

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
:
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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 |
|----------------------|--------|-------|----------|---------|
| Kenneth Chase | | | | |
| 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.)

Page 6

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.

Page 7

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

Page 8

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

Page 9

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 --

Page 10

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.

Page 11

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

Page 12

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.

Page 13

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.

Page 18

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

Page 19

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

Page 20

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

Page 21

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

Page 22

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 --

Page 23

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

Page 24

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

Page 25

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?

Page 26

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.

Page 27

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.

Page 28

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?

Page 29

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.

Page 30

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.

Page 31

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.

Page 32

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?

Page 33

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?

Page 34

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?

Page 35

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.

Page 36

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.

Page 37

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,

Page 38

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

Page 39

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

Page 40

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.

Page 41

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 --

Page 42

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.

Page 43

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

Page 44

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

Page 45

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

Page 46

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 --

Page 47

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

Page 48

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

Page 49

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

Page 50

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

Page 51

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,

Page 52

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

Page 53

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 obstructive 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

Page 54

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.

Page 55

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 NO₂, 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 NO₂ 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.

Page 56

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

Page 57

1 referring to the document. The calculated emissions are so
2 much lower than background. For example, for PM_{2.5}, 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.

Page 58

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

Page 59

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?

Page 60

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.

Page 61

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.

Page 62

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

Page 63

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.

Page 64

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

Page 65

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?

Page 66

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

Page 67

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

Page 68

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

Page 69

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

Page 70

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

Page 71

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

Page 72

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

Page 73

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

Page 74

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?

Page 75

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

Page 76

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

Page 77

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

Page 78

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

Page 79

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.

Page 80

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?

Page 81

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?

Page 82

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

Page 83

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

Page 84

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 --

Page 85

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

Page 86

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.

Page 87

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.

Page 88

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,

Page 89

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

Page 90

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

Page 91

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

Page 92

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

Page 93

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

Page 94

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.

Page 95

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

Page 96

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

Page 97

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

Page 98

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

Page 99

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 --

Page 100

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

Page 101

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.

Page 102

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?

Page 103

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.

Page 104

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?

Page 105

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

Page 106

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.

Page 107

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

Page 108

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.

Page 109

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

Page 110

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.

Page 111

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

Page 112

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?

Page 113

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

Page 114

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

Page 115

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

Page 116

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,

Page 117

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

Page 118

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?

Page 119

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.).

Page 120

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?

Page 121

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

Page 122

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.

Page 123

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?

Page 124

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

Page 125

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

Page 126

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.)

Page 127

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?

Page 128

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?

Page 129

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.)

Page 130

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?

Page 131

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 --

Page 132

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

Page 133

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

Page 134

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

Page 135

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

Page 136

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 --

Page 137

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

Page 138

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

Page 139

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

Page 140

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

Page 141

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.

Page 142

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.

Page 143

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.

Page 144

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?

Page 145

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?

Page 146

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,

Page 147

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.

Page 148

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.

Page 149

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

Page 150

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

Page 151

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?

Page 152

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

Page 153

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

Page 154

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.

Page 155

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.

Page 156

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

Page 157

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.

Page 158

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?

Page 159

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 --

Page 160

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

Page 161

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."

Page 162

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,

Page 163

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.

Page 164

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

Page 165

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

Page 170

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.

Page 171

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

Page 172

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.

Page 173

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 --

Page 174

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

Page 175

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?

Page 176

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

Page 177

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.

Page 178

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

Page 179

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.)

Page 180

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

Page 181

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

Page 182

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.

Page 183

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.

Page 184

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?

Page 185

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

Page 186

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

Page 187

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

Page 188

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

Page 189

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

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.

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

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.

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 --

Page 194

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

Page 195

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

Page 196

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.

Page 197

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 --

Page 198

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.

Page 199

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 --

Page 200

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.

Page 201

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?

Page 202

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?

Page 203

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.

Page 204

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

2 adjourned.)

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Page 205

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| | | | | |
|--|---|--|---|---|
| | 8:13;17:12,14;53:19; 76:16;79:3;82:11 | 96:11,21;97:3;98:11, 17;99:15,21;100:16; 101:14;102:10,11; 103:15,16;104:10; 105:19,21;106:6; 107:12;108:18;109:15, 17;110:11,12,21,23; 111:1,17;112:12,15,17, 18;113:5,8,13,17; 114:15,19,21;115:9,10, 17,20,23;116:3,7,10, 12,17,20;117:16,21; 118:4,5,11,14,16,18, 19;120:5,9,22;121:15; 122:8,11,15;123:15; 124:6,23;125:12,24; 126:2,9,18,23;127:1,3, 6,10,16;128:4,15; 129:3;130:1,3,8,12; 131:4,9,14,25;132:5, 15;135:12,13;142:24, 25;143:1,9,13,16 | adopted (3) 53:19;159:13;186:5 | 42:9 |
| - | | | adopts (1) 186:25 | ago (12) 24:12;36:22;43:4; 47:19;55:1;66:8;76:4; 86:3;87:15;139:11; 150:16;175:19 |
| - (1) 21:3 | 8:5;15:18 | | adult (1) 36:3 | agree (15) 19:19;28:23;31:12; 76:17,22;77:14;78:7, 11;80:1;96:12;118:23; 131:15;136:10;137:12; 192:14 |
| A | 54:8;88:9 | | adults (4) 36:2,6;162:11,12 | agreed (3) 18:2;84:4;129:22 |
| abbreviation (1) 48:18 | 90:17 | | advance (3) 11:23;139:1;156:25 | agreement (2) 61:5;186:3 |
| Abigail (1) 5:16 | activities (1) 61:9 | | adverse (19) 45:18,21,24;62:15; 67:25;80:10;84:18,23, 25;97:5,6;109:23; 113:22;134:25;135:8; 139:25;142:17;163:6; 172:21 | agrees (2) 96:22;186:17 |
| able (13) 8:12;17:12;20:19; 24:16;58:15,18; 139:23,24;140:16,18, 19,20;164:22 | actual (7) 145:21;147:17,19; 150:8;166:6;191:15,23 | | adversely (4) 41:21;48:5;49:20; 97:6 | ahead (9) 39:3;40:1;59:8;85:4; 90:15;91:6;93:22; 157:18;167:19 |
| above (8) 108:21;109:4;180:7; 193:5,23;197:22; 198:13;201:15 | actually (25) 15:9;18:12;20:25; 21:5;40:17;46:8;48:21; 51:2;67:1,3;85:1,7; 96:21;107:8;110:12; 128:10;130:13;151:9; 158:19;171:20;172:8; 177:19;192:1;197:1; 203:9 | Adelman's (1) 46:9 | advice (1) 52:9 | aides (1) 87:8 |
| ABRAMS (2) 115:7;121:8 | acute (4) 34:22;35:19,21,22 | adequate (5) 187:11,19,23; 196:18;197:17 | advising (1) 154:20 | air (90) 12:22;13:19;24:2; 41:20,20;42:15;45:24, 25;48:23;49:3;50:2; 51:16,19;52:17;53:18; 57:16,18,20;58:21; 59:4,12,20,22;67:14, 15;69:19;70:2,3;71:7; 80:16;82:11;84:18; 90:18,18,19,21,22; 97:19;105:6;106:8,10; 107:9,19;108:1;109:9, 23;113:22;114:7,7; 121:11,11;124:8; 145:6,7,8,21;146:3,8; 149:19,20;154:2,10,13, 19,20,23;155:8,9,11, 13;156:15;160:12,18, 21;167:17;168:23; 174:6,9;177:3;185:23; 186:8,16,23;188:5; 190:6;191:18;193:16, 19;194:4;201:8 |
| abroad (1) 34:7 | add (3) 39:14;44:1;46:2 | ADHD (1) 35:9 | Advisory (2) 49:2,3 | airborne (5) 48:18;119:6,9,13; 146:2 |
| Absolutely (5) 9:12;20:13;28:19; 137:23;155:16 | added (1) 197:14 | adjoin (1) 203:17 | Affairs (1) 107:20 | airings (1) 146:25 |
| absurd (1) 174:2 | addition (6) 6:13;23:21,23;73:18; 119:11;186:8 | adjourn (2) 203:19;204:2 | affect (7) 29:10;41:21;48:5; 49:20;93:16;97:6; 161:11 | alleged (1) 70:14 |
| absurdly (1) 174:2 | additional (2) 20:4;52:10 | adjudicated (1) 77:17 | affected (1) 49:8 | allergies (1) 35:13 |
| abutting (1) 113:20 | additions (1) 80:2 | adjudicating (2) 78:7,11 | affects (3) 15:2;29:11;125:15 | allergy (3) 30:9;31:21;32:2 |
| accept (4) 43:8,17;76:18,23 | address (3) 22:17;192:21;193:10 | adjust (2) 9:19;12:10 | affidavit (8) 176:13,16;177:6; 178:24;180:23;182:3, 8,9 | allow (4) 4:7;90:14;102:1; 143:11 |
| acceptable (1) 86:25 | addressed (3) 10:12;89:7;192:4 | ADLEMAN (1) 29:4 | afternoon (1) 167:1 | allowing (1) 152:25 |
| accepted (2) 18:3;40:22 | addresses (3) 45:24;98:11,11 | administered (1) 34:5 | again (30) 4:16;10:16;35:6; 47:20;49:11,18;50:4; 57:7;66:25;67:7;70:6; 78:8;102:24;106:1,18; 119:7;121:21;137:9; 139:21;142:18;149:12, 17;154:17;156:4; 159:1;164:8;172:7; 180:22;187:21;194:14 | |
| accomplished (1) 21:22 | ADELMAN (225) 5:13,14,15,16,16; 21:24;26:24;27:3,4,5, 14,20;29:3,11,18;30:1, 2,25;31:9;32:3,9,13,19, 20;33:23;34:1,4,8,12; 35:1,6,14;36:1,20,21; 37:4,11,15,21;38:2,6; 39:6,7,9,13;40:1,2,21, 25;41:4;46:2,4,5;47:8, 11;62:17;73:14,15,16, 25;74:8,12;76:14,21; 77:10,13,21;78:4,5,14, 19;79:14,15,17;80:1,6, 7;81:1,3;82:1,3,8,21, 23;83:6,10;84:10,22; 85:1,3,6;86:6,10,15,19, 22,25;87:2,5,10,22; 88:1;89:10,17,22;90:1, 2,9,23;91:13,21;92:15; 93:8,18;94:2,4,14,16, 19,25;95:1,8,18,19,20; | administers (1) 24:9 | agent (2) 196:25;201:17 | |
| according (4) 40:2,3;98:11;158:8 | | administrator (3) 52:10;79:3;186:2 | agents (1) 146:2 | |
| account (3) 105:4,16;129:17 | | admirable (1) 76:8 | Agliata (1) | |
| accuracy (1) 138:1 | | admission (1) 41:5 | | |
| accurate (3) 55:15;103:10;166:13 | | admissions (2) 161:25;168:6 | | |
| accurately (1) 69:3 | | admit (2) 74:7;125:16 | | |
| acknowledge (1) 75:20 | | admitted (2) 42:13;89:5 | | |
| acknowledged (1) 88:24 | | ADMS (2) 28:8,9 | | |
| acquaintance (1) 87:13 | | adolescent (2) 30:10;31:22 | | |
| acronym (1) 48:25 | | adopt (1) 59:2 | | |
| across (1) 180:3 | | | | |
| act (7) | | | | |

| | | | | |
|--|--|---|--|---|
| <p>almost (9) 27:17;40:12;58:9; 75:23;80:9;88:24,24; 150:16;174:2</p> <p>along (5) 39:16;42:4;77:3; 93:11;129:11</p> <p>although (3) 43:11;154:24;165:12</p> <p>always (4) 76:17;154:23; 165:10;194:4</p> <p>AMA (2) 27:25;28:1</p> <p>Ambient (18) 48:23;50:2;51:16; 52:17;58:21;59:22; 69:19;70:3;146:3; 185:23;186:8,16,23; 188:5;190:6;191:18; 193:16,19</p> <p>ambiguous (1) 125:17</p> <p>amend (2) 19:15;37:4</p> <p>amended (5) 6:12;15:16;18:7; 69:9;71:22</p> <p>amendment (2) 20:3;101:18</p> <p>amendments (1) 19:12</p> <p>American (3) 24:6;28:2,5</p> <p>amount (7) 57:5;58:2;72:7,11; 83:14,17;181:16</p> <p>ample (1) 67:18</p> <p>amply (1) 43:6</p> <p>AMPR (1) 156:23</p> <p>Amtrak (2) 44:22;106:21</p> <p>analysis (15) 17:22;20:21;41:15, 20;42:15;47:18;70:17, 22,24;71:19;93:16; 150:22;177:20;201:19; 202:14</p> <p>analyze (3) 60:15;61:21;93:25</p> <p>analyzed (1) 60:21</p> <p>and/or (1) 129:21</p> <p>animals (1) 133:14</p> <p>announce (1) 17:1</p> <p>announced (1) 105:10</p> | <p>announcement (1) 156:2</p> <p>annual (8) 76:25;103:7;106:2; 156:3;158:5;164:5,11, 17</p> <p>another's (1) 76:18</p> <p>answered (10) 29:22,25;76:3,12; 81:22;84:16;123:13; 169:8;197:8;198:3</p> <p>antecedent (1) 77:20</p> <p>anticipate (2) 63:9;110:11</p> <p>anticipated (1) 56:9</p> <p>anxiety (3) 34:22,24;35:7</p> <p>apologies (1) 73:8</p> <p>apologize (2) 81:17;163:23</p> <p>apparent (1) 43:1</p> <p>apparently (4) 14:19;148:2;161:3; 175:16</p> <p>Appeals (13) 4:5,18,21,23;6:7,23; 7:2;8:7;9:3;141:17; 142:7,16,21</p> <p>appear (1) 193:18</p> <p>appears (3) 40:14;100:16;149:15</p> <p>appendix (6) 178:12,20,23;179:1, 6;180:15</p> <p>apples (1) 178:25</p> <p>applicable (3) 32:15;154:15;155:21</p> <p>applicant (8) 9:10;10:10;14:8; 19:2,15;96:6,6;134:10</p> <p>applicants (1) 193:15</p> <p>applicant's (5) 6:6,20;9:21;134:24; 191:17</p> <p>application (1) 20:11</p> <p>applied (8) 69:15;70:12;71:23; 80:5;158:15;184:16; 191:13;192:11</p> <p>applies (2) 44:10;172:21</p> <p>apply (12) 51:19;58:25;59:14; 136:3,4;153:1;171:21;</p> | <p>190:21,25;191:14; 197:18,21</p> <p>applying (2) 154:24;182:13</p> <p>Appreciate (1) 10:6</p> <p>appropriate (14) 8:20;17:5;32:3,6; 172:15;183:18;196:3; 197:4,7,18,21;198:9, 22;199:4</p> <p>approve (3) 141:17;142:8,21</p> <p>approved (2) 84:19;143:18</p> <p>approximately (2) 33:6,7</p> <p>April (7) 4:13;31:2;156:6; 157:10;158:22,23; 166:9</p> <p>arbitrarily (1) 37:12</p> <p>arcane (1) 150:22</p> <p>architect (3) 24:25;41:11;154:4</p> <p>architecture (2) 41:12,14</p> <p>area (29) 12:4;29:4;41:23; 43:13,15;44:24;45:1; 49:21;50:7,18;67:3,15, 19;69:17;70:5,18; 71:15;79:23;89:22; 92:14;93:5;112:14; 125:23;138:8;139:2; 151:16;152:13;153:10; 187:25</p> <p>areas (13) 28:23;29:12;30:14, 18,20;31:5;32:24; 40:12,23;50:23;69:19; 70:15;162:2</p> <p>arguing (1) 58:20</p> <p>argument (3) 79:23;136:6;195:19</p> <p>argumentative (1) 81:5</p> <p>arise (1) 35:2</p> <p>arithmetic (3) 55:9;68:19,21</p> <p>Arlington (1) 92:25</p> <p>arms (1) 75:14</p> <p>Army (2) 24:23;154:3</p> <p>aromatic (1) 119:19</p> <p>arose (3)</p> | <p>84:13;191:22,23</p> <p>around (9) 13:7;52:11;57:3; 69:17;75:14;124:8; 148:20,22;174:1</p> <p>art (3) 84:3,4;124:16</p> <p>arterial (1) 36:6</p> <p>article (13) 11:22;75:23;130:16; 131:24;132:6,8,11,16, 18,19;133:23;146:23; 160:17</p> <p>articles (15) 46:21,23;74:17,19, 21,23,24;75:2,8;76:4; 97:25;98:18,22; 100:10;130:14</p> <p>ASAP (1) 203:18</p> <p>aside (1) 67:1</p> <p>aspect (2) 32:23;139:17</p> <p>assembled (1) 76:4</p> <p>asserted (1) 62:23</p> <p>assertion (2) 62:18;193:22</p> <p>assess (2) 83:19;191:13</p> <p>assessment (1) 84:17</p> <p>assigned (2) 34:11;60:13</p> <p>assignment (3) 8:25;34:10;52:8</p> <p>assignments (1) 34:15</p> <p>assistance (3) 43:13;89:20;95:25</p> <p>associate (2) 38:9;189:3</p> <p>associated (7) 56:10;61:9;121:18; 122:23;123:3;159:2,11</p> <p>Associates (3) 23:15,17;97:18</p> <p>Association (3) 5:20;28:2;176:12</p> <p>Association's (1) 6:6</p> <p>assume (15) 7:21,23;24:19;65:23; 70:20;94:10;112:19; 127:21;137:19;177:12; 182:7;183:7;184:16; 200:12;201:8</p> <p>assumed (1) 102:2</p> <p>assumes (1)</p> | <p>127:19</p> <p>assuming (7) 75:11;130:2,13; 184:9,13,19,20</p> <p>assumption (4) 8:11;37:12;179:17; 182:19</p> <p>assumptions (28) 51:9,10;68:22,24; 69:2,24,25;71:2,4,5,21; 72:12;173:5,14,19,22, 24;174:2,18;175:22; 181:16,19,20,21,25; 182:1,2,14</p> <p>assures (1) 66:18</p> <p>asthma (16) 34:23;35:12,17,23; 36:4;53:6,7,14;54:1,3; 161:3,8;162:11,13,15, 16</p> <p>asthmatics (1) 83:4</p> <p>Atlantic (1) 107:17</p> <p>attached (2) 130:4;176:13</p> <p>attaching (1) 6:11</p> <p>attachment (1) 98:10</p> <p>attachments (2) 21:3,4</p> <p>attack (1) 161:3</p> <p>attempted (1) 93:20</p> <p>attempting (4) 76:9,9;84:13;93:24</p> <p>attend (4) 17:15;25:7;31:3,7</p> <p>attendant (1) 195:7</p> <p>attending (3) 50:6,7;54:11</p> <p>attorneys (1) 117:20</p> <p>audible (3) 5:25;22:8;133:6</p> <p>audience (2) 5:23;189:13</p> <p>August (20) 4:15;14:3;15:10; 17:20;51:10;54:25; 55:3,14;68:20;69:25; 73:6;172:23;173:20; 174:15;175:7;178:13, 16;179:20,24;181:21</p> <p>authority (1) 7:12</p> <p>Auto (4) 121:9;122:11,16,16</p> <p>automobile (6)</p> |
|--|--|---|--|---|

| | | | | |
|--|--|---|---|--|
| 4:7;35:3,3;98:4,15; 132:13 automobiles (1) 124:8 automotive (9) 40:9;119:13,14; 123:18,20,25;124:4,7; 131:17 available (4) 86:16;94:20;187:15; 201:15 avenue (1) 30:7 average (27) 26:8;146:1,1,4,7; 157:24;158:1,7,8; 159:13;161:13;164:4, 13,15,23;178:14,18; 180:18,21;183:4,5,9, 12;184:9,10,16;187:22 averaged (5) 158:20;162:21; 164:6,12;165:1 await (1) 9:9 aware (27) 55:9;69:6;96:5; 103:2;104:17,18; 108:21;114:3;119:5,8, 11,16,16;124:24;125:2, 7;126:3,4,5,8;173:18, 21;174:20;175:3,14; 181:10,23 away (3) 29:15;102:8;162:8 awfully (1) 88:11 awhile (1) 100:10 | 179:1,7,11,11,11,15,17, 18,22;180:3,4,6,8,16; 181:17 backwards (1) 172:16 backyard (1) 92:21 bad (3) 66:14,20;116:9 bag (1) 90:21 base (2) 15:6;100:6 based (40) 37:12,18;40:15; 41:18;48:11;50:21; 51:2;52:1,17;55:19; 57:8;62:1;65:19;67:22; 69:8,23;71:6,12,16; 72:11;73:17;88:7,8; 95:10;127:13;129:20; 132:2;152:21;158:6; 164:4;176:14;177:10; 178:10,11,12;179:17; 187:21;201:12,18; 202:13 baseline (1) 142:10 basic (1) 125:13 basically (2) 90:5;142:4 basis (9) 23:12;24:23,24; 36:14;37:7;38:15; 100:18;103:7;138:1 beam (1) 143:14 bear (1) 39:25 beat (1) 93:9 became (4) 156:5,5;157:10; 158:4 become (6) 27:17;158:22;186:4, 5,18,19 begin (3) 43:18;72:24;73:14 beginning (2) 10:12;124:15 begins (5) 126:12,12;127:8; 130:24;147:4 begun (1) 4:13 behalf (4) 4:20;5:5;13:10; 46:11 bell (1) 176:18 below (4) | 103:12;108:23; 161:23;168:4 benchmark (1) 136:9 benzene (13) 118:25;119:9,23,24; 120:3,25;121:1,5; 129:21;130:5;147:14; 150:2,2 Bertel (1) 108:13 besides (2) 25:7;67:18 best (1) 108:17 better (6) 37:16;76:5;86:20; 110:12;198:10;199:5 bewitching (1) 200:9 beyond (13) 8:14;38:23;40:19; 43:12;67:7,17;89:8; 136:24;152:22,23; 177:3;191:15;196:9 biased (2) 68:9,14 big (4) 70:9,11;71:25;92:20 billion (22) 158:6,7,11;162:21; 164:23;167:25;168:11, 15;169:2,17,20;170:10, 16;172:2,17;178:12; 184:22,25;188:4; 189:19,20,21 bit (15) 7:9;9:20;23:22;25:2; 33:2;37:21;49:4;51:14; 57:23;73:20;86:8; 109:4;139:7;174:4; 196:16 black (7) 90:21;92:5,6;108:11; 203:11,13,14 blank (1) 38:11 blue (1) 159:12 Board (26) 4:4,18,20,23;6:7,23; 7:2,3;8:3,7;9:3,18;1; 20:17;24:6,9,9;28:5, 24;40:11;59:5;77:7; 85:17;141:17;142:7, 16,20 board- (1) 29:12 Board-certified (9) 24:6;27:9;28:17; 30:3,7,13;38:19;97:15; 139:9 boarded (4) | 23:7,23,24;24:5 bodies (3) 11:8;78:7,11 body (1) 195:8 bold (1) 183:16 booklet (1) 188:22 boot (1) 88:16 botched (1) 49:4 both (20) 12:8;27:10,12,14; 28:23;36:13;44:10; 47:22;51:8;59:9;71:1; 96:2;97:12;99:19; 127:4;155:9;166:12; 179:2;190:10,15 bottom (5) 21:16;132:24,25; 133:9;153:17 boundaries (1) 111:16 BRANN (9) 5:1,1;42:9;65:5,6; 87:24;92:4,8;141:13 Brann's (2) 65:8,13 break (11) 68:16;72:15;115:25; 116:11,18,25;120:18; 160:5;163:11,14;167:1 Breyse (9) 44:6;98:25;99:10; 100:1,2,4;101:19; 102:4;136:2 Breyse's (3) 99:19,20;100:11 brief (1) 76:10 bright (1) 167:18 bring (2) 9:11;16:7 brings (1) 172:23 broad (1) 54:11 broaden (1) 54:4 broader (2) 134:23;148:16 broadly (1) 139:18 broke (1) 118:17 bronchitis (4) 34:23;35:19,21,22 Bryse (1) 93:2 Bucksport (1) | 107:3 budadine (1) 119:25 building (4) 4:19,19;56:6;108:10 buildings (1) 155:14 built (10) 92:21;109:5;112:21; 113:9,11,20;125:1,1; 141:5;142:9 Bureau (1) 107:20 bureaucratic (1) 192:10 buried (1) 55:11 business (4) 17:14,15;22:17; 86:23 buttrass (1) 194:6 butts (1) 50:11 buy (1) 114:1 |
| C | | | | |
| B | | | | |
| Bachelor's (1) 25:6 back (47) 7:4;8:12;19:4,23; 25:2;44:13;57:25; 64:11;72:15,22;74:9; 75:19;77:6;84:12; 85:21;86:6,9,12,18; 90:16;92:18;100:10; 106:12;107:14,15; 116:25;117:15,25; 142:22,24;144:12; 153:19,20;156:22; 160:23,24;167:5,16,17, 23;169:16;180:23; 194:20;195:25;197:15; 202:19;203:3 background (26) 55:16;57:2,3,5,6; 58:18;69:11;140:17, 22;174:5;178:24; | became (4) 156:5,5;157:10; 158:4 become (6) 27:17;158:22;186:4, 5,18,19 begin (3) 43:18;72:24;73:14 beginning (2) 10:12;124:15 begins (5) 126:12,12;127:8; 130:24;147:4 begun (1) 4:13 behalf (4) 4:20;5:5;13:10; 46:11 bell (1) 176:18 below (4) | 103:12;108:23; 161:23;168:4 benchmark (1) 136:9 benzene (13) 118:25;119:9,23,24; 120:3,25;121:1,5; 129:21;130:5;147:14; 150:2,2 Bertel (1) 108:13 besides (2) 25:7;67:18 best (1) 108:17 better (6) 37:16;76:5;86:20; 110:12;198:10;199:5 bewitching (1) 200:9 beyond (13) 8:14;38:23;40:19; 43:12;67:7,17;89:8; 136:24;152:22,23; 177:3;191:15;196:9 biased (2) 68:9,14 big (4) 70:9,11;71:25;92:20 billion (22) 158:6,7,11;162:21; 164:23;167:25;168:11, 15;169:2,17,20;170:10, 16;172:2,17;178:12; 184:22,25;188:4; 189:19,20,21 bit (15) 7:9;9:20;23:22;25:2; 33:2;37:21;49:4;51:14; 57:23;73:20;86:8; 109:4;139:7;174:4; 196:16 black (7) 90:21;92:5,6;108:11; 203:11,13,14 blank (1) 38:11 blue (1) 159:12 Board (26) 4:4,18,20,23;6:7,23; 7:2,3;8:3,7;9:3,18;1; 20:17;24:6,9,9;28:5, 24;40:11;59:5;77:7; 85:17;141:17;142:7, 16,20 board- (1) 29:12 Board-certified (9) 24:6;27:9;28:17; 30:3,7,13;38:19;97:15; 139:9 boarded (4) | 23:7,23,24;24:5 bodies (3) 11:8;78:7,11 body (1) 195:8 bold (1) 183:16 booklet (1) 188:22 boot (1) 88:16 botched (1) 49:4 both (20) 12:8;27:10,12,14; 28:23;36:13;44:10; 47:22;51:8;59:9;71:1; 96:2;97:12;99:19; 127:4;155:9;166:12; 179:2;190:10,15 bottom (5) 21:16;132:24,25; 133:9;153:17 boundaries (1) 111:16 BRANN (9) 5:1,1;42:9;65:5,6; 87:24;92:4,8;141:13 Brann's (2) 65:8,13 break (11) 68:16;72:15;115:25; 116:11,18,25;120:18; 160:5;163:11,14;167:1 Breyse (9) 44:6;98:25;99:10; 100:1,2,4;101:19; 102:4;136:2 Breyse's (3) 99:19,20;100:11 brief (1) 76:10 bright (1) 167:18 bring (2) 9:11;16:7 brings (1) 172:23 broad (1) 54:11 broaden (1) 54:4 broader (2) 134:23;148:16 broadly (1) 139:18 broke (1) 118:17 bronchitis (4) 34:23;35:19,21,22 Bryse (1) 93:2 Bucksport (1) | 107:3 budadine (1) 119:25 building (4) 4:19,19;56:6;108:10 buildings (1) 155:14 built (10) 92:21;109:5;112:21; 113:9,11,20;125:1,1; 141:5;142:9 Bureau (1) 107:20 bureaucratic (1) 192:10 buried (1) 55:11 business (4) 17:14,15;22:17; 86:23 buttrass (1) 194:6 butts (1) 50:11 buy (1) 114:1 |

| | | | | |
|---|---|---|--|--|
| <p>32:10;37:8,21;38:4; 43:12,12,15;46:2,22; 47:13;51:17;56:8,21; 58:10;60:4,12;61:17, 18;63:24;64:1;65:16, 17,18;75:19,19;76:24; 78:18;79:16,24,25; 80:10;85:4;86:7,19; 90:14,20;91:6,23;92:7, 13,17;93:21,22;96:8; 100:25;107:6,7,22,24; 108:3,4,17;110:15; 112:11;114:17;116:18, 18;117:4,8;119:5,8; 120:12,14;121:17,23; 125:1;126:15,18; 131:20,22;133:5,20,22; 134:6,11,25;135:3,8; 136:6;144:9,22;145:4; 146:13;147:16,18; 148:8;149:11;150:8, 17;151:1;152:11; 155:1,20,23;161:2; 162:7,24;163:13; 174:14;175:11;177:6, 9,10,11,21;182:6; 183:9,15;187:6;189:9; 190:11,11;194:25; 195:15,19;199:8; 200:19</p> <p>cancer (17) 36:4;60:14;76:1; 83:8;98:2,6;118:24; 119:5,8;123:5;127:15, 21;129:11,21;130:11; 134:16;198:20</p> <p>capacity (1) 154:19</p> <p>Capitol (3) 24:25,25;154:4</p> <p>caption (1) 147:11</p> <p>car (11) 100:6,20,23;113:25; 114:1;133:24;134:5, 11,24;135:7;138:13</p> <p>CARB (2) 59:4,6</p> <p>C-A-R-B (1) 59:4</p> <p>carbon (13) 47:20,21;48:17; 91:20;123:16;145:10, 12;146:5;147:14; 157:5,23;164:14; 198:17</p> <p>carcinogenic (6) 60:17;131:11,12,17; 135:9,11</p> <p>Carcinogenicity (5) 130:19;133:13; 134:19;146:24;160:17</p> <p>cardiology (3)</p> | <p>30:12;31:24;32:2</p> <p>cardiovascular (8) 30:10;31:23;36:7; 123:7,8,10,11,13</p> <p>careful (1) 137:16</p> <p>cars (10) 54:7,8,10;122:9,13, 20,21;138:15;145:4; 195:9</p> <p>carve (1) 83:9</p> <p>CASAC (42) 48:20,20,21,25;51:3, 15;52:6,8,18,19;59:21; 60:4;70:7;76:25;77:7; 78:25;79:3;80:17; 81:22;82:12,14; 104:20;129:8,8,15,16; 185:13,14,16,18,21,25; 186:1,10,12,13,15; 187:1;188:2;196:2; 201:6,13</p> <p>CASAC's (2) 51:2;79:10</p> <p>CASC (1) 77:4</p> <p>case (66) 4:24;9:3;10:15; 11:20;12:14;18:5;20:6; 34:25;38:5;40:13,23; 43:22;44:10,19;45:15, 15;46:22;47:9,18,20, 24;48:13;50:3;54:17; 55:5,19;61:2;66:9,25; 67:2,24;69:15;72:10; 74:14,18;75:6,17; 76:16;77:15;80:15; 82:14;89:16;91:20; 93:13,17,20;94:1;99:4; 100:5;124:18;125:13; 129:23;134:5,24; 135:1;137:13,19; 141:11,15;154:15; 155:18,21;156:11; 161:7;191:18;194:14</p> <p>cases (9) 9:2,2;33:12;44:14; 79:19;92:22;106:19, 20;107:8</p> <p>catalyzed (2) 66:13;136:14</p> <p>catch (1) 66:20</p> <p>catching (1) 130:9</p> <p>categories (2) 28:6;33:19</p> <p>category (6) 34:17,18;51:1; 148:16;150:4,6</p> <p>caught (1) 55:10</p> | <p>causative (1) 120:16</p> <p>cause (3) 54:3;55:5;76:1</p> <p>caused (5) 40:9;118:24;119:6,8, 9</p> <p>causes (1) 198:20</p> <p>caveat (1) 102:2</p> <p>Cayman (1) 18:17</p> <p>cement (1) 152:17</p> <p>Center (1) 108:12</p> <p>Century (1) 58:9</p> <p>certain (10) 68:22;69:19;70:15; 95:24;96:12;134:11; 153:22;154:2;176:14; 181:16</p> <p>certainly (24) 7:18;17:17;18:21; 20:5;32:10;33:12;34:2; 38:4;41:25;42:10;43:3, 11,14,15;45:8;46:13; 64:14;66:9;70:23; 115:12;134:1;139:8; 153:2;163:23</p> <p>certainty (1) 68:6</p> <p>certificates (2) 28:6,7</p> <p>certification (3) 24:10;28:24;40:12</p> <p>certifications (2) 32:5;40:4</p> <p>certified (5) 29:5,13;30:9;41:11, 11</p> <p>cetera (7) 23:9;24:3;53:14; 82:10;88:25;89:1; 127:12</p> <p>Chair (2) 8:4;77:2</p> <p>chairman (1) 8:5</p> <p>chairs (1) 86:21</p> <p>chance (3) 13:12;114:25;118:20</p> <p>change (19) 18:4;19:15,17;20:3; 34:10;55:6;68:18;70:8; 75:15;76:6;104:18,21; 105:5,15,16;156:14,21; 165:2;191:19</p> <p>changed (11) 55:2;103:18;104:14,</p> | <p>24;105:14;129:13; 136:11;173:21;175:21; 181:20,21</p> <p>changes (9) 22:5;69:4;103:25; 138:6,8;173:19,19; 174:21,22</p> <p>changing (2) 20:1;36:22</p> <p>characteristics (1) 151:16</p> <p>characterization (2) 29:24;107:11</p> <p>characterize (4) 56:8,12,13;173:22</p> <p>characterized (5) 68:25;96:25;120:3; 150:21;179:2</p> <p>characterizes (1) 179:21</p> <p>characterizing (1) 63:1</p> <p>charge (1) 106:21</p> <p>chartarum (1) 108:12</p> <p>charts (2) 153:18;172:1</p> <p>Chase (73) 6:17;22:12,13,14,16, 18,18;23:5;26:16,23; 27:6;29:5,12;32:21; 38:7;40:3,16,22;41:16, 18;43:22;45:6;46:11, 20;49:18;57:22;58:2; 65:23;67:22;68:8,17; 73:16;78:20;86:8,16; 87:2;92:4;93:4,9; 94:20;95:7;99:8; 101:20;105:3,21; 107:23;108:17,19; 112:10,19;114:3,22; 116:21;118:6,6,20; 126:18;128:22;135:16; 144:6;167:16;175:12; 178:23;179:19;183:6; 188:17;189:3,5; 190:18,19;202:20; 203:4,23</p> <p>Chase's (6) 6:11,12;45:10;49:16; 51:8;194:12</p> <p>chats (1) 35:9</p> <p>check (1) 157:19</p> <p>chemicals (2) 60:13,17</p> <p>chest (1) 23:9</p> <p>child (2) 35:16,23</p> <p>Childcare (1)</p> | <p>108:12</p> <p>children (15) 33:20,21,25;34:6,21; 35:5,8;53:8,22,25; 54:3;83:4;161:3,8; 162:11</p> <p>child's (1) 35:12</p> <p>choose (3) 7:12;17:9;21:25</p> <p>chronic (4) 34:23;35:17;53:6; 83:5</p> <p>CI (1) 189:16</p> <p>cigarette (1) 50:11</p> <p>circle (1) 151:15</p> <p>circles (1) 104:19</p> <p>circulated (1) 14:13</p> <p>circumstance (1) 69:3</p> <p>citations (2) 98:23;196:8</p> <p>cite (2) 129:20;166:13</p> <p>cited (7) 83:4;99:25;100:17; 132:6,10;144:23;154:5</p> <p>citing (2) 132:21;154:14</p> <p>City (1) 107:17</p> <p>Civic (3) 5:20;6:5;176:11</p> <p>claim (2) 152:2;193:23</p> <p>claimed (1) 152:13</p> <p>clarification (4) 21:25;46:9;47:8; 105:22</p> <p>clarifies (1) 55:14</p> <p>clarify (9) 25:24;36:15;37:21; 100:25;101:17;105:13; 148:9;170:15;180:21</p> <p>clarity (1) 179:23</p> <p>classified (1) 131:10</p> <p>clauses (1) 143:9</p> <p>Clean (9) 53:18;65:2,3,10,24, 25;66:2;67:2;82:11</p> <p>cleaned (1) 66:15</p> <p>cleaner (6)</p> |
|---|---|---|--|--|

| | | | | |
|--|--|--|---|--|
| <p>66:6,7,7,11,11,19 clear (9) 8:9;12:3;24:4;30:6; 33:16;67:22;77:25; 173:1;190:3 clearing (1) 132:13 clearly (3) 81:21;177:14;200:15 client (7) 104:6;107:17;110:8, 9;111:6,14,18 clients (1) 74:4 clinic (3) 23:8;32:22;38:14 clinical (7) 38:9;72:2,7,11; 83:14,18;201:12 Clinically (2) 81:2,4 close (5) 83:16;97:18;116:1; 158:20;200:8 closely (1) 88:22 closer (3) 86:13,19,19 closest (3) 91:3,10;92:17 CME (2) 31:17,20 CME's (2) 31:2,18 CO (8) 156:11;157:12,13, 21;187:23;198:9,10; 202:3 Coalition (8) 5:10,14,17;13:10,13, 15;40:25;41:1 code (2) 19:14;22:3 cognizable (1) 78:18 Cole (12) 55:10;175:4,15,17; 176:13,19;180:23; 181:13;182:2,7; 184:15;196:11 Cole's (3) 178:24;180:23;184:4 collaborate (3) 173:11,13;175:5 collaborating (1) 175:15 colleague (1) 92:3 colleagues (1) 30:23 color (4) 159:6,10;167:4,18 colored (2)</p> | <p>161:9;166:24 colorful (2) 166:19;203:7 Columbia (1) 97:16 column (4) 132:25;133:4; 134:14;166:5 combination (1) 155:10 coming (5) 56:3;70:7;104:17; 122:9;191:9 comma (2) 109:9,20 comment (9) 18:22;21:18;143:21, 22,24;164:5;189:9; 190:11,12 comments (2) 164:20;183:3 commercial (1) 4:12 committee (12) 17:15;48:21;49:2,2, 3;70:7;78:25;80:17; 82:12;129:8;165:4,5 common (1) 75:18 community (2) 6:18;140:1 Community-wide (2) 161:22;168:3 companies (1) 44:24 company (4) 23:14,19;44:25; 85:22 comparable (3) 89:1;91:3;93:10 compare (1) 183:18 compared (1) 189:20 compares (1) 93:14 comparing (2) 51:3;178:25 comparison (1) 60:21 compelling (1) 136:5 complained (1) 62:14 complaints (1) 154:21 complete (4) 10:8;54:22;107:15; 190:16 completed (2) 12:25;25:11 completely (1) 36:24</p> | <p>complicated (2) 146:3;192:6 complication (2) 46:3,9 comply (2) 10:25;12:7 components (2) 36:8;122:17 compound (2) 83:21;120:17 compounds (2) 60:19;120:11 comprehensive (3) 144:8,17;145:3 conceivable (1) 81:18 conceivably (1) 142:17 concentration (7) 56:5;123:2;164:6,12; 179:8;182:15;183:13 concentrations (11) 146:1;153:22; 161:21,22;165:1; 168:3;176:22;178:24, 25;180:25;189:25 concept (6) 67:4;112:13;114:3; 135:10;139:10;195:25 concepts (1) 67:20 concern (4) 40:8;62:18;101:8; 162:9 concerned (2) 112:21;113:21 concerns (7) 40:13;53:24;109:22; 110:6;111:3;113:13,14 conclude (2) 70:13;71:5 concluded (3) 106:8;181:1;184:10 concludes (2) 176:20;182:13 conclusion (14) 40:21;62:2;68:5; 78:12;79:21;96:19; 97:5;105:21;108:24; 128:23;130:24;131:7; 177:19;184:3 conclusionary (4) 96:7,13,15,16 conclusions (17) 41:19;55:19;56:3; 58:3;61:2,6,7,17;62:1; 84:14;90:5;96:14; 100:19;103:18;104:14; 105:15;194:7 condition (3) 141:17,22;142:20 conditions (8) 33:5;35:1,10;36:13;</p> | <p>40:8;53:15,17;142:16 conduct (1) 47:18 conducted (3) 4:20;40:6;97:24 conducting (1) 155:7 confidentiality (1) 32:24 confirm (1) 24:19 confusing (1) 112:2 connection (5) 18:25;19:10,11;98:3; 101:17 Conrail (1) 44:23 consensus (1) 77:18 Conservation (4) 44:21,23;45:2,4 conservative (3) 68:25;69:2;174:2 conservatives (1) 127:14 consider (8) 18:10;42:1;45:20; 68:8;141:16,22;197:3, 6 considerably (1) 162:7 consideration (5) 18:7;29:17;82:12; 83:2;195:5 considered (10) 27:19;30:22;36:23, 24;59:21;60:4,17; 105:5;142:20;152:22 considering (2) 133:6;137:3 consistent (2) 9:5;169:17 constant (1) 10:20 constitute (7) 106:8,10;119:17; 123:21;124:8;184:12; 193:5 constraints (1) 17:18 construct (1) 4:7 Construction (1) 108:13 constructive (1) 53:6 consultant (6) 85:14;87:20;88:20, 21;89:1;90:3 consulted (4) 85:24,25;92:24; 107:19</p> | <p>Consulting (8) 14:10;23:11;41:20; 88:23;90:6;91:3;92:22, 23 contacted (4) 84:17;85:7;87:11; 88:3 contain (2) 14:15;122:17 contained (2) 144:11;149:20 contaminants (1) 60:15 contention (4) 177:24;194:4,5,6 context (3) 59:14;129:16;131:24 contingent (1) 94:6 continue (3) 30:19;51:7;142:24 continues (2) 12:4;147:15 continuing (5) 30:17,19;31:2,11,15 contract (1) 85:13 contrary (1) 65:17 contrast (1) 134:1 contribute (1) 57:4 contribution (1) 139:25 contributions (2) 56:14;69:11 control (5) 64:24;122:1,4,12; 125:4 controlled (1) 192:1 controls (4) 65:16;124:16;125:5, 17 controversy (1) 172:15 conversations (1) 175:6 conversely (1) 58:11 conversion (4) 170:5,8;171:13,14 conversions (2) 171:21,24 convert (2) 169:20,25 conveyed (1) 109:25 cooler (1) 9:20 COPD (2) 36:4;53:6</p> |
|--|--|--|---|--|

| | | | | |
|---|---|---|---|--|
| <p>copies (8) 73:2;115:2;167:1,2,3,8;203:14,18</p> <p>copy (40) 7:19;9:13;10:3;14:2,5,7,9;16:5;18:13,13,17;20:7,12;21:16,21,22;39:16;73:3,5;94:10,20,21;95:2,7;104:4,7;109:6;129:23;144:12;155:1;160:1,4;163:11;164:9,21;177:1,15,22;203:12,14</p> <p>CORDRY (59) 5:7,7;6:14,17;8:15,19;10:19;11:2,18;20:14,19,25;21:3,8,13;72:17;89:18;90:13;100:1,3;101:24;112:5;117:10,12,18;132:22;133:5,8,12,17,21,25;134:9;137:8;141:13;142:11,14;159:15,19,22,24;166:16;167:10;171:1,5,6,8,25;172:4;176:1;182:25;192:5,8,22,24;193:9;194:17;200:13,15</p> <p>Cordry's (1) 6:8</p> <p>cords (1) 129:24</p> <p>corner (1) 183:24</p> <p>Corporation (1) 4:4</p> <p>Corps (2) 24:23;154:3</p> <p>corrected (3) 73:3;179:22;193:1</p> <p>correcting (1) 182:14</p> <p>correction (3) 68:19,21;71:23</p> <p>corrections (1) 11:25</p> <p>correctly (2) 72:8;105:17</p> <p>Costco (52) 4:4;5:1,2,5,11,16;14:3;22:11;43:23,24;44:1;48:5,14;54:2;56:7,9;57:4,7;58:16;59:9;61:8;62:4,4,16;63:6;64:12;65:1,9,24;67:25;68:1;69:11;84:17;85:8,14;88:3,6;94:5;97:21;110:1;112:20;125:7,9,20;126:3;136:5;139:5;141:4;144:9,18;147:12;151:17</p> <p>Costco's (1)</p> | <p>124:17</p> <p>cough (2) 34:23;35:17</p> <p>Council (5) 4:19;17:14;49:3;126:4,5</p> <p>counsel (3) 96:6;134:24;172:16</p> <p>count (1) 183:18</p> <p>countries (1) 59:19</p> <p>country (5) 25:21;28:13;52:3,11;80:15</p> <p>County (5) 41:10;51:20;82:5;126:4,5</p> <p>couple (7) 16:13;66:17;109:7;118:7;136:15,17;200:21</p> <p>course (12) 9:8;31:11;43:9;45:2,4;46:4;94:8;114:5;143:4;192:7;195:8;201:22</p> <p>courses (2) 30:17;31:12</p> <p>Court (7) 77:5,12;79:4,5,7,20;98:1</p> <p>courts (1) 50:25</p> <p>covers (1) 50:19</p> <p>create (3) 62:15;107:9;108:1</p> <p>creating (1) 107:10</p> <p>credentials (1) 32:18</p> <p>credits (2) 31:2,20</p> <p>criteria (9) 48:12,15;49:25;56:5;57:18;145:8;152:21;156:15;192:16</p> <p>criticized (1) 74:3</p> <p>cross (1) 117:9</p> <p>cross- (6) 65:16;68:16;72:24;73:13;144:2;202:19</p> <p>cross-examination (8) 12:9;65:18;72:16;74:11;89:14;115:21;167:12;200:10</p> <p>cross-examine (5) 43:15;47:13;61:17;137:23;138:1</p> <p>crystal (1)</p> | <p>173:1</p> <p>cube (4) 158:2;164:17;197:13;199:11</p> <p>cubed (3) 172:6;180:13;187:21</p> <p>cubic (13) 57:4;103:6;169:3,21;170:10,18;172:18;176:23;182:16,18,20;183:13;184:11</p> <p>current (8) 8:1;37:23;38:24,24;144:11;158:4;184:24;197:14</p> <p>currently (2) 39:24;120:24</p> <p>curriculum (2) 38:8;42:5</p> <p>cut (3) 38:22;89:23;153:7</p> <p>cut- (1) 37:1</p> <p>cut-off (1) 37:8</p> <p>CV (5) 26:12;40:2,3,5;88:10</p> | <p>22:19;23:10;44:24;77:5;79:5,7</p> <p>deal (1) 67:19</p> <p>dealing (3) 21:5;24:1;74:4</p> <p>deals (1) 12:22</p> <p>dealt (1) 47:21</p> <p>dearth (1) 191:15</p> <p>death (1) 93:9</p> <p>debate (1) 82:17</p> <p>decades (3) 47:21;53:9;159:12</p> <p>December (10) 15:7;54:24;103:2;155:22;156:12;165:18,21,22;166:6,12</p> <p>decide (4) 7:13;76:23;126:1;142:21</p> <p>deciding (1) 164:18</p> <p>decision (4) 4:24;8:6,21;9:4</p> <p>decisions (1) 9:1</p> <p>decrease (1) 168:8</p> <p>defer (3) 23:2;27:4;29:20</p> <p>define (6) 80:13,22;82:14;140:1;151:15;165:11</p> <p>defined (4) 112:6;129:8,17;145:8</p> <p>definition (7) 82:25;111:14,19,23;112:3,9;129:9</p> <p>definitionally (1) 82:20</p> <p>definitions (1) 111:12</p> <p>definitively (1) 121:4</p> <p>degree (6) 25:5;43:10;59:3;60:10;68:6;189:10</p> <p>degreed (1) 43:11</p> <p>deliver (1) 63:18</p> <p>delivered (1) 64:12</p> <p>delivering (6) 54:9,10;64:24;65:4;75:21;137:11</p> <p>delivery (5)</p> | <p>64:9,22;65:24;137:15;138:19</p> <p>demonstrate (4) 140:16,18,19,20</p> <p>demonstrated (1) 43:6</p> <p>demonstrating (1) 29:12</p> <p>denial (1) 17:23</p> <p>deny (1) 8:13</p> <p>Department (2) 38:10;108:9</p> <p>dependent (3) 122:25;123:2;135:19</p> <p>depending (7) 17:12;31:18;52:8;134:6,25;135:17;195:19</p> <p>depends (5) 33:1;80:14;138:3;142:15;196:24</p> <p>Depression (3) 34:22,24;35:7</p> <p>derives (1) 53:18</p> <p>describe (5) 139:18;144:10;145:4;174:14;175:1</p> <p>described (2) 25:15;150:13</p> <p>describes (1) 159:11</p> <p>description (1) 50:18</p> <p>design (8) 64:2;66:5;75:16;122:3;125:6;136:10,22;139:24</p> <p>designed (5) 44:21,22;53:2,22;201:21</p> <p>despite (4) 103:19;104:14;124:15,16</p> <p>detail (4) 40:16,17;69:5;102:22</p> <p>detailed (1) 17:21</p> <p>detect (1) 81:19</p> <p>determination (2) 184:3;201:5</p> <p>determine (3) 15:6;70:24;125:1</p> <p>determined (1) 52:2</p> <p>determining (1) 172:14</p> <p>develop (3) 12:4;54:3;162:16</p> |
| D | | | | |
| <p>daily (3) 164:5,11;165:1</p> <p>damage (3) 81:6,7,8</p> <p>data (21) 10:13;14:15,17,21,25;15:5;16:2;20:4,20;132:21;133:23;144:8,10,18,20,21,25;145:2,3,4,25</p> <p>database (1) 61:1</p> <p>date (5) 109:14;132:16;146:15;156:1;165:24</p> <p>dated (5) 95:13;96:1;103:11,14;136:3</p> <p>dates (2) 166:4,4</p> <p>David (10) 44:7;85:9,11,23;87:21;88:8;111:6;128:12;144:21;175:14</p> <p>David's (1) 88:8</p> <p>day (5) 4:3;6:19;127:20;195:8,9</p> <p>days (6) 10:17,21;11:23;14:14;15:15;159:15</p> <p>DC (6)</p> | <p>decision (4) 4:24;8:6,21;9:4</p> <p>decisions (1) 9:1</p> <p>decrease (1) 168:8</p> <p>defer (3) 23:2;27:4;29:20</p> <p>define (6) 80:13,22;82:14;140:1;151:15;165:11</p> <p>defined (4) 112:6;129:8,17;145:8</p> <p>definition (7) 82:25;111:14,19,23;112:3,9;129:9</p> <p>definitionally (1) 82:20</p> <p>definitions (1) 111:12</p> <p>definitively (1) 121:4</p> <p>degree (6) 25:5;43:10;59:3;60:10;68:6;189:10</p> <p>degreed (1) 43:11</p> <p>deliver (1) 63:18</p> <p>delivered (1) 64:12</p> <p>delivering (6) 54:9,10;64:24;65:4;75:21;137:11</p> <p>delivery (5)</p> | <p>despite (4) 103:19;104:14;124:15,16</p> <p>detail (4) 40:16,17;69:5;102:22</p> <p>detailed (1) 17:21</p> <p>detect (1) 81:19</p> <p>determination (2) 184:3;201:5</p> <p>determine (3) 15:6;70:24;125:1</p> <p>determined (1) 52:2</p> <p>determining (1) 172:14</p> <p>develop (3) 12:4;54:3;162:16</p> | | |

| | | | | |
|---|---|---|---|---|
| <p>developing (3) 54:1;129:11;173:14</p> <p>development (1) 51:16</p> <p>developments (2) 38:25;39:22</p> <p>devices (5) 66:12,17;122:12; 136:16,19</p> <p>diabetes (1) 36:7</p> <p>diameter (1) 48:19</p> <p>diesel (77) 62:13,15,19;63:6,13, 16;64:6,8,9;65:2,3,10, 25,25;66:3,5,5,13;67:3, 10;75:15,21,22,23,24, 25;76:7;98:2,12;99:24; 100:17;101:8,11,12; 106:21;107:17;121:3, 4,5,6,7,8,9,12,13;130:6, 10,19;131:10;132:24; 133:1,9,12,15,18,18; 134:2,18;135:25; 136:10,15,16;137:5,6, 11,13,14,17;138:5,7,9, 14,14,19;139:3; 146:24;160:17</p> <p>diesels (1) 136:12</p> <p>difference (12) 29:17,19;37:9;58:12; 64:16;70:10,16;72:1; 93:25;125:10;132:4; 189:21</p> <p>different (19) 41:6;65:15;76:22; 77:16;79:18;93:11; 95:21;104:12;108:24; 143:9;155:1,5;179:5,5; 181:18;182:5;192:19; 198:6,7</p> <p>difficult (3) 11:23;29:20;78:15</p> <p>difficulty (1) 134:18</p> <p>dioxide (18) 48:17;55:12;123:24; 124:1,3;145:10,13; 148:10;149:11,13; 158:3;160:13;161:2; 164:22;167:17;189:25; 199:1,14</p> <p>dire (7) 26:23;39:21;40:19; 89:11,13;93:20;143:18</p> <p>DIRECT (4) 23:3;83:15;89:9,23</p> <p>directed (2) 89:15;135:11</p> <p>direction (2) 165:10;170:11</p> | <p>directly (2) 114:23;202:21</p> <p>director (2) 175:18;186:17</p> <p>disagree (3) 7:15;77:16;139:6</p> <p>disagreed (1) 79:19</p> <p>disagreement (1) 135:23</p> <p>disagreements (1) 52:21</p> <p>disappointed (1) 110:24</p> <p>disciplines (2) 52:3,12</p> <p>discovered (1) 161:1</p> <p>discrepancy (1) 196:11</p> <p>discuss (3) 173:5,6,10</p> <p>discussed (3) 48:13;80:17;185:2</p> <p>discussing (1) 109:24</p> <p>discussion (25) 20:16;27:2;45:9,25; 65:11;82:17;86:17; 95:5;104:5;110:4; 114:20;115:19;126:25; 129:25;144:14;149:8; 157:20;159:8;176:9; 178:21;179:25;195:12; 197:9;199:21;202:10</p> <p>discussions (2) 43:2;196:8</p> <p>disease (8) 30:10,11;31:23;36:7; 53:6;83:5;162:10,18</p> <p>diseases (2) 36:3;98:6</p> <p>disk (11) 14:2,7,13,16,17,19, 23;15:5;16:1,4,10</p> <p>disorders (2) 35:5;161:11</p> <p>dispersal (1) 114:7</p> <p>dispersion (9) 69:16,16;70:12; 71:12;151:6;152:15, 21;153:1,10</p> <p>disposition (4) 6:8,25;7:5;8:2</p> <p>dispute (4) 134:7;176:24;177:7; 193:14</p> <p>disputed (3) 134:5,10,24</p> <p>disputes (1) 59:5</p> <p>disputing (1)</p> | <p>100:9</p> <p>distant (2) 162:2;168:7</p> <p>distinction (3) 36:19;37:19;93:24</p> <p>District (3) 31:6;93:1;98:1</p> <p>districts (1) 92:24</p> <p>divide (3) 170:24;171:4,4</p> <p>divided (2) 55:13;181:8</p> <p>dividing (2) 70:9;172:7</p> <p>division (1) 175:18</p> <p>docket (1) 196:7</p> <p>doctor (3) 80:13;100:2,3</p> <p>doctors (1) 73:21</p> <p>doctor's (1) 49:15</p> <p>doctrinaire (1) 12:11</p> <p>document (15) 56:21,23,24;57:1; 60:3;84:13;115:18; 165:6;166:18;167:5; 169:18;177:1,2;178:6; 190:18</p> <p>documentation (1) 189:6</p> <p>documents (5) 48:1;62:24;115:4; 172:14;185:13</p> <p>domestic (1) 44:11</p> <p>done (24) 18:19,20;19:23; 35:11;38:17;43:4;51:3; 55:3;67:23;73:7,9; 80:16;87:7;88:9,22; 99:6;106:4;132:2,12; 140:5;143:13,16; 172:1;200:16</p> <p>door (1) 50:10</p> <p>dosage (4) 134:6,25;135:17,19</p> <p>dosages (1) 134:11</p> <p>Dose (11) 58:6,10,11;121:21, 23;122:25;139:11,12, 15,17;187:17</p> <p>DOT (1) 107:20</p> <p>double (2) 117:20;157:19</p> <p>double-sided (1)</p> | <p>131:4</p> <p>doubt (2) 156:9;162:14</p> <p>down (4) 116:1;120:18; 142:11;174:4</p> <p>downward (2) 104:15,24</p> <p>Dr (133) 5:13,15;6:11,12,17; 22:11,13;23:5;26:16, 23;27:4,6;29:3,5,12; 32:21;35:6;36:20;38:7; 39:7;40:1,3,16,22;41:4, 16,18;43:22;44:6,6; 45:5,9;46:4,8,11,20; 49:16,18;51:8;55:10; 57:22;58:2;65:23; 67:22;68:8,17;73:14, 16;78:20;79:4,14;86:8, 16;87:2;90:1;92:4; 93:4,9;94:20,25;95:7, 17;97:8;98:11,23,25; 99:8,9,10,21,25,25; 100:4,16;101:14,19,20; 102:4,10;105:3,21; 107:23;108:17,19; 110:11;112:10,12,19; 114:3,8,22;115:20; 116:21;117:16,21; 118:4,6,6,20;126:18; 128:21;130:3;135:11, 16;142:24;144:6; 153:14;167:16;175:4, 12,15,17;176:13,19; 178:23,24;179:19; 180:23,23;181:13; 182:2,7;183:6;184:4; 188:17;189:3,5; 190:18,18;194:12; 202:20;203:4,23</p> <p>draft (1) 54:21</p> <p>draw (1) 45:14</p> <p>drawing (1) 77:7</p> <p>drawn (2) 147:16;176:20</p> <p>drilled (1) 139:11</p> <p>driver (1) 75:14</p> <p>drop (1) 89:11</p> <p>dropped (1) 157:10</p> <p>DUCKETT (2) 5:19,19</p> <p>due (1) 29:18</p> <p>duplicate (3) 14:9,11;115:6</p> | <p>during (2) 78:25;92:12</p> <p>duties (2) 24:17,19</p> <p>duty (4) 24:1,2,13,18</p> <hr/> <p style="text-align: center;">E</p> <hr/> <p>earlier (18) 13:12;54:25;68:22, 23;80:25;82:11; 129:18;135:16;136:8, 22;137:6;150:11; 152:5;157:16;164:25; 185:2,25;196:15</p> <p>early (3) 99:17;158:21;175:14</p> <p>easier (1) 120:20</p> <p>ed (1) 35:9</p> <p>edited (1) 95:6</p> <p>Editors (1) 108:14</p> <p>education (5) 30:17,20;31:2,11,15</p> <p>educational (1) 26:11</p> <p>effect (14) 6:12;7:8;45:21; 48:10;62:3;71:13;72:2, 8,11;81:11;134:23; 135:15;166:9;177:10</p> <p>effective (4) 107:17;134:18; 156:5;158:22</p> <p>effects (22) 45:18;67:25;69:10; 80:12,12;90:22;106:8; 130:5;134:6,11;135:1, 8,9,11,19;137:13; 142:17;153:9;159:11; 162:25;163:6;184:25</p> <p>eight (4) 42:7;91:17,17;195:7</p> <p>either (10) 18:14;20:11;34:9; 65:18;85:24;135:5; 146:15;154:5;169:4; 176:4</p> <p>elaborate (5) 23:22;24:14;36:10; 38:4;51:17</p> <p>elderly (2) 53:5;83:4</p> <p>Eleanor (1) 5:19</p> <p>electronic (3) 10:2;73:3;203:18</p> <p>elements (2) 131:16;179:9</p> |
|---|---|---|---|---|

| | | | | |
|---|---|---|--|--|
| <p>elicits (1) 78:17</p> <p>else (7) 5:23;23:22;87:7; 93:7;113:12;196:7; 203:16</p> <p>elsewhere (1) 170:3</p> <p>e-mail (5) 6:10,14;16:25;73:1, 12</p> <p>e-mailed (4) 13:3,7;14:14;21:20</p> <p>e-mails (1) 21:19</p> <p>emergency (3) 36:14;161:24;168:5</p> <p>emission (3) 124:16;125:5,17</p> <p>emissions (40) 54:2,5,6;56:9,17; 57:1;58:2,17;63:10,13; 64:8;67:10;92:19;98:4, 5,5,12,15;99:24;100:6, 20,23;101:12,13; 119:14;121:2,5,9,10, 11,11;122:5,11,16,17; 133:24;135:18,18; 138:13;179:9</p> <p>emitting (1) 75:23</p> <p>emphysema (3) 36:4;53:5;83:5</p> <p>employed (3) 70:7;85:24,25</p> <p>employee (1) 154:21</p> <p>employees (4) 112:20;113:7,11; 190:21</p> <p>employer (1) 24:18</p> <p>employment (1) 25:14</p> <p>empowered (1) 8:1</p> <p>end (4) 33:2;34:14;134:21; 196:16</p> <p>endeavor (1) 10:25</p> <p>ended (3) 77:3,4,11</p> <p>endorse (1) 13:16</p> <p>ends (1) 126:13</p> <p>enforced (1) 59:19</p> <p>engagements (1) 92:23</p> <p>engine (15) 67:10;75:15;130:19,</p> | <p>20,22;131:11,12;133:1, 3,12;137:6;138:20; 146:24,24;160:18</p> <p>engineering (1) 85:23</p> <p>Engineers (2) 24:23;154:3</p> <p>engines (15) 66:5;130:6;132:2,13, 24;133:15,18,19,24; 134:3;136:10,16,23; 137:8;138:23</p> <p>England (2) 39:15,18</p> <p>enough (14) 10:24;53:3;58:10,11; 83:16;99:5;121:23; 123:7,9,13;158:20; 162:16;185:2,7</p> <p>enter (1) 17:1</p> <p>entire (2) 126:11;158:24</p> <p>entirely (1) 96:3</p> <p>entirety (3) 102:14,15;156:7</p> <p>entitled (3) 14:9;65:19;150:23</p> <p>enumerated (1) 119:12</p> <p>environment (1) 182:22</p> <p>Environmental (22) 14:9;16:2;23:25; 24:2,11;26:6,17,20,22; 27:10,18;28:12;30:21, 23;38:25;39:17,41;19; 42:12;43:7;85:23;86:1; 139:10</p> <p>environmets (1) 183:15</p> <p>EPA (78) 12:22;48:2,13,21; 50:1,2;51:15;52:9,10, 16;53:16;58:21;59:6, 21;60:6;69:15;77:2; 79:2;80:18;81:22; 103:3,19;104:14,18; 106:1;107:20;108:22; 126:4,5;145:8;146:3,4, 9;156:2,19;158:8; 159:12;160:12,21,25; 162:24;163:4;166:9; 167:24;168:10,13; 169:6;175:17;178:11; 181:2;183:5;184:22; 185:23;186:1,1,2,6,9, 17,23,25;188:4;190:1, 5,5;191:8,15,25; 196:16;197:3,18,21,23; 198:13;201:2,4,9; 202:12</p> | <p>EPA's (5) 159:3;165:17; 182:17;184:24;189:20</p> <p>epidemiology (1) 52:5</p> <p>epi-studies (1) 134:17</p> <p>EPM (1) 200:6</p> <p>equate (1) 72:2</p> <p>equipment (1) 67:10</p> <p>equipped (1) 66:12</p> <p>equivalent (1) 27:17</p> <p>Erich (2) 5:1;87:24</p> <p>error (4) 55:9;182:11,15; 191:23</p> <p>especially (1) 10:14</p> <p>essence (4) 82:24;97:24;100:16; 119:2</p> <p>essential (1) 80:9</p> <p>essentially (3) 90:3;182:23;192:9</p> <p>establish (5) 29:7;32:17;142:9; 170:4;196:18</p> <p>established (3) 89:4;162:24;177:2</p> <p>establishes (1) 185:14</p> <p>estimate (5) 25:22;33:6;46:22; 199:8,10</p> <p>estimates (3) 55:15;56:4;163:4</p> <p>estimations (1) 127:15</p> <p>et (7) 23:9;24:3;53:14; 82:10;88:25;89:1; 127:11</p> <p>ethyl (1) 150:1</p> <p>evaluate (3) 35:16;37:8;152:21</p> <p>evaluated (1) 134:20</p> <p>evaluation (2) 34:18;78:22</p> <p>even (6) 46:14;67:8;105:17; 106:3;115:25;162:15</p> <p>event (6) 8:24;9:7;20:6;21:16; 65:13;96:10</p> | <p>eventually (3) 24:17;171:9;186:4</p> <p>everybody (6) 10:7;12:12;43:25; 50:19;73:2;138:18</p> <p>everybody's (2) 44:2,4</p> <p>everyone (2) 88:24;91:2</p> <p>everywhere (3) 152:17;158:17,18</p> <p>evidence (12) 4:22;18:4;19:17; 20:10;40:6;43:12; 65:17;134:19;137:4, 18;194:8,19</p> <p>Evidently (1) 149:24</p> <p>evolved (1) 70:25</p> <p>exact (3) 69:1;96:10;171:11</p> <p>exactly (9) 24:14;28:19;56:16; 89:22;96:20;111:11; 112:14;128:2;135:22</p> <p>exam (1) 23:9</p> <p>EXAMINATION (7) 23:3;43:18;68:17; 72:25;73:14;144:3; 202:20</p> <p>examine (2) 12:14;65:17</p> <p>Examiner (3) 4:22;9:1;176:12</p> <p>Examiner's (1) 13:18</p> <p>example (14) 34:11,14;44:20;57:2; 76:24;77:15,21;82:3; 92:17;98:23;107:16; 122:19;169:24;180:3</p> <p>examples (3) 47:16;53:15;83:3</p> <p>exams (1) 33:15</p> <p>exceed (5) 50:1;181:1;182:16; 187:21;191:25</p> <p>exceedance (9) 69:18;70:20;72:1,7; 83:13,17;161:16; 164:19;184:21</p> <p>exceedances (5) 70:2;71:6,10,12,13</p> <p>exceeded (7) 48:14;61:22;77:22; 157:24;158:2;191:7,9</p> <p>except (1) 71:23</p> <p>exception (11) 4:6;17:23;19:16;</p> | <p>48:7;56:18;97:20; 124:18;141:18;142:21; 146:5;150:13</p> <p>exchanges (1) 6:5</p> <p>exclusively (1) 40:15</p> <p>excuse (6) 35:3;62:4;97:5; 126:3;130:9;136:18</p> <p>exercise (1) 83:22</p> <p>exhaust (28) 35:3;40:9;66:14; 76:7;106:21;107:17; 119:13;121:6;123:18, 20,25;124:4,7;130:20, 22;131:11,12,16;133:1, 3,12;134:5,11,16,19; 135:8;136:11;146:25</p> <p>exhausts (2) 134:25;160:18</p> <p>Exhibit (44) 6:5,8,10,13;9:17,21, 23;11:19;13:8,20;16:1; 26:15;38:8;41:8;42:5; 94:16;96:7;97:8; 102:13;103:12,13,14; 124:12;146:25,25; 147:2;160:7,11,12; 165:7,12,19;166:19; 167:16;168:23;169:14; 170:16;179:24;183:22, 22;184:2,4,4;185:20</p> <p>exhibitize (1) 15:11</p> <p>exhibits (5) 11:21,25;203:3,10, 15</p> <p>existing (7) 97:19;124:17;125:5, 18,18,19;162:18</p> <p>expand (1) 99:2</p> <p>expect (9) 83:20;110:23; 115:23;139:13,15; 184:25;185:3,7,9</p> <p>expectation (1) 168:6</p> <p>experience (12) 37:19;40:7;45:14; 67:23;90:3,6,7,25; 91:4;94:3;97:11;162:7</p> <p>experimental (1) 133:14</p> <p>expert (50) 25:16,23,25;26:16, 17;40:11,22;41:5,10, 11,12,13,14,25;42:2, 11,13,17,23,25;43:6,8, 11,14,16,17;67:9;78:9; 82:15;89:5,7,14;</p> |
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| | | | | |
|--|--|--|--|---|
| <p>107:25;112:8;125:12; 131:21;136:16;137:4, 21;138:8,9;139:9; 143:18;152:1,2;153:9; 174:9;177:2;190:15; 196:21 expertise (15) 26:2;40:20;43:5; 44:1;67:9;88:3;125:13; 138:22;152:13,14,20, 22;153:11;174:6;188:1 experts (9) 42:8,10;43:9;52:2, 10,12;59:6;135:23; 198:7 explain (7) 75:19;93:12;96:22; 126:18;127:17;128:16; 181:12 explained (1) 185:25 exposed (3) 127:20;162:16;200:7 exposure (11) 35:2;75:25;106:23; 121:18;126:13;129:12; 139:14;161:2,20; 188:3;198:19 exposures (6) 162:2,3,7,9;163:5; 168:2 express (1) 152:5 expressed (2) 109:22;183:19 expression (1) 187:8 extensively (2) 11:7;44:9 extent (10) 12:5;32:14;46:16; 78:6,10;79:24;90:6,25; 107:10;137:7 extra (2) 104:4;159:5 extracts (2) 133:2,13 extrapolated (1) 145:25</p> | <p>61:2;171:13 factors (2) 60:14,14 facts (2) 93:17;125:13 factual (2) 195:11,13 faculty (1) 25:12 fail (1) 74:6 fair (10) 11:11;12:12;37:14; 46:10,14;107:10; 116:21;120:21;160:6; 200:12 fairly (4) 12:14;92:25;132:18, 19 fairness (7) 12:8;139:1;143:24; 153:6,8,11;177:5 fall (6) 33:18;34:17;45:21; 101:7;150:4,6 falling (2) 175:23;176:1 familiar (14) 4:3;28:7,10;29:23; 35:8;43:25;59:11;60:6; 65:25;67:4;68:23;69:4, 20;155:11 families (1) 34:15 Fannie (3) 24:24;108:7;154:4 far (5) 59:1;62:21;87:7; 195:6;200:7 FBI (4) 24:24;34:10,14; 154:4 February (2) 156:4;160:12 Federal (17) 24:22;48:1;76:16; 105:11;107:19;155:19, 21;156:1,8,18;158:3, 25;159:7;186:3,11,18, 190:20 fee (1) 94:5 feedback (2) 190:24;195:3 feel (5) 24:17;35:25;37:16; 163:5;195:3 feeling (1) 102:17 fellows (1) 38:15 felt (3) 75:5;99:3;139:18</p> | <p>feral (2) 30:11;31:24 few (6) 44:25;48:2;95:23; 134:17;142:25;200:19 field (10) 26:2,17;28:17,18; 35:9;36:22;41:12,13, 14;164:5 fields (5) 24:10;26:3;30:14; 43:6,17 fighting (1) 165:5 figure (8) 80:4;100:10;151:11, 12,19;171:12;177:11; 199:13 file (7) 10:5;17:4;20:20,22, 23;32:4;129:20 filed (25) 6:25;9:2;15:4;17:13, 20;19:6,24,25;20:24, 25;21:5,11;46:11; 62:25;73:4;76:10;98:1; 99:7,8,12,17,22; 102:23;176:12;194:5 files (2) 107:16;118:8 filing (5) 13:9,13;15:17; 101:19;103:18 filings (5) 6:4,8,14;43:2;99:9 filling (3) 4:8;41:21,24 filmed (1) 95:3 filters (5) 66:13,14,20;136:15, 23 final (5) 8:6,21;9:1;68:8; 166:13 find (12) 44:16;49:15;106:13; 149:9;150:17;156:19, 22;161:15;177:18; 185:11,18;187:6 finder (1) 43:14 finding (3) 7:4;55:22;149:3 fine (12) 27:3;30:1;38:6; 76:13;78:14;91:13; 93:21;94:9;118:14,16; 119:5;132:20 finely (1) 112:11 finish (3) 46:24;163:21;175:12</p> | <p>finishes (1) 133:18 firm (2) 79:17;175:19 first (34) 10:10;25:9;26:25; 27:3;33:20;62:16;71:4; 86:2;87:18;99:17; 101:4;109:8,11,13,19, 20;116:12,15;124:13, 13;125:16;126:14; 130:2;132:25;133:10; 144:19;156:12;164:14; 167:24;174:1,1; 194:12,13;199:22 fit (3) 24:13;34:25;200:13 fitness (1) 24:1 fits (1) 20:5 five (20) 18:1;26:8;36:22; 42:7;52:14;54:21; 80:19,19,19;97:10; 145:12;156:15,17,20, 22;157:4;167:2;186:2; 189:18;200:14 five-year (1) 78:24 flashy (3) 159:10;160:11,11 flipside (4) 159:10;161:9; 165:14;167:23 floor (1) 4:18 Florence (1) 108:12 flow (1) 114:7 Flynn (3) 41:14;112:1;117:11 focus (3) 73:11;119:2;193:8 focused (2) 192:25;193:7 focusing (1) 76:4 folder (5) 92:4,5,6;94:24;102:8 folks (2) 64:8;136:10 follow (2) 77:6;143:22 followed (1) 54:23 following (7) 25:12;30:8;31:20; 33:19;34:22;36:3; 83:13 follows (1) 41:17</p> | <p>force (2) 48:24;59:18 forced (1) 126:3 forget (4) 66:16;160:23; 183:23;203:18 forgot (1) 81:17 form (5) 45:14;47:17;48:4; 146:23;172:25 formal (4) 6:23;7:22;20:16; 102:9 Formaldehyde (2) 121:20,23 formally (3) 8:24;17:1,1 forming (2) 44:19;59:22 formula (4) 171:20,21;172:11,15 formulates (1) 186:15 formulating (1) 52:13 Fort (1) 108:13 forth (6) 11:24;12:1;41:19; 74:9;137:18;192:13 forward (3) 66:6;73:4;139:23 fossil (1) 135:25 found (8) 23:19;95:24;108:1; 119:13;150:20;155:14; 172:5;185:20 founder (1) 23:18 four (6) 7:3;23:9;42:7; 119:11;146:6;167:2 fourth (3) 99:18;164:5,11 fourth-hand (1) 176:5 fractions (1) 140:7 frame (2) 33:2;78:16 frames (1) 100:9 free (1) 59:2 Freeman (1) 7:20 frequently (1) 36:23 Friday (8) 4:17;6:21;10:3;16:8,</p> |
| F | | | | |
| <p>fact (29) 7:4;32:21;43:14; 70:8;76:6;77:17,18,19; 78:1,11;79:19,21; 83:17,19;87:11;93:19, 23;100:17;101:19; 103:19;104:14;125:7; 132:1;138:25;140:17; 141:17;168:1;181:25; 183:16 factor (2)</p> | | | | |

| | | | | |
|--|--|---|--|--|
| <p>19;202:24,25;203:25 front (12) 50:10;93:2,2;104:3; 114:14;128:2;129:15; 132:25;154:10;159:10; 170:16;203:4 fuel (17) 54:10;63:6,18;64:6, 7,12;66:6,19;75:21,22, 25;98:2;136:12; 137:12,13,14;138:20 fuels (4) 132:2;133:14; 135:25;136:23 full (6) 22:17;24:16,19; 144:7,19;162:22 full-time (2) 25:12;38:19 fumes (6) 40:9;62:13,14;75:23, 25;134:6 functioning (1) 67:10 fundamentally (1) 90:2 furnished (1) 20:7 further (10) 19:2,5,11,25;37:22; 39:23;58:14;68:12; 143:24;194:5 Furthermore (2) 40:10,13 future (1) 141:21</p> | <p>gave (7) 82:13;89:16;130:16; 144:12;153:22;169:12; 198:5 general (31) 4:12;27:11,14,17,21, 24;28:4,6,24;29:8,9,15, 24;30:3,15;33:3;34:18; 40:4;41:22;45:18;49:5, 6,20;53:3;97:7;112:2; 118:23;153:14;181:15, 22;202:12 generally (5) 117:20;150:14; 162:3;168:2;201:2 generate (3) 92:19;96:2;133:14 generated (1) 54:7 gentleman (2) 91:15;189:5 geographically (1) 158:16 George (4) 25:13;31:4;38:10; 39:24 Georgetown (1) 25:11 geriatric (2) 30:9;31:22 germane (2) 175:11;176:8 gets (4) 80:18;146:2;180:11; 192:5 Gifts (1) 107:18 given (16) 15:15;20:6;22:6; 31:16;44:3,6;69:23,25; 75:20;88:16,18;89:8,9; 104:11;115:2;191:16 gives (1) 55:15 giving (3) 14:13;68:25;183:20 glad (1) 197:1 goal (1) 12:15 Goecke (82) 5:4,4,6;6:10;7:9; 9:11,14,16,25;10:2,5; 14:6,8,11,22;22:11,14; 23:1,2,4;26:1,3,7,10, 14,21;43:20,21;45:12, 13;46:17,19;47:2,14; 49:7,11,14,17,24;51:7, 11,12;54:15;55:25; 56:1,13,17;57:11,15, 18;58:1;61:20;62:8,10; 63:4,5,19,21,25;64:5, 17;65:22;67:14,21;</p> | <p>68:12,14;70:19;71:8, 10;73:1;81:25;82:2; 87:24;89:3;120:17; 126:6;131:18;169:8; 176:25;183:6,8;202:22 Goecke's (1) 7:15 goes (14) 38:23;40:18;41:15; 46:16;66:14;67:15; 89:13;125:12;133:17; 136:22,23;139:23; 142:12;178:24 Good (23) 5:2,4,11,13;12:1; 23:5;27:6,8;31:17; 32:16;34:11,14;53:15; 106:1;115:25;130:16; 151:22;161:12;168:24; 169:25;190:11;194:9; 202:16 govern (1) 155:17 governing (1) 154:2 Government (2) 23:11;44:25 governs (1) 71:3 graduated (2) 143:3;174:7 grand (3) 31:3,3,10 grant (1) 8:2 granted (2) 89:23;180:25 graph (1) 159:6 graphs (1) 153:15 great (1) 13:1 GROSSMAN (555) 4:2,21;5:3,6,12,13, 15,18,21,23;6:1;7:7,15, 17,21,24;8:8,10,18,23; 9:7,12,15,17;10:1,4,6, 11,23;11:3,6,11,16; 12:5,16,17,20;13:1,3,6, 8,14,17,22,24,25;14:7, 24;15:11,20,23;16:1,3, 6,9,13,15,20,23;17:6, 10,25;18:9,12,16,24; 19:10,19,22;20:13,18, 22;21:2,7,10,15,24; 22:3,9,13,16,20,23; 23:1;25:24;26:2,16,19, 22,25;27:12;29:1,6,7, 14,18,21;30:25;32:4,6, 10,14;33:22,24;34:24; 35:4,22;36:18,21;37:1, 6,14,17,25;38:3,7,22;</p> | <p>39:3,7,12,13,20;40:2, 18,24;41:1;42:1,4,16, 20,23;43:1,20;45:5,11; 46:2,4,8,18;47:1,3,6, 10,12;49:7,13,15,23; 50:4,12,15;51:6;54:4; 55:1,23;56:11,15,20, 22;57:9,13,16,20,22; 61:12,15;62:6,20; 63:15,20,23;64:9,19, 25;65:7,12;67:12,16; 68:13,15;69:7,14,22; 70:11,19,23;71:9,11, 18;72:3,6,10,14,19,21, 24;73:10,13,23;74:6; 76:12,20;77:19,23; 78:8,15;79:12,16,22; 80:3,6,21;82:18,22,25; 84:6,8,20,23;85:2,4; 86:7,12,18,23;87:15; 89:3,6,13,18,25;90:10, 12;91:5,11,14,25;92:3, 12;93:4,7,11,21;94:12, 15,18,21,25;95:2,6,17; 96:9,16,19,24;98:9,14; 99:14,21;100:2,4,12, 15,25;101:2,4,10,14, 15,16,23,25;102:10; 103:13,23,24;104:4,6; 105:1,8,12,20,24; 106:5,15,17,25;107:4, 13,21;108:4,6,8,16; 109:14,16;110:10,13, 15,18,20,22,25;111:17, 20,22;112:4,6,16,17; 113:2,10,14,16;114:13, 16;115:4,8,12,16,20, 24;116:5,8,11,14,19, 21,23;117:5,6,7,15,25; 118:3,9,12,15,17; 120:1,6,8,20;121:7,9, 13;122:6,10;123:9,12; 124:3,22;125:10,14,25; 126:7,10,15,21,24; 127:2,5,7,11,24; 128:10,17;129:2; 130:3;131:3,5,20; 132:7,10;133:5,11,16, 20,22;134:4,10,13,22; 135:6,15;136:7,18,20, 25;137:2,10;138:3,21; 139:8,13,15;140:3,9, 18,23;141:7,10,15,25; 142:2,6,13,15;143:8, 11,14,17,23;144:2; 146:18,22;148:8,13,16, 19,24;149:2,18;150:17, 20,25;151:3,6,8,18,24; 152:3,7,10,12,19,24; 153:6;156:24;159:14, 16,21,23;160:3,6,10, 14,16,20,23;163:10,13, 16,19;165:2,6,12,17,</p> | <p>22,24;166:4,11,17,21, 23,25;167:8,11,21; 169:9,14;170:2,5,7,20; 171:3,7,10,16,19; 172:3,10,13,20,25; 173:2;175:9,20;176:2, 6;177:5,21;178:1,4; 179:23;182:4,12; 183:2,8,21,24;184:1,7; 185:6;186:20;188:17, 20,25;189:4,8,11,15, 17,22;190:9,13,22; 191:3,11,21;192:7,14, 23;193:7,12,22;194:1, 3,16,22;195:13,18; 197:20,25;198:2,4; 199:7,12,16;200:3,8, 12,17,23,25;202:16,18, 24;203:1,3,7,9,13,23, 25 ground (1) 24:2 grounds (1) 41:6 Group (5) 51:4;52:2;131:10,11, 13 groups (4) 76:17;77:16;79:18; 162:10 GSA (3) 24:25;108:13;154:5 guarantee (1) 167:4 guess (27) 8:10;16:23;17:13; 39:17;55:15;66:4;69:7; 79:4,24;87:3;100:15; 101:7;102:1;105:12; 113:7;114:1;117:14; 123:22;132:14;134:23; 150:21;165:5;166:10; 188:25;190:14;191:21; 192:2 guessing (1) 55:10 guide (3) 160:13,21;167:17 guidelines (5) 59:12,14,17,19,22 gun (1) 166:9 guy (1) 44:22 gym (1) 108:13</p> |
| G | | | | |
| <p>Gang (2) 41:9;111:25 Gas (61) 5:11,16;48:5,14; 49:9,19;50:5,21;54:2,5, 7;56:7,9,10;57:4; 58:16;61:8;62:4,4; 63:7,11,16;64:7,24; 65:4,9;67:25;68:1; 69:12,17;71:20;75:20; 81:19;84:18;88:25; 91:1;93:10,15;111:9; 112:21;113:6,8,10,11, 20;121:24;122:5,7; 124:24;125:18;136:5; 139:22;141:5;142:7, 11;144:9,18;146:11; 151:17;160:18;189:24 gasoline (16) 54:9;67:10;101:9,12; 130:19,22;131:12,16; 133:2;134:16,19; 135:25;137:8;139:5; 142:8;146:24</p> | <p>half (7) 31:25;32:1;92:21,23; 106:19;124:13,14 hand (10)</p> | | | |

| | | | | |
|--|---|--|--|--|
| 14:4;22:20;41:16; 43:25;92:7;93:20; 135:5;160:7,23;181:23 handed (2) 115:4;177:14 handing (1) 14:4 hands (1) 6:3 happen (3) 111:2;143:6;161:4 happened (5) 7:10;18:7;19:13; 138:5;169:11 happily (1) 22:9 happy (4) 37:4;162:13;163:17; 190:8 hard (2) 39:16;87:4 hardly (1) 44:1 harm (1) 81:20 harmful (2) 58:10;80:10 HARRIS (35) 5:2,2;10:11;11:14; 14:5;16:3,7;18:13,15, 23;22:24,25;23:2;73:1, 8,11;74:2;87:24;96:22, 25;100:25;101:3,5,15, 16,17;104:7;111:4,25; 117:6,8,23;135:2,4; 203:22 hazard (6) 107:10;108:1; 182:21;183:14;184:5, 12 hazardous (1) 101:12 hazards (1) 135:25 head (7) 21:11;102:20,21; 141:14;150:14,21; 175:18 Headquarters (1) 108:10 health (111) 17:23;23:15,17; 32:25;33:10;41:22; 45:18,21;46:6,7,12; 48:5;49:20;50:6,17,22; 52:1,25;58:8,16,22; 59:11;61:10,14;62:3, 15;67:18,25;69:10; 70:3,17;71:14,14,20; 72:2,7,11;81:11;83:14, 18,20,20;84:21,21,25; 86:1;90:22;97:7,16; 101:12;106:8,11; | 107:10;108:2;112:22; 119:17,22;120:4,12,13, 14,16,23,25;121:18; 122:23;123:21;124:9, 11;125:15;131:21; 134:6,11,23;135:1,8, 15,18;136:13;137:1,4, 5;138:4,10,12,24; 139:4,12,19,22,25; 140:19,21;153:9; 159:11;161:19;162:25; 163:6;182:21;183:14; 184:5,12,25;191:14,19; 193:6,10,12,21;194:18; 201:21 health-based (6) 201:18,23;202:3,5,7, 14 health-related (1) 17:22 hear (20) 7:11;27:6;35:20; 51:8;71:1;72:5;86:3,6, 8,20;91:24;121:22; 138:15,22;168:12; 175:10;185:4;190:15; 194:9;200:14 heard (9) 5:24;55:1;87:16,17; 98:7;192:19;193:14, 15;195:9 hearing (32) 4:3,13,18,20,21;9:1; 10:8,12,24;12:12,21; 13:18;14:1;15:14,15; 17:2;20:17;22:9;41:8; 44:21,22;45:2,2;57:24; 86:14;87:4,8;96:5; 155:2;176:12;191:20; 204:1 heart (1) 123:14 heated (1) 196:8 heavily (1) 97:8 Heights (4) 5:7,9;6:5;176:11 Heights's (1) 6:7 held (1) 151:20 help (4) 35:12;93:13;125:21; 135:22 helped (4) 45:14;47:17,17;90:4 helpful (4) 44:19;46:9;61:5; 175:14 here's (2) 95:7;188:21 high (9) | 58:10;80:9;121:21, 23;123:7,9,13;162:16; 193:4 high-efficiency (2) 66:13;136:14 high-efficient (1) 66:12 higher (3) 162:8;171:11;188:4 highest (2) 164:5,11 highly (2) 43:11;108:22 Hippocratic (4) 84:2;143:4,7,19 hire (1) 43:23 hired (5) 85:14;88:6,20,21; 94:5 history (3) 26:11;88:12;162:15 Hold (5) 45:5;90:12;137:2; 145:15;183:8 holding (3) 150:25;151:1;183:21 hone (1) 93:16 Honor (3) 72:18;74:2;200:15 honors (2) 25:6;174:8 hope (5) 12:18;13:15;16:20; 174:20;195:17 Hopefully (1) 187:6 hospital (2) 161:24;168:5 hour (9) 92:13;115:23; 117:16;161:19;180:4; 182:21;200:9,11,18 hours (6) 103:21;117:14,17; 127:20;145:4;195:8 huge (2) 64:16;132:3 human (3) 61:9;101:12;137:1 humans (4) 60:18;131:11,12; 198:17 hundred (1) 111:12 hundreds (1) 28:22 hydrocarbons (1) 119:20 hygiene (1) 52:4 hypothetical (2) | 177:10;184:20 hypothetically (1) 102:2 I IARC (2) 146:23;160:17 ICU's (1) 36:14 idea (7) 49:5,6;69:1;106:1; 166:14;169:1;174:18 identical (3) 44:17;88:13;91:7 identification (4) 9:24;13:21;147:3; 165:20 identified (10) 41:6,9,17,25;42:8,9, 11;60:13;146:2;154:1 identify (6) 4:24;24:22;42:2; 45:16;163:25;189:1 identifying (1) 45:16 ill (1) 69:10 ill-founded (1) 43:5 illogical (1) 73:20 immediate (1) 182:22 immediately (1) 37:13 imminent (3) 105:7,8,18 immune (1) 162:15 immunization (1) 33:4 immunizations (1) 34:6 immunology (2) 30:9;31:22 impact (17) 29:2;46:7;50:6;51:2; 62:15;83:14,18,20,20; 98:4,5;106:10;114:4,4; 138:10;140:19,21 impactful (1) 137:14 impacts (26) 45:25;46:12;50:17, 22;58:16;70:3,17; 71:14,20;84:18,21,23, 25;97:5,6;109:23; 113:22;136:23;137:5; 138:4,12,24;139:4,19, 22;147:15 impending (3) 104:18;105:5,8 | implausible (1) 127:20 important (6) 10:14;51:18;56:3; 58:2;66:18;104:25 imposing (1) 120:25 imprecise (1) 186:21 impressive (1) 121:25 inactive (1) 90:17 inadequate (2) 134:20;193:18 Inc (1) 107:18 include (14) 4:8;45:20;52:25; 53:5;54:6,12;60:19; 66:21;83:7;98:19; 111:19;112:10;148:10; 179:8 included (8) 112:7,9;127:22; 135:25;146:15;147:13, 24;179:10 includes (6) 62:6;148:20,23; 179:11,15;180:7 including (10) 33:14;36:4;53:13; 62:8;63:17;68:2;74:19; 111:23;112:13;162:10 incorrect (1) 72:25 increase (2) 140:14;141:1 increased (1) 54:1 increases (1) 141:19 incremental (2) 139:25;140:21 increments (2) 12:22;13:18 independent (10) 19:22;48:21;52:9; 80:18;97:19,24;98:3; 128:23;185:25;187:15 index (1) 168:23 indicate (3) 32:24;40:10;166:12 indicated (2) 130:4;139:17 indicates (1) 165:13 indicating (1) 91:11 indiscernible (3) 80:8;84:12;94:7 individual (5) |
|--|---|--|--|--|

| | | | | |
|--|--|--|--|---|
| 13:9,13,56:16;83:19; 127:19 | interesting (3) 162:14;166:2;190:2 | isoquest (1) 172:1 | 75:19 | landscape (2) 41:13;73:3 |
| individually (1) 56:15 | internal (20) 23:8,23;26:4,4,18, 22;27:9,17;28:20; 30:11,15;31:24;33:3; 36:12;38:20,20,25; 40:4;42:12;43:7 | issuance (1) 159:3 | jumping (2) 74:8;166:9 | landscaping (1) 18:15 |
| individuals (2) 53:14;162:6 | Internet (1) 159:5 | issue (30) 6:18;7:21;10:13,19; 11:9;15:1,13,18;16:24; 21:6,14,19;40:1;46:6, 6;62:23;76:1;134:8; 135:1,2,4;137:16; 155:13;190:16;191:22; 192:15,17,20;193:6; 194:8 | junction (1) 8:14 | language (1) 69:1 |
| indoor (5) 90:18;155:8,11,13, 14 | internship (1) 25:9 | issued (2) 19:1;155:4 | June (4) 4:14,14,14;146:23 | large (3) 82:6;88:25;91:1 |
| industrial (1) 52:4 | interpreted (1) 110:13 | issues (14) 11:9;17:22;24:1,2; 29:6;32:15;33:10; 43:25;154:20;155:11; 188:10;189:24;193:8, 13 | jurisdiction (1) 191:10 | largely (2) 29:5;73:17 |
| industry (1) 66:16 | interruption (2) 195:21,21 | | jurisdictional (2) 191:1,6 | larger (1) 23:10 |
| information (15) 6:24;10:18;16:11; 31:21;37:24;60:7; 137:23,25;145:24; 159:17;175:4;176:5; 181:24;183:20;184:2 | interview (1) 88:11 | J | K | Larry (1) 5:10 |
| initial (6) 19:23;20:21;85:9,11; 88:10;99:23 | into (28) 21:4;33:18;34:17,25; 61:2;71:1;82:12;83:2, 25;105:4,16;108:10; 109:5;113:25;129:17; 138:13,15;139:11; 143:17,19;150:4; 166:9;172:6;194:21; 195:8,19;200:13; 203:15 | Jackson (2) 77:2,5 | Kamen (1) 73:5 | last (34) 6:4,14,20;10:12; 12:21;14:1;15:14; 20:15;30:16;32:22; 33:7,22,25;35:20; 36:16,17,19,19;37:2; 52:14;90:1;96:5; 100:14;101:7;129:4; 130:24;131:5;142:25; 164:8,22;165:18,25; 188:12;199:18 |
| inject (1) 43:4 | introduced (1) 87:23 | Jacksonville (1) 107:3 | Karen (1) 5:7 | lasting (1) 81:6 |
| injury (3) 24:15;33:5,12 | investigated (1) 134:17 | January (8) 54:23,24;69:9;71:22; 99:17,18;156:4;158:22 | keep (7) 17:17;18:8;37:23; 38:24;86:7;98:22; 101:6 | late (1) 52:14 |
| inpatient (1) 36:13 | investigations (1) 154:11 | Jeff (1) 87:24 | Kenneth (3) 6:17;22:18;41:16 | later (6) 14:14;23:24;69:24; 87:24;92:18;99:18 |
| inquiring (3) 32:16;39:23;89:22 | involved (8) 44:14;88:12;108:11; 120:24;154:10,24; 156:10;196:25 | Jeison (8) 44:6;93:3;98:23; 99:10,17,25;100:11; 136:2 | Kensington (7) 5:7,8,19,22;6:5,7; 176:11 | latest (2) 54:24;194:13 |
| in-service (1) 33:14 | involvement (1) 77:12 | job (3) 24:20;32:16;108:5 | kept (1) 39:22 | latitude (1) 199:24 |
| inside (1) 155:14 | involved (2) 21:18;52:10 | Joe (1) 41:10 | kilometer (1) 151:15 | law (7) 48:24;59:18;156:5; 186:4,5,18,19 |
| insignificant (2) 81:2,4 | irrelevant (1) 36:24 | join (1) 41:4 | kind (7) 9:3;78:18;139:18; 157:19;159:9,24; 198:18 | lawyer (2) 190:14,23 |
| insisted (1) 161:13 | irritation (3) 121:20,24;123:4 | joined (1) 25:12 | kinds (2) 9:2;88:14 | lawyers (1) 73:23 |
| instance (1) 11:19 | IRIS (4) 60:7,8;61:1,22 | Jonathan (1) 77:1 | Kiplinger (1) 108:14 | layman's (3) 126:19;127:10,18 |
| instances (3) 33:11;95:23;107:25 | isolation (1) 77:12 | Journal (3) 39:15,16,18 | knew (4) 42:20,24;88:9,10 | laymen (1) 43:13 |
| instead (4) 63:1;70:9;142:23; 181:8 | isopaths (1) 151:3 | journals (1) 201:13 | Knolls (3) 51:13;53:21;68:3 | lead (13) 48:17;55:23;97:13, 14;145:10,12;146:6; 147:22,24;157:5; 158:1;164:14;199:4 |
| instructing (1) 7:13 | isoplat (4) 151:23;152:2; 153:15,17 | judge (2) 77:5,12 | knowing (1) 183:10 | leading (1) 50:10 |
| insufficient (1) 58:22 | | judged (2) 40:11;193:20 | knowledge (1) 122:12 | learning (1) 72:18 |
| Integrated (1) 60:6 | | judgment (4) 83:23,25;84:4; 117:24 | known (5) 4:11;35:1;57:3;60:7; 104:19 | lease (1) 125:20 |
| intend (1) 143:10 | | judicial (1) 78:22 | knows (2) 170:5,6 | leased (2) 125:9,9 |
| intended (7) 7:25;18:18;51:23; 52:25;53:4;120:10; 135:14 | | July (4) 4:15,15,15;23:20 | | leasing (1) 125:21 |
| intends (2) 62:16;63:6 | | jump (1) | L | least (11) |
| intent (1) 28:3 | | | LA (1) 199:23 | |
| interested (2) 120:12;191:20 | | | label (1) 169:18 | |
| | | | labeled (3) 102:13;169:5;182:10 | |
| | | | land (3) 41:10;112:2;151:15 | |

| | |
|--|---|
| 8:1;52:17;55:19; 60:10;74:4;90:21; 132:12;140:4;149:24; 195:3;200:11 leave (6) 31:17;78:24;114:1; 117:19;155:1;163:16 leaving (1) 113:23 led (2) 62:22;108:23 left (2) 103:9;145:14 left-hand (1) 166:5 legal (4) 78:9,12,12;86:23 legitimately (1) 46:16 length (1) 31:18 lengths (1) 159:5 less (5) 47:19;48:19;69:2; 81:8;106:19 letter (25) 6:11,13;74:22;94:10, 10,11,12;95:10,11,18; 97:4;99:11;101:19; 102:4,7;103:14,22,25; 104:18;105:18;109:6, 11;119:12;124:12; 126:14 letterhead (1) 95:13 letters (2) 98:10;102:3 level (18) 56:8;77:8;80:10; 123:20;140:4;141:1; 142:12;158:18;162:16; 167:25;168:7;181:17; 184:10,11;193:4; 196:15;201:3,3 levels (23) 55:16;56:5;57:3,7, 10;61:22;62:2;67:3; 70:10,15;123:7,9,13, 19;124:5;141:20; 146:4;161:23;168:4; 172:5;176:22;179:6; 191:24 life (1) 199:23 likely (5) 56:4,5,18;117:12; 197:12 limine (6) 9:8,22;15:4;16:17; 18:11;71:3 limit (16) 44:8;127:11,23,25, 25;128:22;142:17; 153:11;157:9;162:21, 24;164:23;178:11,12; 188:3;201:3 limited (6) 42:14;44:2;161:23; 162:17,18;168:4 limiting (2) 153:12;161:20 limits (1) 165:11 line (9) 21:16;54:8;79:13,17; 89:11;93:12;141:24; 153:17;200:22 link (1) 169:6 linked (2) 161:23;168:4 links (1) 160:18 lion's (1) 23:25 Lisa (1) 77:2 list (28) 6:15;33:17;35:6; 38:8;73:4;74:23;75:24, 24;90:16,18,19;91:9, 12,22;92:1,18;98:20, 24;99:3;106:13;107:6, 7,23;120:2,23;130:17; 154:9;155:20 listed (11) 26:11;35:6;53:15; 67:17;75:10,17;153:9; 154:9;180:3,4,7 listing (2) 154:18;155:4 litany (1) 4:2 liter (1) 170:18 literature (22) 44:10;74:14;79:1; 82:17;97:25;98:3,10, 15;99:24,24;100:5,6, 17,19,22,23;136:2; 187:15;196:9;199:5; 201:16,16 litigation (4) 92:22;106:19,19; 108:15 littered (1) 50:11 little (18) 9:18,20;11:23;33:1; 40:7;49:4;57:23,24; 72:17;86:4,8,13;109:4; 139:7;146:2;155:23; 190:18;196:16 live (2) 111:8;112:13 living (1) 23:6 local (9) 50:8;53:25;54:3; 92:24;109:21,25; 111:7;112:10,12 located (2) 4:9;179:18 locomotive (1) 106:21 logical (4) 29:11;73:21;74:3,5 long (9) 10:24;33:17;88:11; 92:25;102:14;117:8; 137:16;143:2;161:10 longer (4) 36:24;72:17;115:21; 200:9 long-standing (1) 87:13 look (29) 11:17;17:4;41:7; 91:9,12,23;92:13; 95:11;100:22;107:6; 110:10;116:18;118:7, 20;130:17,23;146:14; 156:18;160:5,20; 164:24;177:21;180:2; 185:11;186:10;187:3; 192:2;196:1,6 looked (5) 17:8;127:22;187:1; 194:21;196:9 looking (26) 14:15,21,25;34:25; 44:15;77:8,8;90:18; 107:22;108:17;115:20; 132:22;146:22;147:25; 148:8;149:5,7;153:25; 155:8;168:22;170:15; 184:18;186:8;190:7; 194:8;195:15 looks (1) 115:2 lose (1) 167:4 Lot (18) 4:10;21:3;66:7; 72:18;88:22,25;91:1; 99:5;113:19,20,21; 114:8;119:19;138:17; 150:24;151:19;160:22; 194:20 loud (3) 45:20;57:23;114:24 louder (1) 87:1 low (7) 33:13;58:11,11,17; 62:12;123:19;124:5 lower (6) 57:2;77:8;106:2; 108:23;162:3;201:3 lowered (2) 103:3;164:16 lowering (2) 76:25;156:2 luck (1) 190:11 lunch (6) 31:6,10;92:13;116:1, 25,25 lung (7) 36:3,4;83:5;121:24; 123:5;162:10,18 lungs (1) 123:4 | 31:5;151:14;154:12 March (3) 99:19,19;158:23 margin (25) 53:2;70:6;109:4; 129:5,7;185:1,6,11,14; 187:1,8,11,19,23; 195:25;196:3,14,17,18; 197:18,22;198:9,22; 199:4,13 Maria (1) 99:17 Mark (4) 5:14;41:12;86:22; 165:7 marked (7) 9:23;13:20;146:23; 147:2;165:19;166:18; 203:15 market (1) 41:15 Martin (1) 4:21 Maryland (8) 4:10;25:15;51:20; 59:1,7;82:5;93:2; 124:17 master's (1) 189:10 material (4) 11:4;18:4;19:16; 194:19 materials (1) 18:18 math (1) 174:7 mathematical (5) 68:20;71:23;171:12; 182:14;191:22 mathematics (2) 25:6;174:8 matter (10) 4:4;12:19;17:19; 46:7;48:19;51:22; 66:21;96:24;164:21; 196:17 matters (8) 6:3;10:9;13:23;22:7; 88:21;90:4;97:14; 136:13 max (1) 164:11 maximum (9) 158:18;162:1;164:6, 11;165:1;168:11,14; 180:25;182:17 may (69) 4:2,14,14,14;9:11; 11:15;17:12,20;18:16; 19:8;20:2;21:25;22:23; 24:15,17,18;26:15; 35:4;44:7;45:23;46:15; 48:5;49:3;54:6;56:24; |
| M | |
| ma'am (2) 16:15;117:7 MAAQS (1) 165:17 Mae (3) 24:24;108:7;154:4 Maine (1) 107:3 maintain (1) 32:21 major (4) 119:2;161:21;162:6; 168:2 majority (2) 33:9;137:12 makes (12) 28:17;29:16,19;37:9; 58:6,7;64:16;80:20; 93:25;132:3;173:1; 186:1 making (2) 176:13;201:4 Mall (11) 4:11;88:25;91:1; 111:23;176:23;182:16, 22;183:14,15;192:12, 17 man (1) 24:15 management (2) 33:5,12 manager (1) 189:3 manner (1) 10:14 manufactured (1) 64:13 many (20) 25:22;33:6,15;35:9; 39:10,10;43:4;44:12; 46:22;54:19;62:24; 91:9;119:6,9,18,21; 136:1;167:2;187:5; 193:15 map (3) | |

| | | | | |
|--|---|---|---|--|
| 62:22;70:12,13,14,15, 19;72:1,6;73:6,20,22; 77:16;83:13;87:6; 88:16,18;90:8;91:9; 101:20,20,20;112:20; 117:5;119:8;130:7,8; 134:12;137:25,25; 141:15;163:12;171:22; 190:22,24,24;192:20; 193:7;194:17;195:1,1, 18,18;196:8;203:3 | mechanics (2) 106:22;137:5 mechanism (1) 80:15 mechanization (1) 52:23 medical (30) 25:8,11;26:17;27:11, 15,21;28:2,5,18,24; 29:6;30:4,17,19;31:2,3, 11,15;37:22;38:13; 39:9,22,25;40:13;44:9; 74:13,20;82:16;143:3; 201:16 medicine (51) 23:8,24,25;24:7,11; 26:4,4,18,18,23;27:9, 10,17,18,19;28:12,20; 30:10,10,11,15,21,22, 24;31:22,23,23,24; 33:3;34:19;36:12,21; 38:9,10,11,20,20;39:1, 16,17,18;40:5,5,23; 42:12,12;43:8;52:4,4; 84:3;139:10 meeting (1) 6:4 meets (1) 59:9 members (7) 7:3;8:3;18:1;52:6,7; 53:13;58:20 membrane (1) 121:24 memo (1) 12:23 memorize (1) 114:18 memorized (2) 60:11;157:14 memory (3) 91:16;147:8;197:11 mention (6) 55:1;72:25;120:14; 132:1;136:14;146:23 mentioned (15) 7:25;24:12;48:20; 54:25;64:9;68:17,18; 76:15;91:19;97:12; 99:13,25;103:6;136:8, 11 messed (1) 111:21 met (3) 86:2;87:24;175:16 meteorological (4) 69:16;150:22;151:6; 152:15 meteorologist (1) 87:20 meteorology (2) 153:10;174:12 meter (22) | 57:4;103:7;156:3; 158:2;164:17;169:3, 21;170:10;172:2,6,18; 176:23;180:13;182:16, 18,20;183:13;184:11, 20;187:21;197:13; 199:11 methodology (6) 170:2,7;171:11,14; 172:13;177:3 metropolitan (2) 44:24;45:1 Michael (1) 5:4 Michele (2) 5:8;144:15 Michigan (1) 25:10 micrograms (23) 57:3;103:6;156:3; 158:2;164:17;169:3, 21;170:9,18;172:1,6, 18;176:22;180:13; 182:15,17,20;183:13; 184:11,19;187:21; 197:13;199:10 microns (1) 48:19 microphone (1) 86:15 mics (1) 197:13 middle (3) 15:9;134:14;138:11 might (24) 8:15;16:18;50:17,19; 69:18;72:25;75:16; 81:9,10,19;83:20; 86:20;112:21;113:12, 21;120:20;125:16; 145:18;150:22;185:9; 187:6;191:25;196:10, 15 Mike (1) 87:24 Mill (1) 4:9 million (3) 164:4;189:18;198:12 mind (11) 15:1;17:18;18:8; 22:1;76:1,15,16;82:14, 15;101:6;111:11 minds (1) 171:12 mine (1) 171:12 minimal (2) 64:1;69:11 minimally (3) 18:19;103:11;104:12 minimize (1) 106:22 | minimum (1) 39:19 minister (1) 77:3 minor (3) 33:4,12;95:23 minute (2) 169:5;187:21 minutes (3) 163:8;200:14,19 mis- (1) 128:2 miscellaneous (1) 74:20 mischaracterization (2) 7:10;104:16 mischaracterized (1) 105:25 misconception (1) 101:7 misheard (1) 154:7 missed (2) 160:14;168:16 missing (1) 132:24 mis-spoke (1) 130:8 mistake (1) 68:21 mistaken (3) 130:7;149:15,18 misunderstand (4) 135:20,21;155:3; 187:2 misunderstanding (1) 30:6 modeled (2) 140:6;180:6 modeling (16) 51:3;69:8,25;173:5, 14,19;174:5,6,6,10,18; 175:18;177:3;181:16, 24;182:1 modern (1) 137:6 modifications (1) 174:14 modified (5) 51:10;69:24;95:18; 174:19;181:25 mold (1) 108:11 moment (8) 24:12;30:25;51:14; 55:1;76:3;91:14;148:4, 6 money (1) 140:16 monitor (2) 142:5;179:18 monitoring (6) 9:19;141:4,5,18; | 146:9;154:19 monoxide (13) 47:21,21;48:17; 91:20;123:16;145:10, 12;146:6;147:14; 157:5,23;164:14; 198:17 Montgomery (3) 41:10;51:20;82:5 month (1) 38:18 months (4) 38:19;43:4,4;141:6 more (51) 12:6;17:1;23:22; 26:5;29:20;51:14;54:3; 55:15;68:20;69:2;78:9; 79:23;81:14;82:18; 85:21;86:4;89:6;98:19; 101:8,11;106:2; 131:16;133:18,24; 135:9;139:18;157:24; 160:22;162:2,19,19; 163:24;164:20;168:7; 170:12;171:13;173:23; 174:23,25;181:24; 190:14,16;192:6; 194:15;197:13;198:16; 199:23;200:7,7,21; 201:16 morning (8) 5:2,4,11,13;12:25; 13:4;23:5;27:6 mortality (1) 81:13 most (19) 11:24;28:15;30:14, 20,22;52:15;55:4,5; 56:2;66:18;82:12,15, 24,25;83:3;102:24; 107:1;136:10;154:24 mostly (5) 26:6;48:1;60:16; 74:20;138:14 motion (14) 6:7;7:11,13,20;9:8, 22;15:4,17,18;16:17, 17;18:10;71:3;176:12 motions (6) 6:25;7:4,6;8:6,12,17 move (11) 29:14;46:17,25;47:1; 86:19,19;93:7,11; 125:24,24;163:18 moving (1) 165:9 much (19) 10:6;57:2;59:20; 75:23;89:23;92:10; 102:17;113:23,24; 115:21;136:2;144:4; 162:25;183:1;191:12; 192:5;196:21;198:16; |
|--|---|---|---|--|

| | | | | |
|---|--|--|--|--|
| 200:9 mucous (1) 121:24 multiple (1) 132:11 multiplied (2) 55:13;181:8 multiply (6) 170:1,9,17;171:4,5; 172:18 multiplying (2) 70:8;172:8 Myer (1) 108:13 myself (2) 44:8;70:13 | 11;200:15 needed (1) 37:24 needs (3) 11:8;21:14;112:2 neglected (1) 16:4 Negligible (8) 62:9;80:11,12,13,22, 23,24;81:11 neighborhood (10) 45:19;62:5;111:8,11, 19,23;112:7,9;140:1; 198:11 neighbors (2) 48:6;68:1 Nevertheless (1) 30:14 New (15) 39:15,18;65:2;72:18; 76:6,7,9;80:20;87:8; 96:1;103:5;104:11; 158:6;166:3;184:22 news (1) 11:22 next (18) 4:16;17:2;22:10; 38:17;88:2;93:5; 130:23;131:5;144:2; 163:11;164:3,16,20; 166:5;168:1;195:9; 197:2;200:13 NIH (1) 25:10 Nimby (1) 92:21 nine (1) 157:19 nitro (2) 146:25;160:18 nitro-airings (1) 130:20 nitrogen (16) 48:17;55:12;123:24; 124:1,3;145:10; 148:10,21,23;157:5; 158:3,5;160:13;161:2; 167:17;199:14 nitrous (3) 148:13,17;189:25 NO2 (30) 55:12,16;69:19;70:2, 10;71:6;148:10,20,23; 158:4;160:22;161:21, 22;162:5,7,16,21; 168:3,7;176:21; 178:23;179:22;181:17; 182:15,17,21;183:13; 185:19;188:3;191:25 noise (23) 41:20;42:15,15; 44:20;45:9,17,20;46:1, 6,7,13;47:17;57:7,7,9, | 11,13,15;58:18;89:24; 92:19;147:14;198:20 noises (1) 45:20 none (6) 22:9;44:17;48:12; 49:25;91:7;137:20 non-leading (2) 55:24;63:22 non-occupational (1) 47:22 non-workers (1) 188:7 noon (1) 17:13 Nope (1) 149:14 nor (1) 61:13 normal (3) 98:15;100:6,20 normally (1) 188:23 Northern (1) 85:22 note (3) 11:1;80:9;194:10 notes (2) 74:9,9 notice (2) 46:12;156:25 noticed (4) 4:16,17;50:10;58:24 notify (1) 16:25 November (44) 15:8;38:18;54:22; 69:8;71:22;94:14; 95:13;96:1;99:8,9,22; 100:7,24;101:22; 102:5,5,12,24;104:17; 105:4,14,17;109:7,15; 117:2;124:12;127:1; 128:12;146:13,20; 150:12;173:20;174:15; 175:7;176:15,21; 179:21;180:24;181:6, 7,9,14;182:2,3 NOX (24) 145:13;148:1,9,10, 20,22;156:11;157:5; 158:10;159:3,9;161:5; 176:14;180:3;181:1; 184:10;187:10,11,13, 13,14;201:23,25; 202:13 NTDE (1) 76:7 nuisance (1) 46:6 number (38) 11:7;30:20;33:13; 37:11,16;41:8;45:8,9; | 55:13;73:16,19;76:15; 77:22;78:6;80:11;82:6; 92:24;103:12;108:20; 109:3;122:17;124:20, 22;145:3;147:15; 151:2;154:1;160:7; 169:25;176:24;177:8, 18;180:16;183:22; 187:20;196:12;200:1; 201:14 numbers (26) 15:6;60:21;70:8; 79:19;109:5;114:18; 115:13;117:20;153:25; 157:14;169:1;171:23; 172:6,7,8;176:14,20; 180:24,24;181:5,14; 182:3;191:15;193:1,2, 3 numerous (5) 44:23;46:20;80:19; 106:7;107:19 NW (1) 22:19 | 83:18 obviously (3) 73:11;112:13;198:5 occasion (2) 35:12;74:3 occasionally (5) 23:12;31:3;48:2; 52:21;189:5 occupants (1) 68:2 Occupational (22) 23:15,16,24;24:10; 26:5,17,19;27:9,16,18; 28:12;30:20,23;33:9; 38:25;39:17;40:5; 42:11;43:7;47:22;86:1; 139:10 occur (4) 161:21;162:8;168:2; 175:6 odor (3) 42:15;81:19;147:14 odors (3) 81:14,17;82:10 off (31) 21:10;27:2;37:2; 38:22;64:11;65:11; 86:17;89:23;95:5; 104:5;114:20;115:19; 125:16;126:25;128:5; 129:25;138:20;141:23; 143:14;144:14;149:8; 153:7;157:20;159:8; 176:9;178:21;179:25; 193:3;197:9;199:21; 202:10 offer (5) 26:16;43:12;90:8; 152:14,25 offered (1) 138:11 offering (2) 152:6,7 offers (1) 137:3 offhand (1) 129:10 office (4) 4:19;23:10;35:11; 107:15 Officer (1) 155:2 official (1) 169:14 offload (1) 138:20 often (6) 26:5;30:20;59:5; 74:6;77:17;83:4 older (4) 64:14;133:24; 162:11,12 onboard (1) |
| N | | O | | |
| N-631 (1) 4:10 NAAQ (1) 70:16 NAAQs (1) 48:22 nabbed (1) 80:8 name (11) 4:21;22:17;23:14; 25:20;87:19;106:23; 111:7;120:11,12; 121:17;189:1 named (1) 30:14 names (2) 88:19;111:16 National (19) 48:23;50:2;51:16; 52:16;58:21,25;59:22; 69:18;70:2;107:20; 146:3;185:23;186:8, 16,23;190:5;191:18; 193:16,19 nationwide (1) 23:12 nature (6) 8:25;20:6;75:15; 96:7;143:19;154:12 near (4) 93:2;161:21;162:6; 168:2 nearby (4) 50:22,23;112:7; 183:15 necessarily (3) 43:10;88:12;163:15 necessary (1) 142:18 need (15) 6:18;16:7;21:1,6; 33:19;56:23;83:19; 95:1;114:24;157:13; 167:2;172:11;183:10, | 11,13,15;58:18;89:24; 92:19;147:14;198:20 noises (1) 45:20 none (6) 22:9;44:17;48:12; 49:25;91:7;137:20 non-leading (2) 55:24;63:22 non-occupational (1) 47:22 non-workers (1) 188:7 noon (1) 17:13 Nope (1) 149:14 nor (1) 61:13 normal (3) 98:15;100:6,20 normally (1) 188:23 Northern (1) 85:22 note (3) 11:1;80:9;194:10 notes (2) 74:9,9 notice (2) 46:12;156:25 noticed (4) 4:16,17;50:10;58:24 notify (1) 16:25 November (44) 15:8;38:18;54:22; 69:8;71:22;94:14; 95:13;96:1;99:8,9,22; 100:7,24;101:22; 102:5,5,12,24;104:17; 105:4,14,17;109:7,15; 117:2;124:12;127:1; 128:12;146:13,20; 150:12;173:20;174:15; 175:7;176:15,21; 179:21;180:24;181:6, 7,9,14;182:2,3 NOX (24) 145:13;148:1,9,10, 20,22;156:11;157:5; 158:10;159:3,9;161:5; 176:14;180:3;181:1; 184:10;187:10,11,13, 13,14;201:23,25; 202:13 NTDE (1) 76:7 nuisance (1) 46:6 number (38) 11:7;30:20;33:13; 37:11,16;41:8;45:8,9; | 55:13;73:16,19;76:15; 77:22;78:6;80:11;82:6; 92:24;103:12;108:20; 109:3;122:17;124:20, 22;145:3;147:15; 151:2;154:1;160:7; 169:25;176:24;177:8, 18;180:16;183:22; 187:20;196:12;200:1; 201:14 numbers (26) 15:6;60:21;70:8; 79:19;109:5;114:18; 115:13;117:20;153:25; 157:14;169:1;171:23; 172:6,7,8;176:14,20; 180:24,24;181:5,14; 182:3;191:15;193:1,2, 3 numerous (5) 44:23;46:20;80:19; 106:7;107:19 NW (1) 22:19 | 83:18 obviously (3) 73:11;112:13;198:5 occasion (2) 35:12;74:3 occasionally (5) 23:12;31:3;48:2; 52:21;189:5 occupants (1) 68:2 Occupational (22) 23:15,16,24;24:10; 26:5,17,19;27:9,16,18; 28:12;30:20,23;33:9; 38:25;39:17;40:5; 42:11;43:7;47:22;86:1; 139:10 occur (4) 161:21;162:8;168:2; 175:6 odor (3) 42:15;81:19;147:14 odors (3) 81:14,17;82:10 off (31) 21:10;27:2;37:2; 38:22;64:11;65:11; 86:17;89:23;95:5; 104:5;114:20;115:19; 125:16;126:25;128:5; 129:25;138:20;141:23; 143:14;144:14;149:8; 153:7;157:20;159:8; 176:9;178:21;179:25; 193:3;197:9;199:21; 202:10 offer (5) 26:16;43:12;90:8; 152:14,25 offered (1) 138:11 offering (2) 152:6,7 offers (1) 137:3 offhand (1) 129:10 office (4) 4:19;23:10;35:11; 107:15 Officer (1) 155:2 official (1) 169:14 offload (1) 138:20 often (6) 26:5;30:20;59:5; 74:6;77:17;83:4 older (4) 64:14;133:24; 162:11,12 onboard (1) | |

| | | | | |
|---|--|--|---|---|
| <p>33:14 once (5) 50:4;78:8;142:18; 157:24;186:5 one (113) 8:3;10:21;11:19,21; 17:18;31:17;33:19; 38:15;42:6;44:7;45:5, 8;50:5;53:24;54:21,22, 24,24,25;58:15;59:5; 66:18;68:8;71:5;76:18, 23;82:23;83:21;88:22; 90:12;91:18;93:1;94:9; 95:1;98:18;99:11,18, 18,18;100:25;103:1,11, 25;106:20;107:16,24; 115:5,7;117:14,17; 119:25;120:23;121:17; 126:22;127:8,14; 129:23;131:16;132:10; 134:22;137:2;139:23; 140:10;141:1;143:21; 145:14,17;151:3; 152:16;153:2;155:22; 156:16;157:3,7;158:6; 161:19;164:3,8,16,20, 22,25;166:19,20,22,24; 167:2,18;169:4,11; 175:4;180:18;183:4,8; 187:9;188:21;189:24; 190:13;192:15;193:12, 13;195:15;196:19; 197:8,12,19;199:18; 200:22;201:3;203:5,6, 6,7 one-day (1) 31:6 ones (9) 44:8;75:9,10,17; 99:1,1;164:15;174:23; 175:3 ongoing (1) 34:2 only (32) 28:13;40:4;45:1; 51:19;58:25;59:17; 73:2;98:12;99:23,23; 100:17;103:21;104:12; 117:9;129:22;132:10, 22;133:8;134:17; 137:14;140:14;141:3; 149:6;161:7;162:21; 164:13;174:23;179:1, 7;180:19;184:22; 192:14 onto (1) 193:3 open (3) 68:16;86:21;157:18 opening (1) 87:3 operate (2) 4:7;138:23</p> | <p>operating (2) 56:6,6 operation (4) 139:3,4;140:12; 145:4 operational (3) 32:22;142:10,16 opine (2) 61:14;70:21 opinion (38) 37:17;48:9;49:16,16, 19;50:16,21;55:2; 67:24;70:1;71:1,14; 72:11;76:23;82:15; 89:21;104:21,22,23; 105:4;106:4;131:21; 152:5,6,8,14,25;153:2, 4;162:1,17;187:10,18; 190:23;192:3,23; 196:21;198:6 opinions (10) 44:19;45:15;47:17, 24;48:4;51:8;55:5; 125:15;140:24;144:8 opponents (1) 10:13 opportunity (12) 11:17;12:8,13,14; 17:3,4;18:22;20:8; 22:4,6;38:3;116:1 opposed (3) 27:24;28:20;92:20 opposition (16) 6:6;9:15;16:16;19:4; 20:24;40:8;46:5;53:24; 58:20;62:14,17,22,24, 25;63:2;70:15 opposition's (1) 9:22 oral (1) 130:10 oranges (1) 179:1 order (7) 6:18;15:5;16:24; 142:19,22;172:12; 198:11 Ordinance (5) 4:6;18:20;20:2,9; 192:16 ordinary (1) 133:24 organic (1) 60:19 organization (4) 44:14;45:1;59:4,12 organizations (1) 31:8 organized (1) 98:22 original (22) 15:7;51:9;69:24,25; 71:21;72:12;94:15,16,</p> | <p>22;95:16;96:1;99:2; 103:18,25;104:13; 108:20,24;180:23; 182:14;192:25;193:1,5 originally (2) 23:7;53:19 Orlando (2) 31:1;107:18 OSHA (20) 188:3,5,12,17,24; 190:1,4,17,20;191:6; 192:1,8,19;194:12,14, 18,24;195:1,12,15 ostensibly (1) 74:13 others (10) 25:1;48:2;81:15; 88:3;91:19;123:6; 154:5;156:11;161:11; 198:6 otherwise (1) 44:11 ought (6) 141:16;160:11; 177:5;190:9;193:20; 194:20 out (48) 6:18;10:24;11:19,22; 12:6;18:1;49:15;52:22; 53:9,10;58:18;66:14; 78:24;80:4;83:9;90:20; 95:7;99:3;100:10; 113:24,25;114:24; 122:9;129:15,16; 130:21;131:24;136:2; 140:7;141:24;142:19, 19;145:14;152:16,17; 159:6,12;160:10; 161:1,15;164:12; 171:12;174:1;175:23; 176:1;187:25;192:12; 194:11 outcome (1) 94:6 outdoor (4) 90:19;155:9;190:6; 191:8 outdoors (1) 190:5 outpatient (1) 36:14 outside (2) 23:12;24:16 outward (1) 103:20 over (39) 10:24;12:1;25:21; 31:5;36:12;52:2;70:16; 79:20;80:19;90:16; 98:21;102:20,21; 106:13;115:1;129:24; 135:24;140:13;141:20; 142:12;150:14,21;</p> | <p>154:12;158:20;160:5; 162:22,25;164:6,12; 165:1;181:7;187:22; 196:16,19,21,21;197:3, 6;201:6 overall (1) 37:19 overlapping (1) 25:14 overly-broadened (1) 135:10 overrule (2) 90:14;169:9 overruled (2) 61:19;131:22 overseas (2) 34:11,15 own (8) 65:19;117:23;125:7; 175:19;186:13;187:14; 193:20;198:5 owned (1) 125:20 oxide (3) 158:5;198:25;199:1 oxides (8) 145:11;148:14,17, 21,23;157:5,6;198:22 OZAH (2) 4:5,18 Ozone (9) 145:15,17;157:7; 164:3;197:4;199:18, 19,20;200:5</p> | <p>126:12,14;129:4; 130:24,25;131:6,15; 132:11;133:4;144:7, 20;161:18;167:24; 168:1;177:12,13,23,25; 178:3,3;182:8,13; 183:19;184:4 parallels (1) 44:15 parameters (1) 193:20 paraphrasing (1) 78:22 Parcel (4) 4:10;176:23;182:16; 183:14 pardon (3) 38:18;39:6;200:3 parenthetical (1) 53:12 parents (1) 34:7 Paris (1) 58:8 parking (6) 88:25;91:1;113:19, 20,21;114:8 parse (1) 112:11 part (26) 18:3;23:10;30:15,23; 46:21;52:17;55:20; 73:12;74:24;86:21; 88:7,8;89:23;119:4; 125:6;128:23;134:2; 137:19;152:20;156:16, 17;175:7;190:25; 194:12,24;195:1 participate (1) 188:2 particular (10) 12:2;24:9,25;31:7; 37:8;43:13;60:13; 151:19;155:18;162:9 particularly (3) 75:6,6;191:8 particulate (6) 48:19;66:13,21;67:3; 136:15;164:20 parties (8) 4:24;6:2;12:24; 141:16,22;194:9,23; 195:4 parts (28) 6:9;102:18;131:23; 158:6,7,10;162:21; 164:4,23;167:25; 168:11,14;169:2,17,20; 170:10,16;172:2,17; 178:12;184:22,24; 188:4;189:18,19,20,20; 198:12 part-time (2)</p> |
| P | | | | |
| | | | <p>pack (1) 114:1 page (33) 109:10,11;114:18; 115:13;118:21;126:14; 130:23,23;131:1,3; 132:25;133:3,10,19; 134:14;147:4;150:25; 151:1,2;165:13,14,15; 167:17,23;168:22; 173:1;177:25;178:2, 20;179:20;182:8,12; 183:4 pager (1) 169:12 pages (10) 99:12;114:11; 115:11;116:24;117:2; 118:4,24;147:15; 182:9,10 paper (1) 31:16 papers (1) 192:18 paragraph (26) 53:12;109:19;</p> | |

| | | | | |
|--|---|--|---|--|
| 25:13;97:16 passages (3) 102:20;109:7;150:13 passed (2) 126:4,5 passes (2) 86:24;186:16 past (2) 44:15;47:16 Pat (1) 5:2 patho- (1) 198:16 paths (1) 50:10 patient (2) 32:24;35:17 patients (8) 32:23,25;33:4,7,17, 18;36:15;40:7 Patricia (2) 87:23;111:4 patronize (1) 113:19 patterns (1) 114:7 peak (2) 161:20;168:1 pediatric (2) 30:12;31:24 pediatrician (2) 34:3;35:25 peer (1) 201:12 pending (1) 45:6 Penn (5) 106:24,25;107:1,2,2 people (24) 16:25;24:13;34:11; 50:7,17;51:25;62:6; 67:19;81:14;82:6,9; 92:20;112:13;113:1, 18,21;115:25;140:3; 162:10,18,24;165:4; 182:22;192:12 people's (1) 161:20 per (51) 57:4;62:24;103:6; 153:17;156:3;157:24; 158:2,6,7,10;162:21; 164:4,17,23;167:25; 168:11,14;169:2,3,17, 20,21;170:10,10,16,18; 172:2,2,6,17,18; 176:22;178:12;180:13; 182:15,17,20;183:13; 184:11,19,22,25; 187:21;188:4;189:18, 19,20,20;197:13; 198:12;199:10 percent (8) | 102:19,25;103:1; 127:11,23,25;128:22; 196:19 percentage (2) 197:3,6 percentile (6) 158:20;164:24,25; 165:3,3;184:17 Perdue (1) 8:4 perform (1) 24:16 perhaps (5) 86:20;115:24; 145:17;166:21;182:4 period (11) 10:18,24;11:20; 24:17;25:14;140:13; 141:20;158:2,21; 162:25;164:18 periodic (1) 38:15 periodically (1) 66:15 permanent (2) 52:7;81:11 permissible (1) 188:3 person (3) 44:21;81:18;113:25 personal (3) 35:25;71:17;198:6 personally (2) 97:12;114:6 persons (2) 53:5;83:4 perspective (1) 188:2 perspectives (1) 91:9 pertains (1) 53:20 petition (2) 4:5;19:16 petitioner (1) 4:7 PhD (2) 39:9;97:15 Philadelphia (1) 107:2 Philly (1) 106:23 philosophical (1) 84:8 phonetic (1) 119:25 photo (1) 95:19 photos (1) 50:14 phrase (2) 83:21;196:14 phrased (1) | 123:22 physical (2) 33:15;150:8 physician (6) 23:7,21;34:3;39:5,8; 143:10 physicians (1) 28:13 physiology (1) 198:17 pick (2) 37:16;129:22 picked (3) 37:11,15;74:9 picking (1) 131:23 picture (1) 190:16 piece (4) 21:5;31:16;158:4; 194:19 PIERRE (10) 106:14,16;157:15, 17;159:7;169:13; 188:23;189:2,2,7 place (4) 125:6;149:6;164:19; 184:23 placed (1) 85:11 plan (3) 20:4;73:4;93:14 Planning (7) 17:21;18:6;19:18; 20:17;22:1;41:10; 194:20 plans (7) 18:7,15;20:1,3,10; 22:6;141:4 plant (5) 73:3;92:20;93:10; 107:3,18 plants (4) 91:17,17;92:19; 93:23 plausible (1) 114:2 play (4) 50:7;83:25;194:24; 195:1 Plaza (1) 4:10 please (27) 4:25;22:15,17,21; 30:8;47:18;57:22;73:2, 4;83:12;95:9;101:6; 109:8;114:25;120:18; 124:14;126:11;127:17; 130:22,25;131:9; 151:11,25;164:2; 189:1;197:11;203:4 plus (2) 52:11;180:6 | pm (1) 204:1 PM10 (1) 166:12 PM2.5 (22) 48:18;57:2;103:3; 108:21;122:19,24; 145:11,13;148:3; 156:2,8,14,16;157:3,8; 164:16;166:8,12; 187:18;197:7;202:5,13 PMQ5 (1) 76:25 pockets (1) 92:9 point (38) 11:12,12;13:13;18:2, 8;20:14;22:1,5;28:21; 37:21;42:10;43:3; 46:10;61:17;63:2; 70:25;79:13,25;80:10; 81:21;84:1;85:20;87:6; 98:19;108:19;112:15; 122:4;128:23;129:19; 132:14;137:11,15; 150:14;175:4;192:24; 194:11;199:23;202:17 pointed (2) 129:16;152:16 points (3) 12:13,15;47:13 poison (2) 58:6,7 political (1) 74:4 pollutant (11) 56:16;120:15,24; 121:17,19;141:1,20; 166:5;179:5;196:15; 201:3 pollutants (26) 35:2;48:12,15;50:1; 56:5;57:6;69:17;82:10; 97:19;114:7;119:6,9, 13,17;120:3,15;140:4, 11;145:8,9;147:13; 149:20;155:14;156:10, 15;187:9 pollution (7) 12:23;13:19;59:20; 107:9;108:1;179:6; 201:8 polycentric (1) 119:19 pool (3) 50:8,24;68:3 population (11) 53:3,13;81:24,25; 82:1,2,3,4,4,5;83:1 populations (4) 53:1,4;82:13;129:17 portion (2) 83:1;197:22 | portions (1) 56:2 portray (1) 69:3 pose (4) 61:9;116:12,16; 194:24 posed (1) 116:5 position (1) 38:12 possession (1) 101:21 possibility (1) 75:25 possible (13) 70:1;112:23,24; 113:3,4,11,15,16,18, 23;114:2;117:19;140:2 possibly (3) 6:17;131:12,17 post (1) 66:9 potential (26) 45:21;54:2;60:17; 62:3;71:14,20;80:12; 84:18,23,24;97:5,6; 98:5;109:22;113:22; 119:17,22;120:4,13; 121:1;123:21;124:9; 139:14;141:16,22; 142:20 potentially (4) 101:11;118:24; 123:3;127:19 power (10) 75:22;91:17,17; 92:19,20;93:10,14,23; 107:2,18 powers (1) 8:14 PPM (2) 157:21,23 practice (2) 30:15;36:12 practiced (1) 38:20 practicing (1) 23:21 preceded (1) 101:18 precedence (2) 76:19,21 precipitate (1) 161:3 precisely (11) 7:19;34:1;77:14; 80:6,6;82:21;112:15; 120:5,5;135:13,13 precluded (1) 11:20 predicate (2) 195:12,14 |
|--|---|--|---|--|

| | | | | |
|--|--|---|---|--|
| <p>predicted (1) 69:3</p> <p>predictions (1) 117:22</p> <p>pre-employment (1) 33:14</p> <p>prefer (2) 110:19;116:16</p> <p>pre-hearing (1) 41:7</p> <p>preliminary (8) 6:3;10:9;12:18; 13:22;17:19;22:7; 34:18;156:2</p> <p>preparation (4) 11:5;16:19;46:22; 47:9</p> <p>prepare (3) 12:9;47:23;103:21</p> <p>prepared (5) 12:23;15:7;101:22; 173:4,6</p> <p>preparing (1) 95:25</p> <p>presence (1) 124:7</p> <p>present (7) 7:3;12:13;38:11; 123:20,24;124:4;136:4</p> <p>presented (1) 77:15</p> <p>presently (1) 120:15</p> <p>preserve (1) 15:25</p> <p>president (2) 23:18;97:13</p> <p>Presumably (1) 140:3</p> <p>presume (3) 38:12;140:10,11</p> <p>pretend (1) 152:2</p> <p>pretty (7) 11:11;28:18;54:21; 92:10;104:19;121:25; 176:18</p> <p>Preventative (4) 24:7;30:21,22;34:19</p> <p>previous (4) 46:24;90:6;108:19; 118:10</p> <p>previously (2) 14:5;124:13</p> <p>primarily (2) 40:15;161:21</p> <p>primary (2) 64:3;76:1</p> <p>principle (2) 40:9;202:12</p> <p>print (1) 161:1</p> <p>printed (1)</p> | <p>159:6</p> <p>printing (1) 44:23</p> <p>printout (1) 188:24</p> <p>prior (7) 10:17,18;44:18; 45:14;100:23;102:5; 161:4</p> <p>private (2) 23:11;175:19</p> <p>probably (14) 33:13;66:18;75:22; 78:24;86:13;102:8; 106:19;108:12,13,14; 117:17;145:1;156:22; 159:4</p> <p>problem (3) 32:25;39:11;86:21</p> <p>problems (1) 59:20</p> <p>procedural (3) 10:9;18:8;43:3</p> <p>procedure (1) 170:11</p> <p>proceed (3) 6:3;8:11;22:23</p> <p>proceeding (1) 78:18</p> <p>process (11) 21:4;77:16;78:21,25; 80:16;82:19;84:9; 100:13;124:25;137:22; 201:4</p> <p>produce (6) 32:8,8;81:7,10,12; 121:23</p> <p>produced (3) 102:3;132:3;133:15</p> <p>Producing (2) 81:6;92:3</p> <p>product (2) 77:16;98:6</p> <p>productive (2) 34:23;35:17</p> <p>professional (7) 49:19;67:24;83:23, 25;97:11;104:22,23</p> <p>professor (2) 38:9;39:24</p> <p>proffer (4) 29:4;93:18;112:8; 175:6</p> <p>proffered (5) 29:25;42:24;43:7; 61:13;99:13</p> <p>Program (2) 44:21,23</p> <p>progression (1) 29:11</p> <p>project (4) 86:5;92:25;108:11; 189:3</p> | <p>projections (2) 127:15;137:20</p> <p>projects (10) 44:18;88:12,13; 89:20;90:17,17,21; 97:12;107:3;155:2</p> <p>promulgate (1) 185:16</p> <p>promulgated (5) 154:3,15;156:12; 186:9;192:9</p> <p>proper (2) 7:5;189:25</p> <p>properly (1) 78:23</p> <p>property (6) 111:24;124:17; 125:8,18,19,20</p> <p>proposed (26) 48:5,6,14;49:9,19; 50:5,21;56:18;59:9; 61:8;62:4,4;63:10; 67:24;69:11,17;75:20; 76:25;97:20,21;111:9; 124:25;136:4;139:4; 151:17;156:25</p> <p>protect (11) 51:25,25;52:25;53:4, 17,22;58:22;106:22; 161:19;188:10;201:21</p> <p>protection (1) 177:13</p> <p>protections (1) 127:21</p> <p>protective (2) 106:2;136:13</p> <p>prove (1) 93:22</p> <p>proved (1) 80:18</p> <p>proven (1) 200:15</p> <p>provide (6) 11:23;14:2;16:4,12; 114:15,17</p> <p>provided (12) 10:16;11:5;14:5,16; 17:21;18:4;19:17; 33:11;95:21;159:19; 176:14;196:17</p> <p>provides (3) 126:23;127:9;128:13</p> <p>providing (3) 16:4;127:14;137:24</p> <p>public (12) 4:3;20:17;51:25; 52:1,25;58:22;92:25; 97:16;161:19;193:9, 12;201:21</p> <p>publication (2) 132:16;158:25</p> <p>publications (2) 74:20;156:8</p> | <p>published (6) 97:17;158:21;186:3, 10,12,18</p> <p>Puerto (1) 91:18</p> <p>pull (2) 90:20;107:16</p> <p>pulled (1) 160:10</p> <p>pulmonary (6) 30:11;31:23;32:2; 53:6;121:20;123:4</p> <p>pump (1) 122:7</p> <p>pumping (1) 122:5</p> <p>pumps (4) 4:8;54:8,9;113:1</p> <p>purportedly (1) 45:20</p> <p>purposes (2) 129:13;172:9</p> <p>pursuant (1) 4:6</p> <p>pushed (2) 70:14,15</p> <p>pushing (1) 142:23</p> <p>put (4) 21:4;51:1;160:7,24</p> <p>puts (1) 45:2</p> <p>putting (1) 67:1</p> | <p>13;160:13,21;167:5, 17;168:23;174:6; 185:24;186:9,16,23; 190:6;191:18;193:16, 19</p> <p>quality-related (1) 154:14</p> <p>quantity (1) 56:17</p> <p>queued (1) 54:8</p> <p>queues (2) 179:9;181:17</p> <p>quick (1) 47:15</p> <p>quickly (1) 187:7</p> <p>quite (5) 18:24;43:1;79:13; 100:9;106:12</p> <p>quotation (1) 83:15</p> <p>quote (10) 42:11;52:9;79:20; 80:8;83:12;96:10; 150:14;181:24;196:16, 16</p> <p>quotes (2) 128:6;134:21</p> <p>quoting (3) 72:8;84:22;97:4</p> |
| R | | | | |
| Q | | | | |
| <p>QED (1) 200:17</p> <p>qualification (2) 37:10;105:2</p> <p>qualifications (5) 32:12,15;89:4,7,14</p> <p>qualified (4) 25:23;28:4;43:16; 174:9</p> <p>qualifier (4) 157:22,22,23;164:13</p> <p>qualifies (1) 43:14</p> <p>qualify (3) 31:11,13;177:8</p> <p>quality (58) 41:20;42:15;45:24, 25;48:23;49:3;50:2; 51:16,20;52:17;57:16, 19,20;58:21;59:12,23; 67:14,15;69:19;70:2,3; 71:7;84:18;90:18,18, 19,21,22;105:6;106:8, 10;107:19;109:9,23; 113:22;146:4;154:3, 11,20,20;155:8,9,11,</p> | <p>radically (1) 136:11</p> <p>radius (1) 151:15</p> <p>raise (6) 22:20;43:3;65:17; 88:13;137:15;192:14</p> <p>raised (15) 12:21;40:13;46:5,7; 47:13;53:24;62:18; 63:2;122:4;135:7; 137:11;189:23;192:16; 195:2,3</p> <p>raises (2) 46:10;100:18</p> <p>raising (1) 132:14</p> <p>random (1) 75:7</p> <p>range (1) 119:17</p> <p>rapidly (1) 36:22</p> <p>rates (4) 71:12;152:15,21; 153:1</p> <p>rather (4) 22:14;45:15;89:7; 138:13</p> | | | |

| | | | | |
|--|---|---|--|--|
| <p>rationale (1) 165:10</p> <p>reach (7) 68:5;79:20;84:14; 89:21;90:4;96:19; 176:22</p> <p>reached (2) 78:21;194:7</p> <p>reaching (4) 32:23;61:5;97:4; 144:7</p> <p>read (54) 11:7;39:15;40:17; 44:2;46:14,20,23;47:8; 60:3;74:16,25;75:3; 85:3;99:13;102:12,13, 14,18,18,19,22,24; 103:1;107:5;109:8,8; 114:8,11,24;115:1,15; 124:13,14;126:11,13, 15,16;130:13,25; 131:8;138:18;147:8; 150:12;151:1,9; 153:19;156:7;158:4, 24;159:2,4;161:9; 164:8;178:5</p> <p>reading (13) 39:18;40:5,14;44:2; 73:18;95:11;133:7,8; 151:22;152:2;163:1,3; 165:7</p> <p>reads (1) 161:18</p> <p>ready (6) 24:18,19;72:21; 118:3;159:20;167:11</p> <p>realistic (4) 173:24;174:23,25; 181:24</p> <p>realize (2) 16:3;88:22</p> <p>really (14) 17:6;37:9;50:12; 72:3;93:12,12,15,24, 24;96:24;134:5; 178:25;191:5;200:19</p> <p>reams (1) 187:5</p> <p>reason (12) 39:20;73:20;79:2,2; 105:12;130:21;153:12; 176:23;177:7;178:6; 189:22;192:14</p> <p>reasonable (2) 68:5;104:13</p> <p>reasonably (1) 119:21</p> <p>reasoning (1) 77:6</p> <p>reasons (4) 17:24;66:9;85:25; 192:10</p> <p>recall (21)</p> | <p>17:21;18:25;20:3; 65:1;75:11;77:9;83:7; 85:7;97:1;107:6,7; 108:20;111:2,15; 130:7;137:1;143:6; 145:2;159:2;163:4; 181:9</p> <p>receive (2) 10:18;20:11</p> <p>received (8) 6:23;7:7;14:3,8; 15:9;18:17;21:21; 31:21</p> <p>receiving (1) 10:13</p> <p>recent (9) 12:6;55:4,5;132:18, 19;133:24;155:19; 176:18;201:16</p> <p>recently (8) 19:13;31:21;37:12, 13;52:15;164:16; 197:16,19</p> <p>Recess (4) 72:20;118:1,2;167:7</p> <p>re-characterization (1) 7:17</p> <p>recognized (2) 87:19;162:24</p> <p>recollection (7) 65:4,7,13;107:7; 163:7;188:2;199:13</p> <p>recommend (1) 201:14</p> <p>recommendation (11) 4:23;7:5;8:17,21; 52:19;79:1;80:20;88:8; 196:4;201:9,18</p> <p>recommendations (7) 52:18;76:18;154:11; 186:1,15,22;196:2</p> <p>recommended (2) 17:23;52:13</p> <p>recommending (1) 48:22</p> <p>record (41) 4:25;6:22,24;8:5; 14:2;15:8,22;17:2; 22:17;24:4;26:15;27:2; 65:11;72:22;86:17; 95:5;104:5;111:17; 114:20;115:19;126:25; 129:25;138:6;144:11, 14;149:8;157:20; 159:8;160:12;176:7,9; 178:21;179:23,25; 188:25;189:12;197:9; 199:21;202:10;203:10, 16</p> <p>recovery (1) 64:4</p> <p>recreation (2) 50:23;62:7</p> | <p>redirect (1) 202:20</p> <p>reduced (4) 180:16;181:15; 197:19;202:13</p> <p>reduces (1) 201:2</p> <p>reducing (1) 67:3</p> <p>refer (8) 35:24;56:21,23;59:6; 109:6;118:24;129:4; 130:21</p> <p>reference (6) 75:24;99:2;132:23; 133:8;194:11,14</p> <p>referenced (4) 74:24;99:23;147:1; 180:15</p> <p>references (13) 6:13;75:10;76:11; 88:16,19;98:20;99:12, 12;129:20,23;130:4, 17;180:20</p> <p>referencing (4) 128:20;133:23; 178:15;179:7</p> <p>referred (5) 19:18;95:24;96:6; 156:16;189:5</p> <p>referring (11) 27:25;44:5;48:16; 56:23;57:1;63:19; 109:3;128:10,13; 133:2;165:24</p> <p>refers (1) 128:11</p> <p>reflect (1) 129:21</p> <p>reflected (2) 186:22;190:17</p> <p>reflects (1) 189:13</p> <p>refresh (3) 147:8;197:11;199:12</p> <p>refreshing (1) 107:7</p> <p>regard (9) 15:2;29:10;51:8,9; 68:21;69:4;91:2; 192:17;194:21</p> <p>regarding (17) 11:8;13:18;46:12; 93:23;98:15;99:24; 100:6,20,23;109:22; 116:24;117:1;118:4; 132:12;138:12;160:17; 189:24</p> <p>regardless (1) 162:19</p> <p>regenerated (1) 66:15</p> <p>Register (13)</p> | <p>48:1;105:11;155:20, 21;156:1,8,18;158:3, 25;159:7;186:3,11,18</p> <p>Registry (1) 76:16</p> <p>regulate (2) 188:5;191:6</p> <p>regulated (3) 48:13;156:11;202:8</p> <p>regulates (1) 190:5</p> <p>regulating (1) 191:12</p> <p>regulation (9) 77:20,21;78:1,1,2,7, 10;186:9,12</p> <p>regulations (5) 185:16,18;186:14, 21,22</p> <p>regulatory (2) 48:1;155:4</p> <p>reiterate (1) 43:9</p> <p>relate (2) 47:16;172:5</p> <p>related (10) 33:10;35:10;46:21; 56:19;85:23;86:1; 90:21;129:21;130:5,6</p> <p>relates (2) 103:25;156:8</p> <p>relating (2) 172:12;180:22</p> <p>relatively (2) 51:5;161:2</p> <p>relaxation (1) 68:24</p> <p>relaxed (1) 68:22</p> <p>relevance (6) 45:8;76:6;90:9; 126:6,7;196:10</p> <p>relevancy (1) 36:18</p> <p>relevant (17) 29:5;38:5;39:14; 40:12,23;47:25;52:3, 12;74:14,17;75:6,16; 93:19;125:25;155:19, 20;195:4</p> <p>relied (6) 97:7,10,11;144:8,17; 153:23</p> <p>rely (2) 11:15,16</p> <p>remained (1) 104:22</p> <p>remand (1) 7:4</p> <p>remanded (1) 18:5</p> <p>remember (14) 19:4;21:10,11;54:19;</p> | <p>60:3;69:1;88:18,19; 96:10;109:3;115:13; 145:9;158:24;171:11</p> <p>remembers (1) 171:21</p> <p>remind (2) 10:7;51:7</p> <p>reminded (1) 87:19</p> <p>reminding (1) 111:18</p> <p>rendered (1) 8:7</p> <p>Renee (1) 73:4</p> <p>renew (1) 136:21</p> <p>repeat (2) 104:9;151:25</p> <p>rephrase (2) 78:3,4</p> <p>reply (3) 6:6;20:8;195:16</p> <p>report (117) 4:22;6:12;7:14;8:17, 20;11:2;15:7,8;17:20; 18:2,5;19:1,7,9,24; 20:15;21:1,9,17;45:10, 17,24;46:1,11;51:10; 55:3;56:2;68:20,23; 69:4;73:6,18;76:10; 85:1;95:22;96:1,2; 97:8;98:2;99:7,8,11,17, 23;100:7,19,24; 101:22;102:5,9,12; 103:11;108:21,24; 114:9,12,23;117:2; 118:21;119:3,4; 126:13,22,23;127:9,13; 128:1,6,7,9,12,13,13, 19,19,20,24;129:15; 130:5;136:24;137:21; 138:25;139:21;144:6, 22;146:14,18,19; 149:21,25;150:12; 153:16;154:6;173:5,6, 15,20,20;174:15,16; 175:7,8;176:15,19,21; 178:13,16;179:7,20,24; 180:20,24;181:6,9,14; 194:5,11</p> <p>reported (5) 59:3;135:24;144:21; 158:14;178:13</p> <p>reporting (1) 71:22</p> <p>reports (29) 10:13,16;11:14; 15:16;40:16,17;42:15; 44:2,3,4,8;46:21;48:4; 54:16,19;55:3,20; 61:21;68:18;74:20; 96:13;97:10;100:11;</p> |
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| | | | | |
|---|--|---|---|---|
| <p>102:23;127:6;171:24; 179:10,16;192:9 represent (4) 182:21;183:14; 184:21;193:4 representative (1) 85:8 represents (1) 184:5 request (2) 11:18;20:12 require (4) 8:19;20:6;32:8;65:1 required (7) 22:2;32:7;53:16; 77:12;83:1;138:20; 143:4 requirement (1) 53:18 requires (6) 19:14;22:3;65:2,9, 24;146:4 re-read (1) 113:9 re-reviewed (1) 44:13 research (3) 40:6;59:5;189:3 residences (2) 111:19;112:7 residency (3) 25:9,11;38:17 residents (19) 38:14;41:23;48:6; 49:10,21;50:19;53:25; 54:3;62:3;70:4;97:7; 109:21,25;110:5; 111:3,7,8;112:11,12 resolution (3) 7:8,22;8:24 resolve (2) 196:10;203:17 resolved (1) 79:10 resolving (1) 93:13 respect (9) 17:19;29:18;33:20; 36:2,5;88:23;98:1; 120:13;161:8 respectfully (1) 139:6 respiratory (6) 36:5;161:11;185:3,5, 7,9 respiratory-related (2) 161:24;168:5 respond (9) 21:25;22:2,4,5; 45:12,23;58:23;67:12; 118:6 responded (1) 19:5</p> | <p>responding (3) 45:13;154:21;159:16 responds (1) 116:3 response (20) 5:25;9:9,21;13:17; 17:22;19:1,2,5;20:14, 16,20,23;22:8;94:9,9; 134:12;139:11;159:17; 187:17;195:20 responses (1) 19:25 responsibilities (1) 99:5 responsible (1) 48:22 responsive (3) 46:15;50:13,15 rest (2) 11:24;175:10 restrict (1) 36:17 restricted (1) 138:25 result (4) 54:7;56:6;63:10; 184:19 results (4) 179:16,21,22;180:2 resume (7) 4:16;32:16;42:4; 167:11,12;202:19; 203:17 resumed (1) 4:14 retain (1) 12:8 retained (2) 7:12;91:18 return (7) 24:2,13,18;124:11, 12;129:19;163:11 revealed (1) 40:6 reverse (3) 168:22,22;170:11 review (17) 13:12;18:6;43:24; 50:21;82:16;91:15; 97:25;98:3,15;100:7; 144:20;150:15,19; 153:15;187:15;201:13, 15 reviewed (13) 11:4;41:8;44:9,9; 47:25;48:1;54:16; 74:13;98:23;100:11; 101:21;155:19;176:16 reviewing (3) 44:8;48:3;78:25 revised (6) 103:11,19;104:15; 112:1;178:23;194:5</p> | <p>revision (1) 55:14 revisions (1) 95:23 Rico (1) 91:18 right (138) 5:3,18;6:1;8:8,10,18; 9:7,17,20;10:23;11:6, 16;12:5,15;13:2,8,14; 15:23;16:6,12;17:10, 25;20:22;21:13,13; 22:7,13,20,23;24:8,12; 26:23;28:11;29:14; 38:16;40:1,19;41:2; 43:17;45:5;46:8;49:7; 51:13;56:20;62:20; 63:23,25;64:18;65:12; 66:4;71:11;72:14,21; 79:22;85:4;87:9;89:25, 25;90:13;92:10;93:4; 94:18,25;95:7;98:13; 99:14;105:8;106:16; 107:12,21;108:16; 110:18,25;112:16; 114:6,16;115:13; 116:14;117:15,25; 118:3,5,18;124:21; 126:15,21;127:5; 128:5;133:11,16; 134:22;135:6;136:7; 137:24;139:8;140:10; 141:25;143:4,20; 147:25;151:24;152:3; 159:14,22;160:24; 165:9;166:11,18; 167:3,11,12;171:10; 172:10,20;173:13; 175:17;178:4;179:19; 184:7;189:4,8;190:9; 193:25;194:2,16,22,23; 195:9,20;196:12; 197:23;198:2;200:8, 17,18;202:18,18; 203:16 rightly (1) 73:13 ring (2) 54:10;179:8 ringing (1) 176:17 risk (25) 54:1;60:7,14,14; 80:13;98:2;106:9,11; 118:24;119:22;120:23, 25;121:18;122:23; 123:21;124:9,11; 127:15,21;129:11,21; 130:11;134:16;191:14; 193:21 risks (14) 61:10;80:12;112:22; 119:17;120:4,13,13,14,</p> | <p>16;122:23;123:3,6,10, 12 Road (2) 4:9;179:8 roads (6) 54:10;161:22;162:3, 7,8;168:2 roadway (1) 168:14 roadways (2) 162:2;168:7 role (4) 12:11;23:16;43:22; 51:15 rolling (1) 158:1 room (8) 4:17,18;38:16,16; 55:11;94:23;161:24; 168:5 rooms (2) 23:9;36:14 ROSENFELD (156) 5:8,8;7:1,2,16,18,23; 8:3,9;9:5;11:1,4,10; 13:24,25;14:1,12,20; 15:3,19,22,25;16:13, 16,22;17:3,8,17;18:1, 10;19:8,14,21;20:9; 27:1,4;41:2,4;42:3,6, 16,18,22,24;45:3,7,23; 46:10;61:11,13;67:7; 72:5,23;117:14;123:8, 11;136:18,21;137:9, 20;143:25;144:1,4,5, 16;146:19;147:5; 148:6,12;149:4,10,19, 23;150:3;151:9,11,13; 152:4,9;153:3,13; 157:2,25;158:9;160:2, 4,9,14,19;161:6; 163:10,15,17,20,23; 164:1,7;167:13,14,15, 20,22;168:21;169:19; 170:4,6,8,14,21,23; 171:15,18,22;172:11, 19,22;173:3;175:24; 176:10;177:14,17,19, 24;178:2,7,9,22;180:1; 182:11,24;183:1; 184:8;185:10;186:24; 190:2;194:10;195:22, 23,24;197:10,24;198:1, 8;199:3,12,15,17,25; 200:4,10,11,21,24; 201:1;202:11,16 Rosenfeld's (1) 117:9 rotate (1) 38:14 roughly (1) 37:22 rounds (3)</p> | <p>31:3,3,10 row (3) 86:9,12,18 rule (8) 16:18,20;71:3; 153:14;156:12;159:3; 166:8,13 rulemaking (1) 157:1 rules (1) 8:2 ruling (2) 16:25;46:18 running (2) 99:3;137:17 rural (9) 69:15;70:12,22,24; 71:12,17;152:6,15; 153:1 Russell (1) 41:11</p> |
| S | | | | |
| <p>S- (1) 124:18 S-2863 (1) 4:5 safety (26) 33:10;41:22;53:3; 70:6;109:5;129:5,7; 185:1,7,12,14;187:1,8, 11,19,23;196:1,3,14, 18;197:18,22;198:9, 22;199:4,13 same (13) 51:1;54:13;88:13; 98:25;104:22;106:4; 115:3;127:3,3;156:12; 182:1;189:19;198:21 Sammick (1) 79:4 Sammit (1) 77:1 sample (1) 149:19 samples (7) 145:21;146:8,10; 147:17,19;149:20; 150:9 sampling (5) 144:8,10,18;145:3; 154:23 sand (1) 79:18 Sarah (1) 160:7 satisfaction (1) 79:10 satisfied (1) 14:19 satisfies (1) 20:12</p> | | | | |

| | | | | |
|--|--|---|--|---|
| <p>saw (4) 13:3;33:7;100:11; 190:18</p> <p>saying (33) 14:18;19:25;29:8; 64:8;73:2;84:24;97:1; 98:9;105:3,24;128:21, 22,23;129:13;130:7; 132:10,12;133:20; 134:2;135:17;146:8; 148:25;151:18;152:20; 153:15;171:7;176:3; 184:1,6;191:9;194:3; 195:16;198:18</p> <p>scan (1) 114:24</p> <p>scenario (1) 91:8</p> <p>scent (1) 145:7</p> <p>scents (1) 145:6</p> <p>schedule (1) 17:16</p> <p>scheduled (2) 6:16,19</p> <p>school (15) 25:3,8;38:10;39:25; 50:9;51:1,13;53:21,22, 25;68:3;92:24;97:16; 108:13;143:3</p> <p>schools (7) 25:7;50:6,23;62:7; 92:24,25;93:1</p> <p>science (1) 84:4</p> <p>scientific (13) 44:9;46:21;49:3; 68:6;74:21;77:18; 79:21;82:16;97:19; 100:23;170:13;201:16, 19</p> <p>scientists (2) 73:21;135:24</p> <p>sclerosis (1) 36:6</p> <p>scope (7) 42:14,18;67:8,17; 89:8;136:24;177:3</p> <p>scripted (1) 73:17</p> <p>se (2) 62:24;153:17</p> <p>second (21) 4:18;45:5;50:5; 62:13;71:3;73:12; 90:12;99:18;124:14; 130:23;131:3;133:3,4, 4,19;137:2;161:18; 168:3;180:18;183:8; 190:13</p> <p>secondary (1) 64:3</p> | <p>secondhand (1) 114:4</p> <p>secondly (1) 104:20</p> <p>secret (1) 92:9</p> <p>Section (4) 4:6;147:6,9,10</p> <p>sections (6) 47:25;150:15,18,23; 155:19,20</p> <p>sector (1) 23:12</p> <p>seeing (2) 24:13;33:4</p> <p>seeks (1) 19:15</p> <p>seem (4) 73:20;94:2;108:20; 191:14</p> <p>seemed (1) 39:21</p> <p>seems (4) 89:21;131:16; 132:23;171:3</p> <p>segment (1) 28:18</p> <p>segue (1) 195:19</p> <p>segueing (1) 125:15</p> <p>selected (3) 47:25;75:5;88:4</p> <p>selection (1) 75:7</p> <p>sell (2) 62:16;63:6</p> <p>selling (1) 75:21</p> <p>seminar (1) 31:17</p> <p>seminars (3) 31:6,6,10</p> <p>Senate (1) 108:12</p> <p>send (3) 18:13;73:2,3</p> <p>sense (12) 16:18;77:18;83:11; 101:9,10;105:13,16; 117:8;118:23;125:21; 161:16;186:20</p> <p>sensitive (5) 53:1;81:14,18; 129:17;162:9</p> <p>sensitivity (1) 82:9</p> <p>sent (7) 16:11;18:6;73:1; 77:6;94:9;95:12; 188:22</p> <p>sentence (23) 109:8,13,20;124:14,</p> | <p>15;125:16,16;126:11, 14,20;127:8,17;128:5, 11,11,16;129:4; 138:11;144:19;167:24; 168:3;175:10,12</p> <p>separate (2) 58:18;134:18</p> <p>September (20) 4:15,17;6:9,11,20; 11:22;15:1;73:1;94:12; 95:22;96:2;103:11,13, 22;104:2,7;105:15; 144:6;176:11,18</p> <p>series (2) 96:14;154:18</p> <p>services (2) 33:4;94:6</p> <p>serving (1) 111:18</p> <p>session (2) 4:16;10:12</p> <p>set (14) 41:19;53:16;71:3,4; 78:21;81:23;128:5; 142:17;163:8;168:10, 13;181:1;191:12; 192:10</p> <p>sets (4) 59:9;71:2;167:24; 181:18</p> <p>setting (1) 80:15</p> <p>settings (1) 47:22</p> <p>settling (1) 77:11</p> <p>seven (5) 42:7;52:7,11;91:16, 17</p> <p>several (6) 38:19;95:23;127:14; 183:3;187:8,9</p> <p>shaking (1) 141:13</p> <p>shape (1) 12:1</p> <p>share (2) 23:25;190:8</p> <p>SHEARD (2) 5:22,22</p> <p>sheet (3) 166:6;167:20;170:16</p> <p>shop (1) 95:19</p> <p>short (8) 12:23;48:23;90:11; 157:6,6,7;163:4,7</p> <p>shorter (1) 162:25</p> <p>shorthand (1) 170:12</p> <p>short-term (4) 161:2,5,20;162:23</p> | <p>show (8) 15:9;137:16;139:24; 146:14,16;177:6; 179:19;193:17</p> <p>showed (1) 156:4</p> <p>showing (1) 151:14</p> <p>shown (2) 177:1;184:2</p> <p>shows (1) 138:19</p> <p>shut (1) 142:11</p> <p>side (4) 12:13;139:1;153:9; 168:22</p> <p>sides (3) 12:8;190:10,15</p> <p>signed (1) 95:14</p> <p>significance (4) 50:2;51:15;56:14; 121:16</p> <p>significant (3) 56:19;121:14;165:14</p> <p>Silver (1) 4:9</p> <p>SILVERMAN (41) 5:10,10,12;12:16,18, 21;13:2,5,7,9,11,15; 64:15,20,21;65:9,21; 110:17;141:8,24; 142:1,3;148:5,7,11,15, 18;151:25;160:1; 166:15;167:9;168:20; 191:2,5;193:14,24; 194:2;195:6,17; 198:25;203:21</p> <p>Silverman's (1) 13:17</p> <p>similar (8) 44:13;51:5;88:13; 92:17;103:17;144:9, 18;199:13</p> <p>simply (1) 11:24</p> <p>single (2) 107:9;196:24</p> <p>sit (1) 77:4</p> <p>site (11) 4:9;45:19;62:5; 64:10;97:20,23;98:18; 125:5;147:20;150:9; 191:24</p> <p>sited (1) 98:10</p> <p>sites (2) 146:9,10</p> <p>sitting (4) 38:15,16;137:21; 159:19</p> | <p>situation (10) 43:24;60:22;88:23; 89:2;91:1,3;92:17; 106:9,10;193:18</p> <p>six (10) 42:7;145:11;146:1; 156:16,17,17;157:3; 164:12;167:3;198:24</p> <p>sixth (1) 157:7</p> <p>skim (2) 115:16,18</p> <p>skin (1) 198:20</p> <p>skip (1) 84:15</p> <p>skipped (1) 102:21</p> <p>slightly (2) 95:21;182:5</p> <p>small (4) 12:22;13:18;23:8; 28:18</p> <p>smoke (1) 114:4</p> <p>smoking (1) 114:4</p> <p>society (1) 106:3</p> <p>sold (1) 64:7</p> <p>solve (1) 86:21</p> <p>Somebody (5) 19:4;83:8;87:7; 148:9;171:16</p> <p>somehow (2) 21:4;160:14</p> <p>someone (2) 110:1;163:5</p> <p>someplace (1) 142:4</p> <p>sometime (1) 10:8</p> <p>sometimes (3) 31:6;84:12;155:13</p> <p>somewhat (1) 192:19</p> <p>somewhere (1) 171:20</p> <p>soon (1) 192:18</p> <p>sorry (41) 22:14;27:12;34:13; 38:2;39:3;44:12;47:11; 49:4;59:8;64:11;72:5; 81:5,16,25;83:24; 85:19;87:9;89:12;94:3; 99:15;103:12;104:11; 112:1;113:5,10;115:9; 120:11;121:22;122:6; 123:8;130:8;144:15; 145:16;147:7;155:23;</p> |
|--|--|---|--|---|

| | | | | |
|--|---|---|--|---|
| 163:3;167:18;168:12; 170:24;175:25;185:4 sort (3) 88:2,3;95:25 sorts (1) 37:23 sought (1) 120:15 sounds (3) 107:12;121:3,3 source (2) 107:9;108:1 sources (3) 76:15;179:16;180:7 SOX (2) 157:6;187:12 sp (1) 119:25 space (1) 6:19 span (1) 98:21 speak (11) 14:12;20:9;57:23; 86:11;87:1,7;111:7; 128:3;135:3;155:23; 180:22 speaker (1) 57:23 speaking (3) 8:25;117:20;201:2 speaks (2) 126:16;131:18 special (12) 4:5;17:23;19:16; 29:9,16;35:9;48:7; 56:18;97:20;124:18; 141:18;142:21 specialization (1) 29:24 Specializations (1) 28:6 specialties (4) 27:11,15;28:25;40:4 specialty (4) 27:19,21;29:4;30:4 specific (9) 77:22;85:8;93:1; 106:9,10;120:23; 121:17;146:10;174:24 specifically (13) 8:4;20:10;31:19; 34:21;42:8;45:17; 51:14;53:20;55:22; 111:2;113:8;135:9; 175:2 speculate (2) 199:8,8 speculating (2) 88:7;199:6 speed (1) 47:20 spelled (1) | 53:10 Spencer (1) 107:18 spend (1) 162:6 spent (4) 25:10;31:1;181:16; 199:22 spirit (1) 12:3 spoke (1) 32:21 spread (1) 10:23 Spring (1) 4:9 squarely (1) 20:5 squeezing (1) 17:6 ST (10) 106:14,16;157:15, 17;159:7;169:13; 188:23;189:2,2,7 stachybotrys (1) 108:11 staff (22) 9:19;17:21,22;18:2, 6,19,25;19:3,6,12,18, 24;20:7,16;21:18;22:1, 6;66:20;73:5;112:6; 152:16;194:20 stand (4) 49:1;57:21;159:18; 195:2 standard (56) 43:9;69:15,15;76:23, 25;77:15;78:21;80:5; 103:3,5,9;104:15,19; 105:5,6,14;106:2; 108:23;156:3;157:8, 12;158:4,5,15;161:4,5, 19;163:8;167:25; 168:11,14;178:11; 181:1;182:17,21; 183:18;184:22,24; 185:20;187:11;188:13; 189:25;190:1,1;193:5; 196:16;197:3,18,21,21, 23;198:13;201:23,23; 202:3,5 Standards (91) 48:23;50:1,2;51:3,3, 17,18,19,23;52:13,17, 24;53:16,21;58:21,25, 25;59:2,6,7,10,18,23; 61:22;69:19;70:2,3,12, 16;71:7;76:16,22; 80:16;81:22,22,23,23; 103:19;109:1;146:4; 154:3,5,15,24;155:4, 17;156:19,19;164:1; 165:18;169:7;179:3,4; | 185:21,23,24;186:9,10, 16,23;188:1,5,10,18; 190:4,6,7,17,20;191:7, 9,13,15,18,19,25; 192:2,6,8,11,19; 193:16,17,19,23; 194:18,19,24;195:1,15; 196:2 standing (1) 193:16 standpoint (1) 65:15 start (4) 10:15;26:4;142:4; 163:5 started (2) 100:13;120:11 starting (3) 38:17;133:4;175:18 state (11) 6:22;8:2,15;10:20; 22:16;59:1;61:18; 93:20;104:13;120:14; 131:16 stated (5) 15:13;78:20;81:21; 108:22;109:1 statement (7) 27:8;80:9;96:13; 128:20;131:18;133:9; 138:15 statements (2) 138:2,4 state-of-the (1) 124:16 state-of-the-art (5) 36:23;64:3;124:15; 125:4,17 States (5) 23:13;25:20;59:1; 82:4;91:19 stating (2) 7:22;61:16 station (64) 4:8;41:21,24;48:5, 14;49:9,19;50:6,21; 51:5;54:2,5,7;56:7,9, 10;57:4;58:16;59:9; 61:8;62:5;63:7,11; 64:7,24;65:4;67:25; 68:2;69:12,18;71:20; 75:20;81:19;84:19; 88:25;91:1;93:10,15; 106:23,25;107:1,2; 111:9;112:21;113:6,9, 10,11,20;121:24; 124:24;136:5;139:5, 22;140:12;141:5; 142:7,8,12;144:9,18; 146:12;151:17;189:24 stations (3) 122:5,7;125:18 statistics (1) | 174:8 statute (4) 52:14;53:9,10; 190:20 stay (1) 192:25 staying (1) 193:7 step (2) 22:15;58:14 Stephen (4) 41:9;51:13;53:20; 68:3 Sterling (12) 51:5;140:5;144:9,18, 20;145:22;146:10,11; 147:12,17,19;150:9 stick (1) 125:22 still (16) 9:9,25;15:1;23:8; 38:12,13;39:15;69:2; 77:4;86:16;97:16; 128:8;136:1;142:8,9; 199:6 stipulate (1) 79:19 stipulated (1) 78:6 Stop (7) 5:10,16;33:3;78:8; 141:24;191:8;200:20 stopped (3) 33:2;143:23;152:7 stopping (1) 202:17 stops (1) 73:23 storage (1) 64:2 store (1) 112:20 stores (1) 113:19 strange (1) 68:13 strata (1) 179:5 Street (4) 22:19;23:10;111:16, 16 stricter (2) 59:2;106:2 strike (1) 176:6 strongly (1) 79:20 stuck (1) 58:9 students (5) 37:22;38:14;39:10; 50:6,22 studied (1) | 95:24 studies (6) 48:3;129:21;130:10; 132:2;133:13;201:12 study (5) 69:9;97:19;132:12; 139:24;147:12 stuff (4) 66:14;79:7;114:1; 122:9 sub-category (1) 29:9 subject (2) 4:8;12:23 subjected (1) 50:20 submission (7) 41:7;42:10;55:5; 104:11,12,13;194:13 submissions (2) 11:7;99:20 submit (1) 10:2 submitted (9) 11:21;14:18;21:1; 26:14;54:20;55:4;77:2; 100:5;101:19 subparts (1) 6:9 subsequent (1) 99:10 subset (3) 53:8;75:2;82:13 subspecialty (1) 28:7 sub-specialty (1) 30:4 substance (8) 43:16,19;58:10; 89:16;94:1;96:23; 104:1;129:12 substances (1) 127:22 substantive (3) 75:7;173:18,23 substantively (1) 104:24 suddenly (1) 159:12 suffer (1) 162:25 sufficient (2) 32:17;42:1 sufficiently (2) 12:9;193:4 suggest (5) 134:1,3;162:1,12; 194:17 suggested (1) 67:8 suggesting (1) 81:12 suggestion (1) |
|--|---|---|--|---|

| | | | | |
|---|---|---|--|---|
| 171:3 suitcase (2) 92:5;145:1 sulfur (11) 136:12;145:10,12; 149:11,13;157:6; 164:22;198:22,25; 199:1,1 Sullivan (67) 6:19;14:9;15:7,16; 16:1,19;17:20;18:18; 20:5;21:17;44:7;51:4; 55:2,12;61:13;68:18; 71:21;85:9,10,12,18, 20,23;87:11,21; 102:23;110:1;111:6; 117:2;127:13;128:1, 10,12,13,19,20,24; 144:21;146:18,18; 150:12;153:2,14; 171:8,25;172:5;173:4, 7;174:14;175:22; 176:15,19;180:16,22; 181:8,14,20,21,25; 183:5;184:9,13,18; 191:3;194:11;196:11; 202:21 Sullivan's (36) 20:15;21:8;40:15; 41:19;42:14;44:2;51:9; 54:16;55:20;56:2;61:6, 7,16,21;62:1;73:5; 97:8;102:12;108:20; 114:9,11,23;118:21; 128:8;146:19;149:20; 176:21;178:13,15; 179:10,16,20,24;181:6; 193:1;194:4 summaries (2) 153:22;182:9 summarized (2) 100:7;146:15 summarizes (1) 132:20 summary (9) 6:8,25;8:2;16:17; 138:25;178:3;179:21; 180:2;182:7 sun (1) 60:4 sunlight (2) 198:19,19 supplement (5) 21:15;32:4;55:4,14; 172:24 supplemental (5) 19:8;21:5;73:6; 74:23;102:23 supplements (1) 54:23 supplied (5) 18:19,21;19:12; 21:17,22 | supply (1) 189:6 supplying (1) 159:17 support (2) 19:17;20:10 supporting (2) 11:20;177:20 supposed (7) 14:17;80:5;89:15; 115:5,7;164:15;192:1 sure (47) 7:20;12:1,12;16:20, 24;17:16;18:13;20:4; 26:3;27:22;29:1;49:12, 13;50:16,18;55:25,25, 25;60:23,24,24,25; 62:25;63:4,4,4;71:2; 77:24;78:16;84:13; 85:15;88:7;92:8;94:19; 95:9,12;106:12;128:2; 134:7;138:15;149:6; 154:17;164:10;168:18; 189:12;200:6,25 surface (1) 24:3 surprised (1) 110:10 surrounding (2) 62:5;151:16 surviving (1) 199:23 susceptible (1) 162:20 sustain (2) 24:15;67:16 Sustained (2) 46:18;47:4 swimming (2) 50:8;68:2 sworn (1) 22:22 symptoms (4) 185:3,5,8,9 syndrome (1) 92:21 system (5) 36:5;60:7,12;66:14; 123:4 systematic (1) 98:22 systems (2) 36:5;136:11 | tailpipes (2) 122:12;131:17 talk (9) 47:18;57:11,15; 62:13;139:12,13,15; 150:1;157:3 talked (2) 136:1;138:14 talking (32) 6:24;37:2;57:9,13; 63:15,16,17;64:6; 67:14;80:14;81:16; 121:2,4,25;126:21; 132:23;133:1,18; 134:2;137:5,8;138:4; 139:12;140:7,7; 150:16;177:23;189:13; 191:11,12;194:18; 201:8 talks (3) 20:2;133:17;168:1 tank (1) 64:2 taught (2) 37:22;39:9 teach (1) 38:13 teaches (1) 97:16 team (1) 44:1 Technical (9) 18:25;19:3,6,12,23; 21:18;73:5;102:20; 112:6 technically (2) 139:3;158:19 technology (6) 65:3;76:6,7,10; 138:7,9 telling (1) 100:22 temperature (1) 9:20 temporary (1) 81:10 Ten (3) 159:15;200:1,5 tend (1) 75:18 tendered (1) 21:21 tennis (1) 50:25 term (4) 24:4;66:15;80:22; 186:21 termed (3) 27:10,12,14 terminal (1) 83:8 terminated (1) 36:11 | terminology (1) 27:25 terms (20) 15:18;20:2;37:9; 56:14;66:20;67:18; 70:17;89:24;93:13,25; 95:18;126:19;127:10, 18;144:2;148:9,9; 155:17;164:1;193:21 testified (17) 24:21;25:16;46:20; 47:19;49:25;52:24; 69:8;93:23;94:1;106:9; 107:8,25;111:25; 130:6;150:11;181:22; 196:15 testify (20) 37:25;38:4;41:9,11, 13,18;42:17,21;45:17; 64:23;67:9;71:4;79:15; 90:13;97:1;107:9; 117:18;137:22;139:2; 189:11 testifying (12) 6:18;26:1;32:17; 46:12;51:14;89:24; 117:10,13;124:18; 137:22,24;177:4 testimonial (1) 91:4 testimonies (1) 106:7 testimony (47) 11:5;40:14,14;42:14, 19;43:16;52:16;53:21; 64:22,22;65:1,8,13,19; 66:25;67:2,11,19; 69:14;72:18;80:25; 89:8,15,19,23;90:7,25; 93:19;101:24;105:3; 110:14;135:16;138:6, 11,24;141:8;147:1; 154:1;155:18;179:15; 195:7,10;196:1,5,19; 197:17;200:13 thanks (1) 87:8 theme (1) 75:18 thereafter (1) 140:13 therefore (2) 82:5;124:8 third (7) 25:11;99:18;126:12, 14;144:7,19;176:5 third- (1) 181:22 third-hand (2) 175:3;181:23 Thomas (1) 41:14 thorough (1) | 108:5 though (9) 11:14;46:14;49:12; 59:7;92:10;140:10; 153:22;155:4;168:19 thought (18) 10:11;21:19;35:2; 49:11;61:25;120:24; 121:18;129:11;135:6; 138:12,13;148:24; 157:16;192:3;193:10, 14,21;194:9 thousands (1) 28:22 three (27) 10:21;23:8;31:18; 37:5,16,16,18;42:6; 54:23;88:16;119:25; 141:6;146:5,5;151:14; 161:15;163:24;164:6, 12;165:1;167:2; 184:23;187:21;197:13, 13,14;200:7 threshold (2) 198:19,20 thrilled (2) 15:14;86:22 throughout (1) 44:24 throw (1) 102:8 Thursday (1) 17:12 Thus (1) 125:4 Tim (8) 90:20;106:13; 157:13;188:21;189:1, 1,2,9 time-consuming (1) 99:4 timely (1) 10:14 times (9) 24:24;25:22;26:9; 80:19;187:9;188:3; 193:15;200:1,5 time-weighted (2) 158:7;159:13 timing (2) 15:16,17 tiny (2) 140:7,14 title (6) 130:18;147:6,9,11; 151:11,12 titles (1) 129:20 today (16) 4:16;5:24;6:17;9:18; 10:8,19;21:23;73:4; 117:11,13;129:18; 143:3;187:9;200:14; |
|---|---|---|--|---|

| | | | | |
|--|---|--|---|--|
| 203:17,20 together (1) 80:18 togetherness (1) 86:24 told (11) 14:1;69:6;77:5;79:4; 86:4;88:11;103:21; 110:8,9;111:2;135:22 tomorrow (4) 17:5,13,15;142:7 toned (1) 174:4 took (12) 79:4,4;105:4,16; 128:8,24;135:16; 143:2,2,7;191:17; 197:14 top (4) 21:11;106:16; 165:25;167:24 topic (1) 31:7 topics (2) 31:4,20 Topographic (1) 151:14 total (4) 176:21;178:25; 179:10;180:6 totality (1) 97:11 totally (2) 19:19;52:19 toxicologist (1) 97:15 toxicology (1) 52:4 track (3) 64:11;141:23;142:22 tract (1) 121:20 traditional (1) 36:11 train (1) 106:23 training (2) 67:23;106:21 transcript (2) 7:19;60:3 transcripts (3) 138:18;187:5;196:8 transfer (1) 10:5 transient (1) 81:10 translate (1) 136:3 Transportation (1) 108:10 trap (1) 66:14 travel (1) | 33:4 traveling (1) 34:6 treadmill (1) 23:9 treatable (1) 81:8 treated (16) 32:23,25;33:17,18, 20,24;34:21;35:5,16, 22;36:2,3,6,13,16; 79:21 treating (2) 34:2;40:7 treatment (2) 33:11,19 Treatments (1) 36:22 trial (1) 26:1 trick (1) 168:19 tricky (1) 74:1 tried (1) 89:10 trip (1) 129:24 trouble (3) 57:24;86:14;171:1 truck (7) 75:14,15,15;137:17; 138:19,19;139:3 trucks (14) 54:9;63:17;64:9,13, 22,23;65:2,3,10,24; 75:21;137:11,15;138:5 true (11) 45:16;65:23;66:8; 67:1;98:25;111:22; 135:1,2;155:16; 190:22,24 trust (1) 139:20 truth (1) 42:17 try (17) 12:10;55:23;61:1; 73:21,25;74:4,6;84:11; 86:7,11;87:1;91:10; 125:22,22;142:22; 153:7,11 trying (23) 13:11;19:4;63:21; 71:19;75:13,14;76:5; 78:16;79:14;89:21; 90:5;96:21;98:21; 99:21;136:5;170:4; 175:4;177:18;191:13; 192:24;193:10,17; 196:18 turn (6) 22:9;89:18;130:22; | 138:20;143:25;201:6 turned (1) 108:10 Twenty-two (1) 165:4 two (45) 6:25;7:3,5;15:15; 18:1;25:10;30:16; 31:21;32:22;33:7,22, 25;36:16,17,19;37:2, 11,15,18,19;42:6,8; 44:7;45:7,9;54:23; 76:21;87:5;93:2;98:18; 115:2,4,11;116:24; 117:14,17;126:22; 129:22;158:5;164:13, 14;166:17;167:2; 181:18;203:5 type (2) 60:15;134:22 types (2) 53:17;135:18 typically (6) 31:16;35:24;57:6; 60:14;186:1;201:6 typo (1) 178:3 | United (3) 23:13;82:4;91:19 units (1) 174:7 University (7) 25:9,12,13,15;31:4; 38:10;39:25 unleaded (1) 64:7 unless (6) 15:20;114:14; 152:13;168:16;191:7; 194:14 unlikely (2) 117:18,19 unreasonable (1) 112:19 up (45) 9:11;22:15;25:2; 34:15;47:20;50:10; 57:23;64:11;68:16; 70:7;74:10;76:22;77:3, 4,11;79:1;83:22;86:7, 13;87:7;90:17,19; 106:4;109:9,20; 111:21;114:1;132:13; 138:19;144:2;150:25; 151:1,20;155:23; 156:4;163:16;169:16; 177:14;183:21;191:21; 194:8,12;195:21; 197:15;201:13 update (1) 166:6 updated (17) 16:10;17:19;18:2,5, 17;20:20;21:17;52:14; 104:12;159:3;165:18, 25;173:4;179:21; 188:12,15;192:9 updating (1) 11:24 upon (1) 100:5 upper (5) 127:11,23,25,25; 128:22 upshot (1) 77:7 up-to-date (1) 39:22 upwards (1) 30:9 urban (10) 14:17;70:22,24; 71:17;152:5,14,18; 153:1;176:20;180:25 use (11) 24:4;65:18;71:12; 111:12;112:2;113:1, 18;136:12;151:15; 186:21;199:23 used (13) | 6:13;66:16;80:22; 111:15;133:13;151:15; 175:17;181:25;182:2, 3;184:9;187:8;196:14 users (1) 62:7 uses (3) 56:10,19;111:14 using (8) 11:21;75:22;168:25; 169:23;176:20;181:13, 18;184:24 usually (3) 20:1;92:20;129:22 |
| V | | | | |
| | | | vacation (1) 34:10 vaccinations (1) 34:6 vaguely (2) 175:3;181:23 valid (1) 36:25 valuing (1) 150:1 vapor (4) 64:3;121:25;122:4, 11 variability (1) 82:9 variety (3) 33:5;40:8;52:3 various (16) 6:4;11:8;31:7;35:2; 36:7;40:23;82:10;84:3; 98:4,6;102:23;113:19; 119:12;140:11;141:19; 155:8 vast (1) 137:12 vehicle (2) 63:14;98:4 vehicles (7) 63:10,12,16;64:10; 65:25;66:3;133:6 Veirs (1) 4:9 versa (1) 183:19 VERSAR (3) 85:22;87:20;88:10 version (4) 10:3;95:21;104:3; 143:6 versions (2) 84:3;137:6 versus (4) 37:19;137:6;152:6, 14 Vice (3) 8:4;97:13;183:19 | |

| | | | | |
|---|---|--|---|--|
| <p>vicinity (1) 111:9</p> <p>View (5) 5:19,22;9:6;18:3; 32:18</p> <p>violated (1) 193:19</p> <p>violation (1) 12:3</p> <p>Virginia (8) 5:22;51:5;85:22; 140:6;144:9,19; 147:12,20</p> <p>virtually (2) 58:9;96:12</p> <p>visiting (1) 63:16</p> <p>visitors (9) 41:23;45:19;49:10, 21;50:19;62:3;68:1,2; 70:4</p> <p>visits (2) 161:24;168:5</p> <p>vitae (2) 38:8;42:5</p> <p>VOC (4) 61:22,23;62:2;202:8</p> <p>VOC's (8) 119:11;145:19; 147:14;150:4,5,11; 202:7,8</p> <p>voice (1) 86:7</p> <p>voir (7) 26:23;39:21;40:19; 89:11,13;93:20;143:18</p> <p>volatile (1) 60:19</p> <p>volunteer (1) 188:22</p> <p>VOQ (1) 61:25</p> <p>voted (2) 7:2,10</p> <p>vulnerable (8) 53:4,8,13;82:13,15, 24;83:1;162:19</p> | <p>9:18</p> <p>warning (1) 83:22</p> <p>warranted (1) 35:25</p> <p>Washington (10) 22:19;23:15,16; 25:13;31:4;38:10; 39:24;44:24;45:1; 108:14</p> <p>waste (2) 140:15;171:13</p> <p>water (2) 24:3,3</p> <p>watershed (2) 66:4;136:9</p> <p>way (34) 19:23;20:1,11;33:13; 36:24;49:7;54:13; 58:15;61:1,4;63:22; 83:18;86:20;93:9;94:6, 6;98:22;107:24;112:7; 123:22;125:14;137:23; 142:18,19;148:20,22; 163:8;165:11;169:15; 170:12,13,19;177:9; 182:5</p> <p>ways (2) 27:18;127:14</p> <p>wearing (1) 87:8</p> <p>website (2) 160:25;166:10</p> <p>Wednesday (2) 16:21;17:14</p> <p>week (3) 14:14;31:1;39:16</p> <p>weigh (1) 7:12</p> <p>welfare (4) 41:22;49:20;52:1; 97:7</p> <p>well- (1) 11:12</p> <p>well-characterized (2) 119:18,21</p> <p>well-founded (2) 65:14;137:25</p> <p>Westfield (2) 4:11;125:8</p> <p>What's (18) 23:14,16;48:17; 58:19;64:19;77:20; 79:13;91:10;103:5; 106:23;140:7;144:19; 165:21;183:22;189:1; 198:19,20;200:9</p> <p>whatsoever (2) 45:9;46:1</p> <p>Wheaton (5) 4:10,11;124:17; 140:1,6</p> <p>whereas (1)</p> | <p>112:8</p> <p>Whereupon (1) 204:1</p> <p>whichever (1) 81:23</p> <p>white (5) 58:17;79:17;203:11, 14,14</p> <p>whole (7) 18:3;138:15;150:12; 165:23;178:5;191:18; 192:10</p> <p>Wholesale (1) 4:4</p> <p>wide (12) 53:2,3;70:6;109:4; 129:5,7;185:1,2,7; 195:25;196:14,17</p> <p>widely (1) 104:19</p> <p>wife (1) 35:8</p> <p>Willard (1) 41:12</p> <p>wish (3) 6:22;43:18;59:2</p> <p>wishes (2) 5:24;73:14</p> <p>Withdrawn (1) 126:9</p> <p>within (12) 10:18;11:19;20:5; 36:5;67:8;150:6; 152:12,14;159:11; 176:23;182:16;183:13</p> <p>without (9) 32:23;56:22,25; 129:14;139:12;162:15; 183:10;184:1;193:2</p> <p>witness (236) 6:20;22:10,22;25:16, 23,25;26:5,8;27:16; 31:1;34:2,5,9;35:7,24; 38:13;39:2,5,11,14; 40:22;41:3,6;45:4; 47:5,7;50:9,14,24; 54:13;55:23;56:21,25; 57:12,17,21;61:16; 62:9;63:24;64:1,16; 65:14;69:5,13,21;70:6; 71:16,25;72:9,13; 76:24;77:11;79:24; 80:25;81:2;82:7;83:3, 7;84:7;86:11;87:1,3,6, 17,23;90:8,11,16;91:7, 16;92:2,6,9;93:6,14,14; 94:23;96:18,22;97:1; 98:13,16;99:16;100:8, 13;101:6,11;102:7; 104:2,9;105:7,10,25; 106:18;107:1,14; 108:3,5,7,9;111:18,21; 113:6,15;114:18;</p> | <p>115:6,14;116:22; 117:4;120:7,19; 121:11,14;122:14; 123:14;124:5;125:11; 127:13;128:1,16; 129:1;131:7,10,23; 132:1,9;134:12,14; 135:3,21;136:8,19; 137:1;138:17;139:6,9, 14,20;140:5,15,21; 141:3;143:21;144:15; 146:21;147:4;148:22; 149:1,3,9,22,24; 150:19,24;151:2,5,7, 10,12,14,22;152:1,11, 16,23;153:4;156:25; 157:16,18,21;158:1; 159:9;160:22,25; 163:21,24;164:3; 165:4,9,16,21,23; 166:2,8,20,22,24; 169:11,16;170:9,22,24; 172:17,21,23;173:1; 175:13,23;176:4; 177:16,18,25;178:5,8; 182:6;183:3,17,23,25; 184:6;185:9;188:19, 21;189:9,12,14,16,18; 190:11,20;191:1,17; 195:2;198:3,5;199:1, 10,22;200:1;202:23, 25;203:2,6,8,11,24</p> <p>witnesses (6) 6:1,16;10:17,22; 41:8;42:7</p> <p>witness's (5) 37:10;43:5;65:15; 93:18;125:12</p> <p>woman (2) 24:15;38:18</p> <p>wonder (1) 130:17</p> <p>wondered (1) 189:23</p> <p>wondering (1) 117:10</p> <p>Word (2) 10:3;95:17</p> <p>words (2) 16:10;197:14</p> <p>work (17) 22:18;23:11;24:15, 21;26:11;34:10;52:22; 67:23;73:22;85:23; 112:20,20;154:14; 155:7;169:24;195:7,9</p> <p>worked (4) 44:18;87:20;89:20; 154:19</p> <p>worker (1) 194:18</p> <p>workers (19) 34:14;41:23;45:19;</p> | <p>48:6;49:10,21;50:19; 62:3;68:1;70:4;188:11; 189:23;190:4,25; 191:24;192:1,12,15; 193:3</p> <p>working (2) 104:20;131:10</p> <p>workplace (4) 24:16;188:11;191:7, 8</p> <p>work-related (1) 24:1</p> <p>works (1) 171:16</p> <p>World (6) 59:11,19;81:23;82:1; 135:24;139:23</p> <p>world's (1) 79:1</p> <p>worldwide (3) 24:23,24;155:16</p> <p>worry (1) 73:24</p> <p>worse (1) 59:20</p> <p>write (1) 4:22</p> <p>writing (1) 100:24</p> <p>written (5) 7:14;11:7;16:24; 139:20;183:24</p> <p>wrong (5) 20:21;30:8;83:12; 92:10;99:16</p> <p>wrote (3) 100:19;102:6;105:3</p> |
| X | | | | |
| x-ray (1) 23:9 | | | | |
| Y | | | | |
| year (20) 25:9,11;26:9;47:19; 52:15;86:3;98:21; 100:14;108:11;132:3; 133:9;136:9,9;146:7; 150:16;156:6;157:10, 24;162:22;178:14 <p>years (44) 25:10;26:9;30:16; 31:21;32:22;33:7,22, 25;36:12,16,17,19,19, 22;37:2,5,15,19,23; 39:10,18;44:14;52:14; 66:8;80:20;85:21;86:3; 87:15,17;104:20; 127:20;129:12;139:11; 146:5;156:22;161:15; 164:6,12;165:1;</p> | | | | |

| | | | | |
|---|--|---|--|--|
| 175:19;184:23;186:2; 199:22;200:7 Yep (2) 178:17;185:17 | 10-day (2) 10:18;11:19 10th (6) 11:22;95:22;96:2; 103:22;104:2,7 11 (1) 77:8 11:00 (1) 72:15 11160 (1) 4:9 113 (1) 147:4 1140 (1) 22:19 12 (18) 77:1,8,11;102:5; 103:6;104:24;108:21, 23;109:4;156:3;157:8, 9,10,11;164:16;197:14, 19;202:13 12/14 (1) 105:11 12/14/12 (1) 155:24 12-07 (3) 101:18;126:4,5 12th (1) 150:12 13 (6) 177:25;178:3;182:8, 13;183:19;184:4 13-12 (1) 4:5 13th (2) 4:3;14:3 14 (8) 77:9;129:20;155:22; 156:12;165:18,22; 166:6,12 141 (1) 180:11 15 (18) 52:10,11;66:8;74:23; 76:10;77:1,9;104:24; 129:19;130:14,16; 156:3;157:11;163:8; 197:15,19;198:11; 202:13 15a (3) 97:8;102:13;114:23 15b (4) 94:17;96:1;103:17; 124:12 15th (1) 58:8 16 (8) 4:8;15:1;51:10;55:3; 68:20;69:25;73:6; 179:24 16th (5) 17:20;54:25;55:14; 172:23;178:13 | 17 (1) 4:14 17e (1) 42:5 17h (2) 26:15;38:8 188 (8) 55:13,14;70:9,9; 169:23;170:10,17,22 19 (9) 4:14;94:14;99:9,22; 100:7,24;102:5;105:4; 117:2 190 (1) 182:17 1963 (1) 53:19 1964 (1) 25:6 1970's (1) 192:10 1980 (1) 23:20 1995 (1) 38:11 1996 (1) 162:20 19th (8) 22:19;23:10;95:13; 96:1;109:7,15;124:12; 127:1 1-hour (21) 158:6,15;159:13; 164:23,25;167:24; 168:11,14;176:21; 178:12,14,18;179:2,4; 180:25;181:1;182:17; 183:12;184:10;187:11; 202:13 1-year (1) 180:21 | 66:6 2007 (4) 66:5,6,9;136:9 2010 (7) 64:13,14;147:12; 158:21,22,23;161:4 2011 (4) 37:3;54:21;160:12, 12 2012 (51) 15:7,8;54:22;64:13; 69:8;71:22;94:14;99:9, 22;100:7,24;101:22; 102:5,12,24;103:3; 105:4,14,17;117:2; 128:12;132:17;146:13, 20,24;153:16;155:22; 156:13;160:17;165:18, 22;166:7,12;173:19, 20;174:15;176:15,21; 178:14,18;179:21; 180:19,20,20,24;181:6, 7,9,14;182:2,3 2013 (29) 4:13,15;6:9,11; 54:24,25;55:3;69:9,25; 71:23;73:6;94:13; 99:20;103:12,14; 105:15;144:6;173:5, 15,20;174:15;175:7,7; 178:16;179:7,20,24; 181:14,21 20th (4) 6:20;202:19,23; 203:17 22 (5) 52:2,6,11,12;200:20 23 (1) 4:14 24 (2) 103:21;127:20 24-hour (1) 103:9 25 (6) 72:15;86:3;87:15,17; 167:5;199:22 255a (1) 179:24 26 (1) 4:13 262b (1) 184:5 267 (1) 6:5 268 (1) 6:8 269 (1) 6:10 269a (4) 6:11;103:14,15,17 26th (2) 14:21,24 27 (1) | 151:2 271 (1) 6:13 272 (3) 9:18,21,23 273 (2) 13:9,20 274 (1) 16:1 275 (4) 146:25;147:2; 160:15,16 276 (5) 160:12;167:16; 168:23;170:17;203:3 277 (18) 165:12,19;176:22; 177:16,17;178:8,14; 182:15,20;183:13,25; 184:1,2,11,19;185:20, 21;203:4 2863 (1) 124:19 29th (1) 99:19 2B (1) 131:13 2-page (2) 99:11;109:11 2-sided (1) 114:22 |
| Z | | | | |
| zero (3) 63:24;168:24,25 zone (2) 79:18;80:4 zoned (2) 4:11;125:8 Zoning (7) 4:6;18:20;19:14; 20:2,9;101:18;192:16 ZTA (1) 126:8 zylene (1) 150:2 | | | | |
| 0 | | | | |
| 0 (1) 7:2 0.15 (1) 158:2 075 (2) 164:4;200:2 | | | | |
| 1 | | | | |
| 1 (4) 4:14;23:20;131:11; 165:13 1- (2) 180:3;182:20 1.88 (6) 170:1,20,21,24,25; 172:18 1/10,000 (1) 57:5 1:45 (2) 117:16;118:1 10 (15) 4:10;6:9,11;10:16; 11:23;14:14;36:19; 66:8;94:12;103:11,13; 129:12,13;144:6; 198:11 10.8 (1) 57:3 100 (18) 47:7,9;74:17,19,24; 75:2;97:25;103:1; 158:7,10;167:25; 168:11,14;178:12; 184:22,24;188:4; 189:20 100-fold (1) 66:7 100th (1) 57:6 | | | | |
| | | 2 | | |
| | | 2 (5) 4:15;134:14;165:13, 15;180:2 2- (1) 108:10 2.1 (1) 147:10 2.5 (1) 48:19 2:45 (1) 117:16 20 (3) 4:17;129:13;175:19 2000 (7) 132:3,13,23;133:2,6, 9,15 2002 (2) 33:2;36:11 2006 (1) | | |
| | | | 3 | |
| | | | 3- (1) 146:6 3,000 (1) 28:13 3:00 (1) 167:6 30 (4) 4:15;26:9;36:12; 85:21 300 (3) 33:8,9,13 31 (1) 4:15 33 (2) 173:1;178:20 35 (1) 103:9 3a (1) 41:8 3-day (1) 45:2 3-hour (1) 184:9 3-month (1) 158:1 3-year (15) 25:14;158:8,20; 161:13;164:13,15,18; 180:18;183:4,5,9,11; | |

| | | | |
|---|---|--|--|
| 184:10,16;187:22 | | | |
| 4 | 8 | | |
| 4 (3) 4:14;7:2,10 4,000 (1) 28:15 4:30 (1) 10:8 4:35 (1) 204:1 4:45 (2) 10:9;117:19 40 (3) 37:23;39:18;139:11 49 (1) 174:7 | 8 (2) 4:15;179:20 8/13/13 (1) 14:10 8/26 (1) 16:4 80 (7) 47:7,9;74:17,19,24; 75:2;97:25 83 (2) 178:14,19 8-hour (4) 157:23;164:4,6,11 | | |
| 5 | 9 | | |
| 5 (1) 199:10 5,000 (2) 189:19,20 50 (9) 168:24,25;169:24; 170:1,16,17;188:3; 189:21,21 53 (2) 158:6;162:21 59-G-2.06 (1) 4:6 5th (3) 38:18;176:11,18 | 9 (3) 4:15;157:21,23 9:30 (1) 4:19 90 (4) 102:19,24;180:16,18 95 (4) 127:11,22,25;128:22 98 (3) 180:3,4,16 98th (4) 158:19;164:25; 165:3;184:17 99th (3) 164:24,25;165:3 9th (1) 99:8 | | |
| 6 | | | |
| 6 (5) 4:14;177:25;178:2; 182:8,10 60 (5) 90:21,21;97:12; 106:13;155:1 664 (2) 130:23;131:1 6th (1) 73:1 | | | |
| 7 | | | |
| 7 (1) 182:10 70 (2) 127:20;129:12 75 (6) 114:11;117:2;118:4, 21;164:23;200:6 76 (4) 114:11;117:2;118:4, 21 | | | |