

In The Matter Of:

*ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING
FOR REOPENED CAAPP PERMIT FOR MIDWEST GENERATION*

*HEARING
November 15, 2016*

*ADVANTAGE REPORTING SERVICE
110 S.W. JEFFERSON AVE., SUITE 430
PEORIA, IL 61602
PHONE: 309-673-1881 FAX: 309-673-0341
reportingservice@att.net*

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
PUBLIC HEARING FOR REOPENED CAAPP PERMIT FOR
MIDWEST GENERATION -- POWERTON GENERATING
STATION TAKEN NOVEMBER 15, 2016, AT 551 SOUTH
14TH STREET, PEKIN, ILLINOIS, AT 7:00 P.M.
PROCEEDINGS WERE IMMEDIATELY REDUCED TO
STENOGRAPHY BY CINDY M. SCRIBNER, CSR-RPR,
LICENSED SHORTHAND REPORTER.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

MR. FROST: All right. We're going to get started. Good evening, everyone. My name is Brad Frost, I'm the acting hearing officer for the Illinois Environmental Protection Agency. On behalf of acting director Alec Messina, I welcome you to tonight's hearing. My purpose tonight is to ensure this proceeding runs smoothly according to rules in a fair and efficient manner. Personally I will not be responding to specific technical issues relating to the permit, but will defer such issues to the technical staff here at the table. This is an informational hearing before the Illinois EPA, the matter of the reopening of the Clean Air Act Permit Program, otherwise referred to as CAAPP permit for the Midwest Generation Powerton station located at 13082 East Manito Road in Pekin.

The public hearing is held under

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

3

1 the provisions of the Illinois EPA's
2 procedures for permit and closure plan
3 hearings which can be found at 35 Illinois
4 Administrative Code, part 166, subpart A.

5 An informational public hearing
6 means exactly that. It is an opportunity for
7 you to provide information to the Illinois EPA
8 concerning this permit. It is not a contested
9 case hearing. The revisions now planned as
10 contained in the draft revised CAAPP permit
11 address new requirements for the units at this
12 source that became applicable since the
13 issuance of the initial CAAPP permit in 2005
14 and generally update the permits. As part of
15 this proceeding, the Illinois EPA has prepared
16 documents for the public that outline the
17 revisions that are the subject of this
18 hearing. Those documents can be found at the
19 registration table. And then the draft permit
20 can be found on the Illinois EPA website. The
21 Illinois EPA's holding this hearing for the
22 purpose of accepting comments from the public
23 on the planned revision of the CAAPP permit

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

4

1 for the Powerton station prior to actually
2 taking final action on these revisions.

3 I'd like to explain how tonight's
4 proceeding is going to proceed. First I'll
5 have the Illinois EPA staff introduce
6 themselves and identify their responsibilities
7 within the agency in regards to this permit
8 action. Then Doug Rutherford from the Bureau
9 of Air at the Illinois EPA will briefly
10 explain the planned revisions to the CAAPP
11 permit. This will be followed by additional
12 instructions as to how oral comments will be
13 taken during this hearing, and then we will
14 begin taking comments from the public. You're
15 not required to provide your comments orally.
16 Written comments can be given and are given
17 the same consideration and may be submitted to
18 the Illinois EPA at any time during the
19 comment period which ends on December 15th,
20 2016. Tonight is the only time that we will
21 accept oral comments. The Illinois EPA would
22 like to have a final decision on this matter
23 as quickly as practical, however, the actual

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

5

1 decision date will depend upon the number and
2 nature of the comments received as well as
3 other factors.

4 Any person who wants to make oral
5 comments may do so as long as the statements
6 are relevant to the issues at hand and time
7 allows. If you have not completed a
8 registration card at this time, please see
9 Elizabeth Rupel at the registration area, and
10 she can provide you with a registration card.
11 Please be sure to check the appropriate box on
12 the card if you desire to make comments this
13 evening. If you have lengthy comments, it
14 would be helpful to submit them to me in
15 writing before the end of the comment period,
16 and I will ensure that they are included in
17 the hearing record as an exhibit.

18 I stress that we like to avoid
19 unnecessary repetition. All who legibly
20 complete a registration card or submit written
21 comments in this manner during the comment
22 period will be notified of the final decision
23 in this matter and of the availability of the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

6

1 response and the summary. In the
2 responsiveness summary the Illinois EPA will
3 respond to all significant issues that were
4 raised at the hearing and submitted to me
5 prior to the close of the comment period.

6 I'm now going to turn the
7 microphone -- well, I'm going to have the
8 Illinois EPA staff introduce themselves and
9 then turn the microphone over to Doug. After
10 he makes his presentation, I'm going to go
11 over a couple more of the ground rules as they
12 relate to making comments and then we'll go to
13 the comments.

14 MR. REED: Michael Reed,
15 M-I-C-H-A-E-L, R-E-E-D, and I am a CAAPP unit
16 supervisor.

17 MR. RUTHERFORD: And I'm Doug
18 Rutherford, that's D-O-U-G,
19 R-U-T-H-E-R-F-O-R-D, I'm an engineer with the
20 permit unit for the CAAPP permits. I just
21 want to say thank you again for attending the
22 meeting, this public hearing regarding the
23 plan changes to the CAAPP permit from Midwest

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

7

1 Generations Powerton generation station.
2 Changes are planned to the current CAAPP
3 permit for the Powerton station which was
4 issued in October 2015. Because this permit
5 was issued to resolve the appeal of the
6 initial CAAPP permit, the permit -- this
7 permit does not address applicable
8 requirements that took effect after the
9 initial permit was issued. The Illinois EPA
10 has reopened the current permit to make
11 changes to that so that it would address all
12 applicable requirements that are now applied
13 to the Powerton station. This should be
14 understood that even though certain
15 requirements are not addressed in the current
16 CAAPP permit, Midwest Generation is already
17 subject to and must comply with these
18 requirements.

19 For the coal-fired boilers, changes
20 would be made to the permit to add a number of
21 requirements. The U.S. EPA's rules for
22 emissions of mercury and other hazardous
23 pollutants from coal-fired boilers, the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

8

1 mercury and air toxics standards, would be
2 added. Illinois' rules for mercury emissions
3 would also be added. New Illinois rules for
4 sulfur dioxide emissions from the Powerton
5 station as related to local air quality for
6 the Pekin area would also be addressed.
7 U.S. EPA's cross state air pollution rule and
8 Illinois rules that address emissions and
9 sulfur dioxide and nitrogen oxides as related
10 to the transport of emissions and regional air
11 quality would be addressed. As these state
12 rules address Powerton and other coal plants
13 operated by Midwest Generation, these rules
14 are also part of U.S. EPA's approved plan for
15 implementation of best available retrofit
16 technology in Illinois which was required to
17 reduce Illinois' contributions to haze in
18 certain national parks and certain other
19 federal lands in which vistas are an important
20 value.

21 For the coal-fired boilers,
22 Illinois EPA also proposed to provide final
23 approval for the compliance assurance

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

9

1 monitoring plan for particulate matter
2 emissions from the boilers. Testing of these
3 -- testing has been completed that confirms
4 that the plan includes an appropriate
5 indicator value for opacity to identify
6 excursions of the state PM emission standard.

7 For coal-fired boilers, the Acid
8 Rain Program would also be renewed as
9 requested by Powerton.

10 Revisions to the CAAPP permit are
11 also planned to address equipment constructed
12 at Powerton since the initial permit was
13 issued. This includes equipment at the
14 facility to handle the dry sorbent that is now
15 being used on the coal boilers to reduce
16 sulfur dioxide emissions. It also includes
17 the equipment at the plant that is being
18 constructed to handle additives to the coal
19 that are intended to reduce emissions. A
20 portable natural gas fired auxiliary boiler
21 would also be addressed.

22 Other changes are also planned to
23 update the permit. Changes would be made to

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

10

1 clarify certain requirements and reduce
2 potential misunderstandings regarding
3 requirements for monitoring, testing, record
4 keeping and reporting. Revisions must also be
5 made to provisions of the permit to
6 incorporate certain plans and records by
7 reference, such as records that identify the
8 control measures used for material handling
9 operations and the Fugitive Particulate Matter
10 Operating Program. Specific details
11 concerning these plan changes and other plan
12 changes from the CAAPP permit are discussed in
13 the statement of basis prepared by the
14 Illinois EPA. The Illinois EPA has also
15 prepared a brief fact sheet that highlights
16 more of the significant changes that are
17 planned to the permit. If you've not done so
18 already, please pick these documents up as you
19 leave.

20 And I'll turn things over to Brad.

21 MR. FROST: So if you -- again, if
22 you want to make comments tonight and you
23 haven't filled out a registration card, please

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

11

1 do so. The way I'm going to proceed is as
2 people filled out registration cards, I will
3 be calling you up to the podium to make your
4 comments. I want you to state your name and
5 your affiliation. Statements should be
6 relevant to the revisions of the permit. And
7 I'd like everyone to be treated in a
8 respectful manner, that means no clapping, no
9 derogatory sounds. Lengthy comments should be
10 submitted in writing to the agency. And in
11 that purpose, to make sure that we -- everyone
12 that wants to make a comment has a chance to
13 make a comment, I'm going to establish a time
14 limit of five minutes per comment to the room.
15 Then if time allows, those who haven't filled
16 out a card but then wish to make a comment --
17 again, if time allows, I will allow people
18 afterwards then to come up.

19 We do have a court reporter
20 recording the proceedings tonight, so I want
21 to keep noise to a minimum and ask you to
22 speak into the microphone. I'll call you up
23 to the microphone, again state your name and

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

12

1 affiliation and please direct your comments to
2 the hearing panel. The hearing panel is
3 primarily here to accept comments. As time
4 allows, we will respond to questions that may
5 come up in the course of your question or of
6 your comments.

7 So I'm going to start with Robin
8 Garlish, please come up to the microphone.
9 The person after her is Joe Laszlo.

10 MS. GARLISH: Good evening. My
11 name is Robin Garlish, and thank you guys for
12 being here tonight. I am one of the people
13 that requested that you guys come in here, us
14 as neighbors and residents, and listen to what
15 we have to say concerning the Powerton plant.
16 I am a Pekin resident. I'm a mother of a
17 chronic asthmatic daughter, and I'm a member
18 of the Sierra Club, and I'm also a member of
19 the Central Illinois Healthy Community
20 Alliance. I'm proud to stand here with
21 everyone today, and we even have a bunch of
22 students here from the Pekin High School who
23 are also concerned. They see these stacks

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

13

1 spew, that's the word, some of the dirty
2 clouds spew in the morning as they go to
3 school.

4 As a mom I have watched my daughter
5 suffer with asthma her whole life -- with
6 chronic asthma. And now I'm experiencing
7 asthma myself. My asthma attacks have been
8 increasing quite a bit in severity lately. I
9 had to pull over, and I'm not used to being an
10 asthmatic myself, I cough and I cough and I
11 try to drink until I have to pull over. And
12 I'm realizing and I have been diagnosed with
13 the asthma. I am taking the maximum puffs of
14 the ProAir inhaler, Albuterol is another word
15 for it. And the maximum amount is four puffs
16 every six hours and I'm struggling with that
17 amount.

18 I brought some pictures to give to
19 you guys today. I don't know if you would
20 call it an exhibit or not, but I want you guys
21 to have these, and I have just printed them
22 from my computer. Two of them are from Sunday
23 morning on the way to church and the rest of

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

14

1 them are the sunset last night. And I did
2 notice before the sunset last night a little
3 bit of dark in the air over in that area from
4 downtown Pekin, and the reason I looked over
5 there is because I was starting to have the
6 tightness in my chest again. So I did put my
7 name and information and what each one of
8 these were with the Powerton Station Manito
9 Road and also it is -- I got a picture of a
10 subdivision called -- it's been known as
11 cancer alley for quite a few years. I've been
12 here 29 years. So it's been called cancer
13 alley since 29 years ago. People that are
14 born and raised here can probably attest to
15 it's been called that longer, and there's a
16 reason for that. And these are your guys' to
17 keep.

18 MR. FROST: I'll enter these as
19 Exhibit 5.

20 MS. GARLISH: The last time I was
21 over here in the cancer alley neighborhood
22 some of the people's stories have broke my
23 heart. There was one adult child, a grown

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

15

1 man, and he was living with his adult parents
2 in their house. They both were on oxygen and
3 they were invalids at this point, you know,
4 they could not leave the area, go outside of
5 their home, because of the air quality. Many
6 children live in this cancer alley
7 neighborhood. And I was talking with some of
8 the parents while the kids were walking with
9 them and they can't pick up and move and these
10 kids were 10, 11, 12, and it just breaks my
11 heart to see this.

12 Near the plant, close to cancer
13 alley there is an animal shelter, and it was
14 on Facebook, I don't get on there much, but
15 they were asking if anybody knew of anyone
16 having an extra nebulizer, which is a
17 breathing machine for asthmatics and people
18 having trouble breathing. And since my
19 daughter has had it her whole life, we did
20 have an extra nebulizer machine that we picked
21 up from vacation, so we gave that to the TAPS
22 No Kill Animal Shelter which is actually
23 between cancer alley and the Powerton plant is

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

16

1 on the route -- it's Route 29, I think, before
2 you turn to Manito Road.

3 Without looking at what I have left
4 to say, I hope and pray that something can be
5 done about this and the standards. I don't
6 know, something needs to change. My dream
7 would be to have a third party regulate and
8 monitor the air opacity, because I don't think
9 these companies can do this responsibly on
10 their own. That would be my dream to have
11 that. And, obviously, there's other problems
12 in the way. Thank you.

13 MR. FROST: Thank you, Ms. Garlish.
14 If you -- again, if you have additional
15 comments, you can submit them in writing by
16 the end of the comment period. After
17 Mr. Laszlo will be Faith Bugel.

18 MR. LASZLO: My name is Joe Laszlo,
19 L-A-S-Z-L-O. I live at 330 South Barnewalt
20 Drive, Peoria, Illinois. I've been a resident
21 in this area for more than 30 years. And I
22 often recreate in the Illinois River Valley,
23 so I find myself impacted substantially by the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

17

1 emissions from Powerton as well as the other
2 power plants in this valley. I want to
3 address one specific issue with you tonight
4 though. It's my understanding that the
5 proposal has a clause where the air emissions
6 will be monitored and recorded in such a
7 manner that you will use something that I
8 would understand as being a moving average.
9 Now, while I understand moving averages are
10 good for getting trends if you want to see
11 what's happening over a long period of time
12 and you want to know is it generally going up
13 or going down, what it does is it removes
14 spikes from the data. And if we're using a
15 moving average, you're missing out on critical
16 data and reporting that because the spikes are
17 gone. And the spikes are, in this case, very
18 important information. The spikes are telling
19 us when there's an exceedance in critical
20 hazardous air emissions from these plants. So
21 we need to know that data. We need to have
22 that data recorded and reported accurately,
23 completely, not averaged out.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

18

1 So I'm asking you to provide
2 realtime reporting that is undoctored through
3 this averaging process and that all the
4 reports include the opacity, sulfur dioxide
5 and mercury emissions that are not averaged
6 out. So, again, I would also like to thank
7 you for taking this time for these public
8 comments. We appreciate you coming and
9 spending your time with us this evening.

10 MR. FROST: Thank you, Mr. Laszlo.
11 Faith Bugel, after which is Joyce
12 Blumenshine.

13 MS. BUGEL: Good evening. My name
14 is Faith Bugel, F-A-I-T-H, B-U-G-E-L, and I am
15 here representing the Sierra Club this evening
16 and I want to thank IEPA for providing this
17 opportunity for public comment. It's always a
18 meaningful opportunity. And I also think the
19 level of interest in this permit is showed by
20 attendance tonight which is extraordinary.

21 I will submit lengthy written
22 comments before the December 15th deadline, so
23 tonight I just want to focus on two elements

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

19

1 of the permit. First, I wanted to turn to the
2 sulfur dioxide one-hour limit, and I'm
3 referring to condition 7.1.4 E2 on page 62 of
4 the permit. And I noticed that there's a
5 provision that appears in the permit that is
6 limiting SO2 hourly emissions that exceed
7 6,000 pounds per hour to a five percent of
8 operating hours on a monthly basis. And I
9 wanted to say that we commend IEPA for
10 including this provision in the permit,
11 because this provides a limit on the frequency
12 of sulfur dioxide spikes. This is something
13 that Sierra Club advocated for in the SO2
14 hearings for the SO2 one-hour standard, the
15 SIP, the nonattainment SIP, S-I-P, which is
16 the state implementation plan. This is
17 something the Sierra Club advocated for. We
18 think this is a very important addition to the
19 permit because of the -- otherwise the permit
20 allows 30-day averaging of one-hour SO2
21 emissions. We have a problem with 30-day
22 averaging of one-hour SO2 emissions, because
23 SO2 provides a threat to public health over

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

20

1 short term, and a 30-day average for a one-
2 hour limit does in fact allow the types of
3 spikes that are at odds with the purpose of
4 the rule. So we think that provision is
5 really important, and we really appreciate
6 IEPA putting it in.

7 We do -- we did raise an additional
8 concern in the hearings for the one-hour SO2
9 standard, and that concern was not just the
10 frequency of spikes but also the magnitude of
11 spikes. And we note that the permit still
12 does not have a limit on magnitude of spikes,
13 and we think that is still a second important
14 provision where there is a 30-day average,
15 again, to protect public health and those
16 short-term very high SO2 emissions.

17 In response to the inclusion of
18 this condition, we did have a couple of
19 questions. My first question was, whose
20 initiative led to this provision being
21 included? And specifically I'm wondering if
22 this was the applicant who proposed this or
23 IEPA?

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

21

1 MR. RUTHERFORD: It was added
2 because it was in the state Illinois
3 Administrative Code, and that's why it was
4 printed in the permit. And it does become
5 effective on January 1st, 2017.

6 MS. BUGEL: The second question I
7 had is my reading of the permit would indicate
8 that the startup, malfunction and breakdown
9 authorization to continue operations and
10 affirmative defense would not in fact apply to
11 hourly SO2 emissions; is that correct?

12 MR. RUTHERFORD: I believe that's
13 correct; isn't that right?

14 MR. REED: Yes, the startup,
15 shutdown and malfunction authorizations
16 provided in the permit only apply to standards
17 in the 35 Illinois Administrative Code and not
18 those set out otherwise.

19 MS. BUGEL: And so would it then be
20 correct to conclude that if the facility
21 exceeded the five percent limit on 6,000
22 pounds per hour, hourly emissions over the
23 course of a month, and exceeded it due to

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

22

1 periods of startup, malfunction and breakdown,
2 the SMB affirmative defense would not be
3 available to the permittee?

4 MR. REED: Can you repeat that,
5 please?

6 MS. BUGEL: Sure. My question is
7 if the facility exceeded the five percent
8 limit on emissions above 6,000 pounds per
9 hour, but exceeded it due to periods of
10 startup, malfunction and breakdown, the SMB
11 affirmative defense would not be available to
12 the permittee; is that correct?

13 MR. RUTHERFORD: We'll have to
14 respond to that one.

15 MS. BUGEL: Thank you. So the
16 second point I'd like to turn to is the
17 provisions regarding alternative fuels, and
18 these appear in condition 7.1.11-1 on page 95.
19 And we are concerned about the emissions that
20 are -- potentially could be caused from the
21 use of alternative fuels. We would like to
22 see the permit first make clear that emissions
23 must be -- must stay within permit limits and

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

23

1 the authorization to burn alternative fuels is
2 not an authorization to exceed permit limits.
3 Specifically, the permit delineates petcoke,
4 clean lumber and tire derived fuel as
5 potential alternative fuels. All of these
6 fuels have a different emissions profile from
7 coal when burned and may emit pollutants,
8 especially hazardous air pollutants, which I'm
9 going to refer to as HAPS from now on, that
10 aren't limited by the permit.

11 The first -- the permit says that
12 waste may not be used as an alternative fuel.
13 But we are concerned that then the listing can
14 be read as includes items that are frequently
15 waste, for instance, tires can be --
16 potentially be viewed as waste and also clean
17 lumber can be viewed as construction waste.
18 So we view that limitation on waste to be at
19 odds with the actual alternative fuels listed.
20 And we think the permit should specifically
21 say at a minimum no construction waste is
22 allowed.

23 So turning to petcoke to start

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

24

1 with. Petcoke can have higher SO2.

2 MR. FROST: Do you have much
3 longer? You're already past the limit.

4 MS. BUGEL: I'll try to wrap it up
5 quickly.

6 MR. FROST: We can come back to
7 you.

8 MS. BUGEL: Then I will come back
9 when you have time.

10 MR. FROST: If you have a couple
11 more points, go ahead.

12 MS. BUGEL: I'll let you come back
13 to me when you have time at the end. Thank
14 you.

15 MR. REED: Faith, I looked at the
16 permit a little closer and the one question
17 you had on startup, shutdown, or malfunction,
18 breakdown, the permit does not provide
19 authorization for the 7.1.4E conditions, I or
20 lower Roman II.

21 MS. BUGEL: I appreciate that.

22 MR. FROST: Joyce Blumenshine, and
23 then after her, Rebecca Carey.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

25

1 MS. BLUMENSHINE: Thank you. My
2 name is Joyce Blumenshine, I live at 2419 East
3 Reservoir in Peoria. I grew up in Tazewell
4 County, not too far from here in Washington.
5 My mom and dad and family were all here. I
6 watched my dad die of lung cancer from age 15
7 on and my mom die of chronic obstructive
8 pulmonary disease some decades later. And I
9 value breathing and the importance of clean
10 air. And I know your agency is doing
11 critically important work, and the untold
12 hours you have put into this permit, and it is
13 really appreciated. We think it could be
14 better. As a member of the public, of course
15 we're asking you to make this stronger. We
16 need this to be stronger. You know the
17 Illinois River Valley suffers and we all
18 suffer from the cumulative air pollution that
19 is held here by the natural topography and the
20 air current. So we have three coal-fired
21 power plants including Powerton and numerous
22 industries and the chemical alley on the
23 Peoria side down south of Bartonville. So

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

26

1 your work on this permit is essential for us
2 here and our families and our kids. I don't
3 want to see any more family members suffer
4 through what I have already seen. And I know
5 that there's a lot of other factors to that,
6 but air quality and concerns from this plant's
7 pollution are huge as the greater polluter in
8 our area. And we want the strictest permit.

9 I have just a couple questions,
10 please. I'm here tonight as chairperson of
11 the Heart of Illinois Sierra Club. We have
12 almost 900 members through 15 counties
13 including Tazewell, Peoria, Woodford, Fulton
14 and the surrounding areas of the air impacts
15 from Powerton where it goes downwind, that is
16 up river from our southwest lies. And we have
17 a real concern tonight as members of Central
18 Illinois Healthy Community Alliance, it's a
19 coalition of about a dozen groups in Peoria.
20 We are active members of that group because we
21 need action for clean air here.

22 And my questions concern mostly on
23 the startup and shutdown and malfunction

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

27

1 procedures. I'm just a layperson. I don't
2 understand this whole permit at all or even
3 parts of it that I tried to read in that huge
4 document. But I don't understand why plants
5 are allowed -- and I'll just use the word get
6 by -- I don't mean to be disrespectful. I
7 know they have mechanical problems. But how
8 can they not be under regulations from you and
9 have to report all of these? I mean, do they
10 -- can you strengthen the start down --
11 startup, shutdown, and malfunction procedures
12 so that they are documented and the public
13 knows? So like for Robin, she can be prepared
14 not to let her daughter go exercise outside or
15 something?

16 MR. REED: So, Joyce, I think your
17 question is -- there's a couple parts to that.
18 One, the permit actually does require them to
19 report all malfunctions and breakdowns. The
20 difference being in the depending on the
21 severity and the length of time that a
22 malfunction might impact excess emissions.
23 And so the frequency of reporting is

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

28

1 different. So we can certainly take that
2 under consideration. But they are required to
3 report all of their malfunction, breakdowns
4 and startups.

5 MS. BLUMENSHINE: And the reporting
6 then, what happens, do you -- do they have to
7 do something that ensures then that they will
8 make an effort to reduce those? Because I, as
9 a member of the public, and we have seen this
10 in the past, I'm not going to say that we know
11 for sure that plants use these three options
12 as excuses to cover up maybe when they want to
13 flush out something or clean out something or
14 they're just not complying for some reason,
15 but I do have that suspicion personally. And
16 I just would like to know what stronger
17 enforcements IEPA can require for the startup,
18 shutdown and malfunctions.

19 MR. REED: Well, that probably is a
20 better question for our enforcement group at
21 the agency that, you know, takes enforcement
22 action for looking into situations where they
23 may not be considered a malfunction,

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

29

1 breakdown, or may not meet a definition for a
2 malfunction or breakdown. And there are --
3 they are required to minimize both duration
4 and frequency and magnitude of malfunction,
5 breakdowns when they occur.

6 MS. BLUMENSHINE: I just ask you to
7 review that and make that as stringent,
8 please, as possible. Our concerns for the
9 local people because these -- well, however
10 long the duration is, it adds significant
11 amounts to what we're all breathing. And who
12 knows what the trigger point is for a heart
13 attack or some chronic condition.

14 I'll wrap up here just in a moment.
15 I did have a follow-up to the earlier
16 mentioning. I am very concerned about the
17 alternate fuels, the Petcoke issue. As you're
18 well aware Powerton is right on the river and
19 there are major lakes and things very nearby,
20 the channel goes right out there. So whatever
21 alternative fuels are allowed here is it under
22 your purview as far as -- I mean, just the
23 storage and the location there in addition to

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

30

1 concerns for the horrific additional
2 pollution, it seems to me that is a major
3 concern, is that covered by your agency?

4 MR. REED: Yeah. I mean, the
5 Illinois Environmental Protection Agency has
6 the Bureau of Water, the Bureau of Land and
7 the Bureau of Air would all regulate various
8 types of materials depending on the criteria
9 and the categories that they fall into.

10 MS. BLUMENSHINE: Thank you. I
11 hear that. I just, you know, as a resident of
12 this area, a person who, you know, I try to
13 jog and be healthy and utilize the river, you
14 know, I don't think any of these things should
15 be allowed for Powerton. They're going to be
16 stored there, they're going to be burned,
17 there's a huge additional concern for health
18 impacts. Thank you very much for being here
19 and for the opportunity to comment tonight.

20 MR. FROST: Thank you, Ms.
21 Blumenshine.

22 So I have Rebecca Carey next and
23 after that Erika Gilmore.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

31

1 MS. CAREY: My name is Rebecca,
2 R-E-B-E-C-C-A, last name is Carey, C-A-R-E-Y,
3 I live at 2214 North Knoxville in Peoria. And
4 I am a member of Central Illinois Healthy
5 Community Alliance, and I have to admit most
6 of this is way over my head. I grew up on the
7 near north side of Peoria in the shadow of
8 Wabco. We knew nothing, nothing about asthma,
9 never knew anyone who had asthma. But my
10 sister and her grandchildren live right over
11 on the other side of the lake here on
12 Broadway, and at age 62 she has been diagnosed
13 with asthma. And her grandchild, who is four,
14 almost died at Christmas of an asthma attack.
15 We have no one in the family who has asthma.
16 So I am deeply concerned about the regulation
17 of these gases. I've known Robin Garlish for
18 a year and she is a dogged investigator of --
19 she's provided you with pictures and
20 information. And I have been impressed with
21 how hard it is to get information. Apparently
22 there is one fire station here that's
23 regularly monitoring air quality control, and

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

32

1 getting information from that meter has been a
2 challenge. Something -- we need more
3 transparency for the citizens who are willing
4 to do the footwork. And we need more controls
5 for the people who live in this area. My
6 niece was in -- great niece was in the
7 hospital for a week. My -- her mother was at
8 her side, took time off to be at her side.
9 The man that she was involved with had planned
10 to propose to her on December 18th, they held
11 a party in the hospital cafeteria so he could
12 give her that ring. Please, please do
13 something about this air. Thank you.

14 MR. FROST: Thank you, Ms. Carey.
15 Erika Gilmore, and after that Greg
16 Wannier.

17 MS. GILMORE: Hi there, my name's
18 Erika Gilmore, E-R-I-K-A, G-I-L-M-O-R-E. I am
19 a lifetime resident of Pekin, born and raised
20 here. I grew up as an athlete at Pekin
21 Community High School, making my way through
22 grade school, of course, and I've always been
23 a runner. During my adult life I went away

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

33

1 for a period of time, continued to run and
2 engage in outdoor activities. And I didn't
3 realize the severity of the air quality here
4 until I moved away and started to experience
5 far less problems with my breathing and being
6 outdoors and hiking, running competitively.
7 And then moving back again, the same things
8 are happening again, but now in my adult life,
9 just some wheezing and congestion that happens
10 even when I'm not being active.

11 I've moved from different parts of
12 Pekin. I was on the north side for a while
13 and I felt there that the issues were far less
14 severe. And now I'm over on the southwest
15 side of Pekin closer to these -- to Powerton
16 and other plants, and I definitely notice a
17 difference just within proximity.

18 Some other issues that I see as I'm
19 traveling around Pekin, when I come in to
20 Pekin from Route 29, I can see the haze that
21 rests over the city. I always refer to
22 Powerton as Gotham City. I mean, it really
23 sits -- the topography raises it up over the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

34

1 rest of the landscape, and the haze from those
2 stacks just settles in over our city. And it
3 makes me wonder, how are our children being
4 affected by this? So I'm raising my children
5 here and it concerns me a lot. I have
6 students who are highly asthmatic. I'm a
7 coach at the high school. I have kids who run
8 with inhalers. I don't understand why these
9 industries are allowed to self report. I
10 would like to know more about that eventually
11 and somehow and how they're held to those
12 standards of making sure that they're being
13 honest with us as citizens here of this area.
14 I know with some research that asthma is the
15 result of inflammation. And I also know that
16 your body's physiological response to
17 inflammation leads to other problems that your
18 body has. So other factors that -- the other
19 health conditions that can arise from heart
20 conditions to just other responses that your
21 body has leading to further breakdown of your
22 health.

23 I appreciate your time. This is

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

35

1 really important for us, and it's important
2 for our students to see what action is being
3 taken here in our city to improve our air
4 quality. I think we have a long way to go. I
5 feel that we've come a long way. I feel that
6 we still have a long way to go. And I hope to
7 see some changes in things as we move forward.
8 Thank you for your time.

9 MR. FROST: Thank you, Ms. Gilmore.
10 Greg Wannier. And after him Kimbra
11 Wagner.

12 MR. WANNIER: Good evening and
13 thank you for this opportunity to speak. My
14 name is Greg Wannier. Greg and then the last
15 name is W-A-N-N-I-E-R. I'm here with the
16 Sierra Club. And as Faith said, we will be
17 submitting longer written comments with the
18 full scope of our feedback. Tonight I wanted
19 to focus on two aspects of this proposed
20 reopening that are particularly troubling to
21 me and to everyone here, I think.

22 We've heard many people talk about
23 the spikes of pollution that happen during the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

36

1 course of the plant's operation, and many of
2 those spikes occur, as we've heard, during
3 periods of startup, malfunction, and
4 breakdown. And the permit has included
5 condition 7.1.3C and 7.2.3, et cetera, going
6 out, defenses to exceedances of these air
7 pollutant standards that occur during periods
8 of malfunction. They've also created defenses
9 to exceedances that occur during startup of
10 Powerton. Now, the Sierra Club has submitted
11 comments at several power plants across the
12 state explaining several times that these
13 defenses are not only problematic for
14 environmental reasons, they're, in fact,
15 unlawful. In 2014 the DC Circuit ruled in
16 Natural Resource Defense Council versus EPA
17 that startup, shutdown, and malfunction
18 affirmative defenses in Title 5 permits across
19 the country are invalid because they interfere
20 with the proper operation of the Clean Air
21 Act. Specifically the Clean Air Act requires
22 emission limitations on a continuous basis and
23 it provides in Sections 304 and 113 of the act

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

37

1 for the question of penalties to be determined
2 by the U.S. District Court. It does not
3 provide for the U.S. EPA to decide what the
4 penalties should be or what defenses should
5 exist for exceedances during any period of a
6 power plant operation. And that includes
7 periods of malfunction, it includes periods of
8 startup and shutdown of the plant.

9 The EPA has recognized this and EPA
10 has issued several memos in the last two years
11 since that decision affirming the DC Circuit's
12 decision and recognizing that startup,
13 shutdown, malfunction provisions across the
14 country, including those specifically
15 mentioned here in Illinois, that this permit
16 relies on here are invalid. And EPA issued a
17 national state implementation plan or SIP call
18 in May of this year specifically noting that
19 Illinois needed to reform, needed to change
20 its state implementation plan and remove
21 affirmative defense provisions in all of its
22 Title 5 permits. Now, that process is still
23 undergoing, and I understand that. I will

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

38

1 note that the state is required to submit a
2 proposed update that will remove these
3 defenses this month. But that is no reason
4 for the agency in the interim to continue to
5 issue permits that allow for these defenses.

6 Again, just to be clear, these
7 defenses have been found to be directly
8 contrary to the terms of the Clean Air Act and
9 the proper operation of that statute. And I
10 think inclusion here today is causing -- their
11 continued inclusion here will continue to
12 cause the terrible health impacts that we've
13 seen, we've already heard about, and will
14 continue to hear about over the rest of the
15 evening.

16 I'll just note that a lot of the
17 pollutions we're talking about here,
18 especially including SO2 and particulate
19 matter, are at their most damaging when
20 they're at significantly high concentrations.
21 And the highest concentrations that cause the
22 most damage to people and lives occur during
23 these periods. So I would urge that the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

39

1 Illinois EPA -- well, so the question is what
2 can IEPA do about it before the state SIP has
3 been updated? And the answer is, EPA has
4 actually given authorization and urged states
5 in a similar -- in another affirmative defense
6 rule making and that states can and should
7 within their authority immediately begin
8 phasing these out in their Title 5 permits.
9 And EPA said specifically in the context of
10 emergency affirmative defenses that it is not
11 only allowable, but it is proper for states to
12 not wait for the state plan to be updated,
13 which could take years, but to immediately
14 recognize the invalidity and illegalities of
15 the startup, shutdown and malfunction
16 provisions that are killing people in this
17 community, and remove those from their
18 permits.

19 And we'll submit in our comments --
20 you know, we'll guide you to that regulation.
21 We already have -- we haven't gotten responses
22 yet, but I would urge you in this Title 5
23 proceeding to really look at that section and

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

40

1 look at the sources and information that we're
2 providing.

3 So I think that provides IEPA
4 authority to rescind all of the startup,
5 malfunction, breakdown defenses in this
6 permit, and I would urge you to do that. If
7 for -- you know, there are, however, other
8 options even if you don't remove them
9 immediately, although I think that would be
10 lawful. You could, for instance, establish
11 sunset provisions that provide that these
12 defenses only last for so long as the state
13 implementation remains in its current form.
14 You could provide that those defenses are
15 immediately invalidated the moment that the
16 state implementation plan is updated. And
17 I'll say that that would be particularly
18 helpful here given the agency's long history
19 of taking years and years -- over a decade to
20 issue updated permits. I don't think the
21 people here can wait another 10 years to get
22 these illegal terms out of the permits.

23 Another option is that IEPA could

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

41

1 commit in the final permit here to an
2 immediate and targeted reopener of this permit
3 and commit in that final rule to having a
4 hearing and immediate revision of the permit
5 once the state implementation plan is updated
6 rather than waiting the full five years or 10
7 years or 13 years or more to update the
8 permit. Or at the very least, if IEPA doesn't
9 do any of those things, it should make clear
10 that IEPA's determination that an affirmative
11 defense may apply, it does not preclude an
12 enforcement action under the Clear Air Act,
13 because under the DC Circuit rule in NRDC vs.
14 EPA, those provisions are invalid today.
15 They're not invalid -- they're not improper,
16 they're not just something that needs to be
17 replaced in the course of time, they are at
18 this very moment invalid under the law.

19 MR. FROST: We're over the five
20 minutes.

21 MR. WANNIER: That's fine. I have
22 one more issue, but I can wait until the end
23 if there's time.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

42

1 MR. FROST: Thank you, Mr. Wannier.

2 Kimbra Wagner, and after that we've
3 got Virginia Woulfe-Beile.

4 MS. WAGNER: Hi, I'm Kimbra Wagner,
5 that's K-I-M-B-R-A, W-A-G-N-E-R. So basically
6 I guess I'll start, I just moved up here from
7 Florida I would say a little over a year ago,
8 and I can say just from moving up here, the
9 breathing problems that have occurred are out
10 of control. And we live over in Peoria, but
11 when we lived in Bartonville, my son is about
12 three and the wheezing and the coughing and, I
13 mean, even where we live in Peoria, I have to
14 have two air purifiers. So it's not something
15 that, you know, I think is just imagined. I
16 do think it's an environmental factor.

17 A couple of the issues that I
18 really had, especially with -- well, one, you
19 guys mentioned about the excess emissions and
20 with the startup and shutdown, but you didn't
21 really say what the consequences are if they
22 go past that. You just said that they have to
23 lower the emissions. So are there any

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

43

1 consequences for them? Like is there any kind
2 of taxation or is anything done, or are they
3 just kind of told, don't do that?

4 MR. RUTHERFORD: Well, once they
5 report their issues, then it is evaluated and
6 if enforcement action is necessary, it is
7 taken.

8 MS. WAGNER: How long does it
9 usually take, I guess, on average?

10 MR. REED: Well, I can't speak for
11 our enforcement group, but that would be based
12 on the frequency of the reporting that's
13 required. So if they are reported immediately
14 upon the occurrence, which some of these based
15 on their severity are required to be reported
16 immediately, we would look at those reports.
17 And I believe under the statutes we have 180
18 days to take action. However, I will -- I do
19 want to point out that a malfunction,
20 breakdown, when there is an excess emission,
21 it is a deviation, period, whether the excuse
22 is a malfunction, breakdown or something else.
23 And so those are technically pursued as

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

44

1 enforcement actions by anyone and the source
2 and/or the individual, which is what these
3 defenses are all about, is required to prove
4 that it was actually a malfunction, breakdown,
5 or startup that caused those.

6 MS. WAGNER: Okay. So I guess my
7 other point, too, in that does also include
8 with the excess emissions. I mean, doesn't it
9 seem like it would be more logical and make
10 more sense to do some kind of realtime
11 reporting, and I'm sure that they have the
12 technology or that it's easy to come up with.
13 I mean you have people here today that I'm
14 sure would be watching it and be able to have
15 more of a stance and have more information
16 about the amount of emissions that are coming
17 out, especially if it was specific and listed
18 exactly what emissions were released at what
19 percentage.

20 And I also have an issue that the
21 draft permit, whatever it is, that it doesn't
22 exactly specify how the opacity is correlated
23 with the PM emissions. So I guess I would

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

45

1 also ask for that to be more specified. I
2 just think that there's a lot of loopholes
3 that's kind of leaving it up to these bigger
4 corporations. And especially with the way
5 things are going in our country right now, I
6 don't really know if there's enough even
7 public trust to rely on these corporations and
8 if that's valid or not. You know, I'm not
9 saying all corporations are bad, but I do
10 think that there can be some community
11 outreach that can also help watch the people
12 that are in their own neighborhoods. And, I
13 mean, even the third party viewing, you know,
14 I think that would also be good especially if
15 it was chosen. Like, I think people should be
16 more active. And I feel like you guys can set
17 up these statutes and whatever to encourage
18 that and then I don't think we'd be having as
19 many of these.

20 And also, you know, I don't agree
21 with how they're kind of averaged out, because
22 -- I don't really want to get into it because
23 it's been touched on a lot, but that does kind

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

46

1 of give a smoother view of how much emissions
2 are being released at one time, so it looks
3 like, oh, it's not so bad. But when these are
4 released in concentrations, you know, it's
5 doing damage. I know people who have lived
6 here their whole life, had family here, and
7 they do, they have an abnormal amount of
8 cancer, asthma. There just seems to be a lot
9 of issues with this area. And even if we're
10 not doing it for humanistic reasons, I mean,
11 even as economic reasons. I believe Illinois
12 was listed as the -- in the top five states
13 that's losing population. So, I mean, if you
14 cleaned up the environment -- well, not you,
15 but you know what I mean, if people
16 specifically cleaned up the environment, that
17 would also bring in people which would bring
18 in more money. So I just think that there's a
19 lot of reasons to look into this and, you
20 know, reevaluate it. And I hope you guys, you
21 know, do and hear the cries of the people.
22 So, but thank you for being here, you know, I
23 appreciate it. That's it.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

47

1 MR. FROST: Thank you, Ms. Wagner.
2 Virginia Woulfe-Beile, and
3 afterwards Susan Murray.

4 MS. BEILE: Hi, my name is Virginia
5 Woulfe-Beile, W-O-U-L-F-E, hyphen, B-E-I-L-E,
6 and I live at 3214 Whitford Place in Godfrey,
7 Illinois. And I wanted to thank the Illinois
8 EPA for creating this forum to take our
9 comments and questions. And like I said, my
10 name is Virginia Woulfe-Beile, and I was born
11 and raised in Alton, Illinois, a little
12 further south from here, but a river community
13 similar to what we have here. And my husband
14 and I still live there actually in Godfrey
15 now, but a neighboring community. And I was
16 just thinking, you know, when I was a kid
17 growing up in the '60's and '70's when there
18 was little environmental regulation in the
19 Alton area, there was a couple coal-fired
20 power plants and my brothers and I always used
21 to refer to them as chocolate cloud makers
22 because they were always belching this toxic
23 cloud. But with that my youngest brother also

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

48

1 had severe asthma. And I have many memories
2 as a child as an ambulance, you know, coming
3 to our house in the middle of the night and
4 having to whisk away my brother to the
5 hospital and, you know, seeing the fear, you
6 know, in his face gasping for that breath and
7 then the fear that my parents had, you know,
8 not knowing the outcome of this attack. So
9 that's -- really always hit home with me. And
10 I know that, you know, over time, you know,
11 now we're in 2016 and there's been a lot of
12 really strong environmental policies in place
13 with the Clean Air Act and the Clean Water
14 Act, and I've seen the act cleaned up, you
15 know, in my community. You know, it can
16 always be better. I'm always advocating for
17 stronger policies, so that's why I thought it
18 was important to be here tonight with, you
19 know, fellow Illinois residents, because this
20 is our home. And, again, you know, I want to
21 see things continue to improve and not see all
22 this progress that we've made with
23 environmental policy backslide. So I'm really

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

49

1 here today to advocate for clean air and, you
2 know, ask that Illinois EPA to make, you know,
3 the strongest rules for this new permit.

4 And a couple of the things that --
5 just to touch on what I'm concerned about is
6 to ensure that the permit requires the
7 Powerton coal plant complies with all
8 pollution safeguards under the Clean Air Act
9 and that all the available emission controls
10 are installed and used properly. And these
11 are things that ensure that the opacity and
12 the sulfur dioxide and mercury emissions are
13 monitored properly.

14 Also important is the realtime
15 reporting and that through -- that it's not
16 like the averaging that, you know, these
17 spikes that is kind of a reoccurring theme in
18 this hearing, that those are reported and
19 noted properly. Also limit emissions during
20 startup and shutdown and malfunction periods,
21 another reoccurring theme. And to strengthen
22 the draft's inadequate testing, inspection and
23 evaluation standards as well as some of the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

50

1 recordkeeping and reporting requirements to
2 ensure that the Powerton reports determine the
3 cause of any excess pollution.

4 At this time that's all I have to
5 say. But, again, I thank you for giving us
6 the opportunity to give you our comments and
7 concerns.

8 MR. FROST: Thank you, Ms.
9 Woulfe-Beile.

10 Susan Murray and afterwards Gary
11 Hall, I think.

12 MS. MURRAY: My name is Susan
13 Murray. Susan is spelled the normal way and
14 last name is M-U-R-R-A-Y. And I'm here just
15 to offer my own personal perspective. And I
16 would ask, have you ever blown on the ambers
17 of a campfire and watched the flames leap up?
18 Have you ever had the satisfaction of blowing
19 out all the candles on your birthday cake?
20 Have you ever run up a flight of stairs?
21 These are simple things for most of the
22 population, but for those with certain
23 breathing and lung conditions, they become a

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

51

1 challenge. Like many other people who have
2 these kinds of conditions, I look okay. I do
3 just fine sitting in a chair or walking
4 leisurely down a sidewalk. But many things
5 that other people take for granted have become
6 impossible for me.

7 I have had the good fortune of
8 being able to do a certain amount of
9 traveling, and one thing I always notice about
10 a place I'm visiting is how well can I
11 breathe. And many places I am able to breathe
12 much better. I can engage in more activity, I
13 feel better and think better. When I drive
14 back home, I can see the brown band of
15 pollution looming on the horizon, a band of
16 dirty brown separating our earth from our sky.
17 And when I get back home, I can tell the
18 difference, especially on days when air
19 quality is low or when I suspect air quality
20 is low. I can feel my body struggling to get
21 enough air and sometimes I turn to my husband
22 and I say, why are we living here? So I'm
23 asking that you please take all the steps that

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

52

1 you can to keep our air as clean as possible.

2 I think especially important is the
3 realtime reporting. I know that I do have
4 more problems on days when I think maybe these
5 things are happening. Maybe the emissions,
6 the startups, the malfunctions, my body
7 responds to what's happening now, not what's
8 happening over an average of 30 days. Thank
9 you.

10 MR. FROST: Thank you, Ms Murray.
11 Gary Hall and afterwards Brian
12 Urbaszewski.

13 MR. HALL: Gary Hall, G-A-R-Y,
14 H-A-L-L. I'm a member of CIHA, Central
15 Illinois Healthy Alliance, I'm also a member
16 of this community. I was born in Missouri,
17 but raised in Tazewell County, live in Peoria.
18 I've got this little piece of paper here to
19 make sure I get it right. It says keep it
20 personal. How personal can we get? This is
21 the last chance we've got. If we don't clean
22 up this mess that we've got that's been
23 created, we're not going to have another

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

53

1 chance. You three have got the world on your
2 shoulders. You've got the lives of many
3 people at stake. Describe what the benefits
4 of clean air would bring to your friends,
5 family and neighbors. I think we know what
6 that means. You've listened to these people
7 talk about Robin, her daughter and herself,
8 and other people. I bet all three of you know
9 somebody that's suffering right now because of
10 poor air. So that's all I've got to say.
11 Thank you for putting up with me.

12 MR. FROST: Thank you, Mr. Hall.

13 After Brian I have a Abi Dagit.

14 MR. URBASZEWSKI: My name's Brian,
15 B-R-I-A-N, last name U-R-B-A-S-Z-E-W-S-K-I.
16 I'm the director of environmental health
17 programs for Respiratory Health Association,
18 we're a nonprofit based up in Chicago working
19 statewide. Our mission is to prevent lung
20 disease, promote clean air, and help people
21 live better through education, research and
22 policy change. We're also a member of CICA.
23 I don't personally like breathing air

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

54

1 pollution, but I work on behalf of people
2 living with lung disease trying to make the
3 air cleaner and safer, especially for the more
4 than a million people living with lung disease
5 in Illinois. Just in Peoria and Tazewell
6 Counties alone there's nearly 40,000 adults
7 and children living with asthma, which is one
8 lung disease. I also don't want the other 11
9 million plus people in Illinois to develop
10 lung disease or to have the quality of their
11 life diminished by breathing air pollution.

12 I can tell you about Barbara who
13 has trouble getting around because of her
14 COPD, or Kathleen who had a lung transplant
15 two years ago this month who fears going
16 outside on high air pollution days. I can
17 tell you about Carter struggling with asthma
18 and about how his mom has taken him to the
19 emergency room several times because of his
20 asthma, he's six. There's many others and
21 there are many people who have passed from
22 lung disease as well. We all know based on
23 the wealth of medical science, we know that

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

55

1 air pollution sickens people and we know that
2 people die simply from breathing air
3 pollution, that's why it's absolutely critical
4 about two decades after we started this
5 process that IEPA get it right. Even with the
6 recent additions of some air pollution
7 controls, the Powerton plant is still one of
8 the largest sources of air pollution in the
9 Peoria area.

10 Others are going to lay out the
11 details and the elements of the proposed
12 permit that need to be modified to ensure the
13 permit isn't deficient. We urge the IEPA to
14 remedy any problems identified within the
15 proposed permit. And we look forward to
16 helping submit some written comments as well.

17 It goes without saying that we need
18 to ensure -- IEPA needs to ensure that all
19 available state-of-the-art emission controls
20 are installed and used properly. Opacity,
21 sulfur dioxide, mercury emissions, need to be
22 monitored properly, and the complete
23 monitoring data should be reported so that the

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

56

1 public can determine if the permit provisions
2 are being met. We were able to use data to
3 actually use the citizen suit provisions of
4 the Clean Air Act to go after another air
5 pollution source, a coal plant here in the
6 area. We wouldn't be able to do that unless
7 that data was collected properly and we were
8 able to access it. Short-term exposures are
9 still a concern. Spikes in the air quality
10 are only accurately seen when reporting is
11 done in a realtime manner that does not
12 average out the emissions that's being seen
13 over a long period of time. The one-hour
14 standard provisions that we were talking about
15 earlier will limit the number of spikes, the
16 frequency of those spikes, but it still
17 doesn't do anything to limit the magnitude of
18 those spikes. So it's an improvement, but
19 it's still incomplete.

20 No exceptions should be allowed for
21 the SSM provisions. The permit needs to limit
22 the emissions during startup, shutdown, and
23 malfunction periods. The EPA is notified as

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

57

1 Greg said earlier, has notified the Illinois
2 EPA that the SSM provisions in the Illinois
3 SIP don't comply with the Clean Air Act,
4 period. They need to be updated to ensure
5 that pollution limits apply at all times, no
6 exemptions should be allowed. People's lungs
7 can't avoid pollution that exceeds applicable
8 limits no matter when it happens. Therefore,
9 this should not happen, must not be allowed,
10 and the Clean Air Act must always protect
11 public health.

12 The last point I wanted to make, we
13 need to strengthen the draft permit testing,
14 inspection and evaluation standards as well as
15 its record keeping and reporting requirements
16 to ensure that Powerton reports and determines
17 the cause of any excess pollution. People
18 have a right to know so that the problems can
19 be identified and accurately solved so they
20 don't continue over time. Under the Clear Air
21 Act in Title 5, permittee is required to
22 maintain all reasonable safeguards to ensure
23 the Powerton coal plant is in compliance with

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

58

1 all standards under the law. The permit is
2 supposed to contain all information so both
3 energy and the public can easily determine if
4 Powerton coal plant is in compliance.

5 In short, while much improved, the
6 proposed permit still falls short. And those
7 shortfalls need to be addressed and the agency
8 needs to issue a final permit that is in full
9 compliance with the Clean Air Act.

10 Thank you so much for having this
11 opportunity tonight for the people here, many
12 of whom are personally affected by what comes
13 out of that smoke stack and have their voice
14 heard by you. Thank you very much.

15 MR. FROST: Thank you,
16 Mr. Urbaszewski.

17 Abi Dagit, and after her Elizabeth
18 Scrafford.

19 MS. DAGIT: Hi. Abi Dagit, A-B-I,
20 D-A-G-I-T. My main concern is after reading
21 through the handouts that I was given, I have
22 a couple questions about the acid rain and the
23 new -- I forgot the word -- but your -- you

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

59

1 renewed it, and I was wondering what the
2 revisions were.

3 MR. RUTHERFORD: Well, the acid
4 rain permit renewal is in the permit, the
5 actual application that they provided, and
6 then the regulatory requirements that
7 associate with acid rain are identified in the
8 permit in the back.

9 MS. DAGIT: I tried reading through
10 the permit and it was so overwhelming, and
11 it's, you know, very difficult as a concerned
12 citizen. I've been in Pekin my entire life
13 and I mean, growing up I just wanted to move
14 out. But now that I'm getting older, I'd love
15 to stay here, but after reading through all
16 this, there's so many effects. I would like
17 to have children one day, but the pregnancy
18 effects that they have with the air pollution
19 make me not want to be here and raise my kids
20 or my future kids.

21 But, I mean, I never realized how
22 much, you know, the air pollution affected me
23 because this is all I knew. And my sister --

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

60

1 I live on Lake Arlan here in Pekin, and we can
2 see the power plants right across the lake.
3 And my sister and I used to watch out the
4 window and just, you know, watch the clouds
5 form around the plant. And my sister is
6 affected by rain only here in Illinois. She
7 gets blotchy, and after going to the doctor
8 they said it was the pollution that's brought
9 down into the rain. And when she swims in the
10 lakes here in Illinois or, you know, even the
11 river, she just breaks out. And she's been to
12 other states where that never affects her.

13 And, like I said, I never realized
14 how much it did affect me until, you know, my
15 boyfriend was recently diagnosed with cancer
16 and he lives down by the plant and he's only
17 18. And I didn't really understand how that
18 could happen. And I did a little more
19 research and there is a lot to do with
20 pollution, as you've -- we have cancer alley
21 here in Pekin, you know, and it's right by
22 your plant.

23 And back to the acid rain and

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

61

1 stuff, I mean, from 1995 until now there has
2 been 178,533 pounds of acid that has been
3 reported in the air, sulfur in the air. And I
4 feel like that is something that has been just
5 slid under over and over even after reading
6 through all these papers and trying to make
7 sense of how overwhelming and confusing it may
8 be. And, I mean, I just feel like there are
9 so many things that should be more focused on.
10 That's all. Thank you.

11 MR. FROST: Thank you, Ms. Dagit.

12 After Elizabeth it would be John
13 Kershner, but I can't read it exactly.

14 MS. SCRAFFORD: My name is
15 Elizabeth, S-C-R-A-F-F-O-R-D. I am an
16 organizer working with the Sierra Club,
17 working with our members, supporters and
18 concerned citizens that live in Central and
19 Southern Illinois. I've seen you all before.
20 Good evening. Thank you so much for having
21 this hearing tonight. Obviously this is very
22 important to the folks who live here and
23 breathe this air every single day. And

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

62

1 tonight I'm here to stand with the folks that
2 have spoken so far, the community members,
3 that are really very deeply concerned about
4 the people that they love and the air that
5 they breathe every day and to ask you for a
6 stronger draft permit, because we can always
7 do better.

8 You know, working with these
9 residents reminds me all the time of the
10 gravity of this situation. I'm not just
11 someone who works for the Sierra Club, because
12 my life has been touched by pollution in my
13 dad's hometown of Smolderville, Idaho, and I
14 can feel the pollution in the air every single
15 time I pull into Pekin. I feel the sting in
16 my sinuses, the scent in the air, and I know
17 that when Robin and I go out walking, I can
18 hear her start wheezing. I know when I hang
19 out with Julia that she's going to be coughing
20 because she's having a hard time breathing and
21 that these are real people that live here.
22 And I just, you know -- having these hearings
23 gets us all riled up because it's nice to

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

63

1 remember that there are other people like us
2 who are dealing with the same thing day after
3 day, and this is the one opportunity that we
4 have because these permits don't get opened
5 too often. I know it was partially open last
6 year, but just a good reminder for us.

7 And tonight we're looking at NRG's
8 operating permit for the Powerton plant, and I
9 just want to ask you to take really special
10 consideration on this permit. I know we're in
11 a kind of funky political climate where you
12 don't know what the future's going to bring.
13 And you have such an amazing opportunity to
14 make sure that this permit has all of the
15 safeguards that it can possibly have, as the
16 rest of the permits should have. You know,
17 these folks live really in close proximity to
18 the Powerton plant here but to the Edwards
19 plant, to the Havana plant and to the Duck
20 Creek plant. And all those other plants
21 should also have strong up-to-date permits as
22 well as the rest of the industrial polluters
23 that we have. There's nine top industrial

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

64

1 polluters that are showing up on the Center
2 For Public Integrity's list, and the Powerton
3 plant is the toxic polluter for both Pekin and
4 Peoria. So the folks that are living on both
5 sides of river are both impacted because air
6 pollution doesn't hold still and it comes and
7 finds us no matter which side of the river we
8 live on.

9 I got on a roll, and I forget what
10 I was saying.

11 So the draft permit for the NRG
12 Powerton plant is deficient in several ways.
13 Some of the things I am going to talk about I
14 know you've heard before tonight, but I'm just
15 going to reiterate them to make sure we're all
16 on the same page. Specifically we're
17 concerned that all state-of-the-art emission
18 controls need to be installed and used
19 properly, specifically ensuring that the
20 opacity, the sulfur dioxide and the mercury
21 emissions are monitored properly and the
22 results of the monitors are not averaged out.
23 I don't think we can say this enough times

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

65

1 that when we average those spikes out, then we
2 don't know what's going on. And we may feel
3 it in our lungs, but if it's not reported and
4 reported properly, then we can't go back and
5 see what happened, what made this spike. And
6 if we know why there was a spike, then we can
7 correct it or we can ask the plant to correct
8 it. But if we don't know and it's not
9 recorded, we can't fix it. So that really
10 can't be said enough.

11 Again, that the data is recorded
12 and reported and it is not doctored at all.
13 You know, I've been calling it realtime
14 reporting. We want to know what's coming out
15 just like anyone would, you know. I think
16 someone said they'd like to be able to see it
17 on a screen or something, you know. You want
18 to be able to turn on your TV and find out
19 what the weather is, people also want to find
20 out what they're breathing in the same manner
21 and that those spikes in the air quality are
22 only accurately seen when the reporting is
23 done, again, in a realtime manner and not

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

66

1 averaged out.

2 We'd also like you to strengthen
3 the draft permits and adequate testing and
4 inspection and evaluation standards as well as
5 the inadequate record keeping and reporting
6 requirements to ensure that the Powerton plant
7 reports and determines the cause of any excess
8 pollution. So we want to know what's up if
9 we've got excess pollution in the air. It's
10 also concerning that the draft permit allows
11 alternative fuels such as petcoke, petroleum
12 coke, tire derived fuel and clean lumber to be
13 burned. And there's a concern that these
14 fuels have hazardous pollutants that may not
15 be otherwise listed in the permit. And
16 they -- these -- they may not be listed and
17 because we're burning different things, they
18 could have a different pollution profile, and
19 so that should be listed and them limited in
20 this permit.

21 And lastly I would just like to ask
22 you, the Illinois EPA, to fix these shortfalls
23 and issue a final permit that is in compliance

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

67

1 with all the pollution safeguards of the Clean
2 Air Act. Thank you.

3 MR. REED: I just want to point out
4 one thing. I've heard a couple times now this
5 evening about the cause of the excess
6 emissions, and that has been a comment we've
7 seen on several permits now that we're
8 currently evaluating those comments for trying
9 to get completed. And through our
10 considerations, we did find that the cause for
11 whatever reason got dropped out of some of
12 those conditions and that cause is now being
13 put back in the permits, so I just wanted
14 to --

15 MS. SCRAFFORD: So that when
16 there's an excess, you're going to be
17 reporting what the cause is?

18 MR. REED: Yes. Correct. And so
19 as a result of your comments, we did actually
20 pick that up, and we are making that revision.

21 MS. SCRAFFORD: So if you're going
22 to be reporting what the excess is, what the
23 cause is, are you going to be requiring that

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

68

1 the plant then get in compliance at that time
2 as soon as the report happens or within a
3 certain window?

4 MR. REED: If I could defer an
5 answer to that one and we can get back to you
6 through our written comments. That's a little
7 more difficult. I just wanted to mention
8 that. I heard the cause come up a couple
9 times, and we have determined that it did need
10 to go back in the permit, it was an oversight.

11 MS. SCRAFFORD: Okay. Thank you.

12 MR. FROST: Thank you, Ms.
13 Scrafford.

14 Julia Karschner.

15 MS. KARSCHNER: Thank you all for
16 having me. First of all, I'm not contagious.
17 I feel horrible coughing for everybody. My
18 name is Julia Karschner, I live at 1316 South
19 11th Street, Pekin, Illinois, approximately
20 three miles away from the Powerton facility
21 and 1.2 miles away from the Pekin Sports
22 Complex. I don't know any of all the great
23 lingo and all that good jazz, so I'm just

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

69

1 going to regale you my story real quick.

2 I grew up in Tazewell County my
3 whole life. I am 40 years old, moved to
4 Pekin, Illinois, last December, I've been
5 nothing but sick since. Originally moved to
6 9th Street, went to my doctor, went through
7 all that good stuff. Thought it was the
8 house, told my landlord I couldn't take it
9 anymore, he moved me to 11th Street in May,
10 but it wasn't the house, it was the area.
11 Some of the symptoms that I had, I was taking
12 120 Norcos, painkillers, because I had
13 crippling body pain, these weird toxicity and
14 knots, I was going to physical therapy for
15 them. When I went to my gynecologist over
16 here for an annual, they had those weird
17 toxicities and the knots, and I was referred
18 for a mammogram. So then I also had to go
19 through radiology and all that good stuff.
20 And then I started looking into things, and I
21 found out that we're in a sulfur dioxide no
22 attainment zone since 2010. And sulfur
23 dioxide causes weird inflammation of things.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

70

1 And then on top of that, if you guys haven't
2 heard me, I can't breathe, so I've got that
3 going on, too. I've gone to allergists, I've
4 gone to pulmonary specialists. I am allergic
5 to dust mites. My house is spotless at all
6 times. I run air purifiers, haven't opened my
7 windows since May. I'm allergic to dogs. I
8 don't own a dog. I'm allergic to white elm
9 trees.

10 I'm not a scientist, but I am a
11 horticulturist. The plants around here are
12 evidenced with sulfur dioxide, ozone, ammonia,
13 ammonia sulfate. The only air monitoring
14 system in place is on Derby Street. It only
15 monitors sulfur dioxide which we know we're
16 out of nonattainment for. It only tells you
17 the levels, but they won't tell us the levels.
18 But I don't need to know the levels, they're
19 bad.

20 The extra costs that I incur for
21 living here in Pekin, allergy medication,
22 contacts that dry out, weird skin creams for
23 weird spots on my body, my hair breaks. I

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

71

1 could go on and on and on, air filters, not
2 being able to open my windows. I can't even
3 afford my Cilco bills for the Powerton plant
4 that feeds Chicago. And then if it was just
5 me, I could move, right, but there's kids
6 here, and so I can't -- I mean -- and not even
7 my kids -- I won't allow my kids to come here
8 and visit me, won't do it.

9 There's -- I'm not affiliated with
10 anybody. Thank God I ran into the Sierra
11 Club, Central Illinois Healthy Community
12 Alliance. I don't know what to do. If you
13 guys could point us in the right path. I know
14 you guys' hands are tied. I know that this
15 corporation -- 60 or so financial investment
16 firms own Powerton, and it's hard to put a
17 face on that for them. So if you guys could
18 please give them the word that I'm here and
19 that anything I could do to help to help save
20 the people in the area. And spoiler alert,
21 we're on the Illinois River, everything's
22 highly insoluble by water, air, land, there's
23 cancer alley. There's been a documentary

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

72

1 Living Downstream since 2010. No one even
2 investigated, you know, into the cancer
3 clusters, no one even investigated. They sent
4 out surveys and that was it. There's bladder
5 cancer rapid around here. Sulfur dioxide
6 exits the body through the urinary system.
7 I'm really confused, and we really need your
8 help. Thank you.

9 MR. FROST: Thank you.

10 Joyce Harant.

11 MS. HARANT: Thank you very much.

12 My name's Joyce Harant, H-A-R-A-N-T, and I
13 live in Peoria, Illinois. I have a master's
14 degree in community health. I am currently a
15 member of the Peoria City County Board of
16 Health and currently serving as their
17 president. And while the Powerton coal plant
18 is in Tazewell County, the pollution it emits
19 into the air impacts all of the surrounding
20 counties, as you know. We know that this
21 Powerton plant is one of the largest sources
22 of toxic pollution into our air. We also know
23 that the health of our communities is

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

73

1 negatively impacted by these harmful
2 emissions, such as the sulfur dioxide,
3 particulates, nitrogen dioxides, mercuries, et
4 cetera. In both Peoria and Tazewell Counties
5 chronic lower respiratory diseases are the
6 third leading cause of death. The death rate
7 for chronic lower respiratory deaths in
8 Tazewell County is 58.5 per 100,000 and 55.8
9 in Peoria County. And this is compared to the
10 State of Illinois at 41.9. So Peoria and
11 Tazewell Counties show an almost 40 percent
12 higher death rate than the State of Illinois
13 as a whole for this lower respiratory disease.

14 In 2013 in Peoria County the
15 nonwhite asthma rate was 22.2 percent and
16 increased to 36.3 percent for those with
17 incomes below \$15,000. The health and
18 financial costs, we've talked about that, for
19 those suffering from asthma in our entire
20 community is substantial. It results in the
21 asthma accrued hospitalization rate for Peoria
22 being 31.0 per 100,000 population. In Peoria
23 County the negative health impacts of

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

74

1 pollution from the Powerton and other coal
2 plants disproportionately impacts the low
3 income, predominantly African American
4 communities, living in the southern parts of
5 Peoria. This air pollution is an
6 environmental justice issue also. Research in
7 California reported in the American Public
8 Health Association nation's health in 2015
9 reports that children who grew up breathing
10 cleaner air also developed stronger lungs.
11 The study found that gains in lung function
12 paralleled with improving air quality. So the
13 very growth and vitality of our children is
14 what's at stake here. Also in 2015 they
15 reported that in addition to causing
16 respiratory problems, air pollution is also
17 associated with higher risks of stroke. In
18 addition they found that exposure to air
19 pollution known as fine particulate matter was
20 also associated with higher risk of anxiety.

21 Air pollution as associated with
22 coal-fired plants like Powerton make people
23 sick, they cause death, and it keeps children

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

75

1 from developing normal lung function. The
2 IEPA must issue a permit for Powerton that
3 will result in Powerton emitting the least
4 amount of harmful pollutants into the air as
5 possible with current and future
6 state-of-the-art pollution control technology.
7 We deserve nothing less than that. The
8 state-of-the-art pollution technology must not
9 only be monitored in a high quality manner,
10 the data about their emissions must be actual,
11 not averaged, must be placed on a website to
12 provide the public the ability to easily read
13 and find realtime data so that we know what's
14 happening so that we can then take the steps
15 to say, let's minimize the pollution, why are
16 these things happening.

17 Spikes in emissions must be
18 reported and not averaged out. These spikes
19 will be expected to cause increases in health
20 problems for residents. So we should be able
21 to find them so that we can identify and
22 people can then say, I'm having these problems
23 and these pollutions are going up. Those

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

76

1 people must be able to identify what and when
2 all this air pollution is being emitted. The
3 pollution should be contained during startup,
4 shutdown and malfunctions. The plant should
5 be required to maintain low emissions at all
6 times to minimize the impact on the health of
7 area residents. Prior to issuing this permit,
8 the IEPA should have the Illinois Department
9 of Public Health conduct a prospective health
10 impact assessment of the expected Powerton
11 pollution that the IEPA permit would allow.
12 The IEPA should submit this health impact
13 assessment to the public for a comment. The
14 public deserves complete transparency of
15 expected negative health impacts from the
16 Powerton plant pollution, including financial
17 and health costs, impacts on vulnerable
18 populations, et cetera, and why these are
19 justified to be allowed. I urge the IEPA to
20 be part of the solution to improving the
21 health of area residents by issuing an air
22 permit to Powerton that will result in
23 significantly improved air quality and reduced

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

77

1 pollution from the plant.

2 Is there any opportunity for health
3 impact assessments? I mean, does anybody look
4 at the long-term costs of pollution? I mean,
5 we hear it here subjectively, but why don't we
6 have a way to quantify? So if you allow 6,000
7 pounds of sulfur out of those stacks, what's
8 the impact on the populations? That's what
9 I'm asking for. I think that's what we
10 deserve to have.

11 MR. REED: Well, I mean, I think
12 the simple answer is we don't have a
13 regulation that mandates something like that.
14 And that is something you would have to pursue
15 having a law written that would address
16 something like that.

17 MS. HARANT: Okay. Thank you very
18 much.

19 MR. REED: Yeah, and just one
20 further point. Our permit, the requirements
21 in there all come from various statutory
22 requirements that are already established
23 through other means such as a regulation is

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

78

1 developed and then we just take that
2 regulation and put it in the permit, or it
3 comes from a construction permit that creates
4 limitations that we just take and put into the
5 operating permit. So our permit isn't
6 containing necessarily anything new other than
7 necessarily periodic monitoring, reporting,
8 recordkeeping that you folks have all brought
9 up, you know, as needing for us to look into.

10 MS. HARANT: And I understand that,
11 but it's like the impact after the fact. We
12 never measure, the real life health impacts on
13 the people that live in this area are never
14 measured. And so even though they're in the
15 permit, we allow it. It's like we -- this
16 plant as been described, we've got three or
17 four coal plants in the area and other
18 pollutants, so each area would have different
19 results from the same level of pollution just
20 because it would be dispersed differently, it
21 would stay in the area differently. And so we
22 should be looking at all of that in terms of
23 prospectively what's the potential health

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

79

1 impact of these pollutions in the area. So
2 that's just my plea.

3 MR. REED: Something else to keep
4 in mind, too, is the State of Illinois does
5 have to establish national air quality
6 standards that are developed through USEPA and
7 those are based upon scientific studies that
8 are done using health effects and so forth.
9 And so then the state has to put together what
10 Faith has brought up and others, state
11 implementation plan to make sure the State of
12 Illinois air meets those standards and
13 complies with them.

14 MS. HARANT: Thank you very much.

15 MR. FROST: The last card I have is
16 Tracy Fox.

17 MS. FOX: My name is Tracy Fox,
18 T-R-A-C-Y, F-O-X. I'm a resident of
19 Chillicothe, but I've lived my whole life in
20 the Peoria area, and I recreate frequently
21 anywhere from Hennepin down to Havana.

22 After hearing Joyce's eloquent
23 testimony, my stomach is actually churning

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

80

1 thinking about the amount of harm that this
2 causes and how little I feel you've tried to
3 make this permit as good as it can be. I know
4 that I haven't been following air pollution
5 very long, but even I know the SO2 is a
6 pollutant that is closely tied to short term
7 exposures, and that even small exposures to
8 people in vulnerable populations can cause
9 great harm. Therefore, it's very upsetting to
10 me seeing a 30-day averaging, a moving average
11 that's going to count down spikes and no
12 access, no assessment of spike data by the
13 EPA. To me that's lazy on your part and you
14 need to figure out a mechanism to get that
15 data, to analyze it, and to have a series of
16 discreet spikes trigger some sort of review
17 and action and correction in the process.

18 Similarly, with startup, shutdown
19 and malfunction, I've always found this really
20 funny because isn't the pollution itself a
21 malfunction? I mean, really. When I look at
22 the language in this -- and I'm quoting from
23 your little summary, you know, for a

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

81

1 malfunction breakdown this showing consistent
2 demonstration that continued operation was
3 necessary to prevent injury to persons or
4 severe damage to equipment or was required to
5 provide essential services. I can't think of
6 anything more vague to give a blanket
7 justification to malfunction. When I looked
8 it up in the actual permit I see something
9 that it cannot be solely for economic gain.
10 Well, you could say that you are generating
11 even a kilowatt of electricity and that it's
12 supplying someone somewhere and it's more than
13 economic gain. I feel like that's such a poor
14 bar that it makes me lack confidence in
15 anything else you're doing on startup,
16 shutdown and malfunction.

17 The alternative fuels is also to me
18 outrageous. That you're going to allow a
19 coal-burning plant to bring in petcoke,
20 probably from the south side of Chicago or
21 something, or to burn used tire materials and
22 not require any special monitoring whatsoever
23 is really, really concerning to me.

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

82

1 When I look at the permit, you have
2 laid out only 10 hazardous air pollutants that
3 you're considering. I couldn't see anything
4 in the language that would extend that if
5 additional materials are burned as alternative
6 fuels. And yet you require them to report
7 when they're using alternative fuels that
8 contain, for example, chlorine or fluorine,
9 those are specifically called out in your
10 instruction and yet you make no attempt to on
11 the other end monitor for those. That seems
12 to me to be a real oversight. I'm also
13 extremely concerned about the cavalier way
14 that you allow equivalency to fall into the
15 use of alternative fuels. You say that they
16 need to report each batch of alternative fuels
17 and have all these details, and yet when you
18 get into the actual what do they have to
19 report, what do they have to do, you say, ahh,
20 if you've burned that before in a bigger
21 quantity, that's okay, you don't have to do
22 anything at all. Well, let me tell you, I
23 mean, here in Peoria where we make Caterpillar

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

83

1 equipment, we know that a tire is not a tire,
2 there is a great deal of variability between
3 types of tires. Similarly, petcoke is a waste
4 product. It also is extremely variable
5 depending on the density of the tar sands and
6 a thousand other factors. And to lump those
7 together and say, you know, yeah, you can burn
8 those up to three percent, you know, I just
9 don't think that that shows good faith. I
10 think that you need to go through and you need
11 to find a mechanism that has clear
12 requirements of what they're supposed to be
13 doing on a fuel type by fuel type basis. You
14 haven't delineated that many. I think you
15 need to deal with every combination, whatever
16 you're doing, if it's two percent petcoke and
17 one percent clean lumber or whatever the case
18 may be. I think it all needs to be regulated
19 because the cross contamination of these fuels
20 can create all kinds of crazy stuff.

21 Fourthly, nobody else has talked
22 about this, but I'm very concerned about the
23 lack of specificity with coal refining. I

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

84

1 know that Dynergy has touted coal refining as
2 the way that it's going to make SO2
3 requirements in the future. I also know that
4 it can be anything from putting a variety of
5 additives into coal to doing some washing and
6 washing with acids and things like that.
7 Pollution is a zero sum game. All the
8 contaminants in that fuel are not going
9 anywhere. If they're not going up in the air,
10 they're going to be left in the coal ash or
11 they're going to be left in the ash water.

12 I realize that this is a clean air
13 permit, and that's out of your purview. But I
14 think it would give good assurance to the
15 public if you could at least identify a
16 mechanism by which you're going to correlate
17 when they start doing this coal refining work
18 with your water section and with your land
19 section. Because otherwise we just transfer
20 the problem around. It's just a big shell
21 game because the pollution isn't going
22 anywhere.

23 Similarly, I don't feel very much

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

85

1 confidence because no one has identified the
2 chemicals being used, the solids being mixed
3 in with the coal, you know, the types of wash
4 procedures that are used. I don't know that I
5 think there's adequate monitors, I don't think
6 there's even an attempt to do monitoring on
7 the coal refining. So, I mean, that's going
8 to be our problem in the coming year when that
9 gets implemented.

10 And, finally, I've said this at
11 other hearings, the format of this permit is
12 not conducive. It's not conducive to you
13 doing effective work, it's not conducive to us
14 having a meaningful review of it. The onus
15 should be on the companies to put together
16 something that's more meaningful, that's more
17 understandable. I think it's very difficult
18 for you to get your job done with this. You
19 know, I found it really, really difficult to
20 wade through and to understand all the parts.
21 And I just think that you should demand
22 better. And so please make an effort to
23 address some of these problems and do as much

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

86

1 as you can within the purview of these
2 permits. I'm horrified to learn of 40,000
3 asthmatics, of the number of, you know,
4 elevated death levels from COPD and lower
5 respiratory ailments. And, you know, our
6 communities have suffered with this not just
7 for a couple of years but since these plants
8 were built and probably even before these
9 plants were built dating back to the earlier
10 purview of the coal plants that have plagued
11 the Illinois River Valley. Thank you.

12 MR. FROST: Thank you, Ms. Fox.
13 That was everyone that signed up on a card.
14 There's a little glare up there, but I think
15 it's about 8:40. I'm going to allow -- is
16 there anyone that has not spoken yet tonight
17 that would like to make statements? Indicate
18 that there is no one. I had two people that
19 wanted to finish some of their comments. I'll
20 call up Faith Bugel first.

21 Ms. Bugel, I'll give you another
22 seven minutes.

23 MS. BUGEL: Thank you. I will try

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

87

1 not to take seven minutes. I know it's late
2 and people are getting tired, but thank you
3 for the opportunity to finish my comments.
4 Again, my name's Faith Bugel. I was speaking
5 of the alternative fuels earlier, and I just
6 wanted to draw attention to the three
7 alternative fuels listed. The first one is
8 petroleum coke. I did want to point out that
9 petroleum coke can have higher sulfur dioxides
10 and nitrogen oxide emissions than coal. These
11 are, of course, limited by the permit. But
12 the fact that these are higher than coal I
13 think puts an added burden of the need for
14 additional requirements when petroleum coke is
15 being burned. And I'll get to those at the
16 end.

17 Second I want to talk about clean
18 lumber. Again, the permit allows clean lumber
19 to be burned as an alternative fuel. Clean
20 lumber -- well, first of all, lumber -- there
21 are chemicals that are used to treat lumber
22 and these include chromatic arsenicals which
23 can contain chromium, copper, arsenic,

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

88

1 creasote -- and this one I don't even know how
2 to pronounce -- pentachlorophenol, PCP. All
3 of these chemicals pose the risk of additional
4 hazardous air pollutants, HAPS, that are not
5 limited by the permit. So there's a very
6 serious concern here that there could be
7 emissions of HAPS and there are no permit
8 limits for those emissions. So those have to
9 be -- that has to be addressed.

10 Last is tire derived fuel or TDF.
11 TDF can include synthetic rubber tires, and
12 when those are burned, the byproducts can
13 include toxics such as beryllium, lead,
14 cadmium, selenium, silver, manganese and
15 chromium 6. Again, all of these pose the risk
16 of HAPS that are not limited by the permit.
17 So, in short, the permit needs additional
18 requirements to address all of these
19 alternative fuels. First, it needs to require
20 testing of alternative fuels before they're
21 burned and emission limits for the alternative
22 fuels that are specific to the pollutants that
23 are found in those fuels, especially the HAPS

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

89

1 that can be emitted by those fuels.

2 Second, the SMB, the startup,
3 malfunction, breakdown authorization and
4 affirmative defense should not apply to
5 periods when the plant is using alternative
6 fuels.

7 Third, there should be added notice
8 requirements that whenever the plant uses any
9 alternative fuel, it needs to provide notice
10 to both IEPA and to the public regarding
11 amount, content of pollutants in those
12 alternative fuels and the testing results that
13 I mentioned earlier.

14 Finally, the permit should have
15 added reporting requirements that apply to the
16 use of alternative fuels and the impact that
17 those fuels will have on plant emissions.

18 Thank you very much.

19 MR. FROST: Thank you, Ms. Bugel.

20 And Greg Wannier. I'll also
21 provide you seven minutes.

22 MR. WANNIER: And, again, I
23 actually probably won't use most of it. Again

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

90

1 this is Greg Wannier with the Sierra Club.

2 My second point of comment is
3 actually more a question. Looking at the CAM
4 plan on page 105, I noticed that there's only
5 one indicator provided to determine compliance
6 with PM limits, and that's opacity. In
7 previous permits that we've seen for other
8 facilities we've seen multiple indicators.
9 And I was curious how IEPA determines whether
10 or not to add additional indicators?

11 MR. REED: Well, during the first
12 permitting action, the significant
13 modification resolved the appeal. The source
14 proposed to use opacity as the indicator. The
15 Illinois EPA reviewed that information and
16 made a conditional approval. And that
17 conditional approval required the source to do
18 testing to establish if a correlation did in
19 fact exist between particulate matter,
20 opacity, and if it did what that correlation
21 was. And based on the submittal of their
22 compliance assurance monitoring plan and
23 Illinois EPA's review found that the single

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

91

1 indicator actually met all the criteria under
2 the regulatory requirements of Part 64.

3 MR. WANNIER: So is it fair to say
4 that so, for instance, that CWLP -- the CWLP
5 facility, Dallman facility and at Coffeen,
6 there was a determination that opacity alone
7 did not meet that standard?

8 MR. REED: There actually is a
9 difference with the city water power
10 compliance assurance monitoring plan in that
11 they have a particulate matter continuous
12 emissions monitor on one of their units, unit
13 34. And as we all know, continuous emission
14 monitors do have to be calibrated, they do
15 periodically break down or need parts
16 replaced, and so the second indicator was
17 necessary for opacity to continue being able
18 to monitor during those down periods when the
19 CEM was malfunctioning. And the other three
20 units, 31, 32, and 33 actually do continue to
21 rely on one indicator, opacity only.

22 MR. WANNIER: Okay. So just to
23 clarify then in this case the original impetus

HEARING - November 15, 2016
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

92

1 for determining what the appropriate negotors
2 could be came from the plant operator,
3 correct?

4 MR. REED: That's correct. The
5 compliance assurance monitoring does come from
6 the operator.

7 MR. WANNIER: Thank you.

8 MR. FROST: All right. Thank you.
9 I believe that that was everyone that I had
10 cut off. Is there anyone else that I cut off
11 that didn't get to finish their comments?

12 All right. Well, that is everyone
13 we have then. I would like to remind everyone
14 that the comment period closes on December
15 15th of 2016. So written comments must be
16 sent to my attention by that time. Our
17 address is 1021 North Grand Avenue East, P.O.
18 Box 19276, Springfield, Illinois, 62794. I'd
19 like to thank everyone for coming out tonight
20 and have a good evening.

21 (End of proceedings.)

22

23

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PUBLIC HEARING FOR
REOPENED CAAPP PERMIT FOR MIDWEST GENERATION

93

1 STATE OF ILLINOIS)

2) SS

3 COUNTY OF PEORIA)

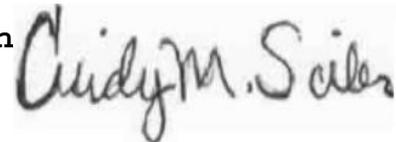
4 C E R T I F I C A T E

5 I, Cindy M. Scribner, CSR-RPR, License
6 #084-004465, a Notary Public duly commissioned
7 and qualified in and for the County of Peoria
8 and State of Illinois, DO HEREBY CERTIFY that,
9 pursuant to notice, there came before me on
10 the 15th day of November, A.D., 2016, at
11 Pekin, Illinois, the foregoing proceedings
12 were immediately reduced to shorthand by means
13 of stenotype by me.

14 I ALSO CERTIFY that the transcript is a true
15 record of the testimony given by the parties.

16 I FURTHER CERTIFY that I am neither attorney
17 or counsel for, nor related to or employed by,
18 any of the parties to the action in which this
19 hearing is taken.

20 IN WITNESS WHEREOF, I have hereunto set my
21 hand at Peoria, Illinois, this 7th
22 December, A.D., 2016.



23

CSR-RPR

	51:12	21:10;22:2,11;	allergic (3)	29:11
§	actual (6)	36:18;37:21;39:5,10;	70:4,7,8	analyze (1)
\$15,000 (1)	4:23;23:19;59:5;	41:10;89:4	allergists (1)	80:15
73:17	75:10;81:8;82:18	affirming (1)	70:3	and/or (1)
A	actually (14)	37:11	allergy (1)	44:2
Abi (3)	4:1;15:22;27:18;	afford (1)	70:21	animal (2)
53:13;58:17,19	39:4;44:4;47:14;56:3;	71:3	alley (9)	15:13,22
A-B-I (1)	67:19;79:23;89:23;	African (1)	14:11,13,21;15:6,	annual (1)
58:19	90:3;91:1,8,20	74:3	13,23;25:22;60:20;	69:16
ability (1)	add (2)	afterwards (4)	71:23	anxiety (1)
75:12	7:20;90:10	11:18;47:3;50:10;	Alliance (5)	74:20
able (12)	added (6)	52:11	12:20;26:18;31:5;	anymore (1)
44:14;51:8,11;56:2,	8:2,3;21:1;87:13;	again (20)	52:15;71:12	69:9
6,8;65:16,18;71:2;	89:7,15	6:21;10:21;11:17,	allow (10)	Apparently (1)
75:20;76:1;91:17	addition (4)	23;14:6;16:14;18:6;	11:17;20:2;38:5;	31:21
abnormal (1)	19:18;29:23;74:15,	20:15;33:7,8;38:6;	71:7;76:11;77:6;	appeal (2)
46:7	18	48:20;50:5;65:11,23;	78:15;81:18;82:14;	7:5;90:13
above (1)	additional (10)	87:4,18;88:15;89:22,	86:15	appear (1)
22:8	4:11;16:14;20:7;	23	allowable (1)	22:18
absolutely (1)	30:1,17;82:5;87:14;	age (2)	39:11	appears (1)
55:3	88:3,17;90:10	25:6;31:12	allowed (9)	19:5
accept (2)	additions (1)	Agency (9)	23:22;27:5;29:21;	applicable (4)
4:21;12:3	55:6	2:8;4:7;11:10;	30:15;34:9;56:20;	3:12;7:7,12;57:7
accepting (1)	additives (2)	25:10;28:21;30:3,5;	57:6,9;76:19	applicant (1)
3:22	9:18;84:5	38:4;58:7	allows (7)	20:22
access (2)	address (11)	agency's (1)	5:7;11:15,17;12:4;	application (1)
56:8;80:12	3:11;7:7,11;8:8,12;	40:18	19:20;66:10;87:18	59:5
according (1)	9:11;17:3;77:15;	ago (3)	almost (3)	applied (1)
2:11	85:23;88:18;92:17	14:13;42:7;54:15	26:12;31:14;73:11	7:12
accrued (1)	addressed (6)	agree (1)	alone (2)	apply (6)
73:21	7:15;8:6,11;9:21;	45:20	54:6;91:6	21:10,16;41:11;
accurately (4)	58:7;88:9	ahead (1)	alternate (1)	57:5;89:4,15
17:22;56:10;57:19;	adds (1)	24:11	29:17	appreciate (5)
65:22	29:10	ahh (1)	alternative (23)	18:8;20:5;24:21;
Acid (6)	adequate (2)	82:19	22:17,21;23:1,5,12,	34:23;46:23
9:7;58:22;59:3,7;	66:3;85:5	ailments (1)	19;29:21;66:11;	appreciated (1)
60:23;61:2	Administrative (3)	86:5	81:17;82:5,7,15,16;	25:13
acids (1)	3:4;21:3,17	Air (89)	87:5,7,19;88:19,20,	appropriate (3)
84:6	admit (1)	2:18;4:9;8:1,5,7,10;	21;89:5,9,12,16	5:11;9:4;92:1
across (4)	31:5	14:3;15:5;16:8;17:5,	although (1)	approval (3)
36:11,18;37:13;	adult (4)	20;23:8;25:10,18,20;	40:9	8:23;90:16,17
60:2	14:23;15:1;32:23;	26:6,14,21;30:7;	Alton (2)	approved (1)
Act (16)	33:8	31:23;32:13;33:3;	47:11,19	8:14
2:19;36:21,21,23;	adults (1)	35:3;36:6,20,21;38:8;	always (12)	approximately (1)
38:8;41:12;48:13,14,	54:6	41:12;42:14;48:13;	18:17;32:22;33:21;	68:19
14;49:8;56:4;57:3,10,	advocate (1)	49:1,8;51:18,19,21;	47:20,22;48:9,16,16;	area (23)
21;58:9;67:2	49:1	52:1;53:4,10,20,23;	51:9;57:10;62:6;	5:9;8:6;14:3;15:4;
acting (2)	advocated (2)	54:3,11,16;55:1,2,6,8;	80:19	16:21;26:8;30:12;
2:6,8	19:13,17	56:4,4,9;57:3,10,20;	amazing (1)	32:5;34:13;46:9;
action (10)	advocating (1)	58:9;59:18,22;61:3,3,	63:13	47:19;55:9;56:6;
4:2,8;26:21;28:22;	48:16	23;62:4,14,16;64:5;	ambers (1)	69:10;71:20;76:7,21;
35:2;41:12;43:6,18;	affect (1)	65:21;66:9;67:2;70:6,	50:16	78:13,17,18,21;79:1,
80:17;90:12	60:14	13;71:1,22;72:19,22;	ambulance (1)	20
actions (1)	affected (4)	74:5,10,12,16,18,21;	48:2	areas (1)
44:1	34:4;58:12;59:22;	75:4;76:2,21,23;79:5,	American (2)	26:14
active (3)	60:6	12;80:4;82:2;84:9,12;	74:3,7	arise (1)
26:20;33:10;45:16	affects (1)	88:4	ammonia (2)	34:19
activities (1)	60:12	Albuterol (1)	70:12,13	Arlan (1)
33:2	affiliated (1)	13:14	amount (8)	60:1
activity (1)	71:9	Alec (1)	13:15,17;44:16;	around (6)
	affiliation (2)	2:9	46:7;51:8;75:4;80:1;	33:19;54:13;60:5;
	11:5;12:1	alert (1)	89:11	70:11;72:5;84:20
	affirmative (9)	71:20	amounts (1)	arsenic (1)

87:23 arsenicals (1) 87:22 ash (2) 84:10,11 aspects (1) 35:19 assessment (3) 76:10,13;80:12 assessments (1) 77:3 associate (1) 59:7 associated (3) 74:17,20,21 Association (2) 53:17;74:8 assurance (5) 8:23;84:14;90:22; 91:10;92:5 asthma (19) 13:5,6,7,13;31:8, 9,13,14,15;34:14; 46:8;48:1;54:7,17,20; 73:15,19,21 asthmatic (3) 12:17;13:10;34:6 asthmatics (2) 15:17;86:3 athlete (1) 32:20 attack (3) 29:13;31:14;48:8 attacks (1) 13:7 attainment (1) 69:22 attempt (2) 82:10;85:6 attendance (1) 18:20 attending (1) 6:21 attention (2) 87:6;92:16 attest (1) 14:14 authority (2) 39:7;40:4 authorization (6) 21:9;23:1,2;24:19; 39:4;89:3 authorizations (1) 21:15 auxiliary (1) 9:20 availability (1) 5:23 available (5) 8:15;22:3,11;49:9; 55:19 Avenue (1) 92:17	average (9) 17:8,15;20:1,14; 43:9;52:8;56:12;65:1; 80:10 averaged (7) 17:23;18:5;45:21; 64:22;66:1;75:11,18 averages (1) 17:9 averaging (5) 18:3;19:20,22; 49:16;80:10 avoid (2) 5:18;57:7 aware (1) 29:18 away (5) 32:23;33:4;48:4; 68:20,21	belching (1) 47:22 below (1) 73:17 benefits (1) 53:3 beryllium (1) 88:13 best (1) 8:15 bet (1) 53:8 better (9) 25:14;28:20;48:16; 51:12,13,13;53:21; 62:7;85:22 big (1) 84:20 bigger (2) 45:3;82:20 bills (1) 71:3 birthday (1) 50:19 bit (2) 13:8;14:3 bladder (1) 72:4 blanket (1) 81:6 blotchy (1) 60:7 blowing (1) 50:18 blown (1) 50:16 Blumenshine (8) 18:12;24:22;25:1,2; 28:5;29:6;30:10,21 Board (1) 72:15 body (7) 34:18,21;51:20; 52:6;69:13;70:23; 72:6 body's (1) 34:16 boiler (1) 9:20 boilers (6) 7:19,23;8:21;9:2,7, 15 born (4) 14:14;32:19;47:10; 52:16 both (8) 15:2;29:3;58:2; 64:3,4,5;73:4;89:10 box (2) 5:11;92:18 boyfriend (1) 60:15 Brad (2)	2:6;10:20 break (1) 91:15 breakdown (14) 21:8;22:1,10;24:18; 29:1,2;34:21;36:4; 40:5;43:20,22;44:4; 81:1;89:3 breakdowns (3) 27:19;28:3;29:5 breaks (3) 15:10;60:11;70:23 breath (1) 48:6 breathe (5) 51:11,11;61:23; 62:5;70:2 breathing (13) 15:17,18;25:9; 29:11;33:5;42:9; 50:23;53:23;54:11; 55:2;62:20;65:20; 74:9 Brian (3) 52:11;53:13,14 B-R-I-A-N (1) 53:15 brief (1) 10:15 briefly (1) 4:9 bring (5) 46:17,17;53:4; 63:12;81:19 Broadway (1) 31:12 broke (1) 14:22 brother (2) 47:23;48:4 brothers (1) 47:20 brought (4) 13:18;60:8;78:8; 79:10 brown (2) 51:14,16 Bugel (17) 16:17;18:11,13,14; 21:6,19;22:6,15;24:4, 8,12,21;86:20,21,23; 87:4;89:19 B-U-G-E-L (1) 18:14 built (2) 86:8,9 bunch (1) 12:21 burden (1) 87:13 Bureau (4) 4:8;30:6,6,7 burn (3)	23:1;81:21;83:7 burned (9) 23:7;30:16;66:13; 82:5,20;87:15,19; 88:12,21 burning (1) 66:17 byproducts (1) 88:12
		C		
		CAAPP (13) 2:20;3:10,13,23; 4:10;6:15,20,23;7:2,6, 16;9:10;10:12 cadmium (1) 88:14 cafeteria (1) 32:11 cake (1) 50:19 calibrated (1) 91:14 California (1) 74:7 call (4) 11:22;13:20;37:17; 86:20 called (4) 14:10,12,15;82:9 calling (2) 11:3;65:13 CAM (1) 90:3 came (1) 92:2 campfire (1) 50:17 can (66) 3:3,18,20;4:16; 5:10;14:14;16:4,9,15; 22:4;23:13,15,17; 24:1,6;27:8,10,13; 28:1,17;33:20;34:19; 39:2,6;40:21;41:22; 42:8;45:10,11,16; 48:15;51:10,12,14,17, 20;52:1,20;54:12,16; 56:1;57:18;58:3;60:1; 62:6,14,17;63:15; 64:23;65:6,7;68:5; 75:14,21,22;80:3,8; 83:7,20;84:4;86:1; 87:9,23;88:11,12; 89:1 cancer (13) 14:11,12,21;15:6, 12,23;25:6;46:8; 60:15,20;71:23;72:2, 5 candles (1) 50:19		

<p>card (8) 5:8,10,12,20;10:23; 11:16;79:15;86:13</p> <p>cards (1) 11:2</p> <p>Carey (5) 24:23;30:22;31:1,2; 32:14</p> <p>C-A-R-E-Y (1) 31:2</p> <p>Carter (1) 54:17</p> <p>case (4) 3:9;17:17;83:17; 91:23</p> <p>categories (1) 30:9</p> <p>Caterpillar (1) 82:23</p> <p>cause (15) 38:12,21;50:3; 57:17;66:7;67:5,10, 12,17,23;68:8;73:6; 74:23;75:19;80:8</p> <p>caused (2) 22:20;44:5</p> <p>causes (2) 69:23;80:2</p> <p>causing (2) 38:10;74:15</p> <p>cavalier (1) 82:13</p> <p>CEM (1) 91:19</p> <p>Center (1) 64:1</p> <p>Central (6) 12:19;26:17;31:4; 52:14;61:18;71:11</p> <p>certain (8) 7:14;8:18,18;10:1, 6;50:22;51:8;68:3</p> <p>certainly (1) 28:1</p> <p>cetera (3) 36:5;73:4;76:18</p> <p>chair (1) 51:3</p> <p>chairperson (1) 26:10</p> <p>challenge (2) 32:2;51:1</p> <p>chance (3) 11:12;52:21;53:1</p> <p>change (3) 16:6;37:19;53:22</p> <p>changes (10) 6:23;7:2,11,19; 9:22,23;10:11,12,16; 35:7</p> <p>channel (1) 29:20</p> <p>check (1)</p>	<p>5:11</p> <p>chemical (1) 25:22</p> <p>chemicals (3) 85:2;87:21;88:3</p> <p>chest (1) 14:6</p> <p>Chicago (3) 53:18;71:4;81:20</p> <p>child (2) 14:23;48:2</p> <p>children (8) 15:6;34:3,4;54:7; 59:17;74:9,13,23</p> <p>Chillicothe (1) 79:19</p> <p>chlorine (1) 82:8</p> <p>chocolate (1) 47:21</p> <p>chosen (1) 45:15</p> <p>Christmas (1) 31:14</p> <p>chromatic (1) 87:22</p> <p>chromium (2) 87:23;88:15</p> <p>chronic (6) 12:17;13:6;25:7; 29:13;73:5,7</p> <p>church (1) 13:23</p> <p>churning (1) 79:23</p> <p>CICA (1) 53:22</p> <p>CIHA (1) 52:14</p> <p>Cilco (1) 71:3</p> <p>Circuit (2) 36:15;41:13</p> <p>Circuit's (1) 37:11</p> <p>citizen (2) 56:3;59:12</p> <p>citizens (3) 32:3;34:13;61:18</p> <p>city (6) 33:21,22;34:2;35:3; 72:15;91:9</p> <p>clapping (1) 11:8</p> <p>clarify (2) 10:1;91:23</p> <p>clause (1) 17:5</p> <p>Clean (28) 2:18;23:4,16;25:9; 26:21;28:13;36:20, 21;38:8;48:13,13; 49:1,8;52:1,21;53:4,</p>	<p>20;56:4;57:3,10;58:9; 66:12;67:1;83:17; 84:12;87:17,18,19</p> <p>cleaned (3) 46:14,16;48:14</p> <p>cleaner (2) 54:3;74:10</p> <p>clear (6) 22:22;38:6;41:9,12; 57:20;83:11</p> <p>climate (1) 63:11</p> <p>close (3) 6:5;15:12;63:17</p> <p>closely (1) 80:6</p> <p>closer (2) 24:16;33:15</p> <p>closes (1) 92:14</p> <p>closure (1) 3:2</p> <p>cloud (2) 47:21,23</p> <p>clouds (2) 13:2;60:4</p> <p>Club (11) 12:18;18:15;19:13, 17;26:11;35:16; 36:10;61:16;62:11; 71:11;90:1</p> <p>clusters (1) 72:3</p> <p>coach (1) 34:7</p> <p>coal (21) 8:12;9:15,18;23:7; 49:7;56:5;57:23;58:4; 72:17;74:1;78:17; 83:23;84:1,5,10,17; 85:3,7;86:10;87:10, 12</p> <p>coal-burning (1) 81:19</p> <p>coal-fired (7) 7:19,23;8:21;9:7; 25:20;47:19;74:22</p> <p>coalition (1) 26:19</p> <p>Code (3) 3:4;21:3,17</p> <p>Coffeen (1) 91:5</p> <p>coke (4) 66:12;87:8,9,14</p> <p>collected (1) 56:7</p> <p>combination (1) 83:15</p> <p>coming (6) 18:8;44:16;48:2; 65:14;85:8;92:19</p> <p>commend (1)</p>	<p>19:9</p> <p>comment (15) 4:19;5:15,21;6:5; 11:12,13,14,16;16:16; 18:17;30:19;67:6; 76:13;90:2;92:14</p> <p>comments (35) 3:22;4:12,14,15,16, 21;5:2,5,12,13,21; 6:12,13;10:22;11:4,9; 12:1,3,6;16:15;18:8, 22;35:17;36:11; 39:19;47:9;50:6; 55:16;67:8,19;68:6; 86:19;87:3;92:11,15</p> <p>commit (2) 41:1,3</p> <p>communities (3) 72:23;74:4;86:6</p> <p>Community (14) 12:19;26:18;31:5; 32:21;39:17;45:10; 47:12,15;48:15; 52:16;62:2;71:11; 72:14;73:20</p> <p>companies (2) 16:9;85:15</p> <p>compared (1) 73:9</p> <p>competitively (1) 33:6</p> <p>complete (3) 5:20;55:22;76:14</p> <p>completed (3) 5:7;9:3;67:9</p> <p>completely (1) 17:23</p> <p>Complex (1) 68:22</p> <p>compliance (10) 8:23;57:23;58:4,9; 66:23;68:1;90:5,22; 91:10;92:5</p> <p>complies (2) 49:7;79:13</p> <p>comply (2) 7:17;57:3</p> <p>complying (1) 28:14</p> <p>computer (1) 13:22</p> <p>concentrations (3) 38:20,21;46:4</p> <p>concern (10) 20:8,9;26:17,22; 30:3,17;56:9;58:20; 66:13;88:6</p> <p>concerned (12) 12:23;22:19;23:13; 29:16;31:16;49:5; 59:11;61:18;62:3; 64:17;82:13;83:22</p> <p>concerning (5)</p>	<p>3:8;10:11;12:15; 66:10;81:23</p> <p>concerns (5) 26:6;29:8;30:1; 34:5;50:7</p> <p>conclude (1) 21:20</p> <p>condition (5) 19:3;20:18;22:18; 29:13;36:5</p> <p>conditional (2) 90:16,17</p> <p>conditions (6) 24:19;34:19,20; 50:23;51:2;67:12</p> <p>conductive (3) 85:12,12,13</p> <p>conduct (1) 76:9</p> <p>confidence (2) 81:14;85:1</p> <p>confirms (1) 9:3</p> <p>confused (1) 72:7</p> <p>confusing (1) 61:7</p> <p>congestion (1) 33:9</p> <p>consequences (2) 42:21;43:1</p> <p>consideration (3) 4:17;28:2;63:10</p> <p>considerations (1) 67:10</p> <p>considered (1) 28:23</p> <p>considering (1) 82:3</p> <p>consistent (1) 81:1</p> <p>constructed (2) 9:11,18</p> <p>construction (3) 23:17,21;78:3</p> <p>contacts (1) 70:22</p> <p>contagious (1) 68:16</p> <p>contain (3) 58:2;82:8;87:23</p> <p>contained (2) 3:10;76:3</p> <p>containing (1) 78:6</p> <p>contaminants (1) 84:8</p> <p>contamination (1) 83:19</p> <p>content (1) 89:11</p> <p>contested (1) 3:8</p>
--	--	--	---	---

<p>context (1) 39:9</p> <p>continue (8) 21:9;38:4,11,14; 48:21;57:20;91:17,20</p> <p>continued (3) 33:1;38:11;81:2</p> <p>continuous (3) 36:22;91:11,13</p> <p>contrary (1) 38:8</p> <p>contributions (1) 8:17</p> <p>control (4) 10:8;31:23;42:10; 75:6</p> <p>controls (5) 32:4;49:9;55:7,19; 64:18</p> <p>COPD (2) 54:14;86:4</p> <p>copper (1) 87:23</p> <p>corporation (1) 71:15</p> <p>corporations (3) 45:4,7,9</p> <p>correction (1) 80:17</p> <p>correlate (1) 84:16</p> <p>correlated (1) 44:22</p> <p>correlation (2) 90:18,20</p> <p>costs (4) 70:20;73:18;76:17; 77:4</p> <p>cough (2) 13:10,10</p> <p>coughing (3) 42:12;62:19;68:17</p> <p>Council (1) 36:16</p> <p>count (1) 80:11</p> <p>counties (5) 26:12;54:6;72:20; 73:4,11</p> <p>country (3) 36:19;37:14;45:5</p> <p>County (9) 25:4;52:17;69:2; 72:15,18;73:8,9,14,23</p> <p>couple (12) 6:11;20:18;24:10; 26:9;27:17;42:17; 47:19;49:4;58:22; 67:4;68:8;86:7</p> <p>course (7) 12:5;21:23;25:14; 32:22;36:1;41:17; 87:11</p>	<p>court (2) 11:19;37:2</p> <p>cover (1) 28:12</p> <p>covered (1) 30:3</p> <p>crazy (1) 83:20</p> <p>creams (1) 70:22</p> <p>creasote (1) 88:1</p> <p>create (1) 83:20</p> <p>created (2) 36:8;52:23</p> <p>creates (1) 78:3</p> <p>creating (1) 47:8</p> <p>Creek (1) 63:20</p> <p>cries (1) 46:21</p> <p>crippling (1) 69:13</p> <p>criteria (2) 30:8;91:1</p> <p>critical (3) 17:15,19;55:3</p> <p>critically (1) 25:11</p> <p>cross (2) 8:7;83:19</p> <p>cumulative (1) 25:18</p> <p>curious (1) 90:9</p> <p>current (6) 7:2,10,15;25:20; 40:13;75:5</p> <p>currently (3) 67:8;72:14,16</p> <p>cut (2) 92:10,10</p> <p>CWLP (2) 91:4,4</p>	<p>damaging (1) 38:19</p> <p>dark (1) 14:3</p> <p>data (12) 17:14,16,21,22; 55:23;56:2,7;65:11; 75:10,13;80:12,15</p> <p>date (1) 5:1</p> <p>dating (1) 86:9</p> <p>daughter (5) 12:17;13:4;15:19; 27:14;53:7</p> <p>day (5) 59:17;61:23;62:5; 63:2,3</p> <p>days (5) 43:18;51:18;52:4,8; 54:16</p> <p>DC (3) 36:15;37:11;41:13</p> <p>deadline (1) 18:22</p> <p>deal (2) 83:2,15</p> <p>dealing (1) 63:2</p> <p>death (5) 73:6,6,12;74:23; 86:4</p> <p>deaths (1) 73:7</p> <p>decade (1) 40:19</p> <p>decades (2) 25:8;55:4</p> <p>December (5) 4:19;18:22;32:10; 69:4;92:14</p> <p>decide (1) 37:3</p> <p>decision (5) 4:22;5:1,22;37:11, 12</p> <p>deeply (2) 31:16;62:3</p> <p>defense (8) 21:10;22:2,11; 36:16;37:21;39:5; 41:11;89:4</p> <p>defenses (13) 36:6,8,13,18;37:4; 38:3,5,7;39:10;40:5, 12,14;44:3</p> <p>defer (2) 2:15;68:4</p> <p>deficient (2) 55:13;64:12</p> <p>definitely (1) 33:16</p> <p>definition (1)</p>	<p>29:1</p> <p>degree (1) 72:14</p> <p>delineated (1) 83:14</p> <p>delineates (1) 23:3</p> <p>demand (1) 85:21</p> <p>demonstration (1) 81:2</p> <p>density (1) 83:5</p> <p>Department (1) 76:8</p> <p>depend (1) 5:1</p> <p>depending (3) 27:20;30:8;83:5</p> <p>Derby (1) 70:14</p> <p>derived (3) 23:4;66:12;88:10</p> <p>derogatory (1) 11:9</p> <p>Describe (1) 53:3</p> <p>described (1) 78:16</p> <p>deserve (2) 75:7;77:10</p> <p>deserves (1) 76:14</p> <p>desire (1) 5:12</p> <p>details (3) 10:10;55:11;82:17</p> <p>determination (2) 41:10;91:6</p> <p>determine (4) 50:2;56:1;58:3; 90:5</p> <p>determined (2) 37:1;68:9</p> <p>determines (3) 57:16;66:7;90:9</p> <p>determining (1) 92:1</p> <p>develop (1) 54:9</p> <p>developed (3) 74:10;78:1;79:6</p> <p>developing (1) 75:1</p> <p>deviation (1) 43:21</p> <p>diagnosed (3) 13:12;31:12;60:15</p> <p>die (3) 25:6,7;55:2</p> <p>died (1) 31:14</p> <p>difference (4)</p>	<p>27:20;33:17;51:18; 91:9</p> <p>different (6) 23:6;28:1;33:11; 66:17,18;78:18</p> <p>differently (2) 78:20,21</p> <p>difficult (4) 59:11;68:7;85:17, 19</p> <p>diminished (1) 54:11</p> <p>dioxide (14) 8:4,9;9:16;18:4; 19:2,12;55:21;64:20; 69:21,23;70:12,15; 72:5;73:2</p> <p>dioxides (2) 73:3;87:9</p> <p>dioxode (1) 49:12</p> <p>direct (1) 12:1</p> <p>directly (1) 38:7</p> <p>director (2) 2:9;53:16</p> <p>dirty (2) 13:1;51:16</p> <p>discreet (1) 80:16</p> <p>discussed (1) 10:12</p> <p>disease (8) 25:8;53:20;54:2,4, 8,10,22;73:13</p> <p>diseases (1) 73:5</p> <p>dispersed (1) 78:20</p> <p>disproportionately (1) 74:2</p> <p>disrespectful (1) 27:6</p> <p>District (1) 37:2</p> <p>doctor (2) 60:7;69:6</p> <p>doctored (1) 65:12</p> <p>document (1) 27:4</p> <p>documentary (1) 71:23</p> <p>documented (1) 27:12</p> <p>documents (3) 3:16,18;10:18</p> <p>dog (1) 70:8</p> <p>dogged (1) 31:18</p> <p>dogs (1)</p>
	D			
	<p>dad (2) 25:5,6</p> <p>dad's (1) 62:13</p> <p>Dagit (6) 53:13;58:17,19,19; 59:9;61:11</p> <p>D-A-G-I-T (1) 58:20</p> <p>Dallman (1) 91:5</p> <p>damage (3) 38:22;46:5;81:4</p>	<p>definition (1)</p>		

70:7 done (7) 10:17;16:5;43:2; 56:11;65:23;79:8; 85:18 Doug (3) 4:8;6:9,17 D-O-U-G (1) 6:18 down (10) 17:13;25:23;27:10; 51:4;60:9,16;79:21; 80:11;91:15,18 Downstream (1) 72:1 downtown (1) 14:4 downwind (1) 26:15 dozen (1) 26:19 draft (8) 3:10,19;44:21; 57:13;62:6;64:11; 66:3,10 draft's (1) 49:22 draw (1) 87:6 dream (2) 16:6,10 drink (1) 13:11 Drive (2) 16:20;51:13 dropped (1) 67:11 dry (2) 9:14;70:22 Duck (1) 63:19 due (2) 21:23;22:9 duration (2) 29:3,10 during (15) 4:13,18;5:21;32:23; 35:23;36:2,7,9;37:5; 38:22;49:19;56:22; 76:3;90:11;91:18 dust (1) 70:5 Dynergy (1) 84:1	51:16 easily (2) 58:3;75:12 East (3) 2:21;25:2;92:17 easy (1) 44:12 economic (3) 46:11;81:9,13 education (1) 53:21 Edwards (1) 63:18 effect (1) 7:8 effective (2) 21:5;85:13 effects (3) 59:16,18;79:8 efficient (1) 2:12 effort (2) 28:8;85:22 electricity (1) 81:11 elements (2) 18:23;55:11 elevated (1) 86:4 Elizabeth (4) 5:9;58:17;61:12,15 elm (1) 70:8 eloquent (1) 79:22 else (5) 43:22;79:3;81:15; 83:21;92:10 emergency (2) 39:10;54:19 emission (8) 9:6;36:22;43:20; 49:9;55:19;64:17; 88:21;91:13 emissions (47) 7:22;8:2,4,8,10;9:2, 16,19;17:1,5,20;18:5; 19:6,21,22;20:16; 21:11,22;22:8,19,22; 23:6;27:22;42:19,23; 44:8,16,18,23;46:1; 49:12,19;52:5;55:21; 56:12,22;64:21;67:6; 73:2;75:10,17;76:5; 87:10;88:7,8;89:17; 91:12 emit (1) 23:7 emits (1) 72:18 emitted (2) 76:2;89:1 emitting (1)	75:3 encourage (1) 45:17 end (7) 5:15;16:16;24:13; 41:22;82:11;87:16; 92:21 ends (1) 4:19 energy (1) 58:3 enforcement (6) 28:20,21;41:12; 43:6,11;44:1 enforcements (1) 28:17 engage (2) 33:2;51:12 engineer (1) 6:19 enough (4) 45:6;51:21;64:23; 65:10 ensure (12) 2:11;5:16;49:6,11; 50:2;55:12,18,18; 57:4,16,22;66:6 ensures (1) 28:7 ensuring (1) 64:19 enter (1) 14:18 entire (2) 59:12;73:19 environment (2) 46:14,16 Environmental (9) 2:7;30:5;36:14; 42:16;47:18;48:12, 23;53:16;74:6 EPA (30) 2:17;3:7,15,20;4:5, 9,18,21;6:2,8;7:9; 8:22;10:14,14;36:16; 37:3,9,9,16;39:1,3,9; 41:14;47:8;49:2; 56:23;57:2,66:22; 80:13;90:15 EPA's (6) 3:1,21;7:21;8:7,14; 90:23 equipment (5) 9:11,13,17;81:4; 83:1 equivalency (1) 82:14 Erika (3) 30:23;32:15,18 E-R-I-K-A (1) 32:18 especially (10) 23:8;38:18;42:18;	44:17;45:4,14;51:18; 52:2;54:3;88:23 essential (2) 26:1;81:5 establish (4) 11:13;40:10;79:5; 90:18 established (1) 77:22 et (3) 36:5;73:3;76:18 evaluated (1) 43:5 evaluating (1) 67:8 evaluation (3) 49:23;57:14;66:4 even (24) 7:14;12:21;27:2; 33:10;40:8;42:13; 45:6,13;46:9,11;55:5; 60:10;61:5;71:2,6; 72:1,3;78:14;80:5,7; 81:11;85:6;86:8;88:1 evening (11) 2:5;5:13;12:10; 18:9,13,15;35:12; 38:15;61:20;67:5; 92:20 eventually (1) 34:10 everybody (1) 68:17 everyone (10) 2:5;11:7,11;12:21; 35:21;86:13;92:9,12, 13,19 everything's (1) 71:21 evidenced (1) 70:12 exactly (4) 3:6;44:18,22;61:13 example (1) 82:8 exceed (2) 19:6;23:2 exceedance (1) 17:19 exceedances (2) 36:9;37:5 exceeded (4) 21:21,23;22:7,9 exceeds (1) 57:7 exceptions (1) 56:20 excess (11) 27:22;42:19;43:20; 44:8;50:3;57:17;66:7, 9;67:5,16,22 excursions (1) 9:6	excuse (1) 43:21 excuses (1) 28:12 exceedances (1) 36:6 exemptions (1) 57:6 exercise (1) 27:14 exhibit (3) 5:17;13:20;14:19 exist (2) 37:5;90:19 exits (1) 72:6 expected (3) 75:19;76:10,15 experience (1) 33:4 experiencing (1) 13:6 explain (2) 4:3,10 explaining (1) 36:12 exposure (1) 74:18 exposures (3) 56:8;80:7,7 extend (1) 82:4 extra (3) 15:16,20;70:20 extraordinary (1) 18:20 extremely (2) 82:13;83:4
F				
E				
E2 (1) 19:3 earlier (6) 29:15;56:15;57:1; 86:9;87:5;89:13 earth (1)			face (2) 48:6;71:17 Facebook (1) 15:14 facilities (1) 90:8 facility (6) 9:14;21:20;22:7; 68:20;91:5,5 fact (7) 10:15;20:2;21:10; 36:14;78:11;87:12; 90:19 factor (1) 42:16 factors (4) 5:3;26:5;34:18; 83:6 fair (2) 2:12;91:3 Faith (9) 16:17;18:11,14;	

24:15;35:16;79:10; 83:9;86:20;87:4	firms (1) 71:16	79:16,17,17;86:12	52:13	32:15;35:10,14,14; 57:1;89:20;90:1
F-A-I-T-H (1) 18:14	First (11) 4:4;19:1;20:19;	F-O-X (1) 79:18	gas (1) 9:20	grew (5) 25:3;31:6;32:20; 69:2;74:9
fall (2) 30:9;82:14	22:22;23:11;68:16;	frequency (6) 19:11;20:10;27:23;	gases (1) 31:17	ground (1) 6:11
falls (1) 58:6	86:20;87:7,20;88:19;	29:4;43:12;56:16	gasping (1) 48:6	group (3) 26:20;28:20;43:11
families (1) 26:2	90:11	frequently (2) 23:14;79:20	gave (1) 15:21	groups (1) 26:19
family (5) 25:5;26:3;31:15;	five (7) 11:14;19:7;21:21;	friends (1) 53:4	generally (2) 3:14;17:12	growing (2) 47:17;59:13
46:6;53:5	22:7;41:6,19;46:12	FROST (27) 2:4,6;10:21;14:18;	generating (1) 81:10	grown (1) 14:23
far (5) 25:4;29:22;33:5,13;	fix (2) 65:9;66:22	16:13;18:10;24:2,6,	Generation (4) 2:20;7:1,16;8:13	growth (1) 74:13
62:2	flames (1) 50:17	10,22;30:20;32:14;	Generations (1) 7:1	guess (4) 42:6;43:9;44:6,23
fear (2) 48:5,7	flight (1) 50:20	35:9;41:19;42:1;47:1;	gets (3) 60:7;62:23;85:9	guide (1) 39:20
fears (1) 54:15	Florida (1) 42:7	50:8;52:10;53:12;	Gilmore (5) 30:23;32:15,17,18;	guys (10) 12:11,13;13:19,20;
federal (1) 8:19	fluorine (1) 82:8	58:15;61:11;68:12;	35:9	42:19;45:16;46:20;
feedback (1) 35:18	flush (1) 28:13	72:9;79:15;86:12;	G-I-L-M-O-R-E (1) 32:18	70:1;71:13,17
feeds (1) 71:4	focus (2) 18:23;35:19	89:19;92:8	given (5) 4:16,16;39:4;40:18;	guys' (2) 14:16;71:14
feel (14) 35:5,5;45:16;51:13;	focused (1) 61:9	fuel (9) 23:4,12;66:12;	58:21	gynecologist (1) 69:15
20:61;4:8;62:14,15;	folks (5) 61:22;62:1;63:17;	83:13,13;84:8;87:19;	giving (1) 50:5	
65:2;68:17;80:2;	64:4;78:8	88:10;89:9	glare (1) 86:14	H
81:13;84:23	followed (1) 4:11	fuels (27) 22:17,21;23:1,5,6,	God (1) 71:10	hair (1) 70:23
fellow (1) 48:19	following (1) 80:4	19;29:17,21;66:11,	Godfrey (2) 47:6,14	Hall (5) 50:11;52:11,13,13;
felt (1) 33:13	follow-up (1) 29:15	14;81:17;82:6,7,15,	goes (3) 26:15;29:20;55:17	53:12
few (1) 14:11	footwork (1) 32:4	16;83:19;87:5,7;	Good (16) 2:5;12:10;17:10;	H-A-L-L (1) 52:14
figure (1) 80:14	forget (1) 64:9	88:19,20,22,23;89:1,	18:13;35:12;45:14;	hand (1) 5:6
filled (3) 10:23;11:2,15	forgot (1) 58:23	6,12,16,17	51:7;61:20;63:6;	handle (2) 9:14,18
filters (1) 71:1	form (2) 40:13;60:5	Fugitive (1) 10:9	68:23;69:7,19;80:3;	handling (1) 10:8
final (8) 4:2,22;5:22;8:22;	format (1) 85:11	full (3) 35:18;41:6;58:8	83:9;84:14;92:20	handouts (1) 58:21
41:1,3;58:8;66:23	forth (1) 79:8	Fulton (1) 26:13	Gotham (1) 33:22	hands (1) 71:14
finally (2) 85:10;89:14	fortune (1) 51:7	function (2) 74:11;75:1	grade (1) 32:22	hang (1) 62:18
financial (3) 71:15;73:18;76:16	forum (1) 47:8	funky (1) 63:11	Grand (1) 92:17	happen (3) 35:23;57:9;60:18
find (7) 16:23;65:18,19;	forward (2) 35:7;55:15	funny (1) 80:20	grandchild (1) 31:13	happened (1) 65:5
67:10;75:13,21;83:11	found (11) 3:3,18,20;38:7;	future (3) 59:20;75:5;84:3	grandchildren (1) 31:10	happening (7) 17:11;33:8;52:5,7,
finds (1) 64:7	69:21;74:11,18;	future's (1) 63:12	granted (1) 51:5	8,75:14,16
fine (3) 41:21;51:3;74:19	80:19;85:19;88:23;		gravity (1) 62:10	happens (4) 28:6;33:9;57:8;
finish (3) 86:19;87:3;92:11	90:23	G	great (4) 32:6;68:22;80:9;	68:2
fire (1) 31:22	four (3) 13:15;31:13;78:17	gain (2) 81:9,13	83:2	HAPS (5) 23:9;88:4,7,16,23
fired (1) 9:20	Fourthly (1) 83:21	gains (1) 74:11	greater (1) 26:7	
	Fox (4)	game (2) 84:7,21	Greg (7)	
		Garlish (6) 12:8,10,11;14:20;		
		16:13;31:17		
		Gary (3) 50:10;52:11,13		
		G-A-R-Y (1)		

Harant (6) 72:10,11,12;77:17; 78:10;79:14	herself (1) 53:7	humanistic (1) 46:10	26:14;30:18;38:12; 72:19;73:23;74:2; 76:15,17;78:12	indicate (2) 21:7;86:17
H-A-R-A-N-T (1) 72:12	Hi (4) 32:17;42:4;47:4; 58:19	husband (2) 47:13;51:21	impetus (1) 91:23	indicator (6) 9:5;90:5,14;91:1, 16,21
hard (3) 31:21;62:20;71:16	High (7) 12:22;20:16;32:21; 34:7;38:20;54:16; 75:9	hyphen (1) 47:5	implementation (8) 8:15;19:16;37:17, 20;40:13,16;41:5; 79:11	indicators (2) 90:8,10
harm (2) 80:1,9		I		individual (1) 44:2
harmful (2) 73:1;75:4	higher (6) 24:1;73:12;74:17, 20;87:9,12	Idaho (1) 62:13	implemented (1) 85:9	industrial (2) 63:22,23
Havana (2) 63:19;79:21	highest (1) 38:21	identified (4) 55:14;57:19;59:7; 85:1	importance (1) 25:9	industries (2) 25:22;34:9
haves (1) 86:6	highlights (1) 10:15	identify (6) 4:6;9:5;10:7;75:21; 76:1;84:15	important (12) 8:19;17:18;19:18; 20:5,13;25:11;35:1,1, 48:18;49:14;52:2; 61:22	inflammation (3) 34:15,17;69:23
hazardous (6) 7:22;17:20;23:8; 66:14;82:2;88:4	highly (2) 34:6;71:22	IEPA (19) 18:16;19:9;20:6,23; 28:17;39:2;40:3,23; 41:8;55:5,13,18;75:2; 76:8,11,12,19;89:10; 90:9	impossible (1) 51:6	information (10) 3:7;14:7;17:18; 31:20,21;32:1;40:1; 44:15;58:2;90:15
haze (3) 8:17;33:20;34:1	hiking (1) 33:6	IEPA's (1) 41:10	impressed (1) 31:20	informational (2) 2:17;3:5
head (1) 31:6	history (1) 40:18	II (1) 24:20	improper (1) 41:15	inhaler (1) 13:14
health (28) 19:23;20:15;30:17; 34:19,22;38:12; 53:16,17;57:11; 72:14,16,23;73:17,23; 74:8,8;75:19;76:6,9,9, 12,15,17,21;77:2; 78:12,23;79:8	hit (1) 48:9	illegal (1) 40:22	improve (2) 35:3;48:21	inhalers (1) 34:8
Healthy (6) 12:19;26:18;30:13; 31:4;52:15;71:11	hold (1) 64:6	illegals (1) 39:14	improved (2) 58:5;76:23	initial (4) 3:13;7:6,9;9:12
hear (5) 30:11;38:14;46:21; 62:18;77:5	holding (1) 3:21	Illinois (63) 2:7,17;3:1,3,7,15, 20,21;4:5,9,18,21;6:2, 8;7:9;8:3,8,16,22; 10:14,14;12:19; 16:20,22;21:2,17; 25:17;26:11,18;30:5; 31:4;37:15,19;39:1; 46:11;47:7,7,11; 48:19;49:2;52:15; 54:5,9;57:1,2;60:6, 10;61:19;66:22; 68:19;69:4;71:11,21; 72:13;73:10,12;76:8; 79:4,12;86:11;90:15, 23;92:18	improvement (1) 56:18	initiative (1) 20:20
heard (8) 35:22;36:2;38:13; 58:14;64:14;67:4; 68:8;70:2	home (5) 15:5;48:9,20;51:14, 17	Illinois' (2) 8:2,17	improving (2) 74:12;76:20	injury (1) 81:3
hearing (18) 2:6,10,17,23;3:5,9, 18,21;4:13;5:17;6:4, 22;12:2,2;41:4;49:18; 61:21;79:22	hometown (1) 62:13	imagined (1) 42:15	inadequate (2) 49:22;66:5	insoluble (1) 71:22
hearings (5) 3:3;19:14;20:8; 62:22;85:11	honest (1) 34:13	immediate (2) 41:2,4	include (5) 18:4;44:7;87:22; 88:11,13	inspection (3) 49:22;57:14;66:4
heart (5) 14:23;15:11;26:11; 29:12;34:19	hope (3) 16:4;35:6;46:20	immediately (6) 39:7,13;40:9,15; 43:13,16	included (3) 5:16;20:21;36:4	installed (3) 49:10;55:20;64:18
held (4) 2:23;25:19;32:10; 34:11	horizon (1) 51:15	impact (9) 27:22;76:6,10,12; 77:3,8;78:11;79:1; 89:16	includes (6) 9:4,13,16;23:14; 37:6,7	instance (3) 23:15;40:10;91:4
help (5) 45:11;53:20;71:19, 19;72:8	horrible (1) 68:17	impacted (3) 16:23;64:5;73:1	including (6) 19:10;25:21;26:13; 37:14;38:18;76:16	instruction (1) 82:10
helpful (2) 5:14;40:18	horrified (1) 86:2	impacts (9)	inclusion (3) 20:17;38:10,11	instructions (1) 4:12
helping (1) 55:16	horticulturist (1) 70:11		income (1) 74:3	Integrity's (1) 64:2
Hennepin (1) 79:21	hospital (3) 32:7,11;48:5		incomes (1) 73:17	intended (1) 9:19
	hospitalization (1) 73:21		incomplete (1) 56:19	interest (1) 18:19
	hour (4) 19:7;20:2;21:22; 22:9		incorporate (1) 10:6	interfere (1) 36:19
	hourly (3) 19:6;21:11,22		increased (1) 73:16	interim (1) 38:4
	hours (3) 13:16;19:8;25:12		increases (1) 75:19	into (19) 11:22;25:12;28:22; 30:9;45:22;46:19; 60:9;62:15;69:20; 71:10;72:2,19,22; 75:4;78:4,9;82:14,18; 84:5
	house (5) 15:2;48:3;69:8,10; 70:5		increasing (1) 13:8	introduce (2) 4:5;6:8
	huge (3) 26:7;27:3;30:17		incur (1) 70:20	invalid (5)

36:19;37:16;41:14, 15,18 invalidated (1) 40:15 invalidity (1) 39:14 invalids (1) 15:3 investigated (2) 72:2,3 investigator (1) 31:18 investment (1) 71:15 involved (1) 32:9 issuance (1) 3:13 issue (10) 17:3;29:17;38:5; 40:20;41:22;44:20; 58:8;66:23;74:6;75:2 issued (6) 7:4,5,9;9:13;37:10, 16 issues (9) 2:14,15;5:6;6:3; 33:13,18;42:17;43:5; 46:9 issuing (2) 76:7,21 items (1) 23:14	K Karschner (3) 68:14,15,18 Kathleen (1) 54:14 keep (5) 11:21;14:17;52:1, 19;79:3 keeping (3) 10:4;57:15;66:5 keeps (1) 74:23 Kershner (1) 61:13 kid (1) 47:16 kids (9) 15:8,10;26:2;34:7; 59:19,20;71:5,7,7 Kill (1) 15:22 killing (1) 39:16 kilowatt (1) 81:11 Kimbra (3) 35:10;42:2,4 K-I-M-B-R-A (1) 42:5 kind (8) 43:1,3;44:10;45:3, 21,23;49:17;63:11 kinds (2) 51:2;83:20 knew (4) 15:15;31:8,9;59:23 knots (2) 69:14,17 knowing (1) 48:8 known (3) 14:10;31:17;74:19 knows (2) 27:13;29:12 Knoxville (1) 31:3	lands (1) 8:19 landscape (1) 34:1 language (2) 80:22;82:4 largest (2) 55:8;72:21 last (15) 14:1,2,20;31:2; 35:14;37:10;40:12; 50:14;52:21;53:15; 57:12;63:5;69:4; 79:15;88:10 lastly (1) 66:21 Laszlo (5) 12:9;16:17,18,18; 18:10 L-A-S-Z-L-O (1) 16:19 late (1) 87:1 lately (1) 13:8 later (1) 25:8 law (3) 41:18;58:1;77:15 lawful (1) 40:10 lay (1) 55:10 layperson (1) 27:1 lazy (1) 80:13 lead (1) 88:13 leading (2) 34:21;73:6 leads (1) 34:17 leap (1) 50:17 learn (1) 86:2 least (3) 41:8;75:3;84:15 leave (2) 10:19;15:4 leaving (1) 45:3 led (1) 20:20 left (3) 16:3;84:10,11 legibly (1) 5:19 leisurely (1) 51:4 length (1) 27:21	lengthy (3) 5:13;11:9;18:21 less (3) 33:5,13;75:7 level (2) 18:19;78:19 levels (4) 70:17,17,18;86:4 lies (1) 26:16 life (11) 13:5;15:19;32:23; 33:8;46:6;54:11; 59:12;62:12;69:3; 78:12;79:19 lifetime (1) 32:19 limit (12) 11:14;19:2,11;20:2, 12;21:21;22:8;24:3; 49:19;56:15,17,21 limitation (1) 23:18 limitations (2) 36:22;78:4 limited (5) 23:10;66:19;87:11; 88:5,16 limiting (1) 19:6 limits (7) 22:23;23:2;57:5,8; 88:8,21;90:6 lingo (1) 68:23 list (1) 64:2 listed (7) 23:19;44:17;46:12; 66:15,16,19;87:7 listen (1) 12:14 listened (1) 53:6 listing (1) 23:13 little (11) 14:2;24:16;42:7; 47:11,18;52:18; 60:18;68:6;80:2,23; 86:14 live (21) 15:6;16:19;25:2; 31:3,10;32:5;42:10, 13;47:6,14;52:17; 53:21;60:1;61:18,22; 62:21;63:17;64:8; 68:18;72:13;78:13 lived (3) 42:11;46:5;79:19 lives (3) 38:22;53:2;60:16 living (9)	15:1;51:22;54:2,4, 7;64:4;70:21;72:1; 74:4 local (2) 8:5;29:9 located (1) 2:21 location (1) 29:23 logical (1) 44:9 long (11) 5:5;17:11;29:10; 35:4,5,6;40:12,18; 43:8;56:13;80:5 longer (3) 14:15;24:3;35:17 long-term (1) 77:4 look (10) 39:23;40:1;43:16; 46:19;51:2;55:15; 77:3;78:9;80:21;82:1 looked (3) 14:4;24:15;81:7 looking (6) 16:3;28:22;63:7; 69:20;78:22;90:3 looks (1) 46:2 looming (1) 51:15 loopholes (1) 45:2 losing (1) 46:13 lot (9) 26:5;34:5;38:16; 45:2,23;46:8,19; 48:11;60:19 love (2) 59:14;62:4 low (4) 51:19,20;74:2;76:5 lower (6) 24:20;42:23;73:5,7, 13;86:4 lumber (9) 23:4,17;66:12; 83:17;87:18,18,20,20, 21 lump (1) 83:6 lung (11) 25:6;50:23;53:19; 54:2,4,8,10,14,22; 74:11;75:1 lungs (3) 57:6;65:3;74:10
J January (1) 21:5 jazz (1) 68:23 job (1) 85:18 Joe (2) 12:9;16:18 jog (1) 30:13 John (1) 61:12 Joyce (6) 18:11;24:22;25:2; 27:16;72:10,12 Joyce's (1) 79:22 Julia (3) 62:19;68:14,18 justice (1) 74:6 justification (1) 81:7 justified (1) 76:19	L lack (2) 81:14;83:23 laid (1) 82:2 lake (3) 31:11;60:1,2 lakes (2) 29:19;60:10 Land (3) 30:6;71:22;84:18 landlord (1) 69:8			
				M machine (2)

<p>15:17,20 magnitude (4) 20:10,12;29:4; 56:17 main (1) 58:20 maintain (2) 57:22;76:5 major (2) 29:19;30:2 makers (1) 47:21 makes (3) 6:10;34:3;81:14 making (5) 6:12;32:21;34:12; 39:6;67:20 malfunction (30) 21:8,15;22:1,10; 24:17;26:23;27:11, 22;28:3,23;29:2,4; 36:3,8,17;37:7,13; 39:15;40:5;43:19,22; 44:4;49:20;56:23; 80:19,21;81:1,7,16; 89:3 malfunctioning (1) 91:19 malfunctions (4) 27:19;28:18;52:6; 76:4 mammogram (1) 69:18 man (2) 15:1;32:9 mandates (1) 77:13 manganese (1) 88:14 Manito (3) 2:21;14:8;16:2 manner (8) 2:12;5:21;11:8; 17:7;56:11;65:20,23; 75:9 Many (15) 15:5;35:22;36:1; 45:19;48:1;51:1,4,11; 53:2;54:20,21;58:11; 59:16;61:9;83:14 master's (1) 72:13 material (1) 10:8 materials (3) 30:8;81:21;82:5 matter (11) 2:18;4:22;5:23;9:1; 10:9;38:19;57:8;64:7; 74:19;90:19;91:11 maximum (2) 13:13,15 may (16)</p>	<p>4:17;5:5;12:4;23:7; 12;28:23;29:1;37:18; 41:11;61:7;65:2; 66:14,16;69:9;70:7; 83:18 maybe (3) 28:12;52:4,5 mean (23) 27:6,9;29:22;30:4; 33:22;42:13;44:8,13; 45:13;46:10,13,15; 59:13,21;61:1,8;71:6; 77:3,4,11;80:21; 82:23;85:7 meaningful (3) 18:18;85:14,16 means (4) 3:6;11:8;53:6; 77:23 measure (1) 78:12 measured (1) 78:14 measures (1) 10:8 mechanical (1) 27:7 mechanism (3) 80:14;83:11;84:16 medical (1) 54:23 medication (1) 70:21 meet (2) 29:1;91:7 meeting (1) 6:22 meets (1) 79:12 member (9) 12:17,18;25:14; 28:9;31:4;52:14,15; 53:22;72:15 members (6) 26:3,12,17,20; 61:17;62:2 memories (1) 48:1 memos (1) 37:10 mention (1) 68:7 mentioned (3) 37:15;42:19;89:13 mentioning (1) 29:16 mercuries (1) 73:3 mercury (7) 7:22;8:1,2;18:5; 49:12;55:21;64:20 mess (1) 52:22</p>	<p>Messina (1) 2:9 met (2) 56:2;91:1 meter (1) 32:1 Michael (1) 6:14 M-I-C-H-A-E-L (1) 6:15 microphone (5) 6:7,9;11:22,23;12:8 middle (1) 48:3 Midwest (4) 2:20;6:23;7:16; 8:13 might (1) 27:22 miles (2) 68:20,21 million (2) 54:4,9 mind (1) 79:4 minimize (3) 29:3;75:15;76:6 minimum (2) 11:21;23:21 minutes (5) 11:14;41:20;86:22; 87:1;89:21 missing (1) 17:15 mission (1) 53:19 Missouri (1) 52:16 misunderstandings (1) 10:2 mites (1) 70:5 mixed (1) 85:2 modification (1) 90:13 modified (1) 55:12 mom (4) 13:4;25:5,7;54:18 moment (3) 29:14;40:15;41:18 money (1) 46:18 monitor (4) 16:8;82:11;91:12, 18 monitored (5) 17:6;49:13;55:22; 64:21;75:9 monitoring (11) 9:1;10:3;31:23; 55:23;70:13;78:7;</p>	<p>81:22;85:6;90:22; 91:10;92:5 monitors (4) 64:22;70:15;85:5; 91:14 month (3) 21:23;38:3;54:15 monthly (1) 19:8 more (28) 6:11;10:16;16:21; 24:11;26:3;32:2,4; 34:10;41:7,22;44:9, 10,15,15;45:1,16; 46:18;51:12;52:4; 54:3;60:18;61:9;68:7; 81:6,12;85:16,16; 90:3 morning (2) 13:2,23 most (5) 31:5;38:19,22; 50:21;89:23 mostly (1) 26:22 mother (2) 12:16;32:7 move (4) 15:9;35:7;59:13; 71:5 moved (6) 33:4,11;42:6;69:3, 5,9 moving (6) 17:8,9,15;33:7; 42:8;80:10 much (17) 15:14;24:2;30:18; 46:1;51:12;58:5,10, 14;59:22;60:14; 61:20;72:11;77:18; 79:14;84:23;85:23; 89:18 multiple (1) 90:8 Murray (5) 47:3;50:10,12,13; 52:10 M-U-R-R-A-Y (1) 50:14 must (13) 7:17;10:4;22:23,23; 57:9,10;75:2,8,10,11, 17;76:1;92:15 myself (3) 13:7,10;16:23</p>	<p>47:4,10;50:12,14; 53:15;61:14;68:18; 79:17 name's (4) 32:17;53:14;72:12; 87:4 national (3) 8:18;37:17;79:5 nation's (1) 74:8 natural (3) 9:20;25:19;36:16 nature (1) 5:2 Near (2) 15:12;31:7 nearby (1) 29:19 nearly (1) 54:6 nebulizer (2) 15:16,20 necessarily (2) 78:6,7 necessary (3) 43:6;81:3;91:17 need (23) 17:21,21;25:16; 26:21;32:2,4;55:12, 17,21;57:4,13;58:7; 64:18;68:9;70:18; 72:7;80:14;82:16; 83:10,10,15;87:13; 91:15 needed (2) 37:19,19 needing (1) 78:9 needs (9) 16:6;41:16;55:18; 56:21;58:8;83:18; 88:17,19;89:9 negative (2) 73:23;76:15 negatively (1) 73:1 negators (1) 92:1 neighborhood (2) 14:21;15:7 neighborhoods (1) 45:12 neighboring (1) 47:15 neighbors (2) 12:14;53:5 new (5) 3:11;8:3;49:3; 58:23;78:6 next (1) 30:22 nice (1) 62:23</p>
			N	
				<p>name (20) 2:6;11:4,23;12:11; 14:7;16:18;18:13; 25:2;31:1,2;35:14,15;</p>

<p>niece (2) 32:6,6</p> <p>night (3) 14:1,2;48:3</p> <p>nine (1) 63:23</p> <p>nitrogen (3) 8:9;73:3;87:10</p> <p>nobody (1) 83:21</p> <p>noise (1) 11:21</p> <p>nonattainment (2) 19:15;70:16</p> <p>nonprofit (1) 53:18</p> <p>nonwhite (1) 73:15</p> <p>Norcoc (1) 69:12</p> <p>normal (2) 50:13;75:1</p> <p>North (4) 31:3,7;33:12;92:17</p> <p>note (3) 20:11;38:1,16</p> <p>noted (1) 49:19</p> <p>notice (5) 14:2;33:16;51:9; 89:7,9</p> <p>noticed (2) 19:4;90:4</p> <p>notified (3) 5:22;56:23;57:1</p> <p>noting (1) 37:18</p> <p>NRDC (1) 41:13</p> <p>NRG (1) 64:11</p> <p>NRG's (1) 63:7</p> <p>number (4) 5:1;7:20;56:15; 86:3</p> <p>numerous (1) 25:21</p>	<p>odds (2) 20:3;23:19</p> <p>off (3) 32:8;92:10,10</p> <p>offer (1) 50:15</p> <p>officer (1) 2:7</p> <p>often (2) 16:22;63:5</p> <p>old (1) 69:3</p> <p>older (1) 59:14</p> <p>once (2) 41:5;43:4</p> <p>one (31) 12:12;14:7,23;17:3; 22:14;24:16;27:18; 31:15,22;41:22; 42:18;46:2;51:9;54:7; 55:7;59:17;63:3;67:4; 68:5;72:1,3,21;77:19; 83:17;85:1;86:18; 87:7;88:1;90:5;91:12, 21</p> <p>one- (1) 20:1</p> <p>one-hour (6) 19:2,14,20,22;20:8; 56:13</p> <p>only (16) 4:20;21:16;36:13; 39:11;40:12;56:10; 60:6,16;65:22;70:13, 14,16;75:9;82:2;90:4; 91:21</p> <p>onus (1) 85:14</p> <p>opacity (13) 9:5;16:8;18:4; 44:22;49:11;55:20; 64:20;90:6,14,20; 91:6,17,21</p> <p>open (2) 63:5;71:2</p> <p>opened (2) 63:4;70:6</p> <p>operated (1) 8:13</p> <p>Operating (4) 10:10;19:8;63:8; 78:5</p> <p>operation (5) 36:1,20;37:6;38:9; 81:2</p> <p>operations (2) 10:9;21:9</p> <p>operator (2) 92:2,6</p> <p>opportunity (11) 3:6;18:17,18;30:19; 35:13;50:6;58:11;</p>	<p>63:3,13;77:2;87:3</p> <p>option (1) 40:23</p> <p>options (2) 28:11;40:8</p> <p>oral (3) 4:12,21;5:4</p> <p>orally (1) 4:15</p> <p>organizer (1) 61:16</p> <p>original (1) 91:23</p> <p>Originally (1) 69:5</p> <p>others (3) 54:20;55:10;79:10</p> <p>otherwise (5) 2:19;19:19;21:18; 66:15;84:19</p> <p>out (46) 10:23;11:2,16; 17:15,23;18:6;21:18; 28:13,13;29:20;36:6; 39:8;40:22;42:9; 43:19;44:17;45:21; 50:19;55:10;56:12; 58:13;59:14;60:3,11; 62:17,19;64:22;65:1, 14,18,20;66:1;67:3, 11;69:21;70:16,22; 72:4;75:18;77:7; 80:14;82:2,9;84:13; 87:8;92:19</p> <p>outcome (1) 48:8</p> <p>outdoor (1) 33:2</p> <p>outdoors (1) 33:6</p> <p>outline (1) 3:16</p> <p>outrageous (1) 81:18</p> <p>outreach (1) 45:11</p> <p>outside (3) 15:4;27:14;54:16</p> <p>over (29) 6:9,11;10:20;13:9, 11;14:3,4,21;17:11; 19:23;21:22;31:6,10; 33:14,21,23;34:2; 38:14;40:19;41:19; 42:7,10;48:10;52:8; 56:13;57:20;61:5,5; 69:15</p> <p>oversight (2) 68:10;82:12</p> <p>overwhelming (2) 59:10;61:7</p> <p>own (5) 16:10;45:12;50:15;</p>	<p>70:8;71:16</p> <p>oxide (1) 87:10</p> <p>oxides (1) 8:9</p> <p>oxygen (1) 15:2</p> <p>ozone (1) 70:12</p>	<p>37:1,4</p> <p>pentachlorophenol (1) 88:2</p> <p>people (44) 11:2,17;12:12; 14:13;15:17;29:9; 32:5;35:22;38:22; 39:16;40:21;44:13; 45:11,15;46:5,15,17, 21;51:1,5;53:3,6,8,20; 54:1,4,9,21;55:1,2; 57:17;58:11;62:4,21; 63:1;65:19;71:20; 74:22;75:22;76:1; 78:13;80:8;86:18; 87:2</p> <p>people's (2) 14:22;57:6</p> <p>Peoria (24) 16:20;25:3,23; 26:13,19;31:3,7; 42:10,13;52:17;54:5; 55:9;64:4;72:13,15; 73:4,9,10,14,21,22; 74:5;79:20;82:23</p> <p>per (6) 11:14;19:7;21:22; 22:8;73:8,22</p> <p>percent (9) 19:7;21:21;22:7; 73:11,15,16;83:8,16, 17</p> <p>percentage (1) 44:19</p> <p>period (12) 4:19;5:15,22;6:5; 16:16;17:11;33:1; 37:5;43:21;56:13; 57:4;92:14</p> <p>periodic (1) 78:7</p> <p>periodically (1) 91:15</p> <p>periods (11) 22:1,9;36:3,7;37:7, 7;38:23;49:20;56:23; 89:5;91:18</p> <p>permit (109) 2:15,19,20;3:2,8,10, 13,19,23;4:7,11;6:20, 23;7:3,4,6,6,7,9,10,16, 20:9;10:12,23;10:5, 12,17;11:6;18:19; 19:1,4,5,10,19,19; 20:11;21:4,7,16; 22:22,23;23:2,3,10, 11,20;24:16,18; 25:12;26:1,8;27:2,18; 36:4;37:15;40:6;41:1, 2,4,8;44:21;49:3,6; 55:12,13,15;56:1,21; 57:13;58:1,6,8;59:4,4, 8,10;62:6;63:8,10,14;</p>
<p>O</p> <p>obstructive (1) 25:7</p> <p>obviously (2) 16:11;61:21</p> <p>occur (5) 29:5;36:2,7,9;38:22</p> <p>occurred (1) 42:9</p> <p>occurrence (1) 43:14</p> <p>October (1) 7:4</p>	<p>operated (1) 8:13</p> <p>Operating (4) 10:10;19:8;63:8; 78:5</p> <p>operation (5) 36:1,20;37:6;38:9; 81:2</p> <p>operations (2) 10:9;21:9</p> <p>operator (2) 92:2,6</p> <p>opportunity (11) 3:6;18:17,18;30:19; 35:13;50:6;58:11;</p>	<p>63:3,13;77:2;87:3</p> <p>option (1) 40:23</p> <p>options (2) 28:11;40:8</p> <p>oral (3) 4:12,21;5:4</p> <p>orally (1) 4:15</p> <p>organizer (1) 61:16</p> <p>original (1) 91:23</p> <p>Originally (1) 69:5</p> <p>others (3) 54:20;55:10;79:10</p> <p>otherwise (5) 2:19;19:19;21:18; 66:15;84:19</p> <p>out (46) 10:23;11:2,16; 17:15,23;18:6;21:18; 28:13,13;29:20;36:6; 39:8;40:22;42:9; 43:19;44:17;45:21; 50:19;55:10;56:12; 58:13;59:14;60:3,11; 62:17,19;64:22;65:1, 14,18,20;66:1;67:3, 11;69:21;70:16,22; 72:4;75:18;77:7; 80:14;82:2,9;84:13; 87:8;92:19</p> <p>outcome (1) 48:8</p> <p>outdoor (1) 33:2</p> <p>outdoors (1) 33:6</p> <p>outline (1) 3:16</p> <p>outrageous (1) 81:18</p> <p>outreach (1) 45:11</p> <p>outside (3) 15:4;27:14;54:16</p> <p>over (29) 6:9,11;10:20;13:9, 11;14:3,4,21;17:11; 19:23;21:22;31:6,10; 33:14,21,23;34:2; 38:14;40:19;41:19; 42:7,10;48:10;52:8; 56:13;57:20;61:5,5; 69:15</p> <p>oversight (2) 68:10;82:12</p> <p>overwhelming (2) 59:10;61:7</p> <p>own (5) 16:10;45:12;50:15;</p>	<p>70:8;71:16</p> <p>oxide (1) 87:10</p> <p>oxides (1) 8:9</p> <p>oxygen (1) 15:2</p> <p>ozone (1) 70:12</p>	<p>37:1,4</p> <p>pentachlorophenol (1) 88:2</p> <p>people (44) 11:2,17;12:12; 14:13;15:17;29:9; 32:5;35:22;38:22; 39:16;40:21;44:13; 45:11,15;46:5,15,17, 21;51:1,5;53:3,6,8,20; 54:1,4,9,21;55:1,2; 57:17;58:11;62:4,21; 63:1;65:19;71:20; 74:22;75:22;76:1; 78:13;80:8;86:18; 87:2</p> <p>people's (2) 14:22;57:6</p> <p>Peoria (24) 16:20;25:3,23; 26:13,19;31:3,7; 42:10,13;52:17;54:5; 55:9;64:4;72:13,15; 73:4,9,10,14,21,22; 74:5;79:20;82:23</p> <p>per (6) 11:14;19:7;21:22; 22:8;73:8,22</p> <p>percent (9) 19:7;21:21;22:7; 73:11,15,16;83:8,16, 17</p> <p>percentage (1) 44:19</p> <p>period (12) 4:19;5:15,22;6:5; 16:16;17:11;33:1; 37:5;43:21;56:13; 57:4;92:14</p> <p>periodic (1) 78:7</p> <p>periodically (1) 91:15</p> <p>periods (11) 22:1,9;36:3,7;37:7, 7;38:23;49:20;56:23; 89:5;91:18</p> <p>permit (109) 2:15,19,20;3:2,8,10, 13,19,23;4:7,11;6:20, 23;7:3,4,6,6,7,9,10,16, 20:9;10:12,23;10:5, 12,17;11:6;18:19; 19:1,4,5,10,19,19; 20:11;21:4,7,16; 22:22,23;23:2,3,10, 11,20;24:16,18; 25:12;26:1,8;27:2,18; 36:4;37:15;40:6;41:1, 2,4,8;44:21;49:3,6; 55:12,13,15;56:1,21; 57:13;58:1,6,8;59:4,4, 8,10;62:6;63:8,10,14;</p>

<p>64:11;66:10,15,20,23; 68:10;75:2;76:7,11, 22;77:20;78:2,3,5,5, 15;80:3;81:8;82:1; 84:13;85:11;87:11, 18;88:5,7,16,17;89:14</p> <p>permits (17) 3:14;6:20;36:18; 37:22;38:5;39:8,18; 40:20,22;63:4,16,21; 66:3;67:7,13;86:2; 90:7</p> <p>permittee (3) 22:3,12;57:21</p> <p>permitting (1) 90:12</p> <p>person (3) 5:4;12:9;30:12</p> <p>personal (3) 50:15;52:20,20</p> <p>Personally (4) 2:13;28:15;53:23; 58:12</p> <p>persons (1) 81:3</p> <p>perspective (1) 50:15</p> <p>petcoke (8) 23:3,23;24:1;29:17; 66:11;81:19;83:3,16</p> <p>petroleum (4) 66:11;87:8,9,14</p> <p>phasing (1) 39:8</p> <p>physical (1) 69:14</p> <p>physiological (1) 34:16</p> <p>pick (3) 10:18;15:9;67:20</p> <p>picked (1) 15:20</p> <p>picture (1) 14:9</p> <p>pictures (2) 13:18;31:19</p> <p>piece (1) 52:18</p> <p>Place (4) 47:6;48:12;51:10; 70:14</p> <p>placed (1) 75:11</p> <p>places (1) 51:11</p> <p>plagued (1) 86:10</p> <p>plan (17) 3:2;6:23;8:14;9:1, 4;10:11,11;19:16; 37:17,20;39:12; 40:16;41:5;79:11; 90:4,22;91:10</p>	<p>planned (8) 3:9,23;4:10;7:2; 9:11,22;10:17;32:9</p> <p>plans (1) 10:6</p> <p>plant (36) 9:17;12:15;15:12, 23;37:6,8;49:7;55:7; 56:5;57:23;58:4;60:5, 16,22;63:8,18,19,19, 20;64:3,12;65:7;66:6; 68:1;71:3;72:17,21; 76:4,16;77:1;78:16; 81:19;89:5,8,17;92:2</p> <p>plants (18) 8:12;17:2,20,25;21; 27:4;28:11;33:16; 36:11;47:20;60:2; 63:20;70:11;74:2,22; 78:17;86:7,9,10</p> <p>plant's (2) 26:6;36:1</p> <p>plea (1) 79:2</p> <p>please (14) 5:8,11;10:18,23; 12:1,8;22:5;26:10; 29:8;32:12,12;51:23; 71:18;85:22</p> <p>plus (1) 54:9</p> <p>PM (3) 9:6;44:23;90:6</p> <p>PO (1) 92:17</p> <p>podium (1) 11:3</p> <p>point (11) 15:3;22:16;29:12; 43:19;44:7;57:12; 67:3;71:13;77:20; 87:8;90:2</p> <p>points (1) 24:11</p> <p>policies (2) 48:12,17</p> <p>policy (2) 48:23;53:22</p> <p>political (1) 63:11</p> <p>pollutant (2) 36:7;80:6</p> <p>pollutants (10) 7:23;23:7,8;66:14; 75:4;78:18;82:2;88:4, 22;89:11</p> <p>polluter (2) 26:7;64:3</p> <p>polluters (2) 63:22;64:1</p> <p>pollution (51) 8:7;25:18;26:7; 30:2;35:23;49:8;50:3;</p>	<p>51:15;54:1,11,16; 55:1,3,6,8;56:5;57:5, 7,17;59:18,22;60:8, 20;62:12,14;64:6; 66:8,9,18;67:1;72:18, 22;74:1,5,16,19,21; 75:6,8,15;76:2,3,11, 16;77:1,4;78:19;80:4, 20;84:7,21</p> <p>pollutions (3) 38:17;75:23;79:1</p> <p>poor (2) 53:10;81:13</p> <p>population (3) 46:13;50:22;73:22</p> <p>populations (3) 76:18;77:8;80:8</p> <p>portable (1) 9:20</p> <p>pose (2) 88:3,15</p> <p>possible (3) 29:8;52:1;75:5</p> <p>possibly (1) 63:15</p> <p>potential (3) 10:2;23:5;78:23</p> <p>potentially (2) 22:20;23:16</p> <p>pounds (5) 19:7;21:22;22:8; 61:2;77:7</p> <p>power (7) 17:2;25:21;36:11; 37:6;47:20;60:2;91:9</p> <p>Powerton (43) 2:21;4:1;7:1,3,13; 8:4,12;9:9,12;12:15; 14:8;15:23;17:1; 25:21;26:15;29:18; 30:15;33:15,22; 36:10;49:7;50:2;55:7; 57:16,23;58:4;63:8, 18;64:2,12;66:6; 68:20;71:3,16;72:17, 21;74:1,22;75:2,3; 76:10,16,22</p> <p>practical (1) 4:23</p> <p>pray (1) 16:4</p> <p>preclude (1) 41:11</p> <p>predominantly (1) 74:3</p> <p>pregnancy (1) 59:17</p> <p>prepared (4) 3:15;10:13,15; 27:13</p> <p>presentation (1) 6:10</p> <p>president (1)</p>	<p>72:17</p> <p>prevent (2) 53:19;81:3</p> <p>previous (1) 90:7</p> <p>primarily (1) 12:3</p> <p>printed (2) 13:21;21:4</p> <p>prior (3) 4:1;6:5;76:7</p> <p>ProAir (1) 13:14</p> <p>probably (5) 14:14;28:19;81:20; 86:8;89:23</p> <p>problem (3) 19:21;84:20;85:8</p> <p>problematic (1) 36:13</p> <p>problems (12) 16:11;27:7;33:5; 34:17;42:9;52:4; 55:14;57:18;74:16; 75:20,22;85:23</p> <p>procedures (4) 3:2;27:1,11;85:4</p> <p>proceed (2) 4:4;11:1</p> <p>proceeding (4) 2:11;3:15;4:4; 39:23</p> <p>proceedings (2) 11:20;92:21</p> <p>process (4) 18:3;37:22;55:5; 80:17</p> <p>product (1) 83:4</p> <p>profile (2) 23:6;66:18</p> <p>Program (3) 2:19;9:8;10:10</p> <p>programs (1) 53:17</p> <p>progress (1) 48:22</p> <p>promote (1) 53:20</p> <p>pronounce (1) 88:2</p> <p>proper (3) 36:20;38:9;39:11</p> <p>properly (9) 49:10,13,19;55:20, 22;56:7;64:19,21; 65:4</p> <p>proposal (1) 17:5</p> <p>propose (1) 32:10</p> <p>proposed (8) 8:22;20:22;35:19;</p>	<p>38:2;55:11,15;58:6; 90:14</p> <p>prospective (1) 76:9</p> <p>prospectively (1) 78:23</p> <p>protect (2) 20:15;57:10</p> <p>Protection (2) 2:8;30:5</p> <p>proof (1) 12:20</p> <p>prove (1) 44:3</p> <p>provide (13) 3:7;4:15;5:10;8:22; 18:1;24:18;37:3; 40:11,14;75:12;81:5; 89:9,21</p> <p>provided (4) 21:16;31:19;59:5; 90:5</p> <p>provides (4) 19:11,23;36:23; 40:3</p> <p>providing (2) 18:16;40:2</p> <p>provision (5) 19:5,10;20:4,14,20</p> <p>provisions (13) 3:1;10:5;22:17; 37:13,21;39:16; 40:11,41;14:56;1,3, 14,21;57:2</p> <p>proximity (2) 33:17;63:17</p> <p>public (25) 2:23;3:5,16,22; 4:14;6:22;18:7,17; 19:23;20:15;25:14; 27:12;28:9;45:7;56:1; 57:11;58:3;64:2;74:7; 75:12;76:9,13,14; 84:15;89:10</p> <p>puffs (2) 13:13,15</p> <p>pull (3) 13:9,11;62:15</p> <p>pulmonary (2) 25:8;70:4</p> <p>purifiers (2) 42:14;70:6</p> <p>purpose (4) 2:10;3:22;11:11; 20:3</p> <p>pursue (1) 77:14</p> <p>pursued (1) 43:23</p> <p>purview (4) 29:22;84:13;86:1, 10</p> <p>put (8)</p>
---	---	---	---	---

<p>14:6;25:12;67:13; 71:16;78:2,4;79:9; 85:15 puts (1) 87:13 putting (3) 20:6;53:11;84:4</p>	<p>33:3;84:12 realized (2) 59:21;60:13 realizing (1) 13:12 really (26) 20:5,5;25:13;33:22; 35:1;39:23;42:18,21; 45:6,22;48:9,12,23; 60:17;62:3;63:9,17; 65:9;72:7,7;80:19,21; 81:23,23;85:19,19 realtime (8) 18:2;44:10;49:14; 52:3;56:11;65:13,23; 75:13 reason (5) 14:4,16;28:14;38:3; 67:11 reasonable (1) 57:22 reasons (4) 36:14;46:10,11,19 Rebecca (3) 24:23;30:22;31:1 R-E-B-E-C-C-A (1) 31:2 received (1) 5:2 recent (1) 55:6 recently (1) 60:15 recognize (1) 39:14 recognized (1) 37:9 recognizing (1) 37:12 record (4) 5:17;10:3;57:15; 66:5 recorded (4) 17:6,22;65:9,11 recording (1) 11:20 recordkeeping (2) 50:1;78:8 records (2) 10:6,7 recreate (2) 16:22;79:20 reduce (5) 8:17;9:15,19;10:1; 28:8 reduced (1) 76:23 Reed (18) 6:14,14;21:14;22:4; 24:15;27:16;28:19; 30:4;43:10;67:3,18; 68:4;77:11,19;79:3; 90:11;91:8;92:4</p>	<p>R-E-E-D (1) 6:15 reevaluate (1) 46:20 refer (3) 23:9;33:21;47:21 reference (1) 10:7 referred (2) 2:19;69:17 referring (1) 19:3 refining (4) 83:23;84:1,17;85:7 reform (1) 37:19 regale (1) 69:1 regarding (4) 6:22;10:2;22:17; 89:10 regards (1) 4:7 regional (1) 8:10 registration (7) 3:19;5:8,9,10,20; 10:23;11:2 regularly (1) 31:23 regulate (2) 16:7;30:7 regulated (1) 83:18 regulation (6) 31:16;39:20;47:18; 77:13,23;78:2 regulations (1) 27:8 regulatory (2) 59:6;91:2 reiterate (1) 64:15 relate (1) 6:12 related (2) 8:5,9 relating (1) 2:14 released (3) 44:18;46:2,4 relevant (2) 5:6;11:6 relies (1) 37:16 rely (2) 45:7;91:21 remains (1) 40:13 remedy (1) 55:14 remember (1) 63:1</p>	<p>remind (1) 92:13 reminder (1) 63:6 reminds (1) 62:9 remove (4) 37:20;38:2;39:17; 40:8 removes (1) 17:13 renewal (1) 59:4 renewed (2) 9:8;59:1 reoccurring (2) 49:17,21 reopened (1) 7:10 reopener (1) 41:2 reopening (2) 2:18;35:20 repeat (1) 22:4 repetition (1) 5:19 replaced (2) 41:17;91:16 report (9) 27:9,19;28:3;34:9; 43:5;68:2;82:6,16,19 reported (12) 17:22;43:13,15; 49:18;55:23;61:3; 65:3,4,12;74:7,15; 75:18 reporter (1) 11:19 reporting (19) 10:4;17:16;18:2; 27:23;28:5;43:12; 44:11;49:15;50:1; 52:3;56:10;57:15; 65:14,22;66:5;67:17, 22;78:7;89:15 reports (6) 18:4;43:16;50:2; 57:16;66:7;74:9 representing (1) 18:15 requested (2) 9:9;12:13 require (5) 27:18;28:17;81:22; 82:6;88:19 required (12) 4:15;8:16;28:2; 29:3;38:1;43:13,15; 44:3;57:21;76:5;81:4; 90:17 requirements (21) 3:11;7:8,12,15,18,</p>	<p>21;10:1,3;50:1;57:15; 59:6;66:6;77:20,22; 83:12;84:3;87:14; 88:18;89:8,15;91:2 requires (2) 36:21;49:6 requiring (1) 67:23 rescind (1) 40:4 research (4) 34:14;53:21;60:19; 74:6 Reservoir (1) 25:3 resident (5) 12:16;16:20;30:11; 32:19;79:18 residents (6) 12:14;48:19;62:9; 75:20;76:7,21 resolve (1) 7:5 resolved (1) 90:13 Resource (1) 36:16 respectful (1) 11:8 Respiratory (6) 53:17;73:5,7,13; 74:16;86:5 respond (3) 6:3;12:4;22:14 responding (1) 2:13 responds (1) 52:7 response (3) 6:1;20:17;34:16 responses (2) 34:20;39:21 responsibilities (1) 4:6 responsibly (1) 16:9 responsiveness (1) 6:2 rest (5) 13:23;34:1;38:14; 63:16,22 rests (1) 33:21 result (4) 34:15;67:19;75:3; 76:22 results (4) 64:22;73:20;78:19; 89:12 retrofit (1) 8:15 review (4) 29:7;80:16;85:14;</p>
Q				
<p>quality (16) 8:5,11;15:5;26:6; 31:23;33:3;35:4; 51:19,19;54:10;56:9; 65:21;74:12;75:9; 76:23;79:5 quantify (1) 77:6 quantity (1) 82:21 quick (1) 69:1 quickly (2) 4:23;24:5 quite (2) 13:8;14:11 quoting (1) 80:22</p>	<p>reason (5) 14:4,16;28:14;38:3; 67:11 reasonable (1) 57:22 reasons (4) 36:14;46:10,11,19 Rebecca (3) 24:23;30:22;31:1 R-E-B-E-C-C-A (1) 31:2 received (1) 5:2 recent (1) 55:6 recently (1) 60:15 recognize (1) 39:14 recognized (1) 37:9 recognizing (1) 37:12 record (4) 5:17;10:3;57:15; 66:5 recorded (4) 17:6,22;65:9,11 recording (1) 11:20 recordkeeping (2) 50:1;78:8 records (2) 10:6,7 recreate (2) 16:22;79:20 reduce (5) 8:17;9:15,19;10:1; 28:8 reduced (1) 76:23 Reed (18) 6:14,14;21:14;22:4; 24:15;27:16;28:19; 30:4;43:10;67:3,18; 68:4;77:11,19;79:3; 90:11;91:8;92:4</p>	<p>R-E-E-D (1) 6:15 reevaluate (1) 46:20 refer (3) 23:9;33:21;47:21 reference (1) 10:7 referred (2) 2:19;69:17 referring (1) 19:3 refining (4) 83:23;84:1,17;85:7 reform (1) 37:19 regale (1) 69:1 regarding (4) 6:22;10:2;22:17; 89:10 regards (1) 4:7 regional (1) 8:10 registration (7) 3:19;5:8,9,10,20; 10:23;11:2 regularly (1) 31:23 regulate (2) 16:7;30:7 regulated (1) 83:18 regulation (6) 31:16;39:20;47:18; 77:13,23;78:2 regulations (1) 27:8 regulatory (2) 59:6;91:2 reiterate (1) 64:15 relate (1) 6:12 related (2) 8:5,9 relating (1) 2:14 released (3) 44:18;46:2,4 relevant (2) 5:6;11:6 relies (1) 37:16 rely (2) 45:7;91:21 remains (1) 40:13 remedy (1) 55:14 remember (1) 63:1</p>	<p>remind (1) 92:13 reminder (1) 63:6 reminds (1) 62:9 remove (4) 37:20;38:2;39:17; 40:8 removes (1) 17:13 renewal (1) 59:4 renewed (2) 9:8;59:1 reoccurring (2) 49:17,21 reopened (1) 7:10 reopener (1) 41:2 reopening (2) 2:18;35:20 repeat (1) 22:4 repetition (1) 5:19 replaced (2) 41:17;91:16 report (9) 27:9,19;28:3;34:9; 43:5;68:2;82:6,16,19 reported (12) 17:22;43:13,15; 49:18;55:23;61:3; 65:3,4,12;74:7,15; 75:18 reporter (1) 11:19 reporting (19) 10:4;17:16;18:2; 27:23;28:5;43:12; 44:11;49:15;50:1; 52:3;56:10;57:15; 65:14,22;66:5;67:17, 22;78:7;89:15 reports (6) 18:4;43:16;50:2; 57:16;66:7;74:9 representing (1) 18:15 requested (2) 9:9;12:13 require (5) 27:18;28:17;81:22; 82:6;88:19 required (12) 4:15;8:16;28:2; 29:3;38:1;43:13,15; 44:3;57:21;76:5;81:4; 90:17 requirements (21) 3:11;7:8,12,15,18,</p>	<p>21;10:1,3;50:1;57:15; 59:6;66:6;77:20,22; 83:12;84:3;87:14; 88:18;89:8,15;91:2 requires (2) 36:21;49:6 requiring (1) 67:23 rescind (1) 40:4 research (4) 34:14;53:21;60:19; 74:6 Reservoir (1) 25:3 resident (5) 12:16;16:20;30:11; 32:19;79:18 residents (6) 12:14;48:19;62:9; 75:20;76:7,21 resolve (1) 7:5 resolved (1) 90:13 Resource (1) 36:16 respectful (1) 11:8 Respiratory (6) 53:17;73:5,7,13; 74:16;86:5 respond (3) 6:3;12:4;22:14 responding (1) 2:13 responds (1) 52:7 response (3) 6:1;20:17;34:16 responses (2) 34:20;39:21 responsibilities (1) 4:6 responsibly (1) 16:9 responsiveness (1) 6:2 rest (5) 13:23;34:1;38:14; 63:16,22 rests (1) 33:21 result (4) 34:15;67:19;75:3; 76:22 results (4) 64:22;73:20;78:19; 89:12 retrofit (1) 8:15 review (4) 29:7;80:16;85:14;</p>
R				
<p>radiology (1) 69:19 Rain (7) 9:8;58:22;59:4,7; 60:6,9,23 raise (2) 20:7;59:19 raised (5) 6:4;14:14;32:19; 47:11;52:17 raises (1) 33:23 raising (1) 34:4 ran (1) 71:10 rapid (1) 72:5 rate (4) 73:6,12,15,21 rather (1) 41:6 read (4) 23:14;27:3;61:13; 75:12 reading (5) 21:7;58:20;59:9,15; 61:5 real (5) 26:17;62:21;69:1; 78:12;82:12 realize (2)</p>	<p>reason (5) 14:4,16;28:14;38:3; 67:11 reasonable (1) 57:22 reasons (4) 36:14;46:10,11,19 Rebecca (3) 24:23;30:22;31:1 R-E-B-E-C-C-A (1) 31:2 received (1) 5:2 recent (1) 55:6 recently (1) 60:15 recognize (1) 39:14 recognized (1) 37:9 recognizing (1) 37:12 record (4) 5:17;10:3;57:15; 66:5 recorded (4) 17:6,22;65:9,11 recording (1) 11:20 recordkeeping (2) 50:1;78:8 records (2) 10:6,7 recreate (2) 16:22;79:20 reduce (5) 8:17;9:15,19;10:1; 28:8 reduced (1) 76:23 Reed (18) 6:14,14;21:14;22:4; 24:15;27:16;28:19; 30:4;43:10;67:3,18; 68:4;77:11,19;79:3; 90:11;91:8;92:4</p>	<p>R-E-E-D (1) 6:15 reevaluate (1) 46:20 refer (3) 23:9;33:21;47:21 reference (1) 10:7 referred (2) 2:19;69:17 referring (1) 19:3 refining (4) 83:23;84:1,17;85:7 reform (1) 37:19 regale (1) 69:1 regarding (4) 6:22;10:2;22:17; 89:10 regards (1) 4:7 regional (1) 8:10 registration (7) 3:19;5:8,9,10,20; 10:23;11:2 regularly (1) 31:23 regulate (2) 16:7;30:7 regulated (1) 83:18 regulation (6) 31:16;39:20;47:18; 77:13,23;78:2 regulations (1) 27:8 regulatory (2) 59:6;91:2 reiterate (1) 64:15 relate (1) 6:12 related (2) 8:5,9 relating (1) 2:14 released (3) 44:18;46:2,4 relevant (2) 5:6;11:6 relies (1) 37:16 rely (2) 45:7;91:21 remains (1) 40:13 remedy (1) 55:14 remember (1) 63:1</p>	<p>remind (1) 92:13 reminder (1) 63:6 reminds (1) 62:9 remove (4) 37:20;38:2;39:17; 40:8 removes (1) 17:13 renewal (1) 59:4 renewed (2) 9:8;59:1 reoccurring (2) 49:17,21 reopened (1) 7:10 reopener (1) 41:2 reopening (2) 2:18;35:20 repeat (1) 22:4 repetition (1) 5:19 replaced (2) 41:17;91:16 report (9) 27:9,19;28:3;34:9; 43:5;68:2;82:6,16,19 reported (12) 17:22;43:13,15; 49:18;55:23;61:3; 65:3,4,12;74:7,15; 75:18 reporter (1) 11:19 reporting (19) 10:4;17:16;18:2; 27:23;28:5;43:12; 44:11;49:15;50:1; 52:3;56:10;57:15; 65:14,22;66:5;67:17, 22;78:7;89:15 reports (6) 18:4;43:16;50:2; 57:16;66:7;74:9 representing (1) 18:15 requested (2) 9:9;12:13 require (5) 27:18;28:17;81:22; 82:6;88:19 required (12) 4:15;8:16;28:2; 29:3;38:1;43:13,15; 44:3;57:21;76:5;81:4; 90:17 requirements (21) 3:11;7:8,12,15,18,</p>	<p>21;10:1,3;50:1;57:15; 59:6;66:6;77:20,22; 83:12;84:3;87:14; 88:18;89:8,15;91:2 requires (2) 36:21;49:6 requiring (1) 67:23 rescind (1) 40:4 research (4) 34:14;53:21;60:19; 74:6 Reservoir (1) 25:3 resident (5) 12:16;16:20;30:11; 32:19;79:18 residents (6) 12:14;48:19;62:9; 75:20;76:7,21 resolve (1) 7:5 resolved (1) 90:13 Resource (1) 36:16 respectful (1) 11:8 Respiratory (6) 53:17;73:5,7,13; 74:16;86:5 respond (3) 6:3;12:4;22:14 responding (1) 2:13 responds (1) 52:7 response (3) 6:1;20:17;34:16 responses (2) 34:20;39:21 responsibilities (1) 4:6 responsibly (1) 16:9 responsiveness (1) 6:2 rest (5) 13:23;34:1;38:14; 63:16,22 rests (1) 33:21 result (4) 34:15;67:19;75:3; 76:22 results (4) 64:22;73:20;78:19; 89:12 retrofit (1) 8:15 review (4) 29:7;80:16;85:14;</p>

90:23 reviewed (1) 90:15 revised (1) 3:10 revision (3) 3:23;41:4;67:20 revisions (8) 3:9;17;4:2,10;9:10; 10:4;11:6;59:2 right (16) 2:4;21:13;29:18,20; 31:10;45:5;52:19; 53:9;55:5;57:18;60:2, 21;71:5,13;92:8,12 riled (1) 62:23 ring (1) 32:12 risk (3) 74:20;88:3,15 risks (1) 74:17 River (11) 16:22;25:17;26:16; 29:18;30:13;47:12; 60:11;64:5,7;71:21; 86:11 Road (3) 2:22;14:9;16:2 Robin (6) 12:7,11;27:13; 31:17;53:7;62:17 roll (1) 64:9 Roman (1) 24:20 room (2) 11:14;54:19 Route (3) 16:1,1;33:20 rubber (1) 88:11 rule (5) 8:7;20:4;39:6;41:3, 13 ruled (1) 36:15 rules (9) 2:12;6:11;7:21;8:2, 3,8,12,13;49:3 run (4) 33:1;34:7;50:20; 70:6 runner (1) 32:23 running (1) 33:6 runs (1) 2:11 Rupel (1) 5:9 Rutherford (8)	4:8;6:17,18;21:1, 12;22:13;43:4;59:3 R-U-T-H-E-R-F-O-R-D (1) 6:19 S safeguards (4) 49:8;57:22;63:15; 67:1 safer (1) 54:3 same (6) 4:17;33:7;63:2; 64:16;65:20;78:19 sands (1) 83:5 satisfaction (1) 50:18 save (1) 71:19 saying (3) 45:9;55:17;64:10 scent (1) 62:16 School (5) 12:22;13:3;32:21, 22;34:7 science (1) 54:23 scientific (1) 79:7 scientist (1) 70:10 scope (1) 35:18 Scrafford (6) 58:18;61:14;67:15, 21;68:11,13 S-C-R-A-F-F-O-R-D (1) 61:15 screen (1) 65:17 second (7) 20:13;21:6;22:16; 87:17;89:2;90:2; 91:16 section (3) 39:23;84:18,19 Sections (1) 36:23 seeing (2) 48:5;80:10 seem (1) 44:9 seems (3) 30:2;46:8;82:11 selenium (1) 88:14 self (1) 34:9 sense (2) 44:10;61:7	sent (2) 72:3;92:16 separating (1) 51:16 series (1) 80:15 serious (1) 88:6 services (1) 81:5 servicing (1) 72:16 set (2) 21:18;45:16 settles (1) 34:2 seven (3) 86:22;87:1;89:21 several (6) 36:11,12;37:10; 54:19;64:12;67:7 severe (3) 33:14;48:1;81:4 severity (4) 13:8;27:21;33:3; 43:15 shadow (1) 31:7 sheet (1) 10:15 shell (1) 84:20 shelter (2) 15:13,22 short (5) 20:1;58:5,6;80:6; 88:17 shortfalls (2) 58:7;66:22 short-term (2) 20:16;56:8 shoulders (1) 53:2 show (1) 73:11 showed (1) 18:19 showing (2) 64:1;81:1 shows (1) 83:9 shutdown (15) 21:15;24:17;26:23; 27:11;28:18;36:17; 37:8,13;39:15;42:20; 49:20;56:22;76:4; 80:18;81:16 sick (2) 69:5;74:23 sickens (1) 55:1 side (9) 25:23;31:7,11;32:8,	8;33;12,15;64:7; 81:20 sides (1) 64:5 sidewalk (1) 51:4 Sierra (11) 12:18;18:15;19:13, 17;26:11;35:16; 36:10;61:16;62:11; 71:10;90:1 signed (1) 86:13 significant (4) 6:3;10:16;29:10; 90:12 significantly (2) 38:20;76:23 silver (1) 88:14 similar (2) 39:5;47:13 Similarly (3) 80:18;83:3;84:23 simple (2) 50:21;77:12 simply (1) 55:2 single (3) 61:23;62:14;90:23 sinuses (1) 62:16 SIP (5) 19:15,15;37:17; 39:2;57:3 S-I-P (1) 19:15 sister (4) 31:10;59:23;60:3,5 sits (1) 33:23 sitting (1) 51:3 situation (1) 62:10 situations (1) 28:22 six (2) 13:16;54:20 skin (1) 70:22 sky (1) 51:16 slid (1) 61:5 small (1) 80:7 SMB (3) 22:2,10;89:2 smoke (1) 58:13 Smolderville (1) 62:13	smoother (1) 46:1 smoothly (1) 2:11 SO2 (13) 19:6,13,14,20,22, 23;20:8,16;21:11; 24:1;38:18;80:5;84:2 solely (1) 81:9 solids (1) 85:2 solution (1) 76:20 solved (1) 57:19 somebody (1) 53:9 somehow (1) 34:11 someone (3) 62:11;65:16;81:12 sometimes (1) 51:21 somewhere (1) 81:12 son (1) 42:11 soon (1) 68:2 sorbent (1) 9:14 sort (1) 80:16 sounds (1) 11:9 source (5) 3:12;44:1;56:5; 90:13,17 sources (3) 40:1;55:8;72:21 South (5) 16:19;25:23;47:12; 68:18;81:20 Southern (2) 61:19;74:4 southwest (2) 26:16;33:14 speak (3) 11:22;35:13;43:10 speaking (1) 87:4 special (2) 63:9;81:22 specialists (1) 70:4 specific (5) 2:14;10:10;17:3; 44:17;88:22 specifically (11) 20:21;23:3,20; 36:21;37:14,18;39:9; 46:16;64:16,19;82:9
---	--	--	--	--

<p>specificity (1) 83:23</p> <p>specified (1) 45:1</p> <p>specify (1) 44:22</p> <p>spelled (1) 50:13</p> <p>spending (1) 18:9</p> <p>spew (2) 13:1,2</p> <p>spike (3) 65:5,6;80:12</p> <p>spikes (22) 17:14,16,17,18; 19:12;20:3,10,11,12; 35:23;36:2;49:17; 56:9,15,16,18;65:1, 21;75:17,18;80:11,16</p> <p>spoiler (1) 71:20</p> <p>spoken (2) 62:2;86:16</p> <p>Sports (1) 68:21</p> <p>spotless (1) 70:5</p> <p>spots (1) 70:23</p> <p>Springfield (1) 92:18</p> <p>SSM (2) 56:21;57:2</p> <p>stack (1) 58:13</p> <p>stacks (3) 12:23;34:2;77:7</p> <p>staff (3) 2:16;4:5;6:8</p> <p>stairs (1) 50:20</p> <p>stake (2) 53:3;74:14</p> <p>stance (1) 44:15</p> <p>stand (2) 12:20;62:1</p> <p>standard (5) 9:6;19:14;20:9; 56:14;91:7</p> <p>standards (11) 8:1;16:5;21:16; 34:12;36:7;49:23; 57:14;58:1;66:4;79:6, 12</p> <p>start (6) 12:7;23:23;27:10; 42:6;62:18;84:17</p> <p>started (4) 2:5;33:4;55:4; 69:20</p> <p>starting (1)</p>	<p>14:5</p> <p>startup (23) 21:8,14;22:1,10; 24:17;26:23;27:11; 28:17;36:3,9,17;37:8, 12;39:15;40:4;42:20; 44:5;49:20;56:22; 76:3;80:18;81:15; 89:2</p> <p>startups (2) 28:4;52:6</p> <p>state (22) 8:7,11;9:6;11:4,23; 19:16;21:2;36:12; 37:17,20;38:1;39:2, 12;40:12,16;41:5; 73:10,12;79:4,9,10,11</p> <p>statement (1) 10:13</p> <p>statements (3) 5:5;11:5;86:17</p> <p>state-of-the-art (4) 55:19;64:17;75:6,8</p> <p>states (5) 39:4,6,11;46:12; 60:12</p> <p>statewide (1) 53:19</p> <p>station (8) 2:21;4:1;7:1,3,13; 8:5;14:8;31:22</p> <p>statute (1) 38:9</p> <p>statutes (2) 43:17;45:17</p> <p>statutory (1) 77:21</p> <p>stay (3) 22:23;59:15;78:21</p> <p>steps (2) 51:23;75:14</p> <p>still (11) 20:11,13;35:6; 37:22;47:14;55:7; 56:9,16,19;58:6;64:6</p> <p>sting (1) 62:15</p> <p>stomach (1) 79:23</p> <p>storage (1) 29:23</p> <p>stored (1) 30:16</p> <p>stories (1) 14:22</p> <p>story (1) 69:1</p> <p>Street (4) 68:19;69:6,9;70:14</p> <p>strengthen (4) 27:10;49:21;57:13; 66:2</p> <p>stress (1)</p>	<p>5:18</p> <p>strictest (1) 26:8</p> <p>stringent (1) 29:7</p> <p>stroke (1) 74:17</p> <p>strong (2) 48:12;63:21</p> <p>stronger (6) 25:15,16;28:16; 48:17;62:6;74:10</p> <p>strongest (1) 49:3</p> <p>struggling (3) 13:16;51:20;54:17</p> <p>students (3) 12:22;34:6;35:2</p> <p>studies (1) 79:7</p> <p>study (1) 74:11</p> <p>stuff (4) 61:1;69:7,19;83:20</p> <p>subdivision (1) 14:10</p> <p>subject (2) 3:17;7:17</p> <p>subjectively (1) 77:5</p> <p>submit (8) 5:14,20;16:15; 18:21;38:1;39:19; 55:16;76:12</p> <p>submittal (1) 90:21</p> <p>submitted (4) 4:17;6:4;11:10; 36:10</p> <p>submitting (1) 35:17</p> <p>subpart (1) 3:4</p> <p>substantial (1) 73:20</p> <p>substantially (1) 16:23</p> <p>suffer (3) 13:5;25:18;26:3</p> <p>suffered (1) 86:6</p> <p>suffering (2) 53:9;73:19</p> <p>suffers (1) 25:17</p> <p>suit (1) 56:3</p> <p>sulfate (1) 70:13</p> <p>sulfur (3) 18:4;19:2,12</p> <p>sulfur (15) 8:4,9;9:16;49:12;</p>	<p>55:21;61:3;64:20; 69:21,22;70:12,15; 72:5;73:2;77:7;87:9</p> <p>sum (1) 84:7</p> <p>summary (3) 6:1,2;80:23</p> <p>Sunday (1) 13:22</p> <p>sunset (3) 14:1,2;40:11</p> <p>supervisor (1) 6:16</p> <p>supplying (1) 81:12</p> <p>supporters (1) 61:17</p> <p>supposed (2) 58:2;83:12</p> <p>sure (11) 5:11;11:11;22:6; 28:11;34:12;44:11, 14;52:19;63:14; 64:15;79:11</p> <p>surrounding (2) 26:14;72:19</p> <p>surveys (1) 72:4</p> <p>Susan (4) 47:3;50:10,12,13</p> <p>suspect (1) 51:19</p> <p>suspicion (1) 28:15</p> <p>swims (1) 60:9</p> <p>symptoms (1) 69:11</p> <p>synthetic (1) 88:11</p> <p>system (2) 70:14;72:6</p>	<p>25:3;26:13;52:17; 54:5;69:2;72:18;73:4, 8,11</p> <p>TDF (2) 88:10,11</p> <p>technical (2) 2:14,16</p> <p>technically (1) 43:23</p> <p>technology (4) 8:16;44:12;75:6,8</p> <p>telling (1) 17:18</p> <p>tells (1) 70:16</p> <p>term (2) 20:1;80:6</p> <p>terms (3) 38:8;40:22;78:22</p> <p>terrible (1) 38:12</p> <p>testimony (1) 79:23</p> <p>Testing (9) 9:2,3;10:3;49:22; 57:13;66:3;88:20; 89:12;90:18</p> <p>theme (2) 49:17,21</p> <p>therapy (1) 69:14</p> <p>Therefore (2) 57:8;80:9</p> <p>thinking (2) 47:16;80:1</p> <p>third (4) 16:7;45:13;73:6; 89:7</p> <p>though (3) 7:14;17:4;78:14</p> <p>thought (2) 48:17;69:7</p> <p>thousand (1) 83:6</p> <p>threat (1) 19:23</p> <p>three (10) 25:20;28:11;42:12; 53:1,8;68:20;78:16; 83:8;87:6;91:19</p> <p>tied (2) 71:14;80:6</p> <p>tightness (1) 14:6</p> <p>times (8) 36:12;54:19;57:5; 64:23;67:4;68:9;70:6; 76:6</p> <p>tire (6) 23:4;66:12;81:21; 83:1,1;88:10</p> <p>tired (1) 87:2</p>
T				
			<p>table (2) 2:16;3:19</p> <p>talk (4) 35:22;53:7;64:13; 87:17</p> <p>talked (2) 73:18;83:21</p> <p>talking (3) 15:7;38:17;56:14</p> <p>TAPS (1) 15:21</p> <p>tar (1) 83:5</p> <p>targeted (1) 41:2</p> <p>taxation (1) 43:2</p> <p>Tazewell (9)</p>	

tires (3) 23:15;83:3;88:11	17:10	12:5,8;15:9,21;17:12;	valid (1) 45:8	wants (2) 5:4;11:12
Title (5) 36:18;37:22;39:8, 22:57:21	tried (3) 27:3;59:9;80:2	24:4;25:3;26:16;	Valley (4) 16:22;17:2;25:17;	wash (1) 85:3
today (6) 12:21;13:19;38:10; 41:14;44:13;49:1	trigger (2) 29:12;80:16	28:12;29:14;31:6;	86:11	washing (2) 84:5,6
together (3) 79:9;83:7;85:15	trouble (2) 15:18;54:13	32:20;33:23;42:6,8;	value (3) 8:20;9:5;25:9	Washington (1) 25:4
told (2) 43:3;69:8	troubling (1) 35:20	44:12;45:3,17;46:14,	variability (1) 83:2	waste (7) 23:12,15,16,17,18, 21;83:3
tonight (20) 2:10;4:20;10:22; 11:20;12:12;17:3;	trust (1) 45:7	16:47;17:48;14;	variable (1) 83:4	watch (3) 45:11;60:3,4
18:20,23;26:10,17;	try (4) 13:11;24:4;30:12;	50:17,20;52:22;	various (2) 30:7;77:21	watched (3) 13:4;25:6;50:17
30:19;35:18;48:18;	86:23	53:11,18;59:13;	versus (1) 36:16	watching (1) 44:14
58:11;61:21;62:1;	trying (3) 54:2;61:6;67:8	62:23;64:1;66:8;	view (2) 23:18;46:1	Water (6) 30:6;48:13;71:22;
63:7;64:14;86:16;	turn (8) 6:6,9;10:20;16:2;	67:20;68:8;69:2;74:9;	viewed (2) 23:16,17	84:11,18;91:9
92:19	19:1;22:16;51:21;	75:23;78:9;79:10;	viewing (1) 45:13	way (13) 11:1;13:23;16:12;
tonight's (2) 2:10;4:3	65:18	81:8;83:8;84:9;86:13,	Virginia (4) 42:3;47:2,4,10	31:6;32:21;35:4,5,6;
took (2) 7:8;32:8	turning (1) 23:23	14,20	visit (1) 71:8	45:4;50:13;77:6;
top (3) 46:12;63:23;70:1	TV (1) 65:18	update (4) 3:14;9:23;38:2;	visiting (1) 51:10	82:13;84:2
topography (2) 25:19;33:23	Two (9) 13:22;18:23;35:19;	41:7	vistas (1) 8:19	ways (1) 64:12
touch (1) 49:5	37:10;42:14;54:15;	updated (6) 39:3,12;40:16,20;	vitality (1) 74:13	wealth (1) 54:23
touched (2) 45:23;62:12	55:4;83:16;86:18	41:5;57:4	voice (1) 58:13	weather (1) 65:19
touted (1) 84:1	type (2) 83:13,13	upon (3) 5:1;43:14;79:7	vs (1) 41:13	website (2) 3:20;75:11
toxic (3) 47:22;64:3;72:22	types (4) 20:2;30:8;83:3;	upsetting (1) 80:9	vulnerable (2) 76:17;80:8	week (1) 32:7
toxicities (1) 69:17	85:3	up-to-date (1) 63:21	W	weird (5) 69:13,16,23;70:22, 23
toxicity (1) 69:13	U	Urbaszewski (3) 52:12;53:14;58:16	Wabco (1) 31:8	welcome (1) 2:9
toxics (2) 8:1;88:13	under (13) 2:23;27:8;28:2;	U-R-B-A-S-Z-E-W-S-K-I (1) 53:15	wade (1) 85:20	what's (10) 17:11;52:7,7;65:2, 14;66:8;74:14;75:13;
Tracy (2) 79:16,17	29:21;41:12,13,18;	urge (5) 38:23;39:22;40:6;	Wagner (7) 35:11;42:2,4,4;	77:7;78:23
T-R-A-C-Y (1) 79:18	43:17;49:8;57:20;	55:13;76:19	43:8;44:6;47:1	whatsoever (1) 81:22
transfer (1) 84:19	58:1;61:5;91:1	urged (1) 39:4	W-A-G-N-E-R (1) 42:5	wheezing (3) 33:9;42:12;62:18
transparency (2) 32:3;76:14	undergoing (1) 37:23	urinary (1) 72:6	wait (3) 39:12;40:21;41:22	whenever (1) 89:8
transplant (1) 54:14	understandable (1) 85:17	use (10) 17:7;22:21;27:5;	walking (3) 15:8;51:3;62:17	whisk (1) 48:4
transport (1) 8:10	understood (1) 7:14	28:11;56:2,3;82:15;	Wannier (12) 32:16;35:10,12,14;	white (1) 70:8
traveling (2) 33:19;51:9	undoctored (1) 18:2	89:16,23;90:14	41:21;42:1;89:20,22;	Whitford (1) 47:6
treat (1) 87:21	unit (3) 6:15,20;91:12	used (13) 9:15;10:8;13:9;	90:1;91:3,22;92:7	whole (7) 13:5;15:19;27:2;
treated (1) 11:7	units (3) 3:11;91:12,20	23:12;47:20;49:10;	W-A-N-N-I-E-R (1) 35:15	46:6;69:3;73:13;
trees (1) 70:9	unlawful (1) 36:15	55:20;60:3;64:18;		79:19
trends (1) 10:18;11:3,18,22;	unless (1) 56:6	81:21;85:2,4;87:21		whose (1) 20:19
	unnecessary (1) 5:19	USEPA (1) 79:6		willing (1)
	untold (1) 25:11	uses (1) 89:8		
	up (48) 10:18;11:3,18,22;	using (4) 17:14;79:8;82:7;		
		89:5		
		usually (1) 43:9		
		utilize (1) 30:13		
		V		
		vacation (1) 15:21		
		vague (1) 81:6		

32:3		2016 (3) 4:20;48:11;92:15	6 (1) 88:15
window (2) 60:4;68:3	1	2017 (1) 21:5	6,000 (4) 19:7;21:21;22:8;
windows (2) 70:7;71:2	1.2 (1) 68:21	22.2 (1) 73:15	77:6
wish (1) 11:16	10 (4) 15:10;40:21;41:6;	2214 (1) 31:3	60 (1) 71:15
within (7) 4:7;22:23;33:17; 39:7;55:14;68:2;86:1	82:2	2419 (1) 25:2	60's (1) 47:17
Without (2) 16:3;55:17	100,000 (2) 73:8,22	29 (4) 14:12,13;16:1; 33:20	62 (2) 19:3;31:12
wonder (1) 34:3	1021 (1) 92:17		62794 (1) 92:18
wondering (2) 20:21;59:1	105 (1) 90:4	3	64 (1) 91:2
Woodford (1) 26:13	11 (2) 15:10;54:8	30 (2) 16:21;52:8	7
word (5) 13:1,14;27:5;58:23; 71:18	113 (1) 36:23	304 (1) 36:23	7.1.11-1 (1) 22:18
work (5) 25:11;26:1;54:1; 84:17;85:13	11th (2) 68:19;69:9	30-day (5) 19:20,21;20:1,14; 80:10	7.1.3C (1) 36:5
working (4) 53:18;61:16,17; 62:8	12 (1) 15:10	31 (1) 91:20	7.1.4 (1) 19:3
works (1) 62:11	120 (1) 69:12	31.0 (1) 73:22	7.1.4E (1) 24:19
world (1) 53:1	13 (1) 41:7	32 (1) 91:20	7.2.3 (1) 36:5
W-O-U-L-F-E (1) 47:5	13082 (1) 2:21	3214 (1) 47:6	70's (1) 47:17
Woulfe-Beile (5) 42:3;47:2,5,10;50:9	1316 (1) 68:18	33 (1) 91:20	8
wrap (2) 24:4;29:14	15 (2) 25:6;26:12	330 (1) 16:19	8:40 (1) 86:15
writing (3) 5:15;11:10;16:15	15th (3) 4:19;18:22;92:15	34 (1) 91:13	9
Written (8) 4:16;5:20;18:21; 35:17;55:16;68:6; 77:15;92:15	166 (1) 3:4	35 (2) 3:3;21:17	900 (1) 26:12
Y	178,533 (1) 61:2	36.3 (1) 73:16	95 (1) 22:18
year (5) 31:18;37:18;42:7; 63:6;85:8	18 (1) 60:17	4	9th (1) 69:6
years (15) 14:11,12,13;16:21; 37:10;39:13;40:19, 19,21;41:6,7,7;54:15; 69:3;86:7	180 (1) 43:17	40 (2) 69:3;73:11	
youngest (1) 47:23	18th (1) 32:10	40,000 (2) 54:6;86:2	
Z	19276 (1) 92:18	41.9 (1) 73:10	
zero (1) 84:7	195 (1) 61:1	5 (6) 14:19;36:18;37:22; 39:8,22;57:21	
zone (1) 69:22	1st (1) 21:5	55.8 (1) 73:8	
	2	58.5 (1) 73:8	
	2005 (1) 3:13	6	
	2010 (2) 69:22;72:1		
	2013 (1) 73:14		
	2014 (1) 36:15		
	2015 (3) 7:4;74:8,14		