I don't  
2 pretend, claim to be an expert of reading isoplats.  
3 MR. GROSSMAN: All right.  
4 BY MS. ROSENFELD:  
5 Q Did you express an opinion earlier about urban  
6 versus rural or are you not offering an opinion on that?  
7 MR. GROSSMAN: No, I stopped him from offering an  
8 opinion about --  
9 MS. ROSENFELD: Okay.  
10 MR. GROSSMAN: -- that.  
11 THE WITNESS: Can I?  
12 MR. GROSSMAN: No. I don't think it's within your  
13 claimed area of expertise, unless you tell me -- is it  
14 within your expertise to offer an opinion about urban versus  
15 rural meteorological dispersion rates?  
16 THE WITNESS: As one of my staff pointed out when  
17 we went out there, there was cement everywhere. It was  
18 urban.  
19 MR. GROSSMAN: Well, that's an observation, but  
20 I'm just saying is it your, part of your expertise to  
21 evaluate dispersion rates based on these criteria or is it,  
22 is that considered beyond your expertise?  
23 THE WITNESS: I think that's beyond.  
24 MR. GROSSMAN: Okay. So then I'm correct in not  
25 allowing you to offer an opinion on whether or not you

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1 should apply the urban or rural dispersion rates? You  
2 certainly had an opinion from Mr. Sullivan on that one.  
3 MS. ROSENFELD: And --  
4 THE WITNESS: And I have an opinion too, but if I  
5 can't say it, then --  
6 MR. GROSSMAN: I understand. But in fairness, we  
7 have to try to -- it's not that I want to cut you off on  
8 anything you want to say, it's that in fairness to the other  
9 side you're listed as an expert in health effects, not in  
10 meteorology and dispersion, so if it's not your area of  
11 expertise, in fairness we want to try to limit you to that.  
12 That's the reason why I'm limiting you to that.  
13 BY MS. ROSENFELD:  
14 Q And so, Dr. Sullivan, as a general rule, you're  
15 saying you didn't review the isoplats on those graphs in the  
16 2012 report?  
17 A Not the isoplats per se. The bottom line is yes.  
18 Q So you -- there are some charts, tables?  
19 A If you want to read, give this back -- you want  
20 this back, don't you?  
21 Q Yes, thank you. There were some tables in there,  
22 though, that gave summaries of certain concentrations, is  
23 that what you relied on then --  
24 A Yes.  
25 Q -- in looking for those numbers? Okay. Thank

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1 you. In your testimony you identified a number of what you,  
2 what I understood you to say were certain governing air  
3 quality standards promulgated by the Army Corps of Engineers  
4 by the FBI, by Fannie Mae, by the U.S. Capitol architect,  
5 GSA and others. Are any of those standards either cited in  
6 your report or --  
7 A I think you misheard me. I --  
8 Q Okay.  
9 A When I listed those agencies and I have the list  
10 in front of me this time, it's -- they all involved air  
11 quality investigations and recommendations, but they were,  
12 the nature of them was all over the map.  
13 Q Okay. So these are agencies that you did air  
14 quality-related work for, you were citing them as having  
15 promulgated standards that are applicable in this case, is  
16 that correct?  
17 A I'm not sure. Would you say it again?  
18 Q You were listing a series of agencies that you had  
19 worked with or for in your capacity as monitoring air  
20 quality, advising on air quality issues?  
21 A Responding to employee complaints.  
22 Q Okay.  
23 A Not always taking air sampling and not all of them  
24 involved applying standards, although most of them did.  
25 Q Okay.

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1 A And I can leave a copy of the 60 different  
2 projects with the Hearing Officer is you want me to.  
3 Q No, no, that's okay. I think I did misunderstand  
4 you. I thought you were listing regulatory standards issued  
5 by these different agencies.  
6 A No.  
7 Q When you were conducting your work for these  
8 various agencies, were you looking at indoor air quality or  
9 outdoor air quality or both?  
10 A A combination.  
11 Q Are you familiar with indoor air quality issues?  
12 A Oh, yeah.  
13 Q And is indoor air quality sometimes an issue? Are  
14 pollutants found in indoor, inside buildings from time to  
15 time?  
16 A Absolutely, yes. That's true worldwide.  
17 Q In terms of the standards that govern in this  
18 particular case, you said in your testimony, I believe, that  
19 you had reviewed recent, relevant sections of the Federal  
20 Register. Can you list for me the relevant sections in the  
21 Federal Register that you think are applicable to this case?  
22 A December 14, 2012, would be one.  
23 Q I'm sorry, can you speak up just a little?  
24 A 12/14/12 --  
25 Q Okay.

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1 A -- is the date of the Federal Register where, the  
2 preliminary announcement of the EPA is lowering the PM2.5  
3 annual standard from 15 to 12 micrograms per meter to, but  
4 then that showed up again in January or February, and I  
5 don't think it became effective, I don't think it became law  
6 until April of this year.  
7 Q Okay. And did you read the entirety of those  
8 Federal Register publications as it relates to PM2.5?  
9 A I doubt it.  
10 Q And there are other pollutants involved in this  
11 case, the CO, the NOX and others. Are those also regulated  
12 in this same rule that was first promulgated on December 14,  
13 2012?  
14 A Yes and no. I mean the change was made to PM2.5,  
15 but the other five criteria air pollutants, as they're  
16 referred to, are part of the six. The PM2.5 is one of the  
17 six and the other five are the other part of the six.  
18 Q And so where would I look in the Federal Register  
19 to find the standards that, the EPA standards for those  
20 other five?  
21 A I don't know. Since they didn't change them, it's  
22 probably, you have to go back five years in time to find the  
23 AMPR.  
24 MR. GROSSMAN: What?  
25 THE WITNESS: The advance notice of proposed

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1 rulemaking.  
2 BY MS. ROSENFELD:  
3 Q And you talk about six, one of them being PM2.5.  
4 What are the other five?  
5 A Lead; carbon monoxide; nitrogen oxides, or NOX for  
6 short; sulfur oxides, or SOX for short; and I believe the  
7 sixth one is ozone, or O3 for short.  
8 Q Okay. And the PM2.5 standard, I, is now at a 12,  
9 a limit of 12, is that correct?  
10 A It became 12 in April of this year. It dropped  
11 from 15 to 12.  
12 Q And the standard for CO?  
13 A CO? Oh, I need that table, Tim. I don't have  
14 those, all those numbers memorized.  
15 MR. ST. PIERRE: I think you have it with you.  
16 THE WITNESS: I thought I had it here earlier.  
17 MR. ST. PIERRE: I think it's in here.  
18 THE WITNESS: Go ahead and open it. I think it's  
19 nine, but let me kind of double check.  
20 (Discussion off the record.)  
21 THE WITNESS: CO is 9 PPM, but there's a  
22 qualifier. There's a qualifier on all of these. The  
23 qualifier on carbon monoxide is that's 9 PPM is an 8-hour  
24 average not to be exceeded more than once per year.  
25 MS. ROSENFELD: Okay.

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1 THE WITNESS: Lead is a rolling 3-month average,  
2 0.15 micrograms per meter cube, not to be exceeded, period.  
3 Nitrogen dioxide is -- well, that's another Federal Register  
4 piece I read was on NO2. That became, the current standard  
5 for nitrogen oxide, well, there's two, an annual standard of  
6 53 parts per billion, but the new one is based on a 1-hour,  
7 time-weighted average. It's 100 parts per billion and  
8 according to EPA you have to do a 3-year average.  
9 BY MS. ROSENFELD:  
10 Q And for the NOX, where is that 100 parts per  
11 billion to be measured from?  
12 A Where is it being measured from or --  
13 Q Yes.  
14 A -- when was it reported?  
15 Q No, where is that 1-hour standard applied  
16 geographically?  
17 A Everywhere.  
18 Q That's the maximum level everywhere?  
19 A Actually it's, technically it's the 98th  
20 percentile, but that's close enough, averaged over a 3-year  
21 period. And that was published in early 2010, I think  
22 January 2010, but it didn't become effective until April,  
23 March or April of 2010.  
24 Q And do you remember if you read that entire  
25 Federal Register publication?

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1 A Say it again?  
2 Q Do you recall if you read everything associated  
3 with the EPA's issuance of its updated rule on NOX?  
4 A I probably didn't, no, I didn't read everything,  
5 but I went to some extra lengths, went to the Internet and I  
6 printed out, you know, the color graph, is that in here?  
7 MR. ST. PIERRE: The Federal Register?  
8 (Discussion off the record.)  
9 THE WITNESS: This is all NOX. It's kind of  
10 flashy in color on the front, but on the flipside it  
11 describes the health effects associated within O2 and why  
12 EPA after all these decades suddenly, out of the blue,  
13 adopted the 1-hour time-weighted average.  
14 MR. GROSSMAN: All right. So this will be --  
15 MS. CORDRY: Ten days?  
16 MR. GROSSMAN: Well, he's responding to a question  
17 and is supplying information in response to a question on  
18 the stand. What would you have him do?  
19 MS. CORDRY: Provided if he's had it sitting here  
20 ready for us?  
21 MR. GROSSMAN: Well, no, I mean --  
22 MS. CORDRY: Okay. All right. But I --  
23 MR. GROSSMAN: I mean --  
24 MS. CORDRY: -- that's the kind of thing that I  
25 think is --

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1 MR. SILVERMAN: Could we get a copy?  
2 MS. ROSENFELD: We, yes, if --  
3 MR. GROSSMAN: Yes.  
4 MS. ROSENFELD: -- we could get a copy and take a  
5 look over the break?  
6 MR. GROSSMAN: I think that's fair. I'm going to  
7 hand it to you. Sarah is going to put an exhibit number on  
8 it just so we --  
9 MS. ROSENFELD: I --  
10 MR. GROSSMAN: -- know because he's pulled it out.  
11 It's a flashy exhibit. We ought to have something flashy in  
12 the record. Exhibit 276 is an EPA 2011, February 2011 air  
13 quality guide for nitrogen dioxide.  
14 MS. ROSENFELD: Mr. Grossman, I somehow missed  
15 275.  
16 MR. GROSSMAN: 275 was something -- that was the  
17 2012 article by the IARC regarding carcinogenicity of diesel  
18 and gas engine exhausts and some nitro air links.  
19 MS. ROSENFELD: Oh, thank you.  
20 MR. GROSSMAN: Okay. Do you want to take a look  
21 at the air quality guide by the EPA?  
22 THE WITNESS: There's a lot more on NO2 that --  
23 MR. GROSSMAN: Don't forget to hand it back to me,  
24 sir, when you put it back, all right?  
25 THE WITNESS: I got on the EPA website, but didn't

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1 print out. I understand that it was discovered that  
2 relatively short-term exposure to nitrogen dioxide can  
3 precipitate an asthma attack in children and that apparently  
4 was, prior to 2010. It didn't happen when I was standard or  
5 short-term standard for NOX.  
6 BY MS. ROSENFELD:  
7 Q And is it your understanding that's the case only  
8 with respect to children or anybody with asthma?  
9 A If you read the flipside of that colored thing, I  
10 think you'll see, it won't take long, I think it could  
11 affect others with respiratory disorders as well. So I  
12 think it was a good thing that they did, but I don't know  
13 why they insisted on a 3-year average.  
14 Q What do you --  
15 A Do you have to wait three years to find out  
16 whether there's an exceedance? That doesn't make sense to  
17 me.  
18 Q The second paragraph of this reads,  
19 "The one hour standard will protect public health by  
20 limiting people's exposure to short-term, peak  
21 concentrations of NO2 which primarily occur near major  
22 roads. Community-wide NO2 concentrations will be  
23 limited to levels below those that have been linked to  
24 respiratory-related emergency room visits and hospital  
25 admissions."

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1 In your opinion does, would this suggest that if the maximum  
2 exposures were at roadways, that areas more distant from  
3 roads would generally have lower exposures --  
4 A Yes.  
5 Q -- to NO2? It says,  
6 "Those individuals who spend time on or near major  
7 roads can experience NO2 exposures considerably  
8 higher than occur away from roads. These  
9 exposures are of particular concern for sensitive  
10 groups such as people with lung disease, including  
11 asthma, children and older adults."  
12 Does that suggest to you any older adults or just those with  
13 asthma? I'm happy to let you --  
14 A That's an interesting question. I doubt any of us  
15 are immune from, even without a history of asthma, if I'm  
16 exposed to a high enough NO2 level, I could develop asthma,  
17 anybody could. So, no, it's not limited to -- in my opinion  
18 it's not limited. People with existing lung disease,  
19 regardless of age, are going to be more vulnerable, more  
20 susceptible. But before they did this, the, since 1996, the  
21 only limit they had on NO2 was 53 parts per billion averaged  
22 over a full year.  
23 Q So is it your understanding that the short-term  
24 limit was established because EPA recognized that people can  
25 suffer health effects over a much shorter period of time,

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1 and in your reading --  
2 A Yes.  
3 Q -- do you -- sorry -- in your reading do you  
4 recall if EPA had any estimates as to how short those  
5 exposures could be before someone would start to feel  
6 adverse health effects?  
7 A My recollection was that it could be as short as  
8 15 minutes, but they didn't set the standard that way.  
9 Q Okay.  
10 MS. ROSENFELD: Mr. Grossman, when we take our  
11 next break, I would like to get a copy and return to any  
12 other questions that I may have.  
13 MR. GROSSMAN: I can -- are you asking to take the  
14 break now?  
15 MS. ROSENFELD: Not necessarily.  
16 MR. GROSSMAN: I'll leave that up to you.  
17 MS. ROSENFELD: No, I'm happy to go on, but if I  
18 move on --  
19 MR. GROSSMAN: Okay.  
20 MS. ROSENFELD: -- I don't want to --  
21 THE WITNESS: Do you want me to finish answering  
22 the question that was on the table?  
23 MS. ROSENFELD: Oh, certainly. I apologize.  
24 THE WITNESS: There's three more that you asked me  
25 to identify.

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1 MS. ROSENFELD: In terms of these standards, yes,  
2 please.  
3 THE WITNESS: The next one is ozone and that's  
4 .075 parts per million based on an 8-hour average. And then  
5 in their comment field they say annual fourth highest daily  
6 maximum 8-hour concentration averaged over three years.  
7 BY MS. ROSENFELD:  
8 Q Could you read that last one again?  
9 A Or give you a copy.  
10 Q Oh, sure.  
11 A Annual fourth highest daily max, maximum 8-hour  
12 concentration averaged over three years. Out of these six,  
13 the only two that they don't have a 3-year average qualifier  
14 on are the first two, carbon monoxide and lead. All the  
15 other ones have, you're supposed to do a 3-year average, the  
16 next one being PM2.5 and that was recently lowered to 12  
17 micrograms per meter cube, but they want to see annual means  
18 for a 3-year period of time before deciding whether  
19 exceedance has taken place or not.  
20 The next one, there's more comments on particulate  
21 matter, but if you're going to get a copy of this, you'll be  
22 able to see it. The last one is sulfur dioxide and that is  
23 a 1-hour average, the limit being 75 parts per billion. But  
24 this time they want to look at the 99th percentile, not the  
25 98th like the earlier one, but the 99th percentile of 1-hour

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1 daily maximum concentrations averaged over three years.  
2 MR. GROSSMAN: What would make them change from  
3 the 98th percentile to the 99th percentile?  
4 THE WITNESS: It's a committee. Twenty-two people  
5 on the committee and they're fighting, I guess.  
6 MR. GROSSMAN: Could I have that document you were  
7 reading from and we'll mark that as an exhibit as well.  
8 Thank you, sir.  
9 THE WITNESS: They're moving in the right  
10 direction. I don't always understand the rationale  
11 underlying the way they define the limits.  
12 MR. GROSSMAN: This will be Exhibit 277. Although  
13 it indicates it's page 1 of 2, there's nothing on the  
14 flipside of this page. Is there anything significant on  
15 page 2?  
16 THE WITNESS: I don't think so.  
17 MR. GROSSMAN: Okay. And this is EPA's MAAQS  
18 Standards. And it's last updated December 14, 2012.  
19 (Exhibit No. 277 was marked for  
20 identification.)  
21 THE WITNESS: What's December?  
22 MR. GROSSMAN: It's December 14, 2012.  
23 THE WITNESS: For the whole table?  
24 MR. GROSSMAN: I'm referring to the date on the  
25 very top where it says last updated. I don't know whether

1 or not --

2 THE WITNESS: That's interesting because it has

3 the new --

4 MR. GROSSMAN: It has dates, it has other dates

5 next to each pollutant on the, in the left-hand column, but

6 I'm just -- the actual sheet has an update of December 14,

7 2012.

8 THE WITNESS: Well, I don't think the PM2.5 rule

9 went into effect until April, but EPA was jumping the gun I

10 guess. That's from their website.

11 MR. GROSSMAN: Right. It does, and it does

12 indicate for the both PM2.5 and PM10, December 14, 2012, as

13 the final rule cite. Whether or not that's accurate, I have

14 no idea.

15 MR. SILVERMAN: I think it is.

16 MS. CORDRY: I think it is too.

17 MR. GROSSMAN: Okay. We have two thinks it is.

18 All right. And the other document you were, that we marked

19 as an exhibit, I think it's this other colorful one here.

20 THE WITNESS: This one?

21 MR. GROSSMAN: I think so, perhaps.

22 THE WITNESS: That's the other one.

23 MR. GROSSMAN: Yes.

24 THE WITNESS: Oh, yes, that's the colored one.

25 MR. GROSSMAN: Okay. Well, why don't we take our

1 afternoon break now and we'll make copies of these. How

2 many copies do we need? One, two, three, four, five. Do

3 you want to go for six? All right. I'll have copies made.

4 I don't guarantee you color, so you're going to lose some of

5 the quality of the document here. We'll come back at 25

6 after 3:00.

7 (Recess.)

8 MR. GROSSMAN: Did you all get your copies?

9 MR. SILVERMAN: Yes, we did, thank you.

10 MS. CORDRY: Thank you.

11 MR. GROSSMAN: All right. Are we ready to resume?

12 All right. If you'll resume with your cross-examination,

13 Ms. Rosenfeld?

14 MS. ROSENFELD: Yes. Thank you.

15 BY MS. ROSENFELD:

16 Q Dr. Chase, going back to Exhibit 276, which is the

17 air quality guide for nitrogen dioxide, on the back page --

18 A It's the one in bright color. I'm sorry, go

19 ahead.

20 MS. ROSENFELD: The sheet?

21 MR. GROSSMAN: Yes, he's gotten it.

22 BY MS. ROSENFELD:

23 Q And on the back page, on the flipside of that, the

24 top paragraph, the first sentence says, EPA sets a 1-hour

25 NOT standard at the level of 100 parts per billion. And

1 then the next paragraph talks about the fact that peak

2 exposures generally occur near major roads and then the

3 second sentence says, community-wide NO2 concentrations will

4 be limited to levels below those that have been linked to

5 respiratory-related emergency room visits at hospital

6 admissions. Is it your understanding that the expectation

7 is that as you get more distant from roadways, the NO2 level

8 will decrease?

9 A Yes.

10 Q And is it your understanding that's why EPA set

11 that 100 parts per billion maximum 1-hour standard?

12 A I'm sorry, I can't hear you.

13 Q Is it your understand that that's why the EPA set

14 the roadway maximum at a 1-hour standard of 100 parts per

15 billion?

16 A Yes, unless I missed something.

17 Q No, I don't think so.

18 A I'm sure.

19 Q Though it wasn't a trick question.

20 MR. SILVERMAN: Yes, it was.

21 BY MS. ROSENFELD:

22 Q And looking at the reverse page, reverse side of

23 that, of Exhibit 276, where it says the air quality index is

24 good, it says zero to 50, what measure, unit of measurement

25 are they using, from zero to 50?

1 A I have no idea where those numbers come from.

2 Q Do you know if it's parts per billion or is it

3 micrograms per cubic meter?

4 A I don't think it's either one because -- oh, wait

5 a minute. It's not labeled, so I don't know what it is.

6 Q So you don't know if it's a link to any EPA

7 standards?

8 MR. GOECKE: Objection. Asked and answered.

9 MR. GROSSMAN: Well, no, I'll overrule that

10 objection.

11 THE WITNESS: Do you know what happened to my one

12 pager? I think I gave it to you.

13 MR. ST. PIERRE: Yes, here it is.

14 MR. GROSSMAN: It's now an official exhibit by the

15 way.

16 THE WITNESS: Let me back up and say they could

17 well be parts per billion because that would be consistent

18 with this other document. But they didn't, didn't label it.

19 BY MS. ROSENFELD:

20 Q And if you were to convert parts per billion to

21 the micrograms per cubic meter, how would you calculate

22 that?

23 A Using 188.

24 Q So, for example, if I were to work with this 50

25 number under good, if I were to convert that, I would take

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1 50 and multiply it by 1.88?  
2 MR. GROSSMAN: You have that methodology  
3 elsewhere.  
4 MS. ROSENFELD: I'm trying to establish --  
5 MR. GROSSMAN: Whether he knows the conversion --  
6 MS. ROSENFELD: -- whether he knows --  
7 MR. GROSSMAN: -- methodology?  
8 MS. ROSENFELD: -- conversion.  
9 THE WITNESS: I believe you multiply micrograms  
10 per cubic meter by 188 to get to parts per billion. So it  
11 would be the reverse procedure to go the other direction.  
12 That's the shorthand way of doing it and it's the more  
13 scientific way of doing it.  
14 BY MS. ROSENFELD:  
15 Q Let me just ask to clarify. So if we're looking  
16 at the 50 parts per billion on the front sheet of Exhibit  
17 276, we would take 50 and multiply it by 188 to get to  
18 micrograms per cubic liter, is that correct?  
19 A The other way.  
20 MR. GROSSMAN: No, 1.88.  
21 MS. ROSENFELD: 1.88.  
22 THE WITNESS: Did I say 188?  
23 MS. ROSENFELD: Yes.  
24 THE WITNESS: Sorry, 1.88. Now you would divide  
25 by 1.88.

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1 MS. CORDRY: That's where we got in trouble  
2 before.  
3 MR. GROSSMAN: There seems to be a suggestion here  
4 that it's not multiply, but divide, or not divide, but  
5 multiply. That's what Ms. Cordry --  
6 MS. CORDRY: Well, that's what --  
7 MR. GROSSMAN: -- is saying.  
8 MS. CORDRY: And that's what Mr. Sullivan said  
9 eventually.  
10 MR. GROSSMAN: All right. I understand. I don't  
11 remember what the exact methodology was, but higher  
12 mathematical minds than mine will have to figure that out.  
13 Let's not waste any more time on this conversion factor.  
14 That's just a conversion methodology. I mean I think --  
15 MS. ROSENFELD: Well --  
16 MR. GROSSMAN: -- that somebody who works with  
17 these things --  
18 MS. ROSENFELD: But --  
19 MR. GROSSMAN: -- should be, should, if they  
20 actually are doing it would go to a formula somewhere and  
21 just apply the formula. Who remembers all the conversions?  
22 MS. ROSENFELD: Well, because I may be asking him  
23 questions about some of the numbers and some of the  
24 conversions in these reports, so --  
25 MS. CORDRY: Mr. Sullivan did his calculations and

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1 the isoquest and all of his charts are done in micrograms  
2 per meter and this is parts per billion.  
3 MR. GROSSMAN: I understand.  
4 MS. CORDRY: So if we're going to ask him how  
5 these relate to the levels that Mr. Sullivan found, we have  
6 to get these numbers into micrograms per meter cubed, which  
7 means I don't want to be dividing these numbers again, I  
8 want to be multiplying these numbers, actually for our  
9 purposes.  
10 MR. GROSSMAN: Right.  
11 MS. ROSENFELD: He'll need to know the formula in  
12 order to answer some of my questions relating to the tables.  
13 MR. GROSSMAN: So you have a methodology there of  
14 determining the, from the documents you have what the  
15 appropriate formula is? There's some controversy here at  
16 counsel table. They say you're doing it backwards.  
17 THE WITNESS: The, to get from parts per billion  
18 to micrograms per cubic meter, you multiply by 1.88.  
19 MS. ROSENFELD: Correct. Thank you.  
20 MR. GROSSMAN: All right.  
21 THE WITNESS: And the adverse applies.  
22 MS. ROSENFELD: Thank you.  
23 THE WITNESS: And so that brings August 16th  
24 supplement --  
25 MR. GROSSMAN: He has the form.

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1 THE WITNESS: -- page 33 makes it crystal clear.  
2 MR. GROSSMAN: Okay.  
3 BY MS. ROSENFELD:  
4 Q Thank you. When Mr. Sullivan prepared his updated  
5 2013 report, did you discuss any of his modeling assumptions  
6 as he prepared that report? Did you discuss that with Mr.  
7 Sullivan?  
8 A Did I -- no, but --  
9 Q Did you, did you --  
10 A -- did I discuss --  
11 Q -- collaborate --  
12 A -- what with him?  
13 Q Right. Did you collaborate with him as he was  
14 developing his modeling assumptions?  
15 A On this 2013 report?  
16 Q Correct.  
17 A No.  
18 Q Okay. And are you aware that he made substantive  
19 changes to his modeling assumptions, changes from his 2012,  
20 November 2012 report to his August 2013 report?  
21 A I'm aware that he made, that he changed some of  
22 the assumptions. I don't know that I would characterize  
23 them as substantive. I think that they were, he made more  
24 realistic assumptions.  
25 Q Do you know --

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1 A The first time around, the first time out, he made  
2 some almost absurd, absurdly conservative assumptions.  
3 Q And --  
4 A So he toned them down a bit.  
5 Q -- what background do you have in modeling? Do  
6 you have any expertise in modeling, air quality modeling?  
7 A Yeah, I have 49 units of math. I graduated with  
8 honors for mathematics and statistics.  
9 Q Have you been qualified as an expert in air  
10 modeling?  
11 A No.  
12 Q In meteorology?  
13 A No.  
14 Q Can you describe what modifications Mr. Sullivan  
15 made between his November 2012 report and his August 2013  
16 report?  
17 A No.  
18 Q You have no idea what modeling assumptions were  
19 modified?  
20 A Well, I hope so. You asked me if I were aware  
21 that he had made some changes and he --  
22 Q And what is your understanding of those changes?  
23 A The only ones that he made were more realistic.  
24 That's my understanding, but I can't be specific.  
25 Q You can't -- more realistic, but you can't

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1 describe what they are, is that your answer?  
2 A I don't know what, I don't know specifically which  
3 ones they were. I am vaguely aware of third-hand  
4 information, but at one point he and Dr. Cole were trying to  
5 collaborate and they --  
6 Q But those conversations, I proffer, didn't occur  
7 as part of the 2013 report, the November, the August 2013  
8 report?  
9 MR. GROSSMAN: Well, I don't know what he's about  
10 to say, so I, so let's hear the rest of the sentence and  
11 then you can tell me if it's not germane. Do you want to  
12 finish your sentence, Dr. Chase?  
13 THE WITNESS: Yes, but it's not, I don't think  
14 it's helpful. I'm just aware that early on David was  
15 collaborating with a Dr. Cole who I don't think I've ever  
16 met. I don't know him, but apparently he is, I think I've  
17 got this right, Dr. Cole used to be with EPA and was  
18 director or head of their modeling division before starting  
19 his own private firm about 20 years ago.  
20 MR. GROSSMAN: So what does that have to do -- I  
21 don't understand, what does that have to do with the changed  
22 assumptions made by Mr. Sullivan?  
23 THE WITNESS: They had a falling out.  
24 BY MS. ROSENFELD:  
25 Q I'm sorry, they what?

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1 MS. CORDRY: Had a falling out.  
2 MR. GROSSMAN: I don't understand. You're  
3 saying --  
4 THE WITNESS: I don't either. Like I said, it's  
5 third or fourth-hand information.  
6 MR. GROSSMAN: Oh. Let's just strike that from  
7 the record since I don't think it, I don't think that it is  
8 germane here.  
9 (Discussion off the record.)  
10 BY MS. ROSENFELD:  
11 Q On September 5th, Kensington Heights Civic  
12 Association filed a motion with the Hearing Examiner and  
13 attached to that was an affidavit from Dr. Cole making  
14 certain calculations based on NOX numbers that were provided  
15 in the November 2012 report by Mr. Sullivan. Have you  
16 reviewed that affidavit?  
17 A I don't think I've seen it. It's not ringing a  
18 bell. September 5th is pretty recent.  
19 Q And in that report, Mr. Sullivan, Dr. Cole  
20 concludes that using the urban numbers drawn from Mr.  
21 Sullivan's November 2012 report, the total 1-hour NO2  
22 concentrations would reach levels of 277 micrograms per  
23 cubic meter within the mall parcel. Do you have any reason  
24 to dispute that number?  
25 MR. GOECKE: I object. He hasn't seen the

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1 document before. She hasn't shown him a copy of this  
2 document. She's already established that he's not an expert  
3 in air modeling or methodology, so this is beyond the scope  
4 of what he's been testifying.  
5 MR. GROSSMAN: I think in fairness we ought to  
6 show him the affidavit, but I think that you can ask him the  
7 question as to whether or not he has any reason to dispute  
8 the number and if he doesn't or he has, he wants to qualify  
9 it in some way, he can. Then if she wants to ask him, in  
10 effect, a hypothetical, which she can ask him, based on  
11 that, that figure she can do that which is, I think, I  
12 assume where she's going. What paragraph, in which  
13 paragraph did you make this protection?  
14 MS. ROSENFELD: Clearly, and I just handed up my  
15 other copy.  
16 THE WITNESS: Didn't you say 277?  
17 MS. ROSENFELD: Yes, 277.  
18 THE WITNESS: I'm trying to find that number.  
19 MS. ROSENFELD: It's actually -- the conclusion is  
20 here and the supporting analysis is --  
21 MR. GROSSMAN: So that I can take a look, tell me  
22 what -- I have a copy of it here -- just tell me what  
23 paragraph you're talking about.  
24 MS. ROSENFELD: His contention --  
25 THE WITNESS: Paragraph 13 on page 6.

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1 MR. GROSSMAN: Okay.  
2 MS. ROSENFELD: I believe they're all page 6, a  
3 typo. But it's paragraph 13 is his summary paragraph.  
4 MR. GROSSMAN: All right. I see it.  
5 THE WITNESS: Well, I haven't read the whole  
6 document but, yes, I have reason to question --  
7 MS. ROSENFELD: You do?  
8 THE WITNESS: -- 277.  
9 BY MS. ROSENFELD:  
10 Q Okay. Based on what?  
11 A Based on the EPA standard where the limit for, the  
12 1-hour limit is 100 parts per billion and based on appendix  
13 A to Sullivan's August 16th report in which he reported that  
14 the 1-hour average for the year 2012 was 83, not 277.  
15 Q And in Mr. Sullivan's -- you're referencing his  
16 August 2013 report, correct?  
17 A Yep.  
18 Q And in there you say his 1-hour average for 2012  
19 was 83?  
20 A Yes, on page 33, also appendix A.  
21 (Discussion off the record.)  
22 BY MS. ROSENFELD:  
23 Q Dr. Chase, appendix A here says revised NO2  
24 background concentrations and Dr. Cole's affidavit goes to  
25 total concentrations. So we're really comparing apples and

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1 oranges. Appendix A is background only.  
2 A No, they're both characterized as 1-hour  
3 standards.  
4 Q Yes, I understand that they're 1-hour standards,  
5 but they're a different pollutant, a different strata in  
6 those pollution levels. But the appendix A that you're  
7 referencing in the 2013 report is only the background  
8 concentration. It does not include the ring road, the  
9 warehouse, the queues, the other elements of emissions that  
10 are included in the total of Mr. Sullivan's reports.  
11 A Background is background, and background includes  
12 everything.  
13 Q I understand. No.  
14 A No?  
15 Q Is it your testimony that background includes the  
16 results of all sources under Mr. Sullivan's reports?  
17 A It's my assumption that background is based on  
18 background. I don't know where the monitor is located.  
19 Q All right. Mr., Dr. Chase, I'm going to show you  
20 page 8 of Mr. Sullivan's August 2013 report. And this is  
21 how he characterizes summary results updated, November 2012  
22 results for corrected NO2 background.  
23 MR. GROSSMAN: Just for clarity in the record, Mr.  
24 Sullivan's August 16, 2013 report is Exhibit 255(a).  
25 (Discussion off the record.)

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1 BY MS. ROSENFELD:  
2 Q If you look at Table 2, summary results, for  
3 example, he has background listed as 98 across the NOX 1-  
4 hour. Do you see, do you see background listed as 98?  
5 A Yeah, and --  
6 Q And then he has a total modeled plus background  
7 which includes these other sources that are listed above  
8 background.  
9 A I see that.  
10 Q Okay.  
11 A It gets to 141.  
12 Q That's correct. And I --  
13 A And these are micrograms per meter cubed. That's  
14 what it says here.  
15 Q And appendix A, which you just referenced, Mr.  
16 Sullivan reduced the background number from 98 to 90. My  
17 question for you --  
18 A Just one second. No, the 90 is a 3-year average  
19 and this is only for 2012.  
20 Q I believe that 2012 references is 2012 report and  
21 not a 1-year average, but we will clarify that with Mr.  
22 Sullivan when we speak with him again. My question relating  
23 to Dr. Cole's affidavit, Dr. Cole went back to the original  
24 numbers, the unchanged numbers from his November 2012 report  
25 and granted the 1-hour maximum concentrations for urban and

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1 concluded that they would exceed the 1-hour NOX standard set  
2 by the EPA.  
3 A That's what it says.  
4 Q Okay.  
5 A Now where did he get his numbers from?  
6 Q Mr. Sullivan's November 2012 report.  
7 A Well, 2012 wasn't over in November.  
8 Q Mr. Sullivan divided instead of multiplied in his  
9 November 2012 report, do you recall?  
10 A I'm aware of that.  
11 Q Okay.  
12 A But that doesn't explain --  
13 Q Mr., Dr. Cole did the calculation using the  
14 November 2012 numbers. Mr. Sullivan in his 2013 report, as  
15 you've said, you've had a general understanding, reduced  
16 certain modeling assumptions, the amount of time spent in  
17 queues, the background level of NO2 and that's why --  
18 A Oh, so the two were using different sets of  
19 assumptions?  
20 Q Mr. Sullivan changed his assumptions. Mr.  
21 Sullivan changed his assumptions in August of 2013. And I  
22 believe you just testified that you had a general third-  
23 hand, you were vaguely aware of that from third-hand  
24 information, but the quote more realistic modeling  
25 assumptions that Mr. Sullivan used, in fact, modified his

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1 underlying modeling assumptions. They are not the same  
2 assumptions that he used in November of 2012. Dr. Cole in  
3 his affidavit used the November 2012 numbers.  
4 MR. GROSSMAN: Perhaps we could get at this in a  
5 slightly different way. I think where you're going, and let  
6 me see if we can just get there, is to ask this witness if  
7 you assume that Dr. Cole is correct in his summary, in his  
8 affidavit and that's paragraph No. 13, page 6, well, I think  
9 all your pages and summaries in this affidavit, all of the  
10 pages are labeled 6 of 7 --  
11 MS. ROSENFELD: That's correct. It is an error.  
12 MR. GROSSMAN: So I don't know what page it was,  
13 but it is paragraph No. 13 and he concludes that applying  
14 the original assumptions and correcting the mathematical  
15 error that the NO2 concentration will be 277 micrograms per  
16 cubic meter within the mall parcel which would exceed the  
17 EPA's maximum 1-hour, NO2 standard of 190 micrograms per  
18 cubic meter. And my question to you is if he's correct in  
19 that assumption, if he's correct in that calculation, and  
20 that it would be 277 micrograms per cubic meter for the 1-  
21 hour NO2 standard, would that represent a health hazard to  
22 the people in the mall or in that immediate environment? Is  
23 that essentially where you're going?  
24 MS. ROSENFELD: Yes, it is.  
25 MS. CORDRY: Yes.

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1 MS. ROSENFELD: Thank you very much.  
2 MR. GROSSMAN: Because I don't think --  
3 THE WITNESS: Several comments. I don't know and  
4 I can't tell from this one page that he did a 3-year average  
5 as EPA calls for and Sullivan did do a 3-year average as --  
6 MR. GOECKE: But, Dr. Chase, they're asking you to  
7 assume.  
8 MR. GROSSMAN: Hold on one second, Mr. Goecke. So  
9 you don't know whether he did a 3-year average, but can you  
10 answer my question without knowing that or do you need to  
11 know that? Do you need to know whether he did a 3-year  
12 average to answer my question as to whether or not a 1-hour  
13 NO2 concentration of 277 micrograms per cubic meter within  
14 the mall parcel would represent a health hazard to those in  
15 the mall or in its nearby environments? Can you tell that  
16 from that bold fact?  
17 THE WITNESS: No, I don't know and I don't have, I  
18 don't have an appropriate count standard to compare it to,  
19 or vice versa. It is not expressed on this paragraph 13,  
20 it's not giving us all the information that this comes from.  
21 MR. GROSSMAN: That this, you're holding up  
22 exhibit, what's the exhibit number on that?  
23 THE WITNESS: I forget.  
24 MR. GROSSMAN: It's written on the corner there.  
25 THE WITNESS: 277.

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1 MR. GROSSMAN: 277. So you're saying that without  
2 the other information that is shown in Exhibit 277, you  
3 can't make a determination as to whether the conclusion in  
4 paragraph 13 of Dr. Cole's exhibit, which is itself Exhibit  
5 262(b) I think it is, is, represents a health hazard?  
6 THE WITNESS: That's what I'm saying.  
7 MR. GROSSMAN: Okay. All right.  
8 BY MS. ROSENFELD:  
9 Q Assuming that Mr. Sullivan used a 3-hour average,  
10 a 3-year average and concluded that the 1-hour level of NOX  
11 was 277 micrograms per cubic meter, would that level  
12 constitute a health hazard?  
13 A Assuming that Sullivan did that --  
14 Q That's correct.  
15 A -- or Cole?  
16 Q Assume that he applied the 3-year average of the  
17 98th percentile --  
18 A He -- Sullivan did. I'm looking at it.  
19 Q And assuming his result was 277 micrograms per  
20 meter, assuming, I'm asking a hypothetical.  
21 A I would take that to represent an exceedance of  
22 the new EPA standard of 100 parts per billion that's only  
23 been in place for three years.  
24 Q And you using EPA's current standard of 100 parts  
25 per billion, what health effects would you expect to see?

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1 A I don't know how wide the margin of safety is, but  
2 if it's not wide enough, then like we discussed earlier, I  
3 would expect respiratory symptoms.  
4 Q I'm sorry, I couldn't hear you.  
5 A Respiratory symptoms.  
6 MR. GROSSMAN: If it wasn't, if the margin of  
7 safety wasn't wide enough, you would expect respiratory  
8 symptoms?  
9 THE WITNESS: Might expect respiratory symptoms.  
10 BY MS. ROSENFELD:  
11 Q Where would you look to find what the margin of  
12 safety is?  
13 A CASAC documents.  
14 Q CASAC establishes the margin of safety?  
15 A I believe so.  
16 Q Does CASAC promulgate regulations?  
17 A Yep.  
18 Q And where would I find the CASAC regulations for  
19 NO2?  
20 A Well, the standard is found at Exhibit 277.  
21 Q The CASAC standards are on 277?  
22 A Yeah.  
23 Q Aren't these EPA standards, National Ambient Air  
24 Quality Standards?  
25 A As I explained earlier, CASAC is independent from

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1 EPA, but CASAC makes its recommendations to EPA typically  
2 every five years to EPA administrator. And if they're in  
3 agreement, they get published in the Federal Register and  
4 eventually become law.  
5 Q But they become law once they're adopted by the  
6 EPA, correct?  
7 A I think so. I think that's correct.  
8 Q In addition to looking at the National Ambient Air  
9 Quality Standards promulgated by EPA, where, what regulation  
10 would I look at for the CASAC standards? Are they published  
11 in the Federal Register?  
12 A Was the CASAC regulation published? Yes, it was.  
13 Q No, I think you said that CASAC has its own  
14 regulations.  
15 A No, CASAC formulates recommendations that they,  
16 for our National Ambient Air Quality Standards, passes them  
17 on to the EPA director and if she or he agrees, then they  
18 become law, they get published in the Federal Register and  
19 become law.  
20 MR. GROSSMAN: I think it -- the sense I get is  
21 was just an imprecise use of the term regulations. They  
22 make recommendations for regulations. They're reflected in  
23 the EPA National Ambient Air Quality Standards.  
24 BY MS. ROSENFELD:  
25 Q And EPA adopts them or doesn't. And, however, you

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1 said that you looked to CASAC for the margin of safety, or  
2 did I misunderstand?  
3 A That's where I would look.  
4 Q Okay.  
5 A But I don't know how many reams from transcripts I  
6 might have to go through. Hopefully we can find them  
7 quickly.  
8 Q You used the expression margin of safety several  
9 times today. I'm going to go through several pollutants one  
10 at a time. For NOX, what, in your opinion would be an  
11 adequate margin of safety for the NOX 1-hour standard?  
12 A For SOX?  
13 Q NOX. NOX.  
14 A NOX? I don't know. I would have to do my own  
15 independent review of the available literature on  
16 Q And --  
17 A -- dose response.  
18 Q And for PM2.5, what would, in your opinion, be an  
19 adequate margin of safety?  
20 A I don't know. Would it be a number that could not  
21 exceed three micrograms per minute meter cubed, again, based  
22 over a 3-year average.  
23 Q And for CO, the adequate margin of safety would be  
24 what?  
25 A I think you're taking me out of my area of

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1 expertise with standards that are, and I don't, I don't  
2 participate in CASAC. For perspective, my recollection is  
3 that the OSHA permissible exposure limit for NO2 is 50 times  
4 higher than this EPA 100 parts per billion.  
5 Q Does OSHA regulate ambient air standards for --  
6 A No.  
7 Q -- non-workers --  
8 A They're --  
9 Q -- so that --  
10 A No, but, no, but it issues standards to protect  
11 workers from the workplace.  
12 Q And when is the last time that OSHA updated that  
13 standard?  
14 A I don't know.  
15 Q Has it ever been updated?  
16 A I can't tell.  
17 MR. GROSSMAN: Dr. Chase, do you have OSHA  
18 standards with you?  
19 THE WITNESS: With me?  
20 MR. GROSSMAN: Yes.  
21 THE WITNESS: Well, here's the one for -- Tim, a  
22 volunteer sent me. Do you got the booklet with you?  
23 MR. ST. PIERRE: I don't. We normally don't have  
24 a printout of the OSHA.  
25 MR. GROSSMAN: I guess for the record we should

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1 identify who Tim is. Tim, what's your name please?  
2 MR. ST. PIERRE: I'm Tim St. Pierre and I'm  
3 project manager and research associate for Dr. Chase.  
4 MR. GROSSMAN: Thank you. All right. And you're  
5 the gentleman that Dr. Chase has occasionally referred to to  
6 supply some documentation, is that correct?  
7 MR. ST. PIERRE: That's correct.  
8 MR. GROSSMAN: All right.  
9 THE WITNESS: Can I comment that Tim has also a  
10 master's degree --  
11 MR. GROSSMAN: No, I'm not asking him to testify  
12 as a witness here. I just want to make sure the record  
13 reflects who you've been talking to in the audience.  
14 THE WITNESS: Okay.  
15 MR. GROSSMAN: Okay.  
16 THE WITNESS: You see where it says CI?  
17 MR. GROSSMAN: Yes.  
18 THE WITNESS: The five is in parts per million  
19 which is the same as 5,000 parts per billion. So she  
20 compared the 5,000 parts per billion to EPA's 100 parts per  
21 billion, you get a difference of 50, 50.  
22 MR. GROSSMAN: The reason I ask this question is I  
23 just wondered since you've raised the question about workers  
24 in, at the gas station as one of your issues regarding the  
25 nitrous dioxide concentrations, would the proper standard

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1 for them be the OSHA standard or the EPA standard?  
2 MS. ROSENFELD: Well, that's an interesting  
3 question and it's not clear to me yet whether it would be  
4 the OSHA standards because they are workers or if it would  
5 be EPA because it's outdoors and EPA regulates the National  
6 Ambient Air Quality Standards, which are the outdoor  
7 standards. I've been looking at that and when I have an  
8 answer, I will be happy to share it.  
9 MR. GROSSMAN: All right. We ought to get an  
10 answer from both sides on that as well as --  
11 THE WITNESS: Good luck. Can I comment? Can I  
12 comment on that?  
13 MR. GROSSMAN: I'll ask you in one second. But I  
14 just, it's more of a lawyer question, I guess, than an  
15 expert question, but so I'd like to hear from both sides on  
16 that issue and I'd also like to get a more complete picture  
17 on what the OSHA standards are that are reflected in that  
18 little document that I saw that Dr. Chase had. Now, Dr.  
19 Chase, did you want to say something?  
20 THE WITNESS: By Federal statute, OSHA standards  
21 would apply to employees.  
22 MR. GROSSMAN: Well, that may be true. That's why  
23 I said it's a lawyer opinion question and I wanted to get  
24 their, their feedback. That may be true and it may be that  
25 that's what we would apply for the workers, that part of it.

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1 THE WITNESS: Isn't it jurisdictional?  
2 MR. SILVERMAN: Yes.  
3 MR. GROSSMAN: Mr. Sullivan, what did you want to  
4 say?  
5 MR. SILVERMAN: I just wanted to say it's really a  
6 jurisdictional question that OSHA can't come in to regulate  
7 the workplace unless its standards are exceeded, but that  
8 doesn't stop EPA from, particularly the outdoor workplace  
9 from coming in and saying its standards have been exceeded.  
10 It's a question of jurisdiction.  
11 MR. GROSSMAN: Well, we're not talking -- I'm not  
12 talking so much about who is regulating as to which set of  
13 standards should be applied in trying to assess the question  
14 of health risk that I have to apply. And since we seem to  
15 have a dearth of actual standards beyond the EPA numbers  
16 that we've been given --  
17 THE WITNESS: Well, I took it that the applicant's  
18 whole case was the National Ambient Air Quality Standards or  
19 health standards. Now if they want to change that, I'd be  
20 interested in hearing that.  
21 MR. GROSSMAN: Well, I guess it didn't come up as  
22 an issue until the question arose because the mathematical  
23 error in the question arose as to whether or not the actual  
24 levels on the site, which is where the workers would be,  
25 might exceed the NO2 standards under the EPA. But if

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1 actually workers are supposed to be controlled by the OSHA  
2 standards, then I guess we should look to that too. I don't  
3 have an opinion about it, I just thought, I think it's a  
4 question that should be addressed.  
5 MS. CORDRY: I would say the question gets much  
6 more complicated than our other standards as well.  
7 MR. GROSSMAN: Of course.  
8 MS. CORDRY: And OSHA standards have not been  
9 updated since essentially the reports promulgated in the  
10 1970's and there's a whole set of bureaucratic reasons for  
11 that and there are other standards that applied and there  
12 are other people out on the mall that are not just workers  
13 and so forth, so --  
14 MR. GROSSMAN: I agree. The only reason I raise  
15 the issue is because I believe that workers is one of the  
16 criteria in the zoning ordinance itself and you have raised  
17 that issue with regard to the measurements taken on the mall  
18 itself and in your papers so that -- and then as soon as I  
19 heard OSHA standards and they are somewhat different, I  
20 said, well, there may be an issue here that we should  
21 address.  
22 MS. CORDRY: But I think we are --  
23 MR. GROSSMAN: I don't have an opinion.  
24 MS. CORDRY: At this point I think we're trying to  
25 stay focused on the original question of, with Mr.

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1 Sullivan's original numbers or with the corrected  
2 calculations and with the numbers that are there without  
3 going off onto workers, just with the numbers that are  
4 there, do those represent a level that is sufficiently high  
5 above the original standard that they would constitute a  
6 health issue.  
7 MR. GROSSMAN: Well, you may be staying focused on  
8 that. I have to focus on all the issues.  
9 MS. CORDRY: Well, I mean that is the public  
10 health question, so I thought we were trying to address  
11 that.  
12 MR. GROSSMAN: That is one of the public health  
13 questions. It's one of the issues here.  
14 MR. SILVERMAN: I thought I heard dispute with the  
15 applicants and I've heard it said many times, is that they  
16 are standing by the National Ambient Air Quality Standards  
17 and then we're trying to show those standards are  
18 inadequate. And now we have a situation where they appear  
19 to be violated the National Ambient Air Quality Standards  
20 and by their own parameters, they ought to be judged in  
21 terms of health risk. I thought that's what --  
22 MR. GROSSMAN: I know that's your assertion and  
23 they claim that they're not above those standards, so --  
24 MR. SILVERMAN: Well, that's so if -- that's  
25 right --

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1 MR. GROSSMAN: So that's --  
2 MR. SILVERMAN: That's right.  
3 MR. GROSSMAN: You're saying that that's, that's  
4 the air contention and that's always been Mr. Sullivan's  
5 contention and that he filed his revised report to further  
6 buttress that contention. Whether or not he's correct, I  
7 haven't reached any conclusions about. I'm just waiting,  
8 looking for the evidence. But this other issue came up, so  
9 I thought it's good to hear from the parties.  
10 MS. ROSENFELD: And on that note I would like to  
11 point out that Mr. Sullivan in his report did not reference  
12 OSHA. It came up for the first time as part of Dr. Chase's  
13 latest submission. That's the first time we've had any  
14 reference to OSHA in this case. Again, unless I'm  
15 interrupting you, I do have more questions.  
16 MR. GROSSMAN: You have a right to interrupt.  
17 MS. CORDRY: May I suggest that if we are going to  
18 be talking about OSHA standards as well and worker health  
19 standards, that's another piece of material evidence that  
20 ought to go back to the Planning Staff because there's a lot  
21 that could be looked into in that regard.  
22 MR. GROSSMAN: All right. Well, maybe. I just  
23 right now want to know whether or not, what the parties say  
24 about whether OSHA standards play a part in this. So I pose  
25 the question to you and you can all tell me the answer as to

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1 whether or not OSHA standards play a part. They may or may  
2 not. It was just raised by the witness on the stand, so I  
3 feel having raised it, that at least, or to get feedback  
4 from the parties as to whether they think that is a relevant  
5 consideration here.  
6 MR. SILVERMAN: I think that so far there's not  
7 been any testimony as to what the attendant of work eight  
8 hours a day is taking into his body in the course of his  
9 work day being right next to the cars and we haven't heard  
10 any testimony about that at all I don't think. So I think  
11 that question would, that that would be the factual  
12 predicate for discussion of OSHA.  
13 MR. GROSSMAN: Well, I think as a factual  
14 predicate for my asking the question as to whether or not we  
15 should be looking at OSHA standards and any one of you can  
16 reply saying yes or no and why.  
17 MR. SILVERMAN: Well, I hope you do.  
18 MR. GROSSMAN: That may be the, that may be the,  
19 you can segue into your argument on that or not depending on  
20 your response to it. All right. So I interrupted your  
21 interruption of my interruption, so it's up to you, Ms.  
22 Rosenfeld.  
23 MS. ROSENFELD: Okay.  
24 BY MS. ROSENFELD:  
25 Q Going back to this concept of a wide margin of

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1 safety, was it your testimony then that you would look to  
2 the CASAC standards or their recommendations as the  
3 appropriate margin of safety?  
4 A Is it my recommendation to do so?  
5 Q Was it your testimony, yes, that that's what you  
6 would look to?  
7 A Yes, but I don't know what else is in that docket.  
8 There may be transcripts of heated discussions, citations of  
9 literature that, beyond what I've already looked at that  
10 might be of relevance. But that won't, that won't resolve  
11 the discrepancy between Sullivan and Cole on which is the  
12 right number.  
13 Q Well, and that wasn't my question. You have, as  
14 I said, used this phrase, a wide margin of safety and you  
15 testified earlier that just because a pollutant level might  
16 be, quote, a little bit over, end quote, the EPA standard,  
17 it wouldn't matter provided there was a wide margin of  
18 safety and I'm trying to establish what margin is adequate.  
19 Is one percent over? I mean it's your testimony, as I  
20 understand it, that it's okay if it's under and it's okay if  
21 it's over. So how much over in your expert opinion is --  
22 A I can't give you a --  
23 Q -- okay?  
24 A -- single answer to that question. It depends on  
25 the agent involved.

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1 Q Well, actually that's, I'm glad you said that  
2 because that was going to be my next question. What  
3 percentage over the EPA standard would you consider to be  
4 appropriate for ozone?  
5 A I don't know.  
6 Q And what percentage over would you consider to be  
7 appropriate for PM2.5?  
8 A I think I answered that one.  
9 (Discussion off the record.)  
10 BY MS. ROSENFELD:  
11 Q If you could refresh my memory then please?  
12 A I think on that one I said it should likely not be  
13 more than three mics, three micrograms per meter cube. In  
14 other words, if you took the current 12 and added three,  
15 then we would be back at 15, which is what it was up until  
16 very recently.  
17 Q So it's your testimony then that the adequate  
18 margin of safety, the appropriate EPA standard to apply is  
19 15, which would be the one that was recently reduced to 12?  
20 MR. GROSSMAN: Well, I don't think you asked him  
21 the appropriate standard, EPA standard was to apply. He,  
22 you're asking him about the margin of safety portion above  
23 the EPA standard, right?  
24 MS. ROSENFELD: That's correct.  
25 MR. GROSSMAN: I think your question --

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1 MS. ROSENFELD: That is what I asked.  
2 MR. GROSSMAN: All right.  
3 THE WITNESS: Well, I answered it, didn't I?  
4 MR. GROSSMAN: Yes, you did.  
5 THE WITNESS: Obviously, I gave you my own  
6 personal opinion. Others would have different answers.  
7 Other experts would have different answers to the question.  
8 BY MS. ROSENFELD:  
9 Q And the appropriate margin of safety for CO?  
10 A CO? That we have a better understanding of. I  
11 would say on the order of, in the neighborhood of 10 or 15  
12 parts per million.  
13 Q Above the EPA standard?  
14 A Yes.  
15 Q Okay.  
16 A See, we know so much more about the patho-  
17 physiology of carbon monoxide in humans than we do from some  
18 of these other things. It's kind of like you're saying  
19 what's the threshold for exposure to sunlight. Sunlight  
20 causes skin cancer. What's the threshold for noise?  
21 Q And if I could ask you the same question, the  
22 appropriate margin of safety for sulfur oxides?  
23 A For which?  
24 Q Six.  
25 MR. SILVERMAN: Sulfur oxide.

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1 THE WITNESS: Sulfur oxide. Sulfur dioxide. I  
2 don't know.  
3 BY MS. ROSENFELD:  
4 Q And the appropriate margin of safety for lead?  
5 A That's something we have better literature on, but  
6 I'm still speculating. I would say --  
7 MR. GROSSMAN: Well, I don't want you to  
8 speculate. You can estimate. But if you have to speculate,  
9 then don't give an answer.  
10 THE WITNESS: I would estimate .5 micrograms per  
11 meter cube.  
12 MR. GROSSMAN: Ms. Rosenfeld, refresh my  
13 recollection. Did we get a similar margin of safety figure  
14 for the nitrogen dioxide?  
15 MS. ROSENFELD: He said he didn't know.  
16 MR. GROSSMAN: Okay.  
17 BY MS. ROSENFELD:  
18 Q And the last one would be ozone.  
19 A Ozone?  
20 Q Ozone.  
21 (Discussion off the record.)  
22 THE WITNESS: Having spent the first 25 years of  
23 my life in L.A. and surviving to this point, I'd use more  
24 latitude there.  
25 MS. ROSENFELD: And I'd like to just --

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1 THE WITNESS: Ten times the number that's there,  
2 .075.  
3 MR. GROSSMAN: Pardon?  
4 BY MS. ROSENFELD:  
5 Q Ten times for ozone?  
6 A Yeah. So that would be .75 EPM. I'm sure I was  
7 exposed to more than that for far more than three years.  
8 MR. GROSSMAN: All right. We're getting close to  
9 the bewitching hour for me. What's -- how much longer do  
10 you think your cross-examination will be, Ms. Rosenfeld?  
11 MS. ROSENFELD: I think at least an hour.  
12 MR. GROSSMAN: Okay. I think it's fair to assume  
13 that Ms. Cordry will have to fit her testimony into the next  
14 five minutes or we won't hear her today.  
15 MS. CORDRY: No need, Your Honor. Clearly proven.  
16 Okay. I'm done. Thank you.  
17 MR. GROSSMAN: All right. It says QED is the --  
18 all right. So since you're going to take another hour, I  
19 mean we can go on for another few minutes, but really about  
20 22 we have to stop.  
21 MS. ROSENFELD: I just had a couple more questions  
22 on this one line --  
23 MR. GROSSMAN: Okay.  
24 MS. ROSENFELD: -- if you wanted to --  
25 MR. GROSSMAN: Sure.

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1 BY MS. ROSENFELD:  
2 Q Just generally speaking, when EPA reduces its  
3 pollutant limit from one level to a lower level, what  
4 process does the EPA go through in making that  
5 determination?  
6 A Typically turn it over to CASAC.  
7 Q And --  
8 A You're talking air pollution I assume?  
9 Q And they make their recommendation to the EPA,  
10 correct?  
11 A Correct.  
12 Q And is that based on clinical studies or peer  
13 review journals? How do they come -- how does CASAC come up  
14 with the number that they recommend?  
15 A All of the above. They review the available and  
16 more recent literature, medical and scientific literature on  
17 the agent in question.  
18 Q So it's a health-based recommendation based on  
19 their scientific analysis?  
20 A Yes.  
21 Q Designed to protect public health?  
22 A Of course, yes.  
23 Q So the NOX standard is a health-based standard, is  
24 that correct?  
25 A The NOX?

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1 Q Yes.

2 A Yes.

3 Q And CO is a health-based standard?

4 A Yes.

5 Q And PM2.5 is a health-based standard?

6 A All of them.

7 Q All of them? VOC's, are they health-based?

8 A VOC? VOC's are not regulated.

9 Q Okay.

10 (Discussion off the record.)

11 BY MS. ROSENFELD:

12 Q So just as a general principle then, the EPA would

13 have reduced the NOX, the 1-hour PM2.5 from 15 to 12 based

14 on health-based analysis, is that correct?

15 A Yes.

16 MS. ROSENFELD: Mr. Grossman, this is a good

17 stopping point.

18 MR. GROSSMAN: All right. All right, so when we

19 come back on the 20th, we'll take, resume with the cross-

20 examination of Dr. Chase and any redirect and then go

21 directly to Mr. Sullivan.

22 MR. GOECKE: That's correct.

23 THE WITNESS: You said the 20th?

24 MR. GROSSMAN: Yes. That's this Friday.

25 THE WITNESS: That's this Friday?

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1 MR. GROSSMAN: Yes.

2 THE WITNESS: Okay.

3 MR. GROSSMAN: And may I have back Exhibits 276

4 and 277 please that you have in front of you, Dr. Chase?

5 Those two, yes, that one.

6 THE WITNESS: There's one other there. This one?

7 MR. GROSSMAN: The one with the colorful --

8 THE WITNESS: Where did you go?

9 MR. GROSSMAN: That's it. They're actually

10 exhibits now in the record here. Thank you.

11 THE WITNESS: I think you have a black and white

12 copy.

13 MR. GROSSMAN: Yes, that's -- well, we have black

14 and white copies. Do you want a copy, a black and white of

15 these? These are the exhibits that were marked into the

16 record. All right. Is there anything else we have to

17 resolve before we adjourn for today and resume on the 20th?

18 Don't forget to give me the electronic copies ASAP and we'll

19 go on from there. Thank you all and we are adjourned for

20 today.

21 MR. SILVERMAN: Thank you.

22 MS. HARRIS: Thank you.

23 MR. GROSSMAN: Thank you, Dr. Chase.

24 THE WITNESS: Thank you.

25 MR. GROSSMAN: See you on Friday.

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1 (Whereupon, at 4:35 p.m., the hearing was

2 adjourned.)

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. Digitally signed by Tracy M. Hahn

**ELECTRONIC CERTIFICATE**

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 in the matter

of:

Petition of Costco Wholesale Corporation

Local Map Amendment No. S-2863

Office of Zoning and Administration Hearings No. 13-12

By:

\_\_\_\_\_  
Tracy M. Hahn, Transcriber

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