ILLINOIS POLLUTION	CONTROL BOARD
IN THE MATTER OF:	)
	)
PETITION OF GREIF	) No. AS 11-1
PACKAGING, LLC, FOR AN	) (Adjusted Standard -
ADJUSTED STANDARD FROM	) Air) CLERK'S OFFICE
35 ILL. ADM. CODE 218	) JAN 0 5 2012
SUBPART TT	STATE OF ILLINOIS Pollution Control Board

RECORD OF PROCEEDINGS had before Kari Wiedenhaupt, taken at James R. Thompson Center, Room 11-512, 100 West Randolph Street, Chicago, Illinois on Tuesday, December 20, 2011, commencing at 1:00p.m. in reference to the above-entitled cause.

23

		Page 3
1		
2		
3	I N D E X	
4	WITNESS EXAM	INATION
5	THOMAS C. PONDER	
6	By THOMAS C. DIMOND	17
7		
8	KHAALIS D. RAHMAN	
9	By THOMAS C. DIMOND	21
10		
11		
12	EXHIBITS	
13	NUMBER MARKED	FOR ID
14	Petitioner's Exhibit	
15	No. 1	18
16	No. 2	19
17	No. 3	20
18		
19	EXHIBITS	
20	NUMBER ADMITTED INTO EVI	DENCE
21	Petitioner's Exhibit	
22	Nos. 1-3 21	
23		
24		

1 REPORT OF PROCEEDINGS 2 TUESDAY, DECEMBER 20, 2011 3 Hi. Good afternoon. MR. HALLORAN: My name 4 is Bradley Halloran. I am a hearing officer 5 with the Illinois Pollution Control Board. 6 also assigned to this matter. It's entitled, in 7 the matter of: Petition of Greif, Inc. and Greif Packaging, LLC, for an adjusted standard 9 from 35 Illinois Administrative Code Part 218, 10 Subpart TT. It's an adjusted standard. 11 docket is 2011-001; again, adjusted standard, 12 and it's for air. 13 Today is Tuesday, December 20th, 2011. 14 It's approximately 1:00 p.m. I note except for 15 some of the representatives from our office, 16 there are no members of the public present. 17 This hearing of today is being held pursuant to 18 Section 104.400, Subpart D of the Board's 19 procedural rules regarding adjusted standards. 20 The hearing will be governed in 21 accordance with the Illinois Environmental 22 Protection Act, the Board's procedural rules; 23 specifically Section 101, Subpart F, and it has

been noticed up appropriately.

- I note that this hearing is intended to
- develop a record for review by the entire Board.
- 3 I'm not going to make the final decision in this
- 4 matter. It's up to the five esteemed members of
- 5 the Pollution Control Board. They will take a
- 6 look at the record, the transcript, and any
- 7 post-hearing briefs, exhibits and then make
- 8 their decision.
- 9 Before we go any further, there is a
- procedural matter I think we should note for the
- 11 record. In response to questions earlier posed
- by our technical staff, petitioner filed an
- application for treatment as non-disclosable
- information pursuant to Section 130.406 of the
- Board's procedural rules. And this is in
- regards to answers to our questions.
- To that end, the application itself
- will be taken with the case, and the information
- sought to remain confidential will not be
- divulged during this hearing.
- I also want to introduce members of our
- Pollution Control Board. We have member,
- Jennifer Burke, here. We have our scientists
- Anand Roa and Alisa Liu, who will be doing a

- good portion of the questions. We also have
- Daniel Robertson, a staff attorney.
- With that said, Mr. Dimond, would you
- 4 like to introduce yourself?
- MR. DIMOND: Certainly. I'm Tom Dimond from
- 6 Ice Miller representing Greif, and I'm
- <sup>7</sup> accompanied here today by my colleague, Sue
- 8 Charles, and Tom Ponder, our technical expert,
- 9 and Khaalis Rahman, who is the plant manager for
- the Naperville Plant.
- MR. HALLORAN: Thank you. Greif. I always
- pronounce that incorrectly, thanks.
- Mr. Matoesian?
- MR. MATOESIAN: My name is Charles Matoesian
- appearing for the Illinois Environmental
- Protection Agency, and here with me to answer
- any questions is Yoginder Mahajan, who is an
- 18 Environmental Protection Engineer.
- MR. HALLORAN: Thank you. And again, Mr.
- Dimond, you introduced Ms. Charles, right? I'm
- sorry.
- MS. CHARLES: Yes.
- MR. HALLORAN: Okay. Thank you. Do you want
- to give a brief opening?

- 1 (Whereupon, a discussion was had
- off the record.)
- MR. HALLORAN: All right. Mr. Dimond, did
- 4 you want to give an opening, please?
- 5 MR. DIMOND: Thank you. I do have an opening
- 6 statement, Mr. Hearing Officer.
- First of all, I would like to thank the
- 8 Board for its time and effort on this Adjusted
- 9 Standard Petition. We would also like to thank
- Mr. Matoesian and the numerous Illinois EPA
- staff who reviewed our proposal. They offered
- good, constructive comments on it so that it
- could ultimately -- that they could recommend
- that it be granted.
- They were also very helpful in
- 16 facilitating early discussions with U.S. EPA to
- address their concerns, because I think as
- anyone who is familiar with the filings in the
- case is aware, ultimately if the Board approves
- the adjusted standard, it will be submitted as a
- 21 SIP Revision to EPA. So we appreciate all the
- effort that Illinois EPA has put into that.
- I would like to summarize the context
- and the proposal set forth in the Second Amended

- 1 Adjusted Standard Petition. As background,
- 2 Greif's plant in Naperville is a fiber drum
- manufacturing plant. It employs approximately
- <sup>4</sup> 90 people. It is a synthetic minor source for
- 5 volatile organic material emissions or what we
- 6 may sometimes abbreviate as VOM. And it has a
- <sup>7</sup> federally enforceable state operating permit,
- 8 which we will frequently refer to as a FESOP
- <sup>9</sup> that makes it a synthetic minor source for the
- 10 VOM materials.
- In general, the process of
- manufacturing fiber drums is pretty
- straightforward. You have a sheet of corrugated
- fiber drum or fibers. You roll it into a
- cylindrical shape. You attach a top and a
- bottom, and you have got a drum. Many of the
- drums that are manufactured in our Naperville
- plant need a polyethylene liner, typically
- because customers either want to put a liquid or
- food grade product in it.
- In the process of applying the
- polyethylene to the inside of the fiber drum,
- you can develop small imperfections in the
- polyethylene liner, and because of that, we need

- to test that polyethylene liner to make sure
- that those imperfections have not arisen during
- 3 the manufacturing process.
- To do that we have -- the plant has
- what is called a QC test process, and basically
- it involves this. The drums are on a conveyer
- <sup>7</sup> line, which is typical for many manufacturing
- 8 plants. It goes down the line. There is a
- 9 mechanical wand that is triggered to actually
- move down inside the drum, and it sprays a
- certain amount of a liquid material on the
- polyethylene liner on the interior of the drum.
- And if the imperfections exist, the
- liquid will get through the polyethylene on to
- the fiber and will make spots appear on the
- fiber drum so that you can visually see those
- spots as a darker spot on the fiber drum.
- Historically, the Naperville plant has
- used a 100 percent denatured alcohol as the test
- fluid for this test process. In 2008 -- and I
- should note that the denatured alcohol is a
- volatile organic material by definition. In
- 23 2007 and 2008 the emissions from the Naperville
- facility were large enough on an annual basis

- that they exceeded the threshold for coverage
- under the Board's Subpart TT regulations.
- The Subpart TT regulations are a part
- of the Board's RACT regulations for the Chicago
- metro area, and in particular, Subpart TT is the
- subcategory for sources that are not covered by
- <sup>7</sup> any more specific category within the RACT
- 8 regulations. So it's sort of a catchall
- <sup>9</sup> category.
- There are two particularly relevant
- aspects of Subpart TT for this proceeding. One
- is that if you trigger the applicability, there
- is in general an 81 percent capture and control
- 14 requirement set forth in the regulations. And
- the other particularly important aspect of those
- regulations for our purposes, is that the
- regulations are what are generally called in the
- industry, once in always in regulations.
- So if you trip the applicability
- threshold once, you are in, and in general, you
- can't get out. So those are two particularly
- important aspects of those regulations.
- As I mentioned, in 2007 and 2008 the
- Naperville plant did exceed that threshold, and

- so it triggered the applicability of the Subpart
- TT. There are two or three aspects of the
- operations at Naperville that make complying
- 4 with Subpart TT difficult.
- Installing control equipment is
- 6 difficult in part because of the nature of the
- 7 characteristics of the denatured alcohol and in
- part because of the configuration of the test
- 9 process. The denatured alcohol itself
- evaporates relatively slowly, and so it's not as
- if when you are on the production line and the
- drums are moving along on the conveyer belt that
- all the emissions will occur at a single point.
- They will begin to occur as soon as the
- liquid is sprayed inside the drum, but as the
- drum continues down the conveyor line to the
- spot on the line where the visual inspection for
- the imperfections actually occurs, that takes
- about 40 seconds, and I think it's about 40 feet
- or so. We have got that number in the petition.
- 21 And then even after they are inspected, those
- drums continue to be conveyed on a conveyor line
- eventually to a drying oven that, you know,
- heats up the material inside the drum trying to

- 1 get more evaporation.
- 2 And then even after the drying of it,
- in some instances employees have to get in --
- well, they have to reach their arm inside the
- 5 drum with a towel and dry out the remaining test
- fluids. So it's a slow evaporating material,
- and that means that if we were going to capture
- 8 all the VOM emissions, we would have to have
- <sup>9</sup> tunnel like structures that go around the
- 10 conveyor belts. We would also have to leave
- some spot for the visual inspection to occur,
- because the employees actually have to be able
- to get up next to the drum to be able to see the
- 14 imperfections.
- And for the -- you know, for the
- purposes of trying to achieve an 81 percent
- capture and control, it means that you have got
- to capture a lot of air. That, in turn, means
- that you have to build a fairly -- a larger size
- piece of control equipment, and with larger size
- in your control equipment comes added cost. So
- those are factors that make capturing the
- emissions and achieving 81 percent capture and
- control rather difficult for our kind of

- <sup>1</sup> facility.
- 2 As we were addressing this issue with
- 3 the Agency, we recognized that we would need to
- do a RACT study as is commonly done when
- <sup>5</sup> adjusted standards are due, done or when someone
- 6 seeks an adjusted standard from a RACT
- 7 regulation. We asked Mr. Ponder to prepare that
- g for us, and he did, and that was attached to our
- 9 first petition that we filed I want to say in
- <sup>10</sup> January of 2011.
- 11 Essentially the RACT study looked at
- three different post emission control
- alternatives and looked at two what I would call
- materials substitution options. The three
- back-end control options -- one was a
- 16 recuperative thermal oxidizer, second was a
- carbon absorber, and the third was a bio-filter.
- And Mr. Ponder looked at those and
- estimated a cost per ton of VOM reduced that
- ranged between 11,667 and \$17,672 per ton. Each
- of those alternatives had some drawbacks
- associated with them as well. Those are details
- in the RACT study, and I'm not going to go over
- them here, but those are addressed in the

- details of the RACT study.
- 2 As I mentioned, we also looked at two
- material substitution alternatives. One was to
- 4 replace the denatured alcohol with a test fluid
- 5 that is not a volatile organic material. The
- 6 material that we looked at there was acetone,
- 7 which while it's a volatile organic, it's not a
- 8 volatile organic material under the Clean Air
- 9 Act.
- We tested that and found that it had a
- problem. When you are sealing up a fiber drum,
- you have to put a gasket at the bottom of the
- drum so that you have a tight seal between the
- bottom and the drum and the cylinder that goes
- on top of it. The acetone unfortunately causes
- that gasket material to degrade, and that's
- just -- you know, if you have got a drum that
- leaks at the bottom, that's not really a drum
- that any of our customers want to buy.
- So we tested the acetone. That did not
- work. The other material substitution option we
- looked at was diluting the denatured alcohol
- with water. We tested that at a variety of
- different combinations. I think we went as high

- as either 60 or 70 percent water content. That
- detail is in our Adjusted Standard Petition and
- in the RACT study itself.
- What we found is that when we went that
- 10w, you -- it did not cause spots to develop on
- the drum in sufficient time that our workers
- 7 could identify it visually on the conveyor line.
- 8 You -- you know, it takes about 40 seconds for
- <sup>9</sup> the drums to get to the spot in the line before
- they go into the oven. So you need to be able
- to detect the imperfections by then.
- 12 What we did is we set up a test where
- we intentionally created imperfections in some
- drums. We sprayed the test fluid in at
- different dilution levels and ultimately found
- that at about a 55 percent water, 45 percent
- denatured alcohol -- and that's not by volume
- but by weight -- there we could still detect the
- imperfections, but if we put more than
- 55 percent water in, we were not able to detect
- the imperfections in sufficient time.
- 22 And the RACT study concludes that for
- this -- for this process, we concluded that the
- Board should consider that RACT. Based on the

- information that I have summarized here today
- and that is explained in more detail in the RACT
- 3 study and in our Second Amended Petition that
- 4 was filed in August, we believe that Greif has
- met the standards in Section 28.1 of the
- 6 Illinois Environmental Protection Act for having
- <sup>7</sup> an adjusted standard granted by the Board.
- 8 After the filing of our Second Amended
- 9 Petition in August, we did continue to work with
- 10 Illinois EPA to address concerns that either
- they or U.S. EPA had with the precise wording of
- the adjusted standard that we had put in our
- 13 Second Amended Petition.
- The Agency's recommendation that was
- filed in October, they had slightly different
- language than we had in our Second Amended
- Petition in August. We have reviewed the
- language that is in the Agency's recommendation,
- and we find that language satisfactory and would
- accept that as the Board's -- as an adjusted
- standard from the Board. So we are in agreement
- with the language that was submitted by the
- 23 Agency in their recommendation.
- In closing, again, I would like to

- thank the Agency and the Board for their efforts
- <sup>2</sup> to review our adjusted standard proposal. I do
- want to put on a couple of witnesses today. I
- want to put on Mr. Ponder to authenticate some
- of the documents in the record as exhibits, and
- I also would like to put on Mr. Rahman to put in
- 7 some evidence regarding the confidential
- information that we submitted that can be taken
- <sup>9</sup> with the case.
- And then, of course, if Board members
- or their technical advisors have questions,
- myself and Ms. Charles, Mr. Ponder and Mr.
- Rahman will be here, and we will be available to
- 14 answer those. Thank you.
- MR. HALLORAN: Thank you, Mr. Dimond. You
- may proceed and call one of the your witnesses
- or both -- Mr. Ponder, I guess, first.
- MR. DIMOND: Okay. Mr. Ponder.
- 19 (Whereupon, the witness was duly
- sworn.)
- THOMAS C. PONDER, Jr.,
- having been first duly sworn, was examined and
- 23 testified as follows:
- 24 EXAMINATION

- 1 BY MR. DIMOND:
- Q. Mr. Ponder, can you please state your
- name for the record?
- 4 A. My name is Thomas C. Ponder, Jr.
- <sup>5</sup> Q. And do you have any degrees or
- 6 accreditations?
- 7 A. I have a BS in chemical engineering
- from the University of Texas. I have six
- 9 professional engineering licenses including
- 10 Illinois, and I'm also a certified cost
- 11 engineer.
- 12 Q. Thank you. Were you asked to prepare a
- study for Greif in connection with this
- 14 proceeding?
- A. Yes, I was.
- Okay. I'm going to hand you a document
- that I would like to have marked as Exhibit 1.
- 18 (Whereupon, Exhibit No. 1 was
- marked for identification.)
- BY MR. DIMOND:
- Q. Could you identify for the record what
- 22 Exhibit 1 is?
- A. It's the Reasonably Available Control
- Technology RACT Study for the Greif Naperville

- <sup>1</sup> facility.
- Q. And did you prepare that?
- <sup>3</sup> A. Yes, I did.
- Q. Okay. Thank you. That's all the
- <sup>5</sup> questions I have got regarding that.
- I'm now going to distribute a second
- document, which I would request be marked as
- 8 Exhibit 2.
- 9 (Whereupon, Exhibit No. 2 was
- marked for identification.)
- 11 BY MR. DIMOND:
- Q. And again, Mr. Ponder, I would ask you
- if you could identify what we have had marked as
- Exhibit 2 for the record?
- A. This is an Air Quality Impact Analysis
- of the VOC emissions from the Greif Packaging
- <sup>17</sup> facility in Naperville.
- Q. And did you prepare that as well?
- A. Yes, I did.
- Q. Describe for us in -- at a high level
- what the -- what analysis is performed in the
- 22 Air Quality Impact Analysis.
- A. Well, this is an analysis based on the
- method by a gentleman named Shafe (phonetic)

- where you compare the VOC emissions from the
- facility to the nitrogen oxide emissions, you
- get a ratio, and then based on the quantity, you
- 4 determine how much impact it's going to have on
- 5 the ambient ozone levels.
- 6 MR. DIMOND: Thank you. And then I have a
- 7 third document that I would like to have marked
- 8 as Exhibit 3.
- 9 (Whereupon, Exhibit No. 3 was
- marked for identification.)
- 11 BY MR. DIMOND:
- Q. And again, Mr. Ponder, if you could
- identify what Exhibit 3 is?
- A. Well, this is a response to some
- questions from the Illinois Environmental
- Protection Agency on the Air Quality Impact
- 17 Analysis.
- Q. Okay. And did you prepare that --
- those response questions to the questions as
- 20 well?
- A. Yes, I did.
- MR. DIMOND: All right. Mr. Hearing Officer,
- we would request that Exhibits 1, 2 and 3 be
- received into the record.

- MR. HALLORAN: Mr. Matoesian, any objection?
- MR. MATOESIAN: None.
- MR. HALLORAN: Petitioner's Exhibits 1, 2 and
- 4 3 are admitted into evidence.
- 5 (Whereupon, Petitioner's Exhibit
- Nos. 1-3 were admitted into
- 7 evidence.)
- MR. DIMOND: And that's all the questions I
- 9 have for Mr. Ponder.
- MR. HALLORAN: Terrific. You may step down.
- MR. DIMOND: Next, I would like to call Mr.
- 12 Rahman.
- 13 (Whereupon, the witness was duly
- sworn.)
- 15 KHAALIS RAHMAN,
- having been first duly sworn, was examined and
- testified as follows:
- 18 EXAMINATION
- 19 BY MR. DIMOND:
- Q. Thank you, Mr. Rahman. Can you give us
- your full name?
- A. Khaalis Rahman.
- Q. Okay. And what is your current
- 24 position?

- A. Plant manager in Naperville.
- Q. Are you employed with Greif?
- A. Yes.
- 4 Q. How long have you been employed by
- 5 Greif?
- A. About sixteen years.
- 7 Q. How long have you been the plant
- 8 manager at Naperville?
- 9 A. One year and one month.
- Q. I will note for the record, Mr.
- Rahman's testimony is primarily related to our
- 12 Application For Treatment of Confidential
- 13 Information. We did not submit an affidavit
- with that, and his testimony here today is meant
- to fill in any perceived holes in that.
- Are you familiar with the Federally
- 17 Enforceable State Operating Permit for the
- Naperville facility and the conditions that it
- 19 places on the Naperville plant?
- A. Yes, I am.
- Q. Does your -- if I use the acronym
- FESOP, you will recognize that, correct?
- <sup>23</sup> A. Yes.
- Q. Does the FESOP require the plant to

- 1 maintain data on the number of line drums
- produced per month or per year?
- 3 A. No.
- Q. Does the FESOP require the plant to
- 5 report data on the number of line drums produced
- 6 per month or per year to Illinois EPA or any
- <sup>7</sup> other regulatory agency?
- 8 A. No, it does not.
- 9 Q. Does the FESOP require the company to
- maintain or report data on the amount of
- denatured alcohol used per line drum?
- 12 A. No.
- 13 Q. Is the information on the number of
- line drums produced by month maintained by
- 15 Greif?
- A. Yes, it is.
- Q. Is that information that is treated by
- the company as confidential information that is
- not disclosed outside the company?
- A. Yes, it is.
- Q. Is access to that information
- restricted to certain company employees?
- A. Yes, it is.
- Q. And how does the company restrict

- access to that information?
- <sup>2</sup> A. By database form and by administrative
- levels and making the accessible levels by
- 4 password.
- <sup>5</sup> Q. And so when you say it's in database
- form, you mean it's accessible through a
- 7 computer terminal?
- 8 A. Yes.
- 9 Q. And so the only people who can get
- access to it are people who have the right
- password; that's correct?
- 12 A. And the correct administrative level.
- Q. Thank you. If a competitor of Greif's
- knew the amount of denatured alcohol used per
- line drum, could they calculate the number of
- line drums produced based on Naperville's
- reported emissions?
- <sup>18</sup> A. Yes.
- Q. And how could a competitor use that
- information to Greif's disadvantage?
- 21 A. Primarily by ascertaining the amount of
- volume that we have going to that particular
- market. It's a fairly closed market. We know
- our suppliers -- or we know our competitors who

- supply those markets. They know the customers
- that we supply, and they can gain certain market
- 3 information from that.
- 4 MR. DIMOND: All right. That's all the
- <sup>5</sup> questions I have.
- 6 MR. HALLORAN: Thank you, Mr. Rahman.
- 7 Mr. Matoesian, anything?
- MR. MATOESIAN: I have no questions.
- 9 MR. HALLORAN: Okay. We are off the record.
- 10 (Whereupon, a discussion was had
- off the record.)
- MR. HALLORAN: All right. We are back on the
- 13 record.
- And I think -- I'm sorry. Go ahead,
- 15 Mr. Dimond.
- MR. DIMOND: Do you think he can step down?
- MR. HALLORAN: Yes, he can step down,
- 18 correct.
- And I think what we will do -- unless
- 20 anybody else has any questions at this moment, I
- think we will swear Mr. Matoesian and the IEPA's
- witness in as well. And then Ms. Liu at this
- point will ask questions, and I guess -- I'm not
- sure who it will be directed to, I assume

- Petitioner's experts for now.
- MS. LIU: And the IEPA.
- MR. HALLORAN: I'm sorry?
- 4 MS. LIU: And the IEPA.
- MR. HALLORAN: And the IEPA.
- In any event, if you raise your right
- <sup>7</sup> hand, Kari will swear you in.
- 8 (Whereupon, the witnesses were
- 9 duly sworn.)
- MR. HALLORAN: Just keep your voices up
- unless you want to move up, but Ms. Liu will
- commence her questioning.
- MS. LIU: Good afternoon. The first two
- questions I have are directed at Greif
- packaging.
- In Greif's filing from December 8th,
- <sup>17</sup> 2011, in response to Hearing Officer ordered
- questions served on November 8th, 2011, on Page
- 2, Mr. Thomas Ponder states, quote, "The maximum
- tons of VOC usage that would need to be
- controlled if the facility complied with Subpart
- TT would be approximately 84.8 tons per year,"
- end quote.
- This is the first time that Greif uses

- this figure of 84.8 tons per year in the record.
- 2 In the Second Amended Petition Greif states that
- it, quote, "Does not employ any equipment to
- 4 capture or destroy VOM emissions," end quote.
- Is the 84.8 tons per year figure based
- on the maximum line drum production before the
- <sup>7</sup> adjusted standard initiatives are put into
- 8 practice?
- 9 MR. PONDER: I think it is. How much solvent
- we would use is based on the -- the potential
- solvent we would use based on this production.
- MR. DIMOND: Could you repeat the question,
- please, or have it read back?
- MS. LIU: Is the 84.8 tons per year figure
- based on the maximum line drum production before
- the adjusted standard initiatives are put into
- 17 practice?
- MR. DIMOND: I think the answer to that
- question is no. It's a theoretical calculation
- of -- it's a theoretical calculation of how much
- VOM could be used if you were achieving
- reductions from that level as a post -- as a
- post control. The facility has never actually
- had that much emissions or used that much VOM.

- 1 It's a theoretical calculation.
- MR. PONDER: Basically, if you use the
- emission level of 22.8 and divide by the control
- efficiency, that's how you get, the 84.8.
- MS. LIU: So is that the maximum?
- 6 MR. PONDER: That's the maximum you could use
- <sup>7</sup> if you don't -- if you limit your emissions to
- 8 22.8.
- 9 MR. DIMOND: As it explained in the response,
- the way you get to the 84.8 is you take 22.8,
- and you divide it by 1 0.731. So it's a
- theoretical calculation. The facility has never
- 13 actually used that much.
- MS. LIU: And that theoretical calculation is
- based on --
- MR. PONDER: The emission limit.
- MS. LIU: In your redacted information -- and
- 18 I won't mention those numbers -- you have a
- maximum line to drum production number per year
- and an amount of solvent that is -- an amount of
- VOM's that are used per drum. When you multiply
- those two numbers, you come up with 84.8,
- 23 correct?
- MR. PONDER: I don't know that off the top of

- 1 my head.
- MR. HALLORAN: You know what? I think what
- we are going to have to do -- if the two
- witnesses can sit up here, because the voices
- 5 keep dropping. And I was kind of afraid of
- 6 that. Sorry.
- MS. LIU: I do have the un-redacted version.
- MR. PONDER: Yes. Give me the un-redacted
- 9 version, and I can tell you if that's the right
- 10 number.
- It comes out that way, because this is
- the theoretical. They don't make that many
- drums, but that's how many they could.
- Yes, you get the 22.8 that way. The
- number that's in this redacted version, that's
- the maximum number of drums they could make in
- the facility. I don't believe it's 8760, but
- they can't run 8760, because there is changes in
- downtime and stuff like that, but that's the
- maximum they could make. They don't make
- 21 anywhere near that many.
- MS. LIU: Okay. But if they do, then the
- maximum VOM usage would be 84.8?
- MR. PONDER: Yes, it would be.

- MS. LIU: And then does the 84.8 ton per year
- figure represent the maximum potential to emit
- before the adjusted standard practices are
- 4 initiated?
- MR. PONDER: I believe so.
- 6 MS. LIU: Those are all the questions I have
- <sup>7</sup> for you. So thank you for clearing that up.
- MR. DIMOND: The only qualification I would
- 9 make on that statement is that potential to emit
- as a regulatory concept is allowed to consider
- limitations that are placed on the facility by
- permit. By permit the facility has a limit of
- 22.8 tons of emissions. Technically, I think in
- a potential to emit calculation made for new
- source review purposes, you would be allowed to
- take the limitation that is in the federally
- enforceable state operating permit and consider
- that to be the potential to emit for the
- 19 facility; but again, if you don't consider that,
- then, yes, the 84.8 might be considered the
- maximum potential to emit.
- MS. LIU: Thank you. Thank you, Mr. Ponder.
- The next few questions I have are
- directed primarily at the Agency.

- 1 Mr. Ponder calculated the difference in
- <sup>2</sup> VOM emissions between the proposed adjusted
- standard for a 73.1 reduction to the Subpart TT
- 4 requirements for an 81 percent reduction at
- <sup>5</sup> 6.7 tons per year. Based on this Mr. Ponder
- 6 calculated an ozone increment of 1.47 parts per
- <sup>7</sup> billion.
- Greif asserted that the granting of
- <sup>9</sup> this petition would have minimal impact on air
- quality. However, the Agency stated, quote, "It
- should be noted that the Agency does not accept
- this argument on its face as almost any
- individual source could make the same claim, and
- it is the aggregate of sources in the area that
- causes ozone non-detainment. However, the
- technical factors in this instance and the
- emission reductions Greif has already made
- offset the Agency's concerns in this regard."
- Previously in Adjusted Standard AS 09-4
- for a company called Royal Fiberglass, the
- agency stated that an increase of two parts per
- billion is quote, "potentially significant", end
- <sup>23</sup> quote.
- In this case we are looking at

- 1 1.47 parts per billion. My first question is,
- does the Agency believe that an increment of
- 3 1.47 parts per billion is potentially
- 4 significant?
- MR. MATOESIAN: I think we would like to
- answer that in writing, if possible.
- MS. LIU: Okay. And the second question is,
- 8 does the Agency believe the granting of this
- 9 proposed adjusted standard will cause or
- contribute to the violations of the National
- 11 Ambient Air Quality Standards for ozone or delay
- efforts to attain the NAAQS, N-A-A-Q-S, in a
- timely manner?
- MR. MATOESIAN: We can answer that in
- writing, too.
- MS. LIU: I would appreciate that, thank you.
- MR. HALLORAN: Anybody else have any
- questions for the witnesses at this time?
- MR. DIMOND: None here.
- MR. HALLORAN: All right. Let's go off the
- record for a minute.
- Whereupon, a discussion was had
- off the record.)
- MR. HALLORAN: Back on the record. Mr.

- 1 Dimond would like to respond to one of the
- questions Ms. Liu posed, and you may proceed,
- 3 Mr. Dimond.
- 4 MR. DIMOND: Sure. It's not technically a
- 5 response since the questions were directed to
- the Agency, but in connection with the question
- of whether or not the incremental emissions from
- 8 the Greif facility as they were calculated in
- <sup>9</sup> the filings that were made by Greif and its
- representatives, as I mentioned at the
- beginning, if this adjusted standard is approved
- by the Board, it will ultimately have to be
- submitted to U.S. EPA as a SIP Revision.
- In the discussion -- in the three-way
- discussions that occurred between Greif,
- 16 Illinois EPA, and U.S. EPA, U.S. EPA raised
- certain concerns regarding whether or not the
- proposal was consistent with Section 110 of the
- 19 Clean Air Act, which in general they described
- 20. as an anti-backsliding provision related to SIP
- 21 revisions.
- In discussions with them, they
- ultimately were satisfied in that regard by the
- addition to the adjusted standard of an

- additional condition. I would like to indicate
- for the record what it is, but I need to look at
- 3 it and be sure.
- We added -- if you will -- on this
- 5 Second Amended Petition -- on Page 16 of the
- 6 Second Amended Petition is where we start the
- <sup>7</sup> adjusted standard language, and then on Page 19
- 8 is Item No. 9 that sets monthly and annual
- 9 limits and tons per month or tons per year for
- emissions from the facility.
- Those limits are identical to what is
- currently in the facility's federally
- enforceable state operating permit. U.S. EPA
- considered the addition of that condition into
- the adjusted standard sufficient to address the
- 16 Section 110 issue under the Clean Air Act, and I
- think that that issue is -- you know, is
- essentially similar to the issue of whether or
- not the incremental emissions from complying
- with the adjusted standard versus Subpart TT
- would be considered to delay or cause a
- violation of the National Ambient Air Quality
- 23 Standards.
- So I just wanted to point out for the

- Board that is a condition that was not in
- our original adjusted standard petition that was
- <sup>3</sup> filed in January. It was in the Second Amended
- 4 Petition filed in August, and that was inserted
- 5 specifically to address that concern of U.S.
- 6 EPA. So I just -- I thought the Board should be
- <sup>7</sup> aware that issue was addressed with EPA in
- 8 that manner.
- 9 MR. HALLORAN: Thank you, Mr. Dimond.
- 10 Counsel has indicated that they are
- going to reserve their closing
- statements/arguments for their post-hearing
- brief, and while off the record, we discussed
- the post-hearing briefing schedule.
- We came up with -- I think the
- transcript should be due by January 2nd, 2012.
- On January 11th, 2012, the IEPA is to respond to
- 18 Ms. Liu's questions posed during this hearing.
- Grief's opening brief is due January
- 20 26th, 2012, and IEPA's response, if any, will be
- due February 9th, 2012. And Mr. Dimond, Greif's
- reply, if any, is due February 16th.
- Mr. Matoesian has indicated that he
- will let me know whether or not they intend to

```
Page 36
 1
     file a response on February 9th, and then I will
 2
     get a written order out advising everyone of
 3
     such and the Board as well.
 4
               I set public comment for January 17th.
 5
     Did I forgot anything? I just want to thank
 6
     everybody present. Thank you for your civility
 7
     and professionalism, and happy holidays and
     happy near year.
 9
                (FURTHER DEPONENT SAITH NOT.)
10
11
12
13
14
15
16
17
18
19
20
21
22
23
```

```
1
 2
            I, KARI WIEDENHAUPT, do hereby certify
 3
     that the foregoing was reported by stenographic
     and mechanical means, which matter was held on
 4
 5
     the date, and at the time and place set out on
     the title page hereof and that the foregoing
 7
     constitutes a true and accurate transcript of
     same.
 9
            I further certify that I am not related
     to any of the parties, nor am I an employee of
10
11
     or related to any of the attorneys representing
12
     the parties, and I have no financial interest in
13
     the outcome of this matter.
             I have hereunder subscribed my hand on
14
     the 5th day of January,
15
16
17
18
19
20
     Kun Wulenhunst
21
22
     KARI WIEDENHAUPT, CSR
23
```

		1-7 2-11			1.2112. 21.7
A	addressing	air 1:7 2:11	anybody	assume 25:24	<b>billion</b> 31:7
abbreviate	13:2	4:12 12:18	25:20 32:17	attach 8:15	31:22 32:1
8:6	adjusted 1:6	14:8 19:15	anyone 7:18	attached 13:8	32:3
<b>able</b> 12:12,13	1:7 4:8,10	19:22 20:16	anything	attain 32:12	bio-filter
15:10,20	4:11,19 7:8	31:9 32:11	25:7 36:5	attorney 2:8	13:17
<b>about</b> 11:19	7:20 8:1	33:19 34:16	anywhere	6:2	Board 1:2
11:19 15:8	13:5,6 15:2	34:22	29:21	attorneys	2:2 4:5 5:2
15:16 22:6	16:7,12,20	alcohol 9:19	appear 9:15	37:11	5:5,22 7:8
above-entit	17:2 27:7	9:21 11:7,9	APPEARA	August 16:4	7:19 15:24
1:16	27:16 30:3	14:4,22	2:1	16:9,17	16:7,21
absorber	31:2,19	15:17 23:11	appearing	35:4	17:1,10
13:17	32:9 33:11	24:14	6:15	authenticate	33:12 35:1
accept 16:20	33:24 34:7	Alisa 2:6	applicability	17:4	35:6 36:3
31:11	34:15,20	5:24	10:12,19	available	<b>Board's</b> 4:18
access 23:21	35:2	allowed	11:1	17:13 18:23	4:22 5:15
24:1,10	<b>ADM</b> 1:8	30:10,15	application	aware 7:19	10:2,4
accessible	administra	almost 31:12	5:13,17	35:7	16:20
24:3,6	4:9 24:2,12	<b>along</b> 11:12	22:12		<b>both</b> 17:17
accompanied	admitted	already	applying	<u>B</u>	bottom 8:16
6:7	3:20 21:4,6	31:17	8:21	<b>B</b> 3:12,19	14:12,14,18
accordance	advising 36:2	alternatives	appreciate	back 25:12	Bradley 2:3
4:21	advisors	13:13,21	7:21 32:16	27:13 32:24	4:4
accreditati	17:11	14:3	appropriat	background	brief 6:24
18:6	affidavit	always 6:11	4:24	8:1	35:13,19
accurate 37:7	22:13	10:18	approved	back-end	briefing
acetone 14:6	afraid 29:5	ambient 20:5	33:11	13:15	35:14
14:15,20	after 11:21	32:11 34:22	approves	based 15:24	briefs 5:7
achieve 12:16	12:2 16:8	Amended	7:19	19:23 20:3	<b>BS</b> 18:7
achieving	afternoon	7:24 16:3,8	approxima	24:16 27:5	<b>build</b> 12:19
12:23 27:21	4:3 26:13	16:13,16	4:14 8:3	27:10,11,15	Bureau 2:11
acronym	again 4:11	27:2 34:5,6	26:22	28:15 31:5	Burke 2:7
22:21	6:19 16:24	35:3	area 10:5	basically 9:5	5:23
Act 4:22 14:9	19:12 20:12	amount 9:11	31:14	28:2	<b>buy</b> 14:19
16:6 33:19	30:19	23:10 24:14	argument	basis 9:24	
34:16	agency 2:10	24:21 28:20	31:12	before 1:11	<u>C</u>
actually 9:9	6:16 13:3	28:20	arisen 9:2	5:9 15:9	C 3:5,6,9
11:18 12:12	16:23 17:1	analysis	arm 12:4	27:6,15	17:21 18:4
27:23 28:13	20:16 23:7	19:15,21,22	around 12:9	30:3	calculate
added 12:21	30:24 31:10	19:23 20:17	ascertaining	<b>begin</b> 11:14	24:15
34:4	31:11,21	Anand 2:4	24:21	beginning	calculated
addition	32:2,8 33:6	5:24	asked 13:7	33:11	31:1,6 33:8
33:24 34:14	Agency's	annual 9:24	18:12	being 4:17	calculation
additional	16:14,18	34:8	aspect 10:15	believe 16:4	27:19,20
34:1	31:18	answer 6:16	aspects 10:11	29:17 30:5	28:1,12,14
address 7:17	aggregate	17:14 27:18	10:22 11:2	32:2,8	30:14
16:10 34:15	31:14	32:6,14	asserted 31:8	belt 11:12	call 13:13
35:5	agreement	answers 5:16	assigned 4:6	<b>belts</b> 12:10	17:16 21:11
addressed	16:21	anti-backsl	associated	between	called 9:5
13:24 35:7	ahead 25:14	33:20	13:22	13:20 14:13	10:17 31:20
20.2.0017				31:2 33:15	came 35:15

	I	<u> </u>	<u> </u>	1	l
capture	14:24	11:8	couple 17:3	19:20	7:1 25:10
10:13 12:7	come 28:22	connection	<b>course</b> 17:10	described	32:22 33:14
12:17,18,23	comes 12:21	18:13 33:6	coverage	33:19	discussions
27:4	29:11	consider	10:1	destroy 27:4	7:16 33:15
capturing	commence	15:24 30:10	covered 10:6	detail 15:2	33:22
12:22	26:12	30:17,19	created 15:13	16:2	distribute
carbon 13:17	commencing	considered	CSR 37:22	details 13:22	19:6
case 5:18	1:15	30:20 34:14	current	14:1	divide 28:3
7:19 17:9	comment	34:21	21:23	detect 15:11	28:11
31:24	36:4	consistent	currently	15:18,20	divulged
catchall 10:8	comments	33:18	34:12	determine	5:20
category 10:7	7:12	constitutes	customers	20:4	docket 4:11
10:9	commonly	37:7	8:19 14:19	develop 5:2	document
cause 1:16	13:4	constructive	25:1	8:23 15:5	18:16 19:7
15:5 32:9	company	7:12	cylinder	difference	20:7
34:21	23:9,18,19	content 15:1	14:14	31:1	documents
causes 14:15	23:22,24	context 7:23	cylindrical	different	17:5
31:15	31:20	continue	8:15	13:12 14:24	doing 5:24
Center 1:12	compare	11:22 16:9		15:15 16:15	done 13:4,5
certain 9:11	20:1	continues	D	difficult 11:4	down 9:8,10
23:22 25:2	competitor	11:16	<b>D</b> 3:3,8 4:18	11:6 12:24	11:16 21:10
33:17	24:13,19	contribute	Daniel 2:8	diluting	25:16,17
Certainly 6:5	competitors	32:10	6:2	14:22	downtime
certified	24:24	control 1:2	darker 9:17	dilution	29:19
18:10	complied	2:2 4:5 5:5	data 23:1,5	15:15	drawbacks
<b>certify</b> 37:2,9	26:21	5:22 10:13	23:10	<b>Dimond</b> 2:16	13:21
changes	complying	11:5 12:17	database	3:6,9 6:3,5	dropping
29:18	11:3 34:19	12:20,21,24	24:2,5	6:5,20 7:3,5	29:5
characteris	computer	13:12,15	date 37:5	17:15,18	drum 8:2,14
11:7	24:7	18:23 27:23	day 37:15	18:1,20	8:16,22
Charles 2:12	concept	28:3	December	19:11 20:6	9:10,12,16
2:17 6:8,14	30:10	controlled	1:14 4:2,13	20:11,22	9:17 11:15
6:20,22	concern 35:5	26:21	26:16	21:8,11,19	11:16,24
17:12	concerns	conveyed	decision 5:3	25:4,15,16	12:5,13
chemical	7:17 16:10	11:22	5:8	27:12,18	14:11,13,14
18:7	31:18 33:17	conveyer 9:6	definition	28:9 30:8	14:17,18
Chicago 1:13	concluded	11:12	9:22	32:19 33:1	15:6 23:11
2:20 10:4	15:23	conveyor	degrade	33:3,4 35:9	24:15 27:6
civility 36:6	concludes	11:16,22	14:16	35:21	27:15 28:19
<b>claim</b> 31:13	15:22	12:10 15:7	degrees 18:5	directed	28:21
Clean 14:8	condition	correct 22:22	delay 32:11	25:24 26:14	drums 8:12
33:19 34:16	34:1,14	24:11,12	34:21	30:24 33:5	8:17 9:6
clearing 30:7	35:1	25:18 28:23	denatured	disadvantage	11:12,22
closed 24:23	conditions	corrugated	9:19,21	24:20	15:9,14
closing 16:24	22:18	8:13	11:7,9 14:4	disclosed	23:1,5,14
35:11	confidential	cost 12:21	14:22 15:17	23:19	24:16 29:13
Code 1:8 4:9	5:19 17:7	13:19 18:10	23:11 24:14	discussed	29:16
colleague 6:7	22:12 23:18	Counsel	DEPONENT	35:13	dry 12:5
combinatio	configurati	35:10	36:9	discussion	drying 11:23
	8	-	Describe		J
			l		

	1	ſ	1	1	
12:2	8:7 22:17	examined	22:22,24	9:23 13:6	27:2 31:8
due 13:5	30:17 34:13	17:22 21:16	23:4,9	16:21 18:8	31:17 33:8
35:16,19,21	engineer 6:18	exceed 10:24	few 30:23	19:16 20:1	33:9,15
35:22	18:11	exceeded	<b>fiber</b> 8:2,12	20:15 25:3	Greif's 8:2
duly 17:19,22	engineering	10:1	8:14,22	26:16 27:22	24:13,20
21:13,16	18:7,9	except 4:14	9:15,16,17	33:7 34:10	26:16 35:21
26:9	enough 9:24	Exhibit 3:14	14:11	34:19	<b>Grief's</b> 35:19
during 5:20	entire 5:2	3:21 18:17	Fiberglass	full 21:21	guess 17:17
9:2 35:18	entitled 4:6	18:18,22	31:20	further 5:9	25:23
	Environme	19:8,9,14	fibers 8:14	36:9 37:9	***************************************
E	2:4,6,10	20:8,9,13	figure 27:1,5		<u>H</u>
E 2:12 3:3,12	4:21 6:15	21:5	27:14 30:2	G	<b>H</b> 3:12,19
3:19	6:18 16:6	exhibits 5:7	<b>file</b> 36:1	gain 25:2	Halloran 2:3
Each 13:20	20:15	17:5 20:23	<b>filed</b> 5:12	gasket 14:12	4:3,4 6:11
earlier 5:11	<b>EPA</b> 2:11	21:3	13:9 16:4	14:16	6:19,23 7:3
early 7:16	7:10,16,21	exist 9:13	16:15 35:3	general 8:11	17:15 21:1
efficiency	7:22 16:10	expert 6:8	35:4	10:13,20	21:3,10
28:4	16:11 23:6	experts 26:1	filing 16:8	33:19	25:6,9,12
effort 7:8,22	33:13,16,16	explained	26:16	generally	25:17 26:3
efforts 17:1	33:16 34:13	16:2 28:9	filings 7:18	10:17	26:5,10
32:12	35:6,7		33:9	gentleman	29:2 32:17
either 8:19	equipment	<u>F</u>	<b>fill</b> 22:15	19:24	32:20,24
15:1 16:10	11:5 12:20	<b>F</b> 4:23	final 5:3	give 6:24 7:4	35:9
emission	12:21 27:3	face 31:12	financial	21:20 29:8	<b>hand</b> 18:16
13:12 28:3	essentially	facilitating	37:12	<b>go</b> 5:9 12:9	26:7 37:14
28:16 31:17	13:11 34:18	7:16	<b>find</b> 16:19	13:23 15:10	<b>happy</b> 36:7,8
emissions 8:5	esteemed 5:4	facility 9:24	<b>first</b> 7:7 13:9	25:14 32:20	having 16:6
9:23 11:13	estimated	13:1 19:1	17:17,22	goes 9:8	17:22 21:16
12:8,23	13:19	19:17 20:2	21:16 26:13	14:14	head 29:1
19:16 20:1	evaporates	22:18 26:21	26:24 32:1	going 5:3	hearing 2:3
20:2 24:17	11:10	27:23 28:12	five 5:4	12:7 13:23	4:4,17,20
27:4,24	evaporating	29:17 30:11	<b>fluid</b> 9:20	18:16 19:6	5:1,20 7:6
28:7 30:13	12:6	30:12,19	14:4 15:14	20:4 24:22	20:22 26:17
31:2 33:7	evaporation	33:8 34:10	fluids 12:6	29:3 35:11	35:18
34:10,19	12:1	facility's	follows 17:23	good 4:3 6:1	heats 11:24
emit 30:2,9	even 11:21	34:12	21:17	7:12 26:13	held 4:17
30:14,18,21	12:2	factors 12:22	<b>food</b> 8:20	governed	37:4
employ 27:3	event 26:6	31:16	foregoing	4:20	helpful 7:15
employed	eventually	fairly 12:19	37:3,6	grade 8:20	her 26:12
22:2,4	11:23	24:23	forgot 36:5	granted 7:14	hereof 37:6
employee	everybody	familiar 7:18	form 24:2,6	16:7	hereunder
37:10	36:6	22:16	<b>forth</b> 7:24	granting	37:14
employees	everyone	February	10:14	31:8 32:8	Hi 4:3
12:3,12	36:2	35:21,22	<b>found</b> 14:10	Greif 1:5	high 14:24
23:22	evidence 3:20	36:1	15:4,15	2:22 4:7,8	19:20
employs 8:3	17:7 21:4,7	federally 8:7	frequently	6:6,11 16:4	Historically
end 5:17	EXAMIN	22:16 30:16	8:8	18:13,24	9:18
26:23 27:4	3:4 17:24	34:12	<b>from</b> 1:7 4:9	19:16 22:2	holes 22:15
31:22	21:18	feet 11:19	4:15 6:5	22:5 23:15	holidays 36:7
<b>enforceable</b>		FESOP 8:8		26:14,24	
			•		and congressions and the state of the state

	I	1	1		1
I	individual	36:4	34:1	maintain	28:6,19
Ice 2:15 6:6	31:13	Jennifer 2:7	limit 28:7,16	23:1,10	29:16,20,23
<b>ID</b> 3:13	industry	5:23	30:12	maintained	30:2,21
identical	10:18	<b>Jr</b> 17:21 18:4	limitation	23:14	<b>may</b> 8:6
34:11	information	just 14:17	30:16	make 5:3,7	17:16 21:10
identificati	5:14,18	26:10 34:24	limitations	9:1,15 11:3	33:2
18:19 19:10	16:1 17:8	35:6 36:5	30:11	12:22 29:12	mean 24:6
20:10	22:13 23:13	т.	<b>limits</b> 34:9,11	29:16,20,20	means 12:7
identify 15:7	23:17,18,21	K	line 9:7,8	30:9 31:13	12:17,18
18:21 19:13	24:1,20	Kari 1:11	11:11,16,17	makes 8:9	37:4
20:13	25:3 28:17	26:7 37:2	11:22 15:7	making 24:3	meant 22:14
IEPA 26:2,4	initiated 30:4	37:22	15:9 23:1,5	manager 6:9	mechanical
26:5 35:17	initiatives	keep 26:10	23:11,14	22:1,8	9:9 37:4
IEPA's 25:21	27:7,16	29:5	24:15,16	manner	member 2:7
35:20	inserted 35:4	Khaalis 3:8	27:6,15	32:13 35:8	5:22
IL 2:20	inside 8:22	6:9 21:15	28:19	manufactu	members
<b>ILL</b> 1:8	9:10 11:15	21:22	liner 8:18,24	8:17	4:16 5:4,21
Illinois 1:2	11:24 12:4	kind 12:24	9:1,12	manufactu	17:10
1:14 2:2,10	inspected	29:5	liquid 8:19	8:3,12 9:3,7	mention
4:5,9,21	11:21	knew 24:14	9:11,14	many 8:16	28:18
6:15 7:10	inspection	know 11:23	11:15	9:7 29:12	mentioned
7:22 16:6	11:17 12:11	12:15 14:17	Liu 2:6 5:24	29:13,21	10:23 14:2
16:10 18:10	Installing	15:8 24:23	25:22 26:2	marked 3:13	33:10
20:15 23:6	11:5	24:24 25:1	26:4,11,13	18:17,19	met 16:5
33:16	instance	28:24 29:2	27:14 28:5	19:7,10,13	method
impact 19:15	31:16	34:17 35:24	28:14,17	20:7,10	19:24
19:22 20:4	instances	L	29:7,22	market 24:23	metro 10:5
20:16 31:9	12:3		30:1,6,22	24:23 25:2	might 30:20
imperfectio	intend 35:24	language 16:16,18,19	32:7,16	markets 25:1	Miller 2:15
8:23 9:2,13	intended 5:1	16:10,18,19	33:2	material 8:5	6:6
11:18 12:14	intentionally	large 9:24	Liu's 35:18	9:11,22	minimal 31:9
15:11,13,19	15:13	large 9:24	<b>LLC</b> 1:6 4:8	11:24 12:6	<b>minor</b> 8:4,9
15:21	interest	12:20	LLP 2:15	14:3,5,6,8	<b>minute</b> 32:21
important	37:12	leaks 14:18	long 22:4,7	14:16,21	moment
10:15,22	interior 9:12	leaks 14.16	look 5:6 34:2	materials	25:20
Inc 4:7	introduce	let 35:24	looked 13:11	8:10 13:14	month 22:9
including	5:21 6:4	Let's 32:20	13:13,18	Matoesian	23:2,6,14
18:9	introduced	level 19:20	14:2,6,22	2:12 6:13	34:9
incorrectly	6:20	24:12 27:22	looking	6:14,14	monthly 34:8
6:12	involves 9:6	28:3	31:24	7:10 21:1,2	more 10:7
increase	issue 13:2	levels 15:15	lot 12:18	25:7,8,21	12:1 15:19
31:21	34:16,17,18	20:5 24:3,3	low 15:5	32:5,14	16:2
increment	35:7	licenses 18:9	<u>M</u>	35:23	move 9:10
31:6 32:2	<b>Item</b> 34:8	like 6:4 7:7,9		matter 1:3	26:11
incremental	J	7:23 12:9	made 30:14	4:6,7 5:4,10	moving 11:12
33:7 34:19	James 1:12	16:24 17:6	31:17 33:9	37:4,13	much 20:4
indicate 34:1		18:17 20:7	MADISON	maximum	27:9,20,24
indicated	January	21:11 29:19	2:18	26:19 27:6	27:24 28:13
35:10,23	13:10 35:3	32:5 33:1	Mahajan	27:15 28:5	multiply
	35:16,17,19	32.3 33.1	2:11 6:17		

	1	£	T.		
28:21	23:1,5,13	option 14:21	per 13:19,20	<b>point</b> 11:13	31:19
myself 17:12	24:15 28:19	options 13:14	23:2,2,6,6	25:23 34:24	primarily
	29:10,15,16	13:15	23:11 24:14	<b>Pollution</b> 1:2	22:11 24:21
N	numbers	order 36:2	26:22 27:1	2:2 4:5 5:5	30:24
N 3:3	28:18,22	ordered	27:5,14	5:22	problem
NAAQS	numerous	26:17	28:19,21	polyethylene	14:11
32:12	7:10	organic 8:5	30:1 31:5,6	8:18,22,24	procedural
name 4:3	N-A-A-Q-S	9:22 14:5,7	31:21 32:1	9:1,12,14	4:19,22
6:14 18:3,4	32:12	14:8	32:3 34:9,9	Ponder 3:5	5:10,15
21:21		original 35:2	perceived	6:8 13:7,18	proceed
named 19:24	O	other 10:15	22:15	17:4,12,17	17:16 33:2
Naperville	objection	14:21 23:7	percent 9:19	17:18,21	proceeding
6:10 8:2,17	21:1	out 10:21	10:13 12:16	18:2,4	10:11 18:14
9:18,23	occur 11:13	12:5 29:11	12:23 15:1	19:12 20:12	PROCEE
10:24 11:3	11:14 12:11	34:24 36:2	15:16,16,20	21:9 26:19	1:11 4:1
18:24 19:17	occurred	37:5	31:4	27:9 28:2,6	process 8:11
22:1,8,18	33:15	outcome	performed	28:16,24	8:21 9:3,5
22:19	occurs 11:18	37:13	19:21	29:8,24	9:20 11:9
Naperville's	October	outside 23:19	permit 8:7	30:5,22	15:23
24:16	16:15	oven 11:23	22:17 30:12	31:1,5	produced
National	off 7:2 25:9	15:10	30:12,17	portion 6:1	23:2,5,14
32:10 34:22	25:11 28:24	over 13:23	34:13	posed 5:11	24:16
nature 11:6	32:20,23	oxide 20:2	petition 1:5	33:2 35:18	product 8:20
near 29:21	35:13	oxidizer	4:7 7:9 8:1	position	production
36:8	offered 7:11	13:16	11:20 13:9	21:24	11:11 27:6
need 8:18,24	office 4:15	ozone 20:5	15:2 16:3,9	possible 32:6	27:11,15
13:3 15:10	officer 2:3	31:6,15	16:13,17	post 13:12	28:19
26:20 34:2	4:4 7:6	32:11	27:2 31:9	27:22,23	professional
never 27:23	20:22 26:17	MANAGEMENT CONTROL OF THE PROPERTY OF THE PROP	34:5,6 35:2	post-hearing	18:9
28:12	<b>offset</b> 31:18	P	35:4	5:7 35:12	profession
new 30:14	<b>Okay</b> 6:23	P 2:3	petitioner	35:14	36:7
next 12:13	17:18 18:16	packaging	5:12	potential	pronounce
21:11 30:23	19:4 20:18	1:6 4:8	Petitioner's	27:10 30:2	6:12
nitrogen 20:2	21:23 25:9	19:16 26:15	3:14,21	30:9,14,18	proposal
None 21:2	29:22 32:7	<b>page</b> 26:18	21:3,5 26:1	30:21	7:11,24
32:19	once 10:18	34:5,7 37:6	phonetic	potentially	17:2 33:18
non-detain	10:20	<b>part</b> 4:9 10:3	19:24	31:22 32:3	proposed
31:15	one 10:11	11:6,8	<b>piece</b> 12:20	practice 27:8	31:2 32:9
non-disclos	13:15 14:3	particular	place 37:5	27:17	Protection
5:13	17:16 22:9	10:5 24:22	placed 30:11	practices	2:10 4:22
Nos 3:22 21:6	22:9 33:1	particularly	places 22:19	30:3	6:16,18
<b>note</b> 4:14 5:1	<b>only</b> 24:9	10:10,15,21	<b>plant</b> 6:9,10	precise 16:11	16:6 20:16
5:10 9:21	30:8	parties 37:10	8:2,3,18 9:4	prepare 13:7	provision
22:10	opening 6:24	37:12	9:18 10:24	18:12 19:2	33:20
<b>noted</b> 31:11	7:4,5 35:19	parts 31:6,21	22:1,7,19	19:18 20:18	public 4:16
noticed 4:24	operating 8:7	32:1,3	22:24 23:4	present 2:14	36:4
November	22:17 30:17	password	plants 9:8	4:16 36:6	purposes
26:18	34:13	24:4,11	please 7:4	pretty 8:12	10:16 12:16
number 3:13	operations	people 8:4	18:2 27:13	Previously	30:15
3:20 11:20	11:3	24:9,10			
			I		1

	1	<u> </u>	ı	<u> </u>	I
pursuant	Rahman's	regarding	20:19 26:17	32:7 34:5,6	sort 10:8
4:17 5:14	22:11	4:19 17:7	28:9 33:5	35:3	sought 5:19
<b>put</b> 7:22 8:19	raise 26:6	19:5 33:17	35:20 36:1	seconds	<b>source</b> 8:4,9
14:12 15:19	raised 33:16	regards 5:16	restrict 23:24	11:19 15:8	30:15 31:13
16:12 17:3	Randolph	regulation	restricted	Section 4:18	sources 10:6
17:4,6,6	1:13	13:7	23:22	4:23 5:14	31:14
27:7,16	ranged 13:20	regulations	review 5:2	16:5 33:18	specific 10:7
<b>p.m</b> 4:14	Rao 2:4	10:2,3,4,8	17:2 30:15	34:16	specifically
	rather 12:24	10:14,16,17	reviewed	see 9:16	4:23 35:5
Q	ratio 20:3	10:18,22	7:11 16:17	12:13	<b>spot</b> 9:17
<b>QC</b> 9:5	reach 12:4	regulatory	Revision	seeks 13:6	11:17 12:11
qualification	read 27:13	23:7 30:10	7:21 33:13	Senior 2:4	15:9
30:8	really 14:18	related 22:11	revisions	<b>served</b> 26:18	spots 9:15,17
quality 19:15	Reasonably	33:20 37:9	33:21	set 7:24	15:5
19:22 20:16	18:23	37:11	right 6:20 7:3	10:14 15:12	sprayed
31:10 32:11	received	relatively	20:22 24:10	36:4 37:5	11:15 15:14
34:22	20:24	11:10	25:4,12	sets 34:8	sprays 9:10
quantity 20:3	recognize	relevant	26:6 29:9	<b>Shafe</b> 19:24	staff 2:8 5:12
question	22:22	10:10	32:20	<b>shape</b> 8:15	6:2 7:11
27:12,19	recognized	remain 5:19	Roa 5:24	sheet 8:13	standard 1:6
32:1,7 33:6	13:3	remaining	Robertson	significant	1:7 4:8,10
questioning	recommend	12:5	2:8 6:2	31:22 32:4	4:11 7:9,20
26:12	7:13	repeat 27:12	roll 8:14	similar 34:18	8:1 13:6
questions	recommen	replace 14:4	<b>Room</b> 1:13	since 33:5	15:2 16:7
5:11,16 6:1	16:14,18,23	reply 35:22	Royal 31:20	single 11:13	16:12,21
6:17 17:11	record 1:11	report 4:1	rules 4:19,22	<b>SIP</b> 7:21	17:2 27:7
19:5 20:15	5:2,6,11 7:2	23:5,10	5:15	33:13,20	27:16 30:3
20:19,19	17:5 18:3	reported	run 29:18	sit 29:4	31:3,19
21:8 25:5,8	18:21 19:14	24:17 37:3		six 18:8	32:9 33:11
25:20,23	20:24 22:10	represent	S	sixteen 22:6	33:24 34:7
26:14,18	25:9,11,13	30:2	<b>S</b> 3:12,19	size 12:19,20	34:15,20
30:6,23	27:1 32:21	representat	<b>SAITH</b> 36:9	slightly 16:15	35:2
32:18 33:2	32:23,24	4:15 33:10	same 31:13	slow 12:6	standards
33:5 35:18	34:2 35:13	representing	37:8	<b>slowly</b> 11:10	4:19 13:5
<b>quote</b> 26:19	recuperative	2:22 6:6	satisfactory	small 8:23	16:5 32:11
26:23 27:3	13:16	37:11	16:19	solvent 27:9	34:23
27:4 31:10	redacted	request 19:7	satisfied	27:11 28:20	start 34:6
31:22,23	28:17 29:15	20:23	33:23	some 4:15	state 8:7 18:2
R	reduced	require 22:24	schedule	12:3,11	22:17 30:17
***************************************	13:19	23:4,9	35:14	13:21 15:13	34:13
R 1:12	reduction	requirement	Scientist 2:5	17:4,7	<b>stated</b> 31:10
RACT 10:4,7	31:3,4	10:14	2:6	20:14	31:21
13:4,6,11	reductions	requireme	scientists	someone 13:5	statement 7:6
13:23 14:1	27:22 31:17	31:4	5:23	sometimes	30:9
15:3,22,24	refer 8:8	reserve 35:11	seal 14:13	8:6	statements/
16:2 18:24	reference	respond 33:1	sealing 14:11	soon 11:14	35:12
<b>Rahman</b> 3:8	1:15	35:17	second 7:24	sorry 6:21	<b>states</b> 26:19
6:9 17:6,13	<b>regard</b> 31:18	response	13:16 16:3	25:14 26:3	27:2
21:12,15,20	33:23	5:11 20:14	16:8,13,16	29:6	stenographic
21:22 25:6			19:6 27:2		
					I

		1	•	•	
37:3	swear 25:21	12:4 16:23	34:9,9	usage 26:20	8:19 13:9
step 21:10	26:7	17:1,11	top 8:15	29:23	14:19 17:3
25:16,17	sworn 17:20	35:11,12	14:15 28:24	use 22:21	17:4 26:11
still 15:18	17:22 21:14	theoretical	towel 12:5	24:19 27:10	36:5
straightfor	21:16 26:9	27:19,20	transcript	27:11 28:2	wanted 34:24
8:13	synthetic 8:4	28:1,12,14	5:6 35:16	28:6	water 14:23
Street 1:13	8:9	29:12	37:7	<b>used</b> 9:19	15:1,16,20
2:18		thermal	treated 23:17	23:11 24:14	way 28:10
structures	T	13:16	treatment	27:21,24	29:11,14
12:9	<b>T</b> 3:12,19	think 5:10	5:13 22:12	28:13,21	weight 15:18
study 13:4,11	take 5:5	7:17 11:19	trigger 10:12	uses 26:24	well 12:4
13:23 14:1	28:10 30:16	14:24 25:14	triggered 9:9	<b>U.S</b> 7:16	13:22 19:18
15:3,22	taken 1:12	25:16,19,21	11:1	16:11 33:13	19:23 20:14
16:3 18:13	5:18 17:8	27:9,18	<b>trip</b> 10:19	33:16,16	20:20 25:22
18:24	takes 11:18	29:2 30:13	true 37:7	34:13 35:5	36:3
stuff 29:19	15:8	32:5 34:17	trying 11:24	******	went 14:24
subcategory	technical	35:15	12:16	V	15:4
10:6	5:12 6:8	third 13:17	<b>TT</b> 1:9 4:10	variety 14:23	were 7:15
<b>submit</b> 22:13	17:11 31:16	20:7	10:2,3,5,11	version 29:7	9:24 12:7
submitted	technically	Thomas 2:16	11:2,4	29:9,15	13:2 15:20
7:20 16:22	30:13 33:4	3:5,6,9	26:22 31:3	versus 34:20	18:12 21:6
17:8 33:13	Technology	17:21 18:4	34:20	very 7:15	26:8 27:21
Subpart 1:9	18:24	26:19	Tuesday 1:14	violation	33:5,8,9,23
4:10,18,23	tell 29:9	Thompson	4:2,13	34:22	West 1:13
10:2,3,5,11	terminal 24:7	1:12	tunnel 12:9	violations	2:18
11:1,4	Terrific	thought 35:6	turn 12:18	32:10	while 14:7
26:21 31:3	21:10	three 11:2	two 10:10,21	visual 11:17	35:13
34:20	test 9:1,5,19	13:12,14	11:2 13:13	12:11	Wiedenha
subscribed	9:20 11:8	three-way	14:2 26:13	visually 9:16	1:12 37:2
37:14	12:5 14:4	33:14	28:22 29:3	15:7	37:22
substitution	15:12,14	threshold	31:21	<b>VOC</b> 19:16	witness 3:4
13:14 14:3	tested 14:10	10:1,20,24	typical 9:7	20:1 26:20	17:19 21:13
14:21	14:20,23	through 9:14	typically	<b>voices</b> 26:10	25:22
Sue 6:7	testified	24:6	8:18	29:4	witnesses
sufficient	17:23 21:17	tight 14:13		volatile 8:5	17:3,16
15:6,21	testimony	time 7:8 15:6	U	9:22 14:5,7	26:8 29:4
34:15	22:11,14	15:21 26:24	ultimately	14:8	32:18
<b>SUITE</b> 2:19	Texas 18:8	32:18 37:5	7:13,19	volume 15:17	wording
summarize	thank 6:11	timely 32:13	15:15 33:12	24:22	16:11
7:23	6:19,23 7:5	title 37:6	33:23	<b>VOM</b> 8:6,10	work 14:21
summarized	7:7,9 17:1	today 4:13,17	under 10:2	12:8 13:19	16:9
16:1	17:14,15	6:7 16:1	14:8 34:16	27:4,21,24	workers 15:6
suppliers	18:12 19:4	17:3 22:14	unfortunat	29:23 31:2	writing 32:6
24:24	20:6 21:20	<b>Tom</b> 6:5,8	14:15	<b>VOM's</b> 28:21	32:15
<b>supply</b> 25:1,2	24:13 25:6	ton 13:19,20	University	<b>TX</b> 7	written 36:2
sure 9:1	30:7,22,22	30:1	18:8	W	AAAA WAAAA AAAA AAAA AAAA AAAA AAAA AA
25:24 33:4	32:16 35:9	tons 26:20,22	unless 25:19	W 2:16	X
34:3	36:5,6	27:1,5,14	26:11	wand 9:9	<b>X</b> 3:3,12,19
SUSAN 2:17	thanks 6:12	30:13 31:5	un-redacted	want 5:21	*7
	their 5:8 7:17		29:7,8	6:23 7:4	<u>Y</u>
	I	I	I		

		1	I	I	1
year 22:9	<b>2nd</b> 35:16	8			
23:2,6	<b>20</b> 1:14 3:17	8th 26:16,18			
26:22 27:1	4:2	<b>81</b> 10:13			
27:5,14	<b>20th</b> 4:13	12:16,23			
28:19 30:1	<b>200</b> 2:18	31:4			
31:5 34:9	<b>2007</b> 9:23	<b>84.8</b> 26:22			
36:8	10:23	27:1,5,14			
years 22:6	2008 9:20,23	28:4,10,22			
Yoginder	10:23	29:23 30:1			
2:11 6:17	<b>2011</b> 1:14 4:2	30:20			
	4:13 13:10	<b>8760</b> 29:17			
\$	26:17,18	29:18			
\$17,672	2011-001	29.10			
13:20	4:11	9			
	2012 35:16	9 34:8			
0	35:17,20,21	9th 35:21			
<b>0.731</b> 28:11	<b>21</b> 3:9,22	36:1			
<b>09-4</b> 31:19	<b>218</b> 1:8 4:9	90 8:4			
1	<b>22.8</b> 28:3,8				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28:10 29:14				
13:15 18:17	30:13				
18:18,22	<b>26th</b> 35:20			:	
20:23 21:3	<b>28.1</b> 16:5				
28:11					
<b>1-3</b> 3:22 21:6	3				
<b>1.47</b> 31:6	<b>3</b> 3:17 20:8,9				
32:1,3	20:13,23				
1:00 4:14	21:4				
1:00p.m 1:15	<b>312</b> 2:21				
<b>100</b> 1:13 9:19	<b>35</b> 1:8 4:9				
101 4:23	<b>3500</b> 2:19				
<b>104.400</b> 4:18					
11th 35:17	4				
<b>11,667</b> 13:20	<b>40</b> 11:19,19				
11-1 1:5	15:8				
<b>11-512</b> 1:13	<b>45</b> 15:16				
<b>110</b> 33:18	5				
34:16					
<b>130.406</b> 5:14	<b>55</b> 15:16,20				
1634:5	6				
16th 35:22 17 3:6	<b>6.7</b> 31:5				
173:0 17th 36:4	<b>60</b> 15:1				
17th 36:4 18 3:15	<b>60606</b> 2:20			·	
<b>18</b> 3:15 <b>19</b> 3:16 34:7					
19 3.10 34:/	7				
2	<b>70</b> 15:1				
<b>2</b> 3:16 19:8,9	726-7146				
19:14 20:23	2:21				
21:3 26:19	<b>73.1</b> 31:3				
21.5 20.17					
	I				l